

# CALL EVALUATION: STUDENTS' PERCEPTION AND CHALLENGES ON THE USE OF VLE AND GAME-BASED LEARNING

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## ABSTRACT

This study investigates how students perceive and interact with the use of a VLE and game-based learning in their classes. The students at a private school in Bali's Badung district made up the study's sample population. There are three different levels of education available at this school: elementary, secondary, and high school. The researcher used a mixed-method approach to collect and analyze the data for this study, gathering both quantitative and qualitative information. The quantitative data came from the findings of the questionnaire, whilst the qualitative data came from the results of the interviews. Interviews were conducted with just five of the 30 students who responded to the surveys. The majority of survey respondents have positive perceptions about and interest in using virtual learning environments and game-based learning platforms, according to the survey results. In this comparison, a score of 4 is the highest and a score of 3 is the lowest. The average score for all participant responses is 3.69 as well. The table with the mean score indicates that 3.69 is a high degree. According to the findings of the interviews, the participants also had trouble connecting to the internet when using the VLE. It is predicted that this study's final results will help teachers choose the finest teaching and learning methods for their students.

**Keywords:** VLE, Game-based Learning, Perception, Challenges

## I. INTRODUCTION

In recent years, technology has increased student learning, teaching, and progress monitoring. The majority of teachers and students think that technology makes it simpler for them to access resources and information. According to Apriani, information and communication technology (ICT) can improve students' moral character as well as their academic performance (2016). Technology use by teachers must be creative (Syahrial & Syafryadin, 2020). Raja and Nagasubramani (2018) list four advantages of adopting technology: In addition to increasing students' drive to learn, it also allows students with busy schedules to work from home on their own terms, teaches them new technological skills they may apply in the industry, boosts students' motivation to learn, and it encourages a "green revolution" by lowering the cost of paper and photocopies.

Computer assisted language learning is one method that has been employed as a modern teaching and learning aid (CALL). It has shown to be utterly effective because the majority of teaching and learning resources available today may be found online. Both professors and students must have access to a computer and an internet connection in order to teach and study languages via CALL. Levy defines CALL as "the research and study of

computer applications in language teaching and learning" in Mutlu (2013). Computers are used as tools for CALL, which is closely related to many other academic disciplines, or as study aids. CALL encompasses a wide range of information and communication technology uses and approaches for teaching and learning foreign languages, from the "classic" drill-and-practice programs that established CALL in the 1960s and 1970s to more contemporary expressions of CALL. CALL is used in both virtual learning environments and web-based remote learning. Mobile-assisted language learning, computer-mediated communication (CMC), virtual worlds for language learning, and interactive whiteboards are also included. The computer can also be utilized by teachers to plan language-learning activities; it can be employed in the curriculum for a number of things, including student tools and tutors. CALL is essentially a method used by teachers to facilitate language acquisition. It can be used as a remedial tool to assist students who need more support or to reinforce what has already been learnt in the classroom.

Two CALL types that are widely applied in the learning process are virtual learning environments (VLE) or web-based learning software and game-based learning. Both professors and students utilize VLE for communicating as well as for sharing resources and making presentations. VLEs provide a mechanism to direct the learning process, communicate the ideal learning process, and motivate teachers and students to take part in the process (Sneha & Nagaraja, 2013). The followings are some advantages of virtual classroom according to Amit and Sukhmandeep (2018), such as (1) fast and universal accessibility to a variety of students, (2) flexibility in terms of travel, (3) sessions may easily be recorded, (4) user friendly system as retrieval and storing of data is fast and effective, (5) overcome geographical barriers, (6) encourages freedom of expression, (7) allow learners to work at their own pace, (8) scheduling problems of classrooms is removed, (9) instructor expertise is distributed more broadly, (10) facility to create breakout rooms during the main session whereby several smaller groups can work together during the session, (11) persons with disabilities can take great help with various devices, (12) cost effective since maintenance cost of campus is eliminated, (13) teachers can reuse their own material or easily get material from others.

