

The Use of Gamification in Teaching Vocabulary of 11th Grade Students at SMAN 4 Mataram

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Abstract: This study delves into the transformative potential of integrating gamification principles into vocabulary learning for 11th-grade students at SMAN 4 Mataram. Vocabulary acquisition is critical for academic progress, especially in preparation for standardized exams and college admissions, yet conventional methods often lack student engagement. Gamification, defined as the incorporation of game elements into non-gaming contexts, emerges as a promising strategy. The research explores how English teachers at SMAN 4 Mataram employ gamification, addressing questions about the types used, advantages gained, and obstacles faced. Using a qualitative descriptive approach, the study identifies two principal gamification classifications: content gamification, involving modifications to educational materials, and structural gamification, integrating game elements without altering content. Teachers utilize diverse gamification methodologies, fostering interactive learning environments. Challenges include accommodating diverse student abilities and aligning with evolving curriculum requirements. Theoretical implications span educational gamification, cognitive processes in vocabulary acquisition, and motivation theories. Practically, the study aims to enhance students' vocabulary skills, academic performance, and engagement, offering valuable insights for educators and policymakers in leveraging gamification for improved language learning outcomes.

Keywords: gamification, vocabulary learning, teaching strategy

INTRODUCTION

Vocabulary stands as a crucial element in the journey of acquiring a language indispensable for the academic progress of students and effective communication (Cameron in Rumaisyah et al., 2023). A strong vocabulary holds particular importance for 11th-grade students who frequently engage in preparation for standardized exams and college admissions. Nonetheless, conventional methods of vocabulary instruction often fall short in capturing students' interest, leading to diminished retention and motivation levels to acquire new vocabulary.

The application of game design elements to non-game contexts is a definition of gamification but until the second half of 2010 it did not gain widespread acceptance (Deterding et al., 2011). Besides that, (Deterding et al., 2011) also defined gamification as the incorporation of video game elements into non-game systems in order to enhance the experience of the user or increase user attachment to the environment. Next, the term gamification was redefined by (Werbach, 2014) as the process of incorporating game-like elements into non-game activities. According to (Landers et al., 2014), gamification is also defined as the process of building a game-like learning environment by adapting points, leaderboards, and badges of game design elements to non-game contexts. Gamification, according to (Kapp, 2012), is not merely the application of mechanics and elements of a game to create more engaging learning; rather, it is the concept of enlarging the engagement of the learners, modifying interactive learning contexts, also accomplishing the autonomy of students' learning. (Shortt et al., 2021) stated that some of the visible incentives in the class such as competitive scores, cumulative scores, rewards, and badges appear to create expected behaviors from the students.

Utilizing gamification in language learning, particularly in the realm of acquiring vocabulary, stands as a burgeoning area of study. Games create a vibrant and engrossing educational setting wherein students actively engage in the

learning process. Through repetition, comprehension of context, and real-world application, games have the capacity to strengthen vocabulary learning, all the while preserving an enjoyable learning experience.

Gamification, which involves incorporating game elements and mechanics into non-gaming contexts like education, taps into the inherent appeal of games, such as competition, rewards, and interactivity, to enhance the educational experience. The application of the concept of dynamics, game techniques, and structures in educational environments is the basis of gamification. In educational situations these are expected to increase motivation, establish attachment to the environment, also encourage individuals to engage in the desired behaviors (Deterding et al., 2011) ; (Lee & Hammer, 2011). It is estimated that, the unity of the students can be built through gamification by the application of game thinking, game-based mechanics, and game aesthetics to develop their motivation, encourage them to learn, and help them find the resolution of the problems (Kapp, 2012). The primary objective of gamification besides entertainment, is also strengthen people's attachment to the environment, motivate them, and let them have access to a variety of diverse experiences (Lee & Hammer, 2011). (Filippou et al., 2018) report that gamification is highly effective at enhancing motivation, learning, participation, and achievement. In a nutshell, gamification endeavors to utilize the game elements that maintain motivation and interest during games to similarly motivate and retain the learner in the system when conveying specific educational content that would not ordinarily involve a game. In short, an educational environment through gamification in education should strive to create a meaningful culture for the students and help them achieve intrinsic motivation through the integration of game elements into the environment.

