



Engaging English Language Learners through Gamification and Serious Games

Aayushi¹, Dr. Sonam Kamboj²

¹Research Scholar, Department of English and Modern European Languages, Banasthali Vidyapith, Banasthali, Jaipur, Rajasthan, India

²Assistant Professor, Department of English, Chaudhary Charan Singh Haryana Agricultural University, Hisar, Haryana, India

Received: 30 Sep 2024; Received in revised form: 29 Oct 2024; Accepted: 05 Nov 2024; Available online: 11 Nov 2024

©2024 The Author(s). Published by Infogain Publication. This is an open-access article under the CC BY license

(<https://creativecommons.org/licenses/by/4.0/>).

Abstract— This project investigates the creative blending of gamification and serious games in a way that encourages ELL engagement in the classroom. Such a belief exists that teachers can create a good learning environment that fosters the acquisition of language, as well as the active engagement of pupils, by tapping into elements of game design to foster community among learners. The current study provides a taxonomy of the key benefits and drawbacks in applying serious games and gamification for teaching English. By considering the SWOT analysis of the application of the two singular, game-based approaches to learning a language like English, student opinions are gathered by using the Delphi method. This study produced an ordered list of critical adoption and entry factors to consider while gamifying the process of learning English. Discussion of these problems led us to identify other elements. We then proceed to discuss the importance and implications of the potential and difficulties associated with gamification and serious games in the context of our results.



Keywords— Engaging English Language Learners, Gamification, Serious Games, SWOT Analysis, Teaching English

I. INTRODUCTION

The development in digital technology has brought a significant transformation to the educational scene with creative opportunities for improving the learning opportunities. Some of these technologies include serious games and gamification, which have received promising attention from ELLs. Gamification is the use of game design elements in a context that is not a game, while serious games are designed with a specific learning goal in view. Both approaches tap into the intrinsic motivation that games naturally engage: the social interactions, competition, and achievements that will make them especially effective for ELLs, who so often confront obstacles in learning language. This traditional method of education can be turned into a very exciting and effective learning environment for English Language Learners by the implementation of gamification to instruction in the traditional classroom. Teachers may use leaders' boards, badges, and points to ensure that the students are

motivated and feel accomplished. A gamified language learning program may provide rewards for completing tasks or achieving levels of particular competence to enable further continued study. This encourages students to take risk, utilize their language skills, make mistakes, and learn from them without fear of failure since it also enhances motivation. Serious games, specially designed for second language acquisition, offer a unique opportunity for ELLs to take part in authentic situations where they can purposefully exercise their skills. Simulations of real-life issues give students opportunities to discuss, deal with problems, and make decisions that oblige them to use their language skills. For instance, for role-playing games, the ability to improve speaking and listening skills can be facilitated by situating students in realistic situations in the use of a restaurant or inquiring for directions. With this kind of experienced learning, apart from teaching vocabulary and practicing grammar, cultural competency is developed, which is often the

missing component in language learning that classroom environments completely overlook.

Gamification and serious games also promote collaborative learning, another component of language learning. A few of them are intended to be played in a team or group as social interaction and peer learning is promoted. Cooperative games offer ELLs opportunities to place language skills in a safe space that they can exchange ideas, negotiate meanings, and give each other feedbacks. While improving language skills, this social component also builds self-esteem and instills a sense of belonging, especially for people who would otherwise feel as though they are learning something entirely new-and perhaps alone.

Gamification of a method, and serious games, can provide the opportunity to interact with the students in a revolutionary manner. Teachers can build a collaborative, dynamic, and culturally competent learning environment that fosters language acquisition through the motivational elements of games. If educational institutions are still using technology to perfect their teaching methods, adding gamification and serious games to English language courses can really revolutionize student learning and make language acquisition more fun and efficient.

II. LITERATURE REVIEW

Prakash and Rao (2015) Elaborate how gamification may transform learning environments, especially with regard to IT administration. The authors assert that gamification can be a great motivator for the students, create teamwork, and inculcate a sense of competitiveness while undertaking the learning process. The paper discusses several gamification strategies that can greatly enhance the outcomes of learning and motivation through leader boards, badges, and point systems. As such, this theory-to-practice bridge was something the authors insisted upon in presenting case examples of successful gamification in IT courses. Their conclusions are that curriculum gamification can indeed ensure an effective contribution towards better retention as well as an energized learning environment.