The creation of engaging and difficult games for game-based learning is intended to improve learners' skills and knowledge. According to Setyaningrum et al. (2018), the usage of game-based learning that incorporates a problem-solving method (GeoGame Adventure) also yielded superior learning results than traditional training that was centered on the textbook. According to Cheng et al. (2012), educational video games should have characteristics of challenge, fantasy, and fun.

- 1) Challenge, i.e., game difficulty. The considerations included the difficulty of creating goals for the game, the degree of latitude given to the game's rules and fundamental limitations, and the methods that players may employ while playing against the clock, the computer, themselves, and even actual people.
- 2) Fantasy, or the use of one's imagination in the game experience. It primarily increased the allure of games and motivated players to finish the task at hand.
- 3) Fun, or enjoyment of the gaming experience. It could improve the leisure value of games in addition to increasing learning motivation and entertaining the learning effect.

Nurhikma (2017) carried out a study to find out if the use of computer assisted language learning (CALL) may improve students' hearing comprehension and students' motivation in listening activity. The findings show that the CALL paradigm can improve students' listening comprehension. Using the CALL paradigm has a beneficial effect on students' listening motivation as well. In 2020, Ashim also conducted related research. This study looked into how Bangladeshi college students who were learning English using computer-assisted language learning (CALL) perceived such challenges and overcame them. The findings showed that students felt positively about CALL's involvement in English teaching and learning. The findings also showed that pupils have some trouble using computers and other key technology tools for learning English.

This current study, the authors looked into how students perceived and struggled with the use of a virtual learning environment (VLE) and game-based learning in the classroom. One of Bali's private schools provided the study's sample population. Primary, lower-secondary, and high-secondary school were separated into three separate levels. A mixed-method technique was used to collect the data for this study, which suggests that both quantitative and qualitative data were collected and examined. Results from the survey were used to generate the quantitative data. The questionnaire contains 20 assertions that need to be addressed. While the qualitative information was gleaned from interview data. Five individuals were randomly selected by the author to be interviewed. It is predicted that this study's final findings will aid teachers in selecting the best teaching and learning strategies for their students. Additionally, students might increase their desire to learn.

## **II. METHOD**

A private school in Bali provided the study's sample population. Primary, secondary, and high school were the three separate levels that they were divided into. Ten students will be assigned to each level. Because this particular school has children in reception (years 4-6) through grade 13, the researchers decided to gather data there (high school).

A questionnaire will be delivered to the study's sample participants in order to collect data. The researcher has chosen the questionnaire in order to simplify and measure how learners perceive the use of the VLE in classroom instruction. The questionnaire has thirteen five-point Likert scales that are broken up into three sections (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = extremely agree). So that it may be finished in ten to fifteen minutes, the number of questions is kept to a minimum. Nevertheless, the interview script only contains five ill-defined questions. In order to facilitate a thorough discussion of the CALL integration experiences in English language teaching and learning, the questions for the students have been designed.

The spreadsheet tool was used to examine the data from the questionnaires. Both the basic background information and the respondents' remarks were computed and displayed as percentages. The degree and nature of the subjects' motivation and attitude toward learning were evaluated on a five-point scale. This scale was utilized in the questionnaire to represent the level of agreement or disagreement in accordance with the following criteria.:

**Table 1. Table of the Mean Range**

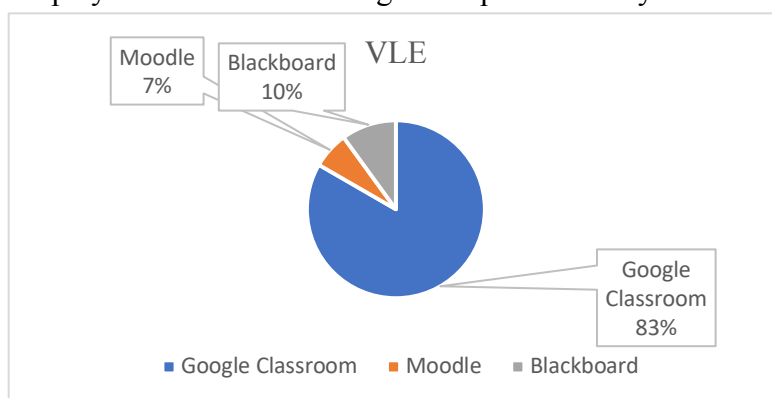
Mean Range	Interpretation
3.68 – 5.00	High degree
2.34 – 3.67	Moderate degree
1.00 – 2.33	Low degree

Tables and charts are used to present the results of the questionnaires. On the other hand, the researcher used a qualitative semi-structured interview and thematic analysis. Classifications are examined using thematic analysis to reveal themes (Boyatzis as cited in Ashim, 2020). It fully explains the facts and covers a range of topics through examples (Braun & Clarke as cited in Ashim, 2020).

### III. FINDINGS AND DISCUSSION

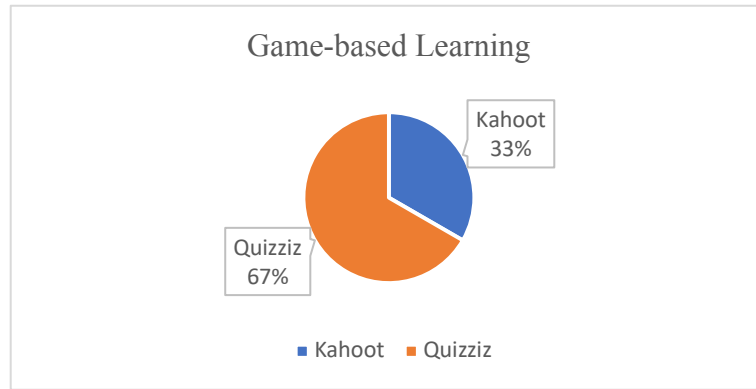
The researchers used questionnaires with 20 statements each to collect information about how students perceived and were interested in using VLEs and game-based learning. Ten men and thirty women made up the group of 30 participants.

Three examples of VLE platforms, including Google Classroom, Blackboard, and Moodle, were given to the participants. Additionally, two instances of game-based learning environments were provided, including Kahoot and Quizziz. Because students have been utilizing VLE and game-based learning platforms (at least one of the examples provided) for two years, those platforms were chosen based on the researchers' initial survey. The following chart displays the results according to the platform they used:



**Picture 1. VLE Platform Used by The Participants**

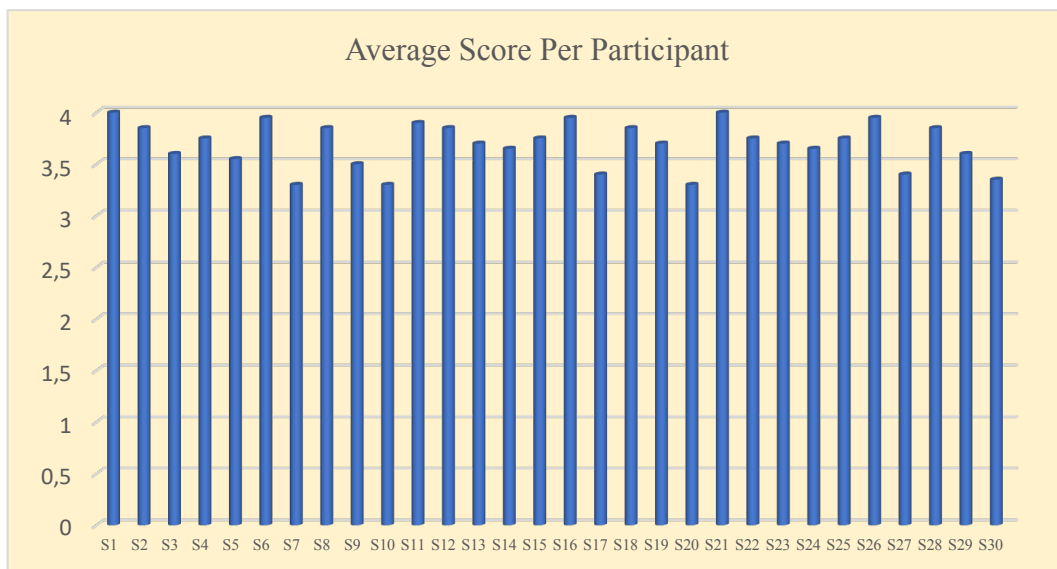
The majority of students at this school have used Google Classroom. According to the displayed data, 83% of the participants use Google Classroom to aid in their academic work. During the interview, one of the participants remarked that Google Classroom is simple to use and offers many of options to enhance her studies. She also hopes that this platform will continue to be utilized in the future.