The gamification strategy entails incorporating game mechanics into an online community, educational tool,

website, or other enterprise system in order to increase engagement and motivation (Deterding et al., 2011). (Lee & Hammer, 2011), (Kapp, 2012), (Bicen & Kocakoyun, 2018) think that gamification is an innovative trend in education that aims to create a more engaging learning process for students with a learning environment that is fun and humorous. It is also believed can facilitate and encourage student participation in learning. Students can experience a sense of enjoyment also engagement in gamified learning contexts. Besides that, they also can succeed in overcoming a challenge, receive immediate feedback until ultimately feel a sense of accomplishment (Bicen & Kocakoyun, 2018).

The use of gamification activities in previous studies has been proven that in the class it meet student needs attract students' attention (Carless & Lam, 2014), increase student participation, motivation, and achievement (Buckley & Doyle, 2014); (Domínguez et al., 2013), and helps students adopt such new behaviors as trying new learning methods (Karataş, 2014). More time has been spent by students on course-related materials through a carefully designed gamification process and it has also been proven (Kalliopi, 2011). Other than that, higher-level thinking skills such as faster decision-making, empathizing, performing multiple operations, measuring knowledge and as well as for developing a commitment to the class, and assisting students in thinking the unthinkable can be taught also by this kind of thing. A review of the literature on gamification reveals that this strategy is widely acknowledged as highly effective for increasing the motivation and participation of the digital generation and assisting them in developing age-appropriate behavior.

This exploration seeks to reveal the transformative potential when gamification principles are applied to vocabulary learning within the broader educational context. It delves into the ways in which gamified approaches not only enhance motivation and engagement but also offer innovative tools for expanding one's lexical repertoire. By seamlessly weaving the excitement of games into the process of vocabulary acquisition, educators can inspire learners to actively explore, experiment, and master language in a manner that is both enjoyable and effective.

RESEARCH METHOD

This study employed a qualitative research approach as its research design. Qualitative research is a method utilized to gain insight into the meanings that individuals or groups ascribe to social or human issues (Sutton & Austin, 2015). The qualitative method is a means of examining phenomena as experienced by research participants. This approach involves comprehensively understanding aspects like behavior, perception, motivation, and actions, among others. The data collected using this method is described using words and language, within the natural context where the phenomena occur. Various natural techniques, such as interviews, observations, and discussions are frequently employed in qualitative research. Therefore, in this study, the researcher employed a qualitative approach to delve deeply into the subject matter. This research design was anticipated to facilitate the acquisition of extensive insights from participants regarding the investigated issue. Qualitative data were gathered through questionnaires and interviews, and these data were subjected to content analysis. The analysis process entailed the identification of recurring themes and patterns within the data, aimed at elucidating the utilization of

gamification in teaching vocabulary of 11th-grade students at SMAN 4 Mataram.

The participants of this study were students and teachers in SMAN 4 Mataram. In selecting the participants for this research, certain criteria were set, such as students who had participated in gamified vocabulary learning programs. Questionnaires were used to explore the students' experiences with gamification and how it had helped them in broadening their vocabulary. Interviews were conducted with teachers who had used gamification in teaching vocabulary. Additionally, the interviews were used to explore the teachers' experiences with gamification and how it had helped their students acquire new vocabulary. This research were conducted in 11th grade classes at SMAN 4 Mataram in October 2023 to November 2023. The goal of this research is to explore the use of gamification in teaching vocabulary of 11th grade students at SMAN 4 Mataram.

The research utilized data consisting of the viewpoints of both teachers and students concerning the effectiveness of gamification in enhancing vocabulary acquisition for 11th-grade students at SMAN 4 Mataram. To gather the required information, various methods for data collection were employed, as follows:

1. Observation

The purpose of this study is to understand the strategies employed by teachers when implementing gamification in the classrooms of SMAN 4 Mataram. The research employed a checklist observation method, adapted from (Holmes, 2013). Holmes' checklist observation method is a type of observational research technique that utilizes a checklist to document particular behaviors or occurrences. Typically, the researcher customizes the checklist to align with their research questions and the specific behaviors or events they wish to observe. Once the checklist is prepared, the researcher observes the participants and records whether each behavior or event takes place. Additionally, the researcher can document the frequency, duration, or intensity of these behaviors or events. The checklist observation method is relatively straightforward but proves highly effective in gathering data related to specific behaviors or events. Furthermore, it minimizes interference with the natural progression of events, making it a relatively non-intrusive data collection method.

