

Game on: Boosting Students' Reading Motivation Through Gamification

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Abstract

Reading motivation is important since it affects not only the selection of reading materials but also the level of engagement and comprehension of the content. People of all ages can benefit from improved learning and educational outcomes if they comprehend the significance of motivation in reading. This study aimed to assess whether gamification increases the reading motivation of the BEED college students in Diaz College year 2025. Through purposive sampling, 30 first-year students were selected. With a pre-experimental approach, one group pre- and post-test, and with the use of a t-test, the study revealed that the value of t is 0.00001, and the value of p is <0.00001 . The result is significant at $p < 0.05$. Therefore, there is a significant difference between pre-test and post-test. Substantially, gamification proved to increase the motivation of the students in reading since it can stimulate and promote active reading sessions in the classroom. The findings recommend that gamification can be used to increase the students' reading motivation.

Keywords: Reading motivation, gamification, pre-test, post-test

Introduction

One of the macro skills one needs to master is reading. It aids in the development of competence and awareness of environmental events. This is typically one of the advantages that reading may offer people. According to Basmo (2021), reading offers several benefits, including psychological and intellectual ones. In the former category, reading can help one develop one's speech and vocabulary (Schreiner, n.d.).

Additionally, reading has a psychosocial benefit by lowering stress and sadness. Given these benefits, it is critical to provide support for reading and comprehension instruction in the classroom and at home. According to the results of the study, Reading Perceptions, Needs, and Practices among Parents of an Urban Poor Community in the Philippines, parents believed that reading was crucial for their children's social development and that reading starts at home (Gunobgunob-Mirasol & Topacio, 2021).

However, these advantages cannot be achieved easily since there are factors that contribute to achieving this ideal. One of the problems dominating the gaps is the students' motivation to read. According to the assessment and feedback of the teachers and students at Diaz College, most of the freshmen college students, particularly BEED students, were found to be low in reading performance due to a lack of motivation. In this context, freshmen BEED college students corroborated that they do not have intrinsic motivation to engage in reading activities. Motivation refers to the reasons that people act towards a goal. Psychologists understand that motivation can only be understood through behavior (<https://study.com/>, 2023). In this regard, the researchers would seek to address the motivational gap among the BEED students in the reading activity.

Literature Review

This section contains sources that define concepts and provide facts from some pieces of literature and studies.

Intrinsic Vs Extrinsic Motivation

Doing something because one is naturally engaged in the work or activity at hand is known as intrinsic motivation. Their motivation is centered on enjoying the action itself and finding a balance between their level of interest, perceived competence or capability, and the demands of the task at hand. They are not preoccupied with external rewards or accolades. As an illustration, a learner considers working hard without expecting a reward to be intrinsically motivated. On the other hand, the psychologists Edward Deci and Richard Ryan have defined intrinsic motivation as growth-oriented, which means it is the inclination to explore and learn. In contrast, extrinsic motivation is the act of engaging in a task or activity to receive external reinforcement or avoid punishment. Reinforcements can include verbal praise and recognition, awards, money, job titles, prestige, fame, popularity, degrees, or records (Bontempi, 2023). Contextually, the BEED students pertain to this gap.

Gamification in Education

The incorporation of game-like aspects into the educational process is known as "gamification." The goal of this creative strategy is to improve student motivation, engagement, and, eventually, academic results. Teachers can create an immersive learning environment that can make traditional teaching more engaging and fun by incorporating game design principles.

Using incentive systems is one of the main elements of gamification. Students can receive similar rewards for doing projects, taking part in debates, or reaching learning milestones as players in video games do by collecting points, badges, or levels. For instance, websites like Kahoot! and Classcraft enable educators to design challenges and tests that incentivize students for their work (C. Franco, 2022). In addition to encouraging active participation, these awards encourage healthy peer competitiveness, which transforms learning into a group activity.

In relation to the implication of gamification in education, the study of Smiderle et al. (2020) titled, The impact of gamification on students' learning, engagement, and behavior based on their personality traits, is relevant. Similar to how games can increase student engagement, gamification of education can help students develop certain skills and maximize their learning. However, scientific research has revealed negative consequences depending on the user. Researchers have examined the effects of gamification on students' behavior, learning, and engagement based on their personality traits in a web-based programming learning environment to gain some understanding of this problem. For four months, we ran an experiment with forty first-year undergraduate students enrolled in programming classes.