Ishaq et al. (2022) In their paper, Serious Game Design Model for Language Learning in the Cultural Context, they offer a serious game design model for language learning in cultural contexts. That kind of study underlines the importance of contextually relevant information in serious games and, in addition, enhances the ways through which cultural components could help enrich language learning results. To establish an engaging learning process, the authors provide a framework on serious game design, which includes scenarios that are interactive, linguistic barriers, and cultural anecdotes. Their model, which

justifies alignment with instructional objectives of the gaming mechanics, lies in pedagogical ideas. It focuses on how serious games would elevate language proficiency and cultural sensitivity to appreciate further the educational process. For example, the authors present empirical evidence of pilot studies showing how their approach improves engagement and language skills among learners.

Kim and Lee (2015) presents an overall framework providing insight into how gamified learning environments actually work. It examines the dynamical model pointing to game dynamics, educational objectives, and learner motivation. The authors examine several variables that might influence the effectiveness of gamification, such as learner characteristics, design of game features, and the educational setting. They then explore mathematically the effects that various techniques in gamification will have on student engagement and achievement. The study states that effective gamification is likely to increase intrinsic motivation and better understanding about the course content. The authors further specify that the approach should be used by educators and instructional designers with the help of optimizing gamified learning experiences to successfully meet learning objectives.

Buckley and Doyle (2017) in this research study, the authors investigate how individual differences in personality traits and learning styles can affect gamification. Using the prediction market paradigm, the authors analyze how learner attributes interact with gamified aspects. In the light of findings, there appears to be some evidence pointing towards the fact that perhaps a one-size-fits-all approach would not prove to be best when it comes to gamification; rather, customized techniques for gamification can enhance the engagement and performance of students. According to authors' evaluation of the learning styles, the gamification designers need to be flexible while designing the gamification. It includes changeable rewards, feedback, and difficulties that one has to tackle. This researcher asks the educational community to consider the individual learner profiles while designing learning through gamification and emphasizes personalization in gamification.

Ricardo (2017) explores the idea of introducing serious games as a combination with CLIL. What the author conveys here is that serious games can indeed span the gap between language learning and academic content by offering students an entertaining means to achieve both proficiency in language, subject matter expertise simultaneously. Ricardo identifies critical design elements such as cooperation, authenticity, and interactivity that enhance the learning process through a qualitative

investigation of several serious games. The paper brings case studies from contextualized scenarios-challenging the learner to apply their language abilities in real-world settings-showing how serious video games might assist with language acquisition. The findings highlighted an increase in language ability and topic understanding with a boost in motivation and engagement arising from CLIL-gaming.

Roth, Schneckenberg, and Tsai (2015) based on their article, "The Ludic Drive as Innovation Driver: Introduction to the Gamification of Innovation," the authors present the notion of a ludic drive as an innovation driver. This study analyses how companies might develop an innovative culture by using gamification, which exploits people's naturalistic drive toward play and discovery. The authors argue that the introduction of game elements into an innovation process can improve creative capacities, cohesive capacities, and solving capacities in teams. The text offers a model for applying gamification concepts to stimulate creative problem-solving and illustrates examples of successful applications in different organizational environments. The results reveal the flexibility of a gamified approach toward encouraging organizational creativity and adaptability in a competitive environment while engaging human beings.

III. METHOD

In order to close the newly identified study gap, we identified potential challenges and opportunities that Azad Institute of Engineering and Technology (AIET) Collage may encounter when using gaming in relation to English language preparation. To generate fresh ideas for a preliminary exploratory analysis, we conducted a SWOT analysis with students from the School of Computer and Information Science. The purpose of this SWOT analysis is to outline the possible advantages, challenges, possible results, and risks of gamification in the teaching of English as a second language.

The SWOT analysis provided a well-thought-out arrangement of elements that could assist Azad Institute of Engineering and Technology (AIET) college in evaluating the advantages and disadvantages of gamifying English language instruction. These components can help raise employees' knowledge of the risks associated with working in a gamified workplace and educate them about its advantages. We considered the following questions in order to handle these SWOT investigation classes:

- **Strengths:** In your perspective, what are the main benefits of gamification and serious gaming?

- **Weaknesses:** In your perspective, what are the main drawbacks of gamification and serious gaming?
- **Opportunities:** What possible benefits could serious gaming and gamification have for English language learners?
- **Threats:** What possible risks do gamification and serious games present in the context of learning English?