2. Interviews

To gather the necessary data, interviews were conducted with the teachers who teach 11th-grade students at SMAN 4 Mataram and have used gamification to teach vocabulary acquisition. The interview involved direct interaction between the interviewer and the respondents as what (Rubin, 2012) did. In this research, the interviews were semi-structured and encompassed a set of 15 open-ended questions adapted from previous studies. These questions are thoughtfully designed to elicit the information required to address the research inquiries effectively. The teachers were specifically questioned about their firsthand experiences with gamification and its impact on their students' learning and acquisition of new vocabulary. Thereunto, the questions of this interview has been contrusted as guidance to the researcher in conducting the interview based on previous study that relate to the topic of this study (Creswell, 2013). Whereas, the making of this instrument has been reviewd by the expert in education field since the instrument was constructed based on the

assessment in questionnaire form that has been developed by this field. To put in consisely, during the interview was conducted the researcher developed other questions when the researcher found unclear answer from the participants.

3. Recording

In order to avoid the loss of data need, the interviews were recorded using a voice recorder. During these interviews, the researcher also posed impromptu questions to gather supplementary data when deemed necessary. It is important to note that the data collected through these approaches were not real-time but instead provide insights into the participants' experiences.

4. Questionnaires

Questionnaires were distributed using paper surveys with open-ended questions to 11th-grade students who have engaged in gamified vocabulary learning programs in a suitable classroom setting. A research instrument called a questionnaire consists of a series of queries (or other types of prompts) designed to collect data from respondents in a statistical study or survey. As what (Mayring, 2000) suggest in scientific research surveys, it is common to include a combination of questions, some of which are open-ended and others that are close-ended. To avoid misunderstanding between the researcher and participants, the researcher distributed the questions in both English and Indonesian language.

In Making sure the data in this study is top-notch relies on two big things: validity and reliability. In line with the statement of Sugiyono (2008), validity is all about how well the data matches up with what the researcher can actually report. He also defined that reliability is about how steady and consistent the data is. In the world of qualitative research, having valid findings means the researcher's reports sync up with what really went down among the subjects. It is like both the participants and the researchers are on the same page when they talk about and explain what happened.

Since the researcher using interview and questionnaire to gather data in this study, the researcher using two strategies. First up is triangulation. This idea, pumped up by Brink (1993), brings in multiple angles – different investigators, methods, and data sources. The goal here is to double-check our findings and make sure the researcher's biases don't mess things up. We're also tapping into the thoughts of various experts, like Glassuer & Strauss (1967), Sandelowski (1981), Miles & Huberman (1984), and others, to really dig into and double-check the data.

Then there's expert consensual validation. Brink (1993) says this is about getting the thumbs up from people who really know the study's topic. In this study, this involves the teachers who teach 11th grade students at SMAN 4 Mataram with gamified learning. These experted teachers help the reseacher out at different points, dropping knowledge that makes the study way better.

The qualitative data analysis in this study is summarized by drawing on various models and approaches from Denzin & Lincoln (1994), Miles & Huberman (1994), Marshall, C. & G. Rossman (1995), Rubin & Rubin (1995), and Sugiyono (2008). The researcher in this study follows the steps outlined by H. O'Connor & N. Gibson (2003) and Rahmat Sahid (2011), adapting their models. The utilization of multiple models and approaches is rooted in the implementation of validity and reliability processes. This study employs diverse

approches in analyzing the data. The steps of qualitative data analysis are elaborated below:

1. Organizing the Data

In this initial step, the researcher organizes the data by condensing and prioritizing it. Organizing interview-based data can be time-consuming. H. O'Connor & N. Gibson (2003) suggests starting by reflecting on the interview guide, differentiating questions based on each topic, and noting down participant answers. The researcher creates a table to facilitate data analysis, following the steps adapted from H. O'Connor & N. Gibson (2003) and Rahmat Sahid (2011), including:

1) Analysis during Data Collection:

Recording objective notes during data collection, classifying and editing answers or situations as they are, maintaining a factual or objective-descriptive approach.

2) Making Notes, Code, and/or Label to the Data:

Differentiating and classifying data based on frequently used phrases and words, evaluating the relevance of answers to the study's objective and research questions. The researcher assigns codes and/or labels using different color blocks in the table for classified answers.

