

# The Analysis on the Implementation of Mobile-Assisted Language Learning Strategy Through Quizizz Application to Improve Student's Reading Comprehension at Undiksha Singaraja

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**Abstract**— This research aimed at improving student's reading comprehension by applying MALL-based learning strategy through Quizizz application in literal reading class. Subjects of the research were the second-semester students of D class at Undiksha Singaraja who took the literal reading subject. The research was a classroom action research conducted in two cycles. The data were collected by giving reading comprehension test to measure the student's reading comprehension; observing the teaching-learning process; and giving questionnaire for collecting the data of student's perception toward the implementation of MALL-based learning strategy. The results showed that (1) the score of student's reading comprehensions test improved significantly at the end of each cycle; (2) the students had a generally positive perceptions toward the implementation of MALL-based learning strategy. In short, the student's reading comprehension in II D class could be improved by applying MALL-based learning strategy through Quizizz application.

**Keywords**—MALL Strategy; Quizizz Application; Reading Comprehension.

## I. INTRODUCTION

In higher education, several fields of science must be mastered by students. One such field of study is English. English is one of the important fields of study that must be mastered by students to compete in the current era of globalization. In teaching English, skills that must be mastered are four language skills, namely listening, speaking, reading, and writing. These skills are taught in an integrated manner because one skill cannot be taught without applying the other skills.

Among the four main skills above, reading is one of the basic skills in English that must be mastered by students because through reading, students are expected to be able to get more knowledge, information and certain pleasures. Reference [1] states that reading also provides opportunities to improve language skills such as enriching vocabulary, grammar, punctuation, and how we construct sentences, paragraphs, and texts. In line with this, reference [2] states that there are three different definitions in learning to read. First, learning to read

means learning how to pronounce words. Second, learning to read means learning to identify words and get their meaning. Third, learning to read means learning to understand the text to get the meaning contained in the text.

Because reading is very important in language learning, the learning process must be given serious attention. In the curriculum, it is stated that one of the competencies that must be possessed is to understand functional written texts and short essays related to the environment and everyday life. Therefore, the first thing to consider in the reading process is understanding because reading without understanding would not be able to get the information contained in the text. An understanding was closely related to the knowledge a person has. In other words, it can be said that in order to understand a text, a person must be able to use the background knowledge he has and relate it to new information when reading a text. Therefore, the first point to be made about the reading process is reading comprehension, because reading without comprehension cannot be called reading, because the interaction between the reader's prior knowledge comprehension of the knowledge from the text is the basic element for comprehension. In other words, it can be said that in order to be able to comprehend a printed material, a reader should be able to use their existing prior knowledge and relate it with the new information as she or he reads.

Some important abilities must be mastered by students to understand the text. These components were: 1) the ability to obtain general and specific information from written texts, both explicitly and implicitly, 2) the ability to obtain the main ideas listed in the text both explicitly and implicitly, 3) the ability to search for meaning words, phrases, or sentences based on context, and 4) the ability to understand the reference words used in the text. Because of that, the students were expected to have the ability to understand the text, especially to find the main ideas, specific information, reference words, and the meaning of words contained in the text.

In understanding the contents of the text, students encountered many problems both from students themselves who lack vocabulary and from the strategies used by the

teacher during the learning process. These problems included difficulties in finding the main ideas, specific information, reference words, and the meaning of words in the text. One of the factors causing the problem was the ineffectiveness of the strategies implemented by the teacher. For example, the teacher only read the text for students, and then students were asked to read the text themselves before they answered some questions related to the text. In addition, the vocabulary of students was not much on the topics discussed in the text. This situation made students bored and they were not motivated to continue reading the given reading text.