The Delphi approach served as the framework for our exploratory study. Delphi studies are frequently utilized in data framework research when space experts need to agree on a place where thought age is required.

3.1. The Participants

Students from the Azad Institute of Engineering and Technology (AIET) College of Computer and Information Science were asked to participate in our examination in October 2023. They were instructed to oversee a SWOT analysis of serious games and gamification that was analogous to presenting English as an unknown dialect. Table 1 shows the examination members' financial situation.

Table 1: Data on Participant Demographics

Study Data	
Total participants	54
Youngest participant	27
Oldest participant	31
Male participants	47
Female participants	11
Game Experience	Very often

3.2. The Brainstorming Process

The members were approached for a few exercises that comprised the conceptualizing system throughout the course of 360 minutes. The research plan and methodology are summarized as follows:

- Understudies were instructed to brainstorm independently on the four SWOT topics following an introductory presentation on gaming and its "serious" applications.
- After being divided into four subgroups, understudies were told to condense, elucidate, and arrange all of their thoughts into unique statements based on one of the four issues. A facilitator assisted with this task for each part. The strategy was to rework unclear concepts, remove superfluous ones, and group related ideas together.
- Following that, every student re-enlisted as a group. The facilitator of each subgroup gave a brief

introduction and explained to the group which arguments had been selected for each of their topics.

- Next, using a 10-point Likert-type scale, where a score of 10 indicated a very vital declaration and a score of 1 indicated a very un-huge attestation related with each of the four SWOT subjects, students were asked to freely and confidentially judge the pertinence of each statement.
- In order to encourage discussion about the findings (suggestion by suggestion), allow ideas to be changed on an individual basis, and make the evaluation standard deviations more agreeable, the vote-based scores were then distributed to all participants in a free gathering organization.

We had an open discussion about the conceptualizing results with like-minded friends for ninety minutes. We expected them to elaborate and provide more clarity on how they understood the importance of the explanations and how they contributed to the success of game-based English language learning. A summary of the main questions addressing these trends was created to aid in the conversation.

IV. RESULTS

A total of 170 concepts were submitted by understudies to the basic gathering in order to generate fresh concepts that aided distinguish the four SWOT analysis sections. According to the conceptualizing system, the concepts underwent more refinement, investigation, and naming. Following the collection of the material, the SWOT analysis's general conclusions were reviewed and revised in an attempt to make the statements clearer. We next asked the participants to respond to a few targeted questions regarding the statements in order to ensure that concepts are thoroughly examined and explained:

1. Were the statements that surfaced misclassified as opportunities and strengths or as threats?
2. Do the claims that are made make sense and are relevant to gamification and serious games?
3. Are the findings unique to a certain serious game?

We collected the data and organized it into four tables (SD = Standard Deviation) after carefully considering our options.

Table 2: Strengths

Strengths	Mean	SD
An atmosphere that is stimulating, demanding, and thrilling	10.5	0.75
Continuing the attempt to learn	9.68	0.98
Speaking, writing, listening, and reading are only a few of the abilities that are needed for language practice.	9.76	0.70
Increasing the responsiveness of the pupils	9.11	0.80
Increasing the student's motivation for achievement	9.71	1.37
Increased involvement of students in the classroom	9.37	1.07
emphasizing language use as opposed to language itself	10.3	0.28
Particular language content needs to be studied, practiced, or revisited.	9.3	1.18
Improving Student Performance	10.4	0.47
Changing the classroom routine	8.98	0.59
Engaging pupils in conversation, participation, and enjoyment	10.60	0.52

The initial conceptualization of the area section led to the identification of pertinent strengths by the members. The need for "a persuading, difficult, and thrilling climate in the mean to reach out" in their homerooms was initially addressed by understudies. They looked at the positive connections between this kind of air and their desire to learn. Members emphasized the gamified interaction's significance as a break from the typical language-learning process. An important aspect of teaching English was the focus of their attention. In this instance, learning will be

improved by an extra educational opportunity. Understudies will be able to work together, communicate, and enjoy themselves more as a result.