2. Data Display

The presentation of data in this study employs tables, followed by a detailed narrative and descriptive explanation. Specifically, the data is showcased using a conceptually clustered matrix, as outlined by Miles and Huberman (Rahmat Sahid, 2011). This model is chosen due to the study's emphasis on triangulation with multiple theoretical perspectives, aligning well with the validation and reliability processes inherent in the conceptually clustered matrix. According to Rahmat Sahid (2011), the conceptually clustered matrix serves to summarize diverse research findings from various experts, each with distinct concerns. Throughout the data analysis process in this study, the researcher establishes connections between the study's results and multiple previous studies and theories related to self-regulated learning and academic procrastination.

FINDINGS AND DISCUSSION

Research Finding

This research aimed to determine the use of gamification in teaching vocabulary at 11th Grade Students at SMAN 4 Mataram. The qualitative descriptive method was applied in this research. The finding of this study was gained through observation, questionnaire, and interview. The interview with the teacher is executed to answer the first and the third of research question and in obtaining its first, and third research objective regarding the types of gamification that are used in teaching vocabulary and the factors that hurdle the 11th grade students' teacher at SMAN 4 Mataram in applying gamification in teaching vocabulary. Correspondingly, the questionnaire were carried out in gaining the second and overall research objectives on the advantages of using gamification as an educational strategy for enhancing vocabulary building of 11th grade students at SMAN 4 Mataram. Consisely, the finding report on this chapter is written based on the research objective that has been established by the researcher.

Types of Gamification

The first research question in this study is what types of gamification that are used by the English teachers of the 11th grade students at SMAN 4 Mataram. There are two categories of gamification for this research question based on the findings and data analysis which are **content gamification** and **structural gamification**.

Based on those types, after conducting a research and data analysis, this study found that structural gamification refers to the process of application of game elements to learning content without changing the content. The gamification is designed and structured around the content. The main aim behind structural gamification is to motivate the learner to proceed through the content and engage them in it through rewards. For instance, the learner would gain points for completing a course segment or an assignment. The learning material itself may have no game elements, but the points or badges at the end are the game element. Meanwhile, content gamification refers to the application of game elements and thinking to content and altering the content to make it more game-like. In this kind of gamification, the learning material itself has game elements like characters or other story elements like scenario.

This study discovered that 11th grade students' English teacher uses two categories of gamification in teaching vocabulary, which is content gamification and structural gamification. For the content gamification, the teacher uses Puzzles, Crosswords, and Badges&Points, and for the structural gamification, the teacher uses Feedback Loops, Q&A sessions, Storytelling and Challenges. The researcher concludes that the respondent uses 7 types of games in teaching vocabulary of 11th grade students. The detail explanation about the finding of 6 types of games is explained below:

1. **Puzzleword:** Puzzleword refers to a word puzzle or game where players rearrange letters to form words. It often involves solving clues to find the correct words. Puzzleword games help reinforce vocabulary by requiring students to actively engage with and recall words. It enhances word recognition, spelling, and cognitive skills.
2. **Crosswords:** Crosswords are word puzzles in a grid format where clues are provided for each word. Players fill in the grid with words based on the given clues. Crosswords are effective for expanding vocabulary as students learn new words through context clues. It promotes word association and understanding of word meanings.
3. **Feedback Loops:** Feedback loops involve providing information about performance, allowing learners to make adjustments and improve. In the context of teaching, it's a continuous cycle of assessment and improvement. Feedback loops in vocabulary learning offer students insights into their progress, helping them identify areas for improvement. It enhances retention and application of newly acquired words.
4. **Q&A Sessions:** Question and answer (Q&A) sessions involve interactive discussions where students respond to questions posed by the teacher or peers. Q&A sessions encourage active participation, allowing students to articulate their understanding of vocabulary. It improves communication skills and reinforces word usage in context.
5. **Storytelling:** Storytelling involves narrating or creating a narrative. In an educational context, it can be used to convey information or teach concepts through a compelling story. Storytelling aids vocabulary learning by presenting

words in a meaningful context. It enhances comprehension, encourages creativity, and allows students to grasp the nuances of language.