That condition was also experienced by students in English Language Education Department who took literal reading courses. They experienced problems in terms of finding the main ideas, specific information, reference words, and the meaning of words in the text which had an impact on students' reading comprehension. Most students got low scores on the reading comprehension test. Based on interviews with some students who experienced problems in reading comprehension, several things cause this to happen, namely: the application of constructivist learning models was still not as expected, students' low willingness to learn because it was difficult to find information contained in the text, and the time allotted to find the information sought was very limited. In addition to this, the efforts made by lecturers in learning to read tend to be only through the provision of theoretical explanations, then the lecturer assigned students to read with free topics or topics that are determined. The method used by the lecturer is product-oriented, not process-oriented. These efforts did not guide and did not provide experience to students scientifically to find their own and learn to solve their problems because the learning patterns were still oriented to the teacher (teacher-centered) which should be oriented to students (student-centered). This condition needed to be addressed immediately by finding practical steps in learning to read.

Related to the problem above, the existence of models and techniques of learning to read is very helpful for students in finding main ideas, specific information, reference words, and meaning of words listed in the text. There were several written models and techniques that can be used to help students understand the text's contents. Among the many models and strategies, MALL (Mobile Assisted Language Learning) strategies can help students to achieve reading competence. MALL is a language learning approach in which the language learning is assisted or enhanced by the use of use of handheld mobile devices. MALL is part of Mobile Learning (m-learning) and Computer-assisted language learning (CALL). When applying MALL, the language learning is often supported by mobile, cellular devices such as Cell phones (cellphones) (including iPhone or iPad.), MP3 or MP4 players (for example iPods), Personal Digital Assistants [3]. With MALL, students could access language learning materials, quizzes related to teaching materials and communicate with their teachers and colleagues anytime, anywhere.

One online quiz application that was very useful to help students to increase their mastery of vocabulary is 'Quizizz'. This application was equipped with features for lecturers and students. Lecturers could make quiz in the form of multiple choices and enter the answer key (through the "create quiz"

feature) in accordance with the teaching material and students could not follow and answer the quiz (through the "join quiz" feature) that had been made by the lecturer [4]. This application was also equipped with a timekeeper to answer every question. If a student answered quickly, the student would get more points compared to students who answer in a long time. In addition, this application also provided a direct evaluation that allows lecturers to see student achievements directly when answering quizzes online and after answering them [5]. On the lecturer-quizizz screen, it would be seen students who scored highest to lowest, questions that most students answered incorrectly as further enrichment material.

Some research results indicated that learning by using MALL could improve students' reading comprehension levels. Reference [6] conducted a study on MALL entitled "Effects of Gloss Type on Text Recall and Incidental Vocabulary Learning in Mobile-Assisted L2 Listening". This research investigated the effects of multimedia glosses on text recall and incidental vocabulary learning in MALL-based L2 listening tasks. The results of this study indicated that access to glosses facilitates the introduction and production of vocabulary so that it could improve student understanding in reading a text. Besides, students became very interested in participating in learning to read because they can access material easily and quickly.

Based on the explanation above, the implementation of MALL strategies through the "Quizizz" application was investigated in order to know whether it can improve the reading comprehension of students in the English Language Education Department in Undiksha or not.

## II. METHOD

This research was a classroom action research in Literal Reading course by applying MALL strategy that the output was expected to improve students' reading comprehension. Classroom action research is a way to solve problems found in the classroom, then repaired so that it can improve the quality of learning. The classroom action research model used was reference [7] model, with a series of activities namely planning, acting, observing, and reflecting.

There were two cycles that were employed in this study and each cycle involved planning, action, observation, and reflection.

### A. Planning

Before conducting the action, there were some preparations that had been designed, namely teaching scenario, materials, questionnaires, reading tests, and teaching diary.

### B. Action

The plan which had been made was implemented at this stage. The researcher did all the planning in the classroom and the class management was done based on the teaching scenario.

**C. Observation**

It refers to process of observing the action. The observation was carried out both during and after the action. During the action, the researcher observed the classroom situation and the students' behaviors in the diary. After the action, the pos-test and the questionnaires were given to the students then the result of the post-test and the questionnaires were analyzed at this stage. Analyzing students post-test was intended to find out the result of the action whether the students' comprehension in reading improved or not. On the other hands, analyzing the results of the questionnaires was intended to know the students' responses toward the action.