The understudy will become more reactive and less worried as a result. According to the participants' responses, this kind of learning will help them focus better and rekindle their drive for success. Lastly, gamification and serious games stimulate students' curiosity while fostering a sense of community and involvement. The necessity of using a ludic environment to practice, assess,

and enhance language skills including speaking, writing, and listening was emphasized by understudies. Students'

presentations could benefit from this kind of educational assistance.

Table 3: Weaknesses

Weaknesses	Mean	SD
Lack of comfort as a result of varied levels of rivalry among pupils	8.16	2.02
Frustration brought on by a misunderstanding of the game	6.72	4.57
The game's overarching class vibe is insufficient.	7.40	2.50
Due to the ludic ambiance, there is a lack of control in the lesson.	5.55	2.70
Discipline concerns as a result of the ludicrous general atmosphere	5.72	3.06
Distraction from the game's true aim without learning	9.06	1.60
Perceiving game-based learning as useless, a waste of time, childish, and immature	5.20	3.12

Weaknesses were the next topic discussed during the brainstorming session. A few drawbacks of gamification and serious gaming for language learning were noted by the participants. Due of their rivalry, students have previously observed that they are unlikely to feel completely at ease in ludic situations and that, should they lose the game, they may feel depressed, distracted, or disappointed. Students will become distracted from the game's true objective if "the game didn't match their prerequisites then again if it's inadequate with regards to

the general energy of the class," as distinct understudies have diverse learning patterns. Students also complained that "hard discipline issues and impel nonattendance of control" would result from the relaxed atmosphere. "Puerile, energetic, pointless or even a waste of time" is another way they describe gamified games and cycles. Understudies eventually raised the concern that playing in a ludic environment may make them forget the game's primary goal and "be occupied from learning without accomplishing the genuine reason behind the game."

Table 4: Opportunities

Opportunities	Mean	SD
Continuous self-education	9.28	2.96
Students are evaluated on a continuous basis.	9.12	2.10
Complete independence for acquiring knowledge	9.61	2.53
There is no gender or social prejudice.	9.62	2.52
Increasing the margin of error with no negative consequences	9.89	2.29
Increase classroom enjoyment and delight by establishing a pleasant learning environment.	10.40	2.80
Learning through many educational methods	9.22	2.77
Connecting education to real-world and practical applications	10.57	2.97
Providing pupils with an appropriate and limitless range of tasks	9.12	2.56
Inspiring pupils to uncover their own sources of learning motivation	10.22	2.68
Student engagement	7.65	4.10
Redirecting students' interests	8.06	3.25
Make education meaningful and memorable for the student.	10.34	3.35

During the third brainstorming session, participants identified a few potential applications of gaming and gamification in English language instruction. Understudies found that students may routinely learn self-learning and assessment with a possibility of correctly encountering

when they are in ludic situations. This was the most significant finding. Furthermore, understudies will have every chance to comprehend thanks to the ludic mood. Participant feedback indicates that gamified learning resources and games "allow students to express their ideas

with almost no fear or shyness or unfavourable consequences." They insisted that there would be no discrimination or social segregation on the basis of orientation in this educational setting. As a result, understudies will feel more at ease while learning, which will boost their dedication and productivity. Games and gamified learning materials will undoubtedly promote happiness and provide a lovely, cozy learning environment. Understudies will be more motivated to learn and involved in study hall activities. According to understudies, they believe that language classes are more like machines and that using highly innovative teaching resources doesn't better suit their needs. They may also help students discover their own passion for learning and foster their creativity. In addition to attracting understudies and expecting them to advance, these new learning tools "will also get and redirect students' thought and interest to their language course." "These new materials have the potential to make us exceptionally focused and more connected to our work," someone says. "They could make the informative communication seriously engaging, outstanding, and leave improved impact on our spirits so courses will be a depiction of satisfaction without stress or weakness," said another student. Finally, the members argued that the game would make the "created automated learning keener with new ages" possible. They argue that some of the current exhibiting tools, such as the writing board, chalk, and video projector, should be replaced by truly cutting-edge equipment or initiatives.