6. **Badges Points:** Badges and points are a gamification element where students earn virtual badges or points as a reward for achievements or completing tasks. Badges and points serve as motivational tools. Students earn rewards for expanding their vocabulary, creating a sense of accomplishment and encouraging continuous effort. Badges and points serve as motivational tools. Students earn rewards for expanding their vocabulary, creating a sense of accomplishment and encouraging continuous effort. Gamification elements like badges and points provide incentives for vocabulary learning. They create a sense of achievement and motivate students to actively participate in language-related activities.
7. Of these six gamification types, their use is adjusted according to the class. Feedback Loops, Q&A Session, and Storytelling are more commonly employed in classes with students who actively communicate and have a basic interest in English. Meanwhile, Puzzleword, Crossword, and Badges & Points are utilized in classes where students have less interest in English. These games are used to captivate students' interest in learning and to expand their English vocabulary, making the learning process more engaging for them.

Furthermore, the part of the interview that explains the findings are shown below:

The choice of gamification type depends on the class being taught. If one class has active verbal communication among its students, I usually use gamification through Q&A and feedback loops. On the other hand, in classes where students are less active, to make them excited, I typically use Puzzleword, crossword, and badges & points, as fundamentally, everyone enjoys playing. – R01/RQ1/Q4

Initially, the students are provided with keywords, referring to important words related to the material we will cover. For example, if it's a descriptive text, we inform the students about its purpose and what we intend to explain, let's say we're discussing about Narmada Park. Afterward, we identify vocabulary that students may encounter in English. When we come across these words, we write them on the board as keywords to guide students to the upcoming material. We intentionally introduce certain words to facilitate students' understanding of the content, whether it's in the form of speaking, reading, writing, or listening. – R01/RQ1/Q2

There are many techniques. One of them involves eliciting vocabularies from the context of the material we present, whether it's a description or narrative. For instance, we might discuss the Princess of Mandalika, a familiar figure for students. By asking questions like "What do you know about Princess Mandalika?" and using Indonesian as a backup, we elicit vocabulary. We use methods such as starting with certain letters or spaces to encourage students to guess and participate actively. I often use puzzles, and crosswords, or feedback loops, and QNA sessions. The method varies for each class based on their unique characteristics. -R01/RQ1/Q2

There are many ways, not limited to a single type of game. It could involve puzzles or other designed games. The key benefit is that it makes students happy and engaged from the beginning of the teaching learning process. When they enjoy the material, it serves as a trigger for them to delve deeper into the learning process, the game excites them. - R01/RQ1/Q9

The Obstacles Found in Applying Gamification in Teaching Vocabulary

In the implementation of gamification in teaching vocabulary, several challenges arise for educators, as highlighted in the interview with the respondent below:

It depends on the students' intake. If they have a good intake, they may enrich their vocabulary further. However, for slow learners, simply identifying and remembering the material is already a significant achievement. If we force a low intake, we'll face challenges. -R01/RQ3/Q5

Returning to the intake, if the intake obtained is favorable, the student may attempt to enrich their vocabulary from other sources. However, in the case of our intake involving slow learners, their ability to identify is already remarkable. Thus, reverting to the earlier point, if we impose a low intake, we will encounter difficulties. Hence, when we attempt to provide keywords, bringing forth the previously challenging vocabulary, those adept in the subject automatically seek to enhance their knowledge with additional terms, including synonyms, and more. As for the slow learners, at the very least, they will recall and reflect upon the material, drawing from their own experiences. Although the extent of their success has not been formally measured, we glean insights from our daily teaching activities. -R01/RQ3/Q7

One notable difficulty involves accommodating diverse student abilities, a concern articulated by the respondent who emphasizes the necessity of tailoring gamification methods to engage both active students, typically those with higher abilities, and finding ways to involve less competent students. This highlights the importance of addressing varying levels of student engagement and proficiency within a classroom, requiring careful consideration to ensure that gamification strategies effectively cater to the diverse learning needs.