Despite conflicting research findings, gamification in education has demonstrated promise for improving student motivation, engagement, and learning outcomes. Relevantly, a study of Li et al. (2023) titled, Examining the effectiveness of gamification as a tool promoting teaching and learning in educational settings: a meta-analysis revealed a significant result. To assess the efficacy of gamification in learning, this meta-analysis examined 41 studies involving more than 5,071 participants. The results showed that the effect size was significantly substantial ($g = 0.822$). The study investigated the variables affecting this association and found that user type, educational discipline, design principles, length of gamified experience, and learning environments all had a significant impact. Measurement techniques and publication kinds, however, had no discernible effect on the results. These results hold significance for upcoming advancements in educational gamification.

Although some reports are conflicting, many gamification studies demonstrate positive benefits on learners' moods and outcomes. The title, Understanding gamification experiences with the benefits dependency network lens (McHenry & Makarius, 2022), investigates the reasons for the partial success of certain gamification initiatives. It implies that by examining the context in which gamification is used and considering it as a fusion of technological and human components, we may enhance it. This entails a cycle of selecting technology, allowing gamification, and analyzing the behaviors of both teachers and students. To better comprehend gamification and enhance future results, the study presents the Benefits Dependency Network (BDN), which analyzes the prerequisites for training and education success. By using the BDN, researchers can gain a better understanding of why certain studies yield ambiguous results.

Impact of Gamification on Students' Motivations and Engagement

In the realm of education, gamification has become a potent instrument, especially when it comes to raising students' motivation and reading engagement. Teachers can design more engaging and dynamic learning activities that motivate students to actively participate by adding game-like features. This paper investigates how gamification can increase student motivation and reading engagement.

Gamification has been used extensively in education in recent years. In this article titled, Play hard, Study Hard? The Influence of Gamification on Students' Study Engagement by Chen, J., & Liang, M. (2022), researchers develop a theoretical model to demonstrate how gamification affects students' study engagement. They tested hypotheses

using correlational, regression, and confirmatory factor analyses, and the results demonstrate that gamification affects students' study engagement through the indirect effects of enjoyment and self-efficacy. In addition, the implications and future research directions shall be discussed. Mediavilla et al. (2024) look at the evidence for gamification in education and how it affects student motivation and academic performance. A Systematic Literature Review (SLR) was done following PRISMA guidelines, using three databases: Web of Science, Scopus, and Scielo. Nine SLR articles from 2016 to 2022 were included, focusing on either student motivation or academic performance, with content in English or Spanish. The findings indicate that gamification positively impacts motivation, helping students learn and develop skills crucial for success. It highlights the importance of creativity and flexibility in effectively using gamification in classrooms. According to the findings, gamification has a major impact on students' motivation by helping them absorb information, develop their skills, and improve their academic competencies. In particular, it refers to a broad range of abilities that are necessary for success in the classroom and that can be improved through engaging and interactive learning experiences. These abilities can be social, collaborative, self-learning, cognitive, and more. It has been determined that the secret to successfully gamifying the classroom is innovation and flexibility.

The use of game-like aspects outside of games, especially in educational settings, is known as gamification. Because of its potential to improve learner happiness and engagement, this technique has been increasingly popular in recent years. Teachers can make standard learning experiences more dynamic and interactive by adding elements like challenges, leaderboards, badges, and points. This will keep students engaged and motivated. In addition, Baah et al. (2023) revealed through a study that the satisfaction attribute of motivation influences students' engagement in learning, whereas attention, relevance, confidence, and relatedness do not.

Moreover, the use of gamification also affects learners' intrinsic motivation. Appealing to intrinsic motivating aspects is one of the main reasons it works well in the learning process. Students feel more accomplished when they see their progress graphically reflected by badges or points. Students who finish modules or take part in discussions, for example, may receive badges from an online learning platform. In addition to offering instant feedback, this motivates students to establish and meet objectives. Such positive feedback can greatly increase a learner's propensity to interact with the content.

According to the study of Li et al. (2024) titled, Gamification Enhances Student Intrinsic Motivation, Perceptions of Autonomy and Relatedness, but Minimal Impact on Competency: A Meta-Analysis and Systematic Review, whether gamification in the classroom increases or decreases student motivation, it is still an effect that needs to be considered. The study examined studies conducted between 2011 and 2022 with an emphasis on the differences between gamified and conventional learning. According to a meta-analysis of 35 trials involving 2,500 students, gamified learning has a minor but noteworthy advantage. Gamification had minimal impact on perceived skill, but it enhanced students' sense of autonomy and relatedness. The modest influence on intrinsic motivation may be explained by issues such as learners' feeling unqualified or powerless, according to a further analysis of 31 studies.