Table 5: Threats

Threats	Mean	SD
Negligence has resulted in lower grades.	7.65	3.99
lowering class values	7.28	3.52
Excessive losing motivates people.	9.40	3.32
boredom and lack in learning	7.72	3.81
High reliance on machine reliability	9.48	3.78

The potential of gamification and serious games as English language learning aids influenced the last stage of the conceptualizing movement. Understudies identified a number of concerns and believed they warranted careful consideration. First, they added a bet that class values and stamps would be degraded as a result of the usage of ridiculous teaching materials. Participants really indicated that gamification and gaming could promote irresponsibility and diminish the advantages of education. One student remarked, "I think the homeroom will be crazy and the teacher won't be able to control what they are doing, so it will be hard to deal with a playing study

hall." Additionally, social loafers will profit from the existing situation, and the instructor is unable to recall them. The second possibility that playing video games could lead to fatigue and disruption was the subject of sub studies. A lot of people also raised the concern that gamification and gaming can lead to an unhealthy dependence on technology.

V. CONCLUSION

Gamification and serious games represent a lively approach toward language learning that manages to cover the diverse demands and interests of contemporary students by engaging ELLs. The significant potential of gamified tactics in transforming the conventional setting of language learning into an engaging and interactive one, which fosters cooperation and active engagement, demonstrates the findings of this study. Game mechanics and game elements teachers employ to elicit motivation, alleviate anxiety levels, and enhance vocabulary acquisition might serve as a means of shaping an attractive environment for students. Major benefits and opportunities identified in our analysis make in-class gamification and serious games worth considering. On the contrary, it outlined several risks and disadvantages that need to be addressed to be managed. This is the first exploratory research into this research program. We look forward in the future to conducting a quantitative study to investigate the relationship between students' performance and the critical success aspects of using ludic learning resources.

REFERENCES

- [1] Almeida, F., & Simoes, J. (2019). The role of serious games, gamification and industry 4.0 tools in the education 4.0 paradigm. *Contemporary Educational Technology*, 10(2), 120-136.
- [2] Cruz, P. J. A. (2022). Understanding students' engagement with a Serious Game to learn English: A sociocultural perspective. *International Journal of Serious Games*, 9(4), 137-152.
- [3] Dehghanzadeh, H., Fardanesh, H., Hatami, J., Talae, 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.
- [4] E. Prakash et M. Rao, «Transforming Learning and IT Management through Gamification, *International Series of Computer Entertainment and Media Technology*, » Switzerland: Springer International Publishing, 2015.
- [5] Ishaq, K., Rosdi, F., Zin, N. A. M., & Abid, A. (2022). Serious game design model for language

- learning in the cultural context. *Education and Information Technologies*, 27(7), 9317-9355.
- [6] J. T. Kim et W.-H. Lee, «Dynamical model for gamification of learning (DMGL),» *Multimedia Tools and Applications*, vol. 74, n° 119, pp. 8483-8493, 2015.
- [7] Karagiorgas, D. N., & Niemann, S. (2017). Gamification and game-based learning. *Journal of Educational Technology Systems*, 45(4), 499-519.
- [8] Landers, R. N. (2014). Developing a theory of gamified learning: Linking serious games and gamification of learning. *Simulation & gaming*, 45(6), 752-768.
- [9] M. G. Myhre, «Gamification in Mobile Language Learning: Improving User Satisfaction for Norwegian Immigrants, » 2015.
- [10] P. Buckley et E. Doyle, «Individualising gamification: An investigation of the impact of learning styles and personality traits on the efficacy of gamification using a prediction market, » *Computers & Education*, vol. 106, pp. 43-55, 2017.
- [11] Ricardo, C. P. (2017). Gamifying content and language integrated learning with serious videogames. *Journal of Language and Education*, 3(3), 107-114.
- [12] S. Roth, D. Schneckenberg et C.-W. Tsai, «The ludic drive as innovation driver: Introduction to the gamification of innovation, » *Creativity and Innovation Management*, vol. 24, n° 12, pp. 300-306, 2015.
- [13] W. Trooster, S. L. Goei, A. Ticheloven, E. Oprins, G. van de Boer-Visschedijk, G. Corbalan et M. van Schaik, «The Effectiveness of the Game LINGO Online: A Serious Game for English Pronunciation, » *Simulation and Serious Games for Education*, Springer, 2017, pp. 125-136.
- [14] Yanes, N., & Bououd, I. (2019, April). Using gamification and serious games for English language learning. In *2019 International Conference on Computer and Information Sciences (ICCIS)* (pp. 1-6). IEEE.
- [15] Zadeja, I., & Bushati, J. (2022). Gamification and serious games methodologies in education. In *International Symposium on Graphic Engineering and Design* (pp. 599-605).