Certainly, my approach involves grouping them, specifically by categorizing students. So, in this scenario, hypothetically, if we were to represent it statistically, approximately 20% of the students possess a higher proficiency. Now, this 20% is organized by combining them with the slow learners. At the very least, slow learners are involved in the teaching and learning process, participating in discussions, even if conducted in Bahasa Indonesia. Additionally, the role of the teacher is not only to observe students but also to provide support and encouragement to those who may exhibit a tendency to be less engaged or less competent. This involves encouraging deeper involvement through prompts such as "What do you think about your friend's opinions?" and "What is your opinion? Where do you get the answer?" Thus, ensuring there is at least communication, as the essence of language learning lies in effective communication. If the primary issue faced is indeed poor vocabulary, a deficiency in terms, implying limitations on the part of the students, for high school education in this institution, we utilize materials that are inherently simple but highly applicable. If we were to employ more advanced materials, only a few students would be able to actively participate. -R01/RQ3/Q4

Each class is distinct because the intake we acquire is also varied. Consequently, we cannot impose the same instructional steps outlined in the lesson plan on every different class. -R01/RQ03/Q3

As the respondent stated above, another challenge revolves around the need for an individualized approach. The respondent underscores the inadequacy of a generalized gamification approach, emphasizing that methods must be

adapted based on each class's unique characteristics. This individualized approach demands additional preparation and resource allocation, recognizing the specific dynamics and learning styles inherent in each class.

Assessment and academic integrity also emerge as challenges, as the respondent acknowledges the need for vigilance in assessments due to the potential for students to copy from their peers. This underscores the importance of employing effective assessment strategies that accurately reflect individual student progress in vocabulary retention while ensuring the integrity of the learning process. As stated by the respondent:

Automatically, the results of the assigned tasks will be evident, but this does not lead us to boast because sometimes students tend to cheat. However, at the very least, this becomes a gauge for us when assessing the capabilities of the students. Hence, here we incorporate a drill approach. "Oh, it turns out the students encountered some challenging vocabulary; let's conduct a drill." It could be that they copied from their peers, and they might not be aware of it. Once we conduct the drill, there is a record in their minds because they have pronounced and uttered those words before. The second aspect is that they have written it down; they might forget today, but tomorrow we attempt it again, eliciting it when we say it. The words resurface, leading to frequent repetitions of previously deemed difficult vocabulary. Consequently, when we administer reading or speaking tests, the students, at the very least, comprehend and have experienced it, as experience is crucial in language. Language comprises four skills: reading, listening, writing, and speaking. If these are not practiced, students will automatically struggle to acquire proficiency. -R01/RQ03/Q8

Lastly, the alignment of gamified learning methods with evolving curriculum requirements may present challenges, as the respondent suggests that effectiveness depends on the chosen method. Educators need to stay flexible and adaptive, continuously evaluating and adjusting gamification strategies to align with curriculum changes and evolving educational goals. As stated by the respondent below:

Engaging methods will encourage student participation. Thus, I believe it aligns with the independent curriculum. Consequently, teachers need to skillfully design teaching modules and effective methods tailored to students' needs. -R01/RQ3/Q10

In conclusion, successfully integrating gamification into vocabulary teaching methods requires educators to navigate challenges related to student diversity, individualized approaches, balancing excitement and learning objectives, maintaining assessment integrity, ensuring resource accessibility, and adapting to evolving curriculum requirements. Addressing these factors comprehensively will contribute to the effective implementation of gamified learning experiences in language education.

The Advantages of Using Gamification in Teaching Vocabulary

The questionnaire was administered to answer the second and overall research objectives, which is investigating the advantages of utilizing gamification as an educational strategy to enhance vocabulary building for 11th-grade students at SMAN 4 Mataram.

After categorizing the responses from 34 participants regarding the 15 open-ended questions in the questionnaire, it was found that the benefits of gamified learning for students based on students answers are:

1. Widens students' English vocabulary

Most of the participants stated that gamified learning in teaching vocabulary helps them to widen their vocabulary. Gamification introduces an element of competition, achievement, or reward, providing students with a sense of accomplishment. The inherent challenge in games encourages students to actively participate in the learning process. This motivational aspect not only drives them to acquire new vocabulary but also fosters a positive attitude toward learning English. As the (P2) stated in his answer sheets for the questionnaire:

The benefit of gamification for students is that it helps us mastering new vocabulary -P2/Q/Q13

It helps me master various vocabulary -P3/Q/Q13

It can enhance a deeper understanding of English vocabulary. -P4/Q/Q13

It helps me acquire new vocabulary -P5/Q/Q13

2. Motivates them to learn and to love English

Gamification introduces an element of competition, achievement, or reward, providing students with a sense of accomplishment. The inherent challenge in games encourages students to actively participate in the learning process. This motivational aspect not only drives them to acquire new vocabulary but also fosters a positive attitude toward learning English. As one of the student stated in the answer sheet:

It grows the love for English -P13/Q/Q13

It motivates me to strive to be better in English and to learn more -P10/Q/Q13

3. Makes the teaching learning process fun and exciting

By incorporating game elements such as puzzles, challenges, or interactive activities, the teaching-learning process becomes more enjoyable. The element of fun inherent in gamification captures students' interest and attention, turning what might be perceived as traditional or mundane lessons into dynamic and entertaining experiences. The excerpt of the answers of the open-ended questionnaire is presented below:

It makes the learning process fun-P10/Q/Q13

4. Makes it easier to understand the material

Most of students agree that gamification makes the material easier to understand, as stated below:

Gamification makes it easier for me to understand the study materials. -P15/Q/Q13

Gamification often involves contextualizing vocabulary within scenarios or narratives, making the material more relatable and understandable for students. When learning occurs within a game-based context, students can grasp the meaning and usage of words in a practical and memorable way. This immersive learning approach aids in better comprehension and retention of vocabulary

5. It can alleviate students' feelings of tension during teaching and learning process and serve as a method for acquainting students with their teachers.

Gamification introduces an element of playfulness, reducing the anxiety or tension that students may associate

with traditional learning. The interactive and collaborative nature of games fosters a positive learning environment. Additionally, games can serve as icebreakers, facilitating a more relaxed and informal interaction between students and teachers. This not only eases tension but also contributes to building a positive teacher-student relationship.

As some students stated in the questionnaire sheets:

Gamification can alleviate students' tension during learning and can serve as a means to familiarize students with teachers to avoid awkwardness. -P20/Q/Q13

The researcher presented some results of the questionnaire with charts by categorizing participants' answers, In short, some of the findings are displayed with the charts below:

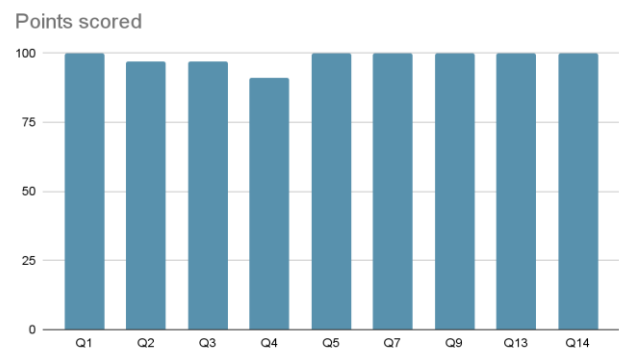


Figure 1. The students' perspective on the effectiveness of using gamification in teaching vocabulary

6. Effective teaching strategy for vocabulary learning

As indicated in the chart above, for the third question (Q3), 97,05% of students who responded 'yes' on the questionnaire sheets implied that most of 11th-grade students at SMAN 4 Mataram agreed that gamification is an effective way to learn and remember new vocabulary.

7. Helps students improve vocabulary retention and word recall

From the questionnaire data obtained, it was found that 91.17% of students believe that gamification helps them improve vocabulary retention and word recall.

Discussion

The discussion of the finding in this chapter is constructed based on the the reseach questions in the first chapter, namely: 1) What types of gamification that are used by the English teachers for the 11th grade at SMAN 4 Mataram?. 2) What are the advantages of using gamification techniques as an educational strategy for enhancing vocabulary building among 11th grade students at SMAN 4 Mataram. 3) What are the obstacles and difficulties for the 11th grade students' teachers at SMAN 4 Mataram in applying gamification techniques in teaching vocabulary.

Based on the research findings, the first research question explored the types of gamification used by English teachers. There are two main types, content gamification and structural gamification, were identified. Structural gamification involves applying game elements to learning content without altering the content itself, while content gamification alters the content to make it more game-like. The interview findings revealed that the English teacher at SMAN 4 Mataram employs both types to enhance vocabulary teaching.

The teacher's methods include introducing keywords, contextualizing vocabulary within scenarios or narratives, and utilizing various gamification elements such as puzzles, crosswords, feedback loops, Q&A sessions, storytelling, and badges points. This discovery aligns coherently with the assertions stated by Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011) regarding the elucidation of 'Defining Gamification and Its Types.' These methods aim to make the learning process engaging and enjoyable, aligning with the flexible curriculum concept.