Gamification improved students' sense of autonomy and relatedness while having little effect on perceived skill. Relevantly, the study of Kumar Bharti (2023) emphasized that students' motivation is positively impacted by gamification since it cultivates a sense of competence and autonomy. Learners reported improved concentration on learning assignments, higher willingness to persevere in the face of difficulties, and increased engagement with the course materials. By successfully addressing both intrinsic and extrinsic motivation, gamification components like points, leaderboards, and awards raise students' interest in the material. Moreover, it has a major impact on learning outcomes when properly planned and executed. Students who were exposed to gamified learning environments demonstrated enhanced comprehension of difficult topics, better academic achievement, and increased memory of course material. Gamification's cooperative and competitive elements encourage engagement and information sharing.

The studies are pertinent to the current investigation since they all highlight how gamification affects students' motivation and learning through a variety of approaches, settings, and research topics. The current study most likely explores gamification as a means of gauging the reading motivation of BEED students.

The definition of gamification by Franco (2022) and Bontempi (2023) highlights the facts and empirical evidence of this strategy and how it could be used in the landscape of education. Due to the emergence of this innovation, several studies have yielded findings that support the contribution of gamification in the motivation and engagement towards students' learning and other aspects such as autonomy, relatedness, and competence.

Substantially, the studies of Smiderle et al. (2020), Li et al. (2023), McHenry and Makarius (2022), Chen, J., and Liang, M. (2022), Mediavilla et al. (2024), Baah et al. (2023), Li et al. (2024), and Kumar Bharti (2023) revealed that gamification had an astonishing effect on the learners. Through gamification, learners show an incredible performance in learning, and their attitude changes positively towards any activity as long as they are satisfied. Furthermore, their intrinsic motivation increases after intrinsic motivation. Although gamification shows an incredible output in the landscape of education, limitations still exist in various contexts and methods of a certain study.

In the present study, the researchers identify a gap among BEED students' motivation in reading at Diaz College, year 2025. Thus, the researchers aim to address this gap by utilizing gamification as a strategy in gauging students' reading motivation.

Statement of the Problem

Based on the assessment and feedback from the teachers and students, it is evident that the first-year BEED students in Diaz College have low motivation in reading, which has caused them to have low performance in academics. In this regard, this study aimed to assess the first-year BEED students' reading motivation.

Specifically, it sought to answer the following questions:

1. What is the perceived motivation of BEED students in the pre-assessment?
2. What is the perceived motivation of students in the post-assessment?
3. Is there a significant difference between the students' perceived motivation in pre-assessment and post-assessment?
4. What are the insights of BEED students in reading before and after the gamification was used?
5. Based on the findings, what recommendations can be made?

Methodology

This chapter presents the research design, respondents, sampling technique, instrument, procedure, and data treatment of the study.

The research design of this study is pre-experimental. This method of using pre-experiments is the simplest kind of research design. One or more groups are observed following the administration of a therapy or agent that is believed to bring about change in a pre-experiment. These are usually conducted as a first step to assess the quality of the evidence proving or disproving an intervention (DeCarlo, 2018). One-shot case study design, static-group comparison, and one-group pretest-posttest are the three main pre-experimental forms.

The one-group pretest-posttest design, which uses two points in time—one before and one after the treatment—to be examined for a single case, was employed in this investigation. It is believed that therapy or intervention altered the desired result. A comparison or control group is not used. Because the researcher used a treatment to improve the reading motivation of the BEED students in Diaz College (case), it was very suited for the study. The study's case was the subjects' reading motivation, which was assessed at two different times. The pre-assessment took place at the first point, and the approach was applied at the second point. The learners' scores before and after implementing the technique differed significantly, as revealed by the two-time points principle.

In this study, purposive random sampling was utilized as a sampling technique. Purposive sampling is a collection of non-probability sampling methods where units are chosen based on the qualities you require in your sample. Put differently, purposive sampling involves the "on purpose" selection of units (Nikolopoulou, 2022). In this case, the BEED students were purposively selected to be part of the study.

Moreover, the instrument used in this study was the story of a Filipino author, Filomena Colindrino, titled "Why women wash dishes?". This was used as material in the reading activity, both pretest and posttest.

During the post-assessment, the researcher-facilitator integrated gamification into some parts of the reading activity. The researcher-facilitator made use of questions and answers with rewards who answered the question in the middle of the reading activity. Consequently, the results of the assessments were calculated and interpreted using the adopted survey questionnaire by Rak Neugebauer, S. (2016).