**D. Reflection**

Reflection refers to the diagnosis of the effect of the treatment. It was done at the end of the action in order to identify the strengths and weaknesses of the action. In this stage, the researcher found out the reasons of the students' failure. The researcher could also decide whether the next cycle is needed to be conducted. Reflection was also served as feedback to improve the next action.

The research began with a problem in learning. The existing problems were discussed and explored together by the research team. The next activity was to conduct a survey to capture the initial conditions of the research subject before giving the action. Another thing that was also done was measuring the level of students' reading comprehension in understanding a text. The results obtained from both are diagnosed together and form the basis of research planning. Planning was done in general and specifically. General planning covered the whole research, while the special covers the actions of each research cycle which was always done at the beginning of the cycle. Furthermore, acting (observing) was done as long as the action was given. The end of the cycle was carried out reflection to see the process and the achievement of the results of the actions that had been given.

The action taken was MALL-assisted learning to improve students' reading comprehension. In the MALL-assisted learning cycle implemented in the classroom. After that, a reflection of the first cycle was made as a basis for determining the next action by making some modifications.

The subjects of this study were second-semester students of D class in the English Language Education Department, Faculty of Language and Art, Ganesha University of Education who took part in the Literal Reading course. They were 32 students. Based on the direct observation of researchers, who were also lecturer of Literal Reading courses, and discussions with the research team, several reasons were underlying the decision to choose class D semester 2 as a class given action with MALL-assisted learning, namely (1) the level of reading comprehension of students was relatively low seen from the pre-test; (2) most of the students in the class showed less enthusiasm for reading and attending lectures. On average they had no interest in attending Literal Reading lectures. This study aimed to find out whether MALL-assisted learning can improve the level of reading comprehension of students, so the object of this research was the process of reading learning and

reading comprehension of students who got action on applying the MALL strategy.

Data collection was done by observing, giving tests and questionnaires. Tests were carried out to measure students' reading comprehension by using reading tests. There were two kinds of reading tests: pre-test and post-test. The pre-test was administered before giving the action in order to know the students' achievement in reading comprehension. Meanwhile, the post-test was administered at the end of each cycle in order to know the students' achievement in reading comprehension after the action given. The post-test was administered in order to know whether or not the students' achievement has improved. The test instrument used in this study consisted of four devices, namely for the pretest, twice in the learning of the MALL-assisted reading period, and the post-test. The designed test was in the form of an essay test that was measured by using a reading assessment rubric. Based on the data collection techniques above, two types of data were collected from this study, namely quantitative data, obtained from test results, and qualitative data obtained from observations during the administration of actions and questionnaires. Data obtained from reading tests were analyzed quantitatively to obtain an average score achieved by students before and after being given an action. The average score was then compared in each cycle to find out an increase in students' reading comprehension. Unlike the data obtained from the reading comprehension test results, the data obtained from observations and questionnaires (qualitative data) were analyzed descriptively. This qualitative data was used to describe the process of reading learning in the classroom during the administration of actions and responses or responses of students to the implementation of actions, in this case, namely MALL-assisted learning in reading learning.

The observation sheet was used in order to make a note the classroom activities during the learning process. It was used to record students' behaviors and the condition of the class during the teaching-learning activities. The data from the observation sheet was used to know the students' problems during the teaching-learning process so that the researcher could make a decision about what should be done to minimize these problems in order to get better result in each cycle. The form of the diary could be shown as follows:

TABLE I. OBSERVATION SHEET

No	Teacher's Activity	Students' Activity	Time	Students' Response	Classroom Situation	Notes
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Table 1 shows that six items should be written in the diary. The first one is the teacher's activities followed by the students' activity. The time allotment given for the activity is also written in the diary. The students' response to the activity carried out in the classroom is placed in the next column. The classroom situation also must receive attention. Supposed that there are any further explanations for the activities or the response, it can be put under the notes column.