Several challenges were identified in the implementation of gamification. One significant challenge is accommodating diverse student abilities. The teacher highlighted the importance of tailoring gamification methods to engage both high-ability and slow-learner students. Grouping students based on their abilities and providing support to less engaged or competent students are strategies employed.

An individualized approach was emphasized, recognizing that each class is unique, and a generalized gamification approach may be inadequate. Assessment and academic integrity pose challenges, with the need for vigilance in preventing plagiarism and ensuring fair evaluations. The alignment of gamified learning methods with curriculum changes was also highlighted, requiring adaptability from educators. This discovery aligns with the assertions stated by Hamari, J., Koivisto, J., & Sarsa, H. in their work titled 'Does Gamification Work? - A Literature Review of Empirical Studies on Gamification,' presented at the 2014 47th Hawaii International Conference on System Sciences.

The questionnaire results revealed several advantages of gamified learning for vocabulary building:

1. **Widening Vocabulary:** Participants expressed that gamification helps them master new vocabulary, enhances a deeper understanding of English vocabulary, and fosters positive attitudes toward learning.
2. **Motivates to Learn and Love English:** Gamification elements such as competition, achievement, and rewards motivate students to actively participate, fostering a positive attitude and love for English.
3. **Easier Comprehension of Material:** Students agree that gamification makes learning materials more accessible and relatable by contextualizing vocabulary within scenarios or narratives.
4. **Alleviating Tension and Building Relationships:** Gamification introduces playfulness, reducing tension associated with traditional learning. Games serve as icebreakers, fostering a positive teacher-student relationship.
5. **This discovery aligns with the findings presented by Caponetto, I., Earp, J., & Ott, M. in their work titled 'Gamification and Education: A Literature Review' presented at the European Conference on Games Based Learning (Vol. 1, p. 50), published by Academic Conferences International Limited.**

The study highlights the multifaceted nature of gamification in vocabulary teaching, offering benefits such as increased motivation, improved comprehension, and positive attitudes toward English. Overcoming challenges requires tailored approaches, adaptability to student diversity, and continuous assessment and adjustment of gamification strategies in line with curriculum changes. The findings

contribute to a deeper understanding of the effectiveness and challenges of integrating gamification into language education.

CONCLUSION

The study delineated two principal classifications of gamification: content gamification and structural gamification. Content gamification involves modifying educational materials to incorporate game elements, such as characters or narrative components, thereby creating a more game-like experience. In contrast, structural gamification integrates game elements into existing educational content without altering the content itself, motivating learners through rewards and engagement.

Furthermore, the research uncovered that 11th English educators at SMAN 4 Mataram employ a diverse array of gamification methodologies, including Puzzleword, Crosswords, Feedback Loops, Q&A Sessions, Storytelling, and Badges Points. These methodologies collectively contribute to fostering an interactive learning environment that enriches vocabulary learning.

The study also shed light on the challenges faced by teachers in implementing gamification. These challenges include accommodating diverse student abilities, the need for an individualized approach, concerns about assessment and academic integrity, and aligning gamified methods with evolving curriculum requirements. The importance of addressing these challenges comprehensively to ensure the effective implementation of gamified learning experiences in language education was emphasized.

In essence, this research sheds light on the transformative potential of gamification in vocabulary learning, offering innovative tools for educators to enhance motivation, engagement, and overall effectiveness in language education. The findings provide valuable insights for English teachers, and education policymakers seeking to leverage gamification for improved language learning outcomes in high school settings.

Suggestion

This study recognizes certain limitations that warrant consideration in future research. The investigation revealed two gamification types: Content Gamification and Structural Gamification. Future research may delve into dissecting these gamification types, evaluating their effectiveness in teaching, and understanding their specific influences on vocabulary learning. Additionally, a comparative study could explore distinctions in gamification approaches, especially those emphasizing technology.

The application of social learning theories, models, and methods holds potential in designing and assessing collaborative gamification activities for vocabulary teaching. This strategy promises a more detailed grasp of gamification techniques. Expanding the research to cover activities outside traditional classrooms, such as extracurricular pursuits and flipped learning, may unveil how gamification operates in these alternative contexts. Similarly, incorporating various age groups in the study could broaden its scope, investigating the diverse effects of gamification in different settings. Therefore, future research endeavors should embrace these pathways to enrich our understanding of how gamification influences vocabulary instruction.

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