To calculate the perceived reading motivation of the BEED students before and after the implementation of gamification, the mean and Likert scale were utilized. Moreover, the result of the data was supported by the verbatim of the respondents through focus group discussions (FGD). Moreover, to solve the significant differences of the pre and post assessment, t-test was used.

Results

This section presents the data collected from the students' pretest and post-test results in both tabular and textual form. To find the answers to the study's listed questions, the data were subjected to the proper statistical tests, then examined and interpreted.

Table 1. Pre-assessment of students' perceived motivation in reading

Perceived reading indicators	Mean	Description
1. I liked thinking deeply about the materials I read	1.67	Not at all true for me
2. I wanted to be knowledgeable about the topic I was reading about	1.47	Not at all true for me
3. I enjoyed thinking about the concepts I read about	1.6	Not at all true for me
4. My full attention was on the ideas/information in the text	1.6	Not at all true for me
5. I wanted to understand the concepts I was reading about	1.7	Not at all true for me
6. I read to get more information about a specific topic	1.67	Not at all true for me
7. I felt interested to learn something new through reading	1.57	Not at all true for me
8. I created pictures in my mind while I thought about the texts	1.33	Not at all true for me
9. I was interested in the materials we were reading	2.03	A little bit true for me
10. I liked making connections between things I read and my ideas	1.5	Not at all true for me
11. I read because I was interested to learn new information	1.77	Not at all true for me
12. When we discussed a text in class, I wanted to read more about it	1.63	Not at all true for me
13. I enjoyed reading and did not want to stop reading	1.57	Not at all true for me
14. I felt like I connected with characters or ideas in the texts	1.6	Not at all true for me
15. I read because I was curious to learn more about the topic	1.73	Not at all true for me
16. I was really focused on what I was reading	1.67	Not at all true for me
17. I found what I was reading gripping and exciting	1.7	Not at all true for me
18. I wanted to learn more about the topic I was reading about	1.7	Not at all true for me
Overall Mean	1.64	Not at all true for me

1-Not at all true for me 2-A little bit true for me 3-Mostly true for me 4-Completely true for me

The table shows that among the item indicators of perceived reading motivation of BEED college students, item number 8 gained the lowest mean, which is demonstrated by 1.33. Additionally, item 8 pertains to creating pictures in their mind while they thought about the text. According to the verbatim of the respondents, they felt bored during the reading activity. They were sleepy, and to some extent, they were not used to reading at home. These ideas contribute to the reading motivation of BEED students. Surprisingly, item number 9 obtained the highest means, which is evidenced by 2.03. Respondents corroborated that at some point, they were a bit interested in the reading material. Generally, the perceived reading motivation of BEED college students is 1.64, which means that most of the items were not true from the perspectives of the students.

Table 2. Post-assessment of students' perceived motivation in reading using gamification

Perceived reading indicators	Mean	Description
1. I liked thinking deeply about the materials I read	3.1	Mostly true for me
2. I wanted to be knowledgeable about the topic I was reading about	3.2	Mostly true for me
3. I enjoyed thinking about the concepts I read about	3.1	Mostly true for me
4. My full attention was on the ideas/information in the text	3.37	Mostly true for me
5. I wanted to understand the concepts I was reading about	3.17	Mostly true for me
6. I read to get more information about a specific topic	3.03	Mostly true for me
7. I felt interested to learn something new through reading	3.17	Mostly true for me
8. I created pictures in my mind while I thought about the texts	3.5	Mostly true for me
9. I was interested in the materials we were reading	3.43	Mostly true for me
10. I liked making connections between things I read and my ideas	3.4	Mostly true for me
11. I read because I was interested to learn new information	3.3	Mostly true for me
12. When we discussed a text in class, I wanted to read more about it	3.33	Mostly true for me
13. I enjoyed reading and did not want to stop reading	3.27	Mostly true for me
14. I felt like I connected with characters or ideas in the texts	3.37	Mostly true for me
15. I read because I was curious to learn more about the topic	3.47	Mostly true for me
16. I was really focused on what I was reading	3.07	Mostly true for me
17. I found what I was reading gripping and exciting	3.4	Mostly true for me
18. I wanted to learn more about the topic I was reading about	3.17	Mostly true for me
Overall Mean	3.27	Mostly true for me

1-Not at all true for me 2-A little bit true for me 3-Mostly true for me 4-Completely true for me