The success criteria in this study included success in the process and product. Success in the process could be seen from an increase in the Literal Reading learning process. The increase was marked by the presence of a more enthusiastic and enthusiastic student learning attitude. All of these improvements could be observed during lectures. Thus, in the process, indicators of the success of this study could be observed during lectures that showed active lecture interactions, solid collaboration in groups, and their enthusiastic attitude. This step could be taken through an open questionnaire and observation. The criterion for product success was shown by the increase in students' reading comprehension. In every reading learning process, the product would always be measured. The measurement instrument was in the form of a reading comprehension test that was measured using an essay reading test rubric.

### III. FINDING AND DISCUSSION

Due to the fact that this study was a classroom action research, there were two findings obtained namely, the quantitative and the qualitative findings. The quantitative findings could be seen from the students' results of pre-test and post-tests while the qualitative findings could be seen from the result of questionnaires and students' activity. In addition, the purpose of this study was to improve students' reading comprehension in the Literal Reading course. The improvement could be seen from the diary notes, test results and questionnaires. From the research diary, it was known that there were changes in student behavior during the learning process.

The result of the pre-test showed that the students had low achievement in reading comprehension. The students' mean score was 70.16 and categorized as sufficient. Looking at the result of the pre-test, it was considered important to give some kinds of treatments to the students in order to help them achieve improvement in reading comprehension.

On the other hand, the questionnaire was distributed after conducting a pre-test. After calculating the questionnaires' scores, it was found that the highest questionnaire score of the students was 36 and the lowest score was 22. In addition, the mean score of the questionnaire in pre-test was 27.74, so the criterion was negative. It could be concluded that the students had problems in reading class, especially about students' responses when joining the reading course. From the result of pre-observation, the researcher decided to give treatment to the students by implementing a MALL-based learning strategy in teaching reading. It was hoped that the implementation of it could overcome students' reading problems and improve their achievement in reading comprehension.

Cycle I was carried out in three sessions in which two sessions were intended for action and one session was for test. The questionnaire was administered at the end of the test. The post-test was conducted to measure whether the students had gained improvement after being given the treatment using a MALL-based learning strategy. There were some students felt confused and some of them did not focus on doing online quizzes. This indicated their unpreparedness in learning by using new strategies that utilize Smartphones for learning.

Some of them complained that their cellphone batteries were low, there was no signal and the quota suddenly ran out. This happened at the first meeting because they still did not understand correctly about the stages that they had to do in this Literal Reading Online learning. But this was immediately resolved at the second meeting in cycle I. The ten stages were carried out smoothly because they already had experience from previous activities. They looked very enthusiastic and have a high will in following the learning process. So that at the end of the activity they can already get good grades from the results of answering online quizzes on the Quizziz application.

The improvement of students' reading comprehension was clearly seen in the results they achieved in post-test 1. From the results of post-test 1, it was seen that the average score of students was 78.08, which was categorized as good. This increased by 7.92 points from the score on the pre-test. Even though the average score of students had increased, there were still 5 students (12%) who could not experience an increase in reading comprehension.

On the other hand, 32 students (89%) showed positive responses and only 4 students (11%) gave negative responses to the application of MALL-based learning strategies. This was obtained after the calculation of the results of the questionnaire answered by students at the end of cycle 1. It implied that students were very happy and enthusiastic during the learning process that implemented MALL-based learning strategies. This study would be considered successful if all students were able to improve reading comprehension and all students respond positively to the application of MALL-based learning strategies. Therefore, the second cycle was carried out to achieve indicators of success (100% of all students had increased reading comprehension and gave positive responses).