**Picture 2.** Game-based Learning Platform Used by The Participants

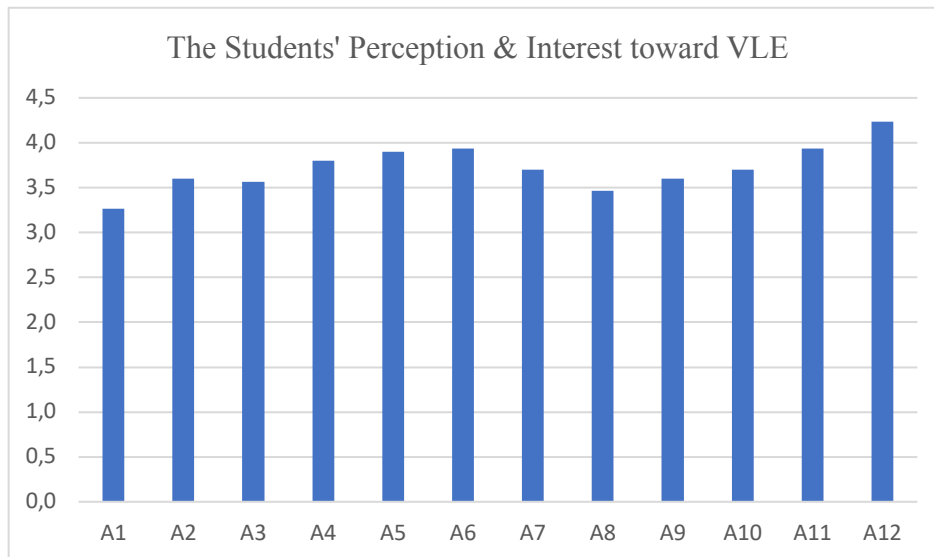
Both Quizziz and Kahoot provide engaging and exciting online gaming for learning. According to the survey's findings, 67% of respondents said they utilized Quizziz more frequently than Kahoot. One of the participants argued that Quizziz is more well-known and that the teacher frequently offered quizzes as homework or for class assignments.

According to the questionnaire results, the majority of participants have favorable opinions about and interest in using virtual learning environments and game-based learning platforms. The greatest score is 4, and the lowest is 3, in this comparison. In addition, 3.69 is the average score across all participant responses. 3.69 is listed as high degree in the table with the mean score. The graphic below shows the specifics of the outcome:



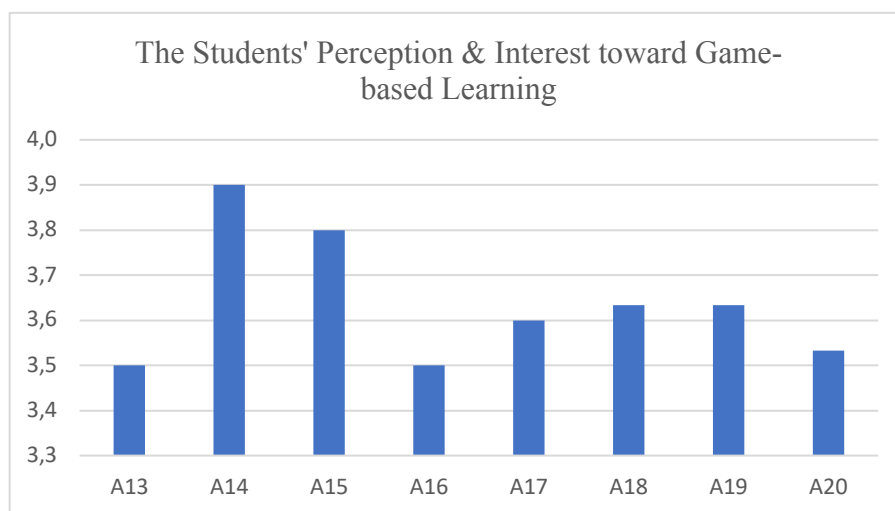
**Picture 3.** Average Score Per Participant

The questionnaire has 12 statements that discuss how students perceive and are interested in VLEs. These 12 statements have a 3.7 average score. This result indicates that the statements are largely accepted by the responders. During the interview, one of the participants came to the conclusion that the VLE website had aided her in her studies and that she would suggest the website to other students. Following are the full statements and the chart:



**Picture 4.** The Students' Perception and Interest toward VLE

The questionnaire has 8 items that discuss how the students perceive and are interested in game-based learning. These 8 statements have an overall score of 3.6. This result indicates that the statements are largely accepted by the responders. The claim that pupils are enthusiastic about learning via games received the highest score. Following are the full statements and the chart:



**Picture 5.** The Students' Perception and Interest toward Game-based

Based on the above findings, it can be concluded that participants generally have favorable perceptions of and interest in using VLE and game-based learning platforms. The average score obtained through the questionnaire serves as proof of this. The result is 3.69, which denotes a "high degree." Most participants concur that the platform is very helpful in advancing their research. The site, according to them, is simple to use and access. Being tech savvy is beneficial to them. The participants said they would also tell other pupils to use the platform. Yet, some of them claimed that while utilizing an internet tool to study,

they became sidetracked. They also believed that they required supervision when using the platform.

Finding out whether or not there were problems using the VLE and game-based learning platform is the second research topic of this study. Five students were questioned, and they each responded to two questions: "What obstacles did you encounter when utilizing the platforms?" and "What did you do to resolve the issue?" The participants faced difficulties, such as slow connections, out-of-date technology, a lack of motivation, time constraints, and a need for IT skills, according to the results. The participants could, however, also resolve the issues on their own, by seeking out a strategic location to get a stronger connection, using a more modern device, like a phone, asking their parents to remind and encourage them, texting via phone to get faster communication, and using IT more frequently to get comfortable with it.

#### **IV. CONCLUSION AND SUGGESTION**

According to the aforementioned findings, it can be said that participants generally have favorable perceptions of and interest in using VLE and game-based learning platforms. The average score obtained through the questionnaire serves as proof of this. The result is 3.69, which denotes a "high degree." Most participants concur that the platform is very helpful in advancing their research. Additionally, they encountered difficulties using the platforms due to a slow connection, an obsolete device or computer, a lack of motivation, the need for IT knowledge, and the length of the process. The participants could, however, also resolve the issues on their own, by seeking out a strategic location to get a stronger connection, using a more modern device, like a phone, asking their parents to remind and encourage them, texting via phone to get faster communication, and using IT more frequently to get comfortable with it.

The research's findings imply that students could make the most of their use of the VLE to aid in their learning. To make the lessons more fascinating and engaging, they must be innovative and use the VLE appropriately. Also, the teachers must develop their creative skills and learn how to use the VLE efficiently. Other platforms, such as an online quiz site, might be integrated with the VLE. It is advised to conduct additional research on the more general usage of computers to support students' learning.

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