The table presents the perceived reading motivation of BEED college students after the utilization of gamification. Item number 6 had the lowest mean, as demonstrated by 3.03, which means that their perceived reading motivation pertains mostly true in terms of reading to get more information about a specific topic. Surprisingly, item number 8 obtained the highest mean, as evidenced by 3.5. This means that it was most likely true for the respondents to create

pictures in their minds while they thought about the text. This is substantiated by the statements of the respondents who confirmed that when gamification was employed, their reading motivation changed. They were so attentive to listening to the question of the student-teacher moderator, as they were expecting rewards. Moreover, they liked it when they were asked to imagine some of the scenes in the story. According to them, they prefer this kind of strategy since it stimulated their motivation and interaction in the class's reading activities. With the positive result and feedback on the use of gamification, the general perceived reading motivations of BEED college students are most likely to be true, as reflected in the items, as demonstrated by 3.27.

Table 3. Difference in the pre- and post-assessment

	Mean	<i>t</i>	df	Sig 2-tailed
Pre Test	1.64	-43	29	0.00001
Post Test	3.27			

Upon computing the data, it showed that the value of *t* is 0.00001, and the value of *p* is <0.00001 . The result is significant at $p < 0.05$. Therefore, the null hypothesis is thereby rejected. Thus, there is a significant difference between the pre-test and post-test.

Discussion

This section provides a detailed discussion on the results of the study's objectives. To start, it revealed that in the pre-assessment, the general perceived motivation of third-year BEED students is 1.64, which means that the items of the survey questionnaire are most likely not true as perceived by them. Based on the verbatim of the respondents, They were not motivated due to the boredom that they felt during the reading activity. They were not engaged since they were not used at home in self-paced reading. According to Gourley, G. (2025), students have poor reading motivation since they do not have an interest in reading or the materials being read. If this continues, they will end up becoming non-readers and will affect their cognitive capacity since text reading serves as a foundation for incidental word learning. it is also plausible that poor reading comprehension limits future vocabulary increases (Spencer, M., & Wagner, R. K., 2018). Moreover, students' poor academic performance is associated with reading anxiety. In fact, according to the study of Soares et al. (2023), academic performance has a direct positive correlation with students' academics. This is substantiated by the verbatim of the respondents, where they emphasized that some of them were not comfortable reading since they felt fear that they might not understand or could not answer when asked by the teacher.

Not only about the students' innate lack of interest and motivation to read, but also the nature of the student to have a specific comprehension deficit. According to the study of Spencer, M., & Wagner, R. K. (2018), comprehension deficit of the learner is possible despite adequate decoding.

Table 1 emphasized the results of the BEED students in the pre-assessment and generalized to have low motivation due to low interest and anxiety in reading.

On the other hand, Table 2 presents how students responded to the reading activity with the use of gamification. It showed that the general perceived motivation of the students in reading pertains to be mostly true for them. This is supported by the verbatim of the respondents when they expressed their insights during the reading activity with the implementation of gamification. According to them, they felt excited about the activity since they would be rewarded. They were encouraged to look at the words closely and think of images in the scenes of the story. This is supported by the study of Matyakhan et al. (2024) titled, Implementing Gamification to Enhance Reading Engagement and Reading Comprehension of Thai EFL University Students. The results showed that the participants expressed favorable opinions and insights about gamification in learning. With the creative and different approach to changing a reading class from traditional to modern, students were motivated to participate in the reading activity. Moreover, while students' motivation increased with gamification in the reading activity, their ability to facilitate knowledge and interact in the class also increased. Substantially, this event is corroborated by the study of Jaramillo-Mediavilla et al. (2024). Based on the findings, gamification has a significant impact on motivation by helping students assimilate knowledge, improve their skills, and develop their academic competencies. Among other things, these abilities may be social, collaborative, self-learning, or cognitive. The implementation of gamification in the classroom is found to be mostly dependent on creativity and flexibility.

Conclusion

This study concluded that gamification could increase the reading motivation of learners. Thus, it stimulates and provides venues for active interaction in the class reading activities. It is suggested that for learners who struggle with reading habits, gamification can be used. Moreover, Gamification makes activities more interesting and

pleasurable by introducing game-like aspects into non-gaming environments. The use of gamification in this study has a positive result in increasing students' reading motivation. Furthermore, this study recommends that teachers and practitioners should make conventional reading sessions into engaging, interactive adventures by implementing gamification strategies.

For future researchers, it is recommended to use another variable for a deeper understanding of reading motivations among learners in a different context.

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