Several problems arose during the teaching and learning process in cycle I. Most students still could not participate properly in this activity. At the first meeting, some students felt confused by the activity because this activity was new to them. In addition, during the activities, some students did not focus on doing online quizzes which adversely affected their final grades. To overcome these problems, modifications were made to the learning process in the next cycle. In the first modification, the instructor instructed students to be able to ensure that the HP battery did not run out during the online quiz work. Therefore, students must charge their cellphones fully before college started. Second, students must ensure that the network used for online had 4G speed and was stable in the classroom where learning takes place. Third, students must ensure that the internet quota available on each of their cellphones was sufficient to take online quizzes a maximum of the day before class. The topic developed was determined by the lecturer where students were instructed to find information about the topic discussed before the meeting was held and bring that information to the class meeting. This was done to make time-efficient and easier for them to work on online quizzes. Second, remind students to be disciplined with time, so that activities at each stage could be carried out efficiently. This modification was applied during the learning process in cycle II. Modifications made students more cheerful and excited when participating in learning activities. Only a few were seen still confused because they had to answer every

question on the online quiz with very limited time. Most of the students had been seen to be calmer and more fluent in doing online quizzes so that at the end of the stage, they could achieve very good grades. In this activity, they were more confident in carrying out their tasks and student enthusiasm was higher than before.

The results could be seen in the increase in the post-test score 2. The average value of students in post-test 2 was 85.69. This value increased by 9.61 points compared to the results of the post-test 1. The increase in student scores was caused by some modifications made in the application of MALL-based learning strategies in cycle 2. Students also became more active compared to the first cycle. Students became more confident and comfortable when following the stages of a MALL-based learning strategy.

On the other hand, all students experienced an increase in reading comprehension as seen from the students' scores on the post-test 2. Add to that the responses of all students who were categorized positively. The results were obtained after calculating the questionnaire filled out by students after taking the post-test 2. Judging from the reading comprehension of all students that improved and the responses of all students categorized positively, the indicators of the success of this study had been achieved. So the data concluded that this study was successful and could be stopped.

The result of this study reflected the same condition with several researchers that were conducted before. Reference [6] also conducted research on MALL, especially concerning the effects of Gloss Type on Text Recall and Incidental Vocabulary Learning in a second language acquisition class where the learning process was assisted by mobile devices. The study revealed that there was a significant effect of Gloss Type and Text Recall strategies toward the mastery of new vocabulary in the second language learning that was assisted with mobile device. The study also revealed that there was a significant effect of Gloss Type and Text Recall strategies toward the production of vocabulary in the second language learning under investigation.

Also inline with the result of the present study is the research conducted by [4] where the MALL was used for developing good toward English as foreign language learning in Japan. The main objective of this research was to find out whether certain MALL practices could foster an advanced form of independent learning (SRL). SRL on students is responsible for arousing and maintaining their motivation to create, implement, and evaluate strategic learning plans. It was concluded that the use of the MALL learning module encourages the student to study without teacher intervention, which is often referred to as independent learning. In this case, teacher's intervention is absent from the determination of time spent on learning assignments, the levels of satisfaction that were obtained from assignments, and self-measured achievements. Furthermore, SRL was observed in terms of the

specificity of the objectives, the creation of learning tasks and applications in the classroom.

From the explanation above, it can be concluded that the MALL-based learning strategy through the Quizziz application was one of the innovative learning strategies that can help students to improve English competency especially their reading comprehension.

#### IV. CONCLUSION AND SUGGESTION

Based on the results of the research that had been achieved and the discussion in the previous chapter IV, it could be concluded that the application of the MALL strategy was able to improve the process of literal reading in second-semester students of Class D of English Education Study Program. Some indicators that could be seen are students who were more enthusiastic and enthusiastic in participating in reading learning, the reading learning process carried out in the classroom took place more dynamically, and there was an increase in students' courage to express ideas about the reading they were facing. Improvements that occurred in the literal reading learning process as described above had implications for improving the ability of students to understand the contents of reading. This was evidenced by an increase in students' reading comprehension scores. An increase in students' reading comprehension scores occurs at the end of each cycle.

The positive findings from this research have several implications namely, 1) the importance of reading techniques can increase student motivation, build curiosity for a concept, and involve all language skills to support the learning process; 2) MALL strategy can be applied in reading activities with various condition because it can improve the students' reading comprehension and can minimize the error while reading activity conducted.

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