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## DEVELOPING MALL-BASED READING COMPREHENSION TEST FOR SEVENTH GRADE USING QUIZIZZ

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### ABSTRACT

*This study aims at developing reading comprehension test based on Mobile Assisted Language Learning (MALL) for seventh grade of Junior High School students. It is adapted R and D development model proposed by Borg and Gall consisting of seven steps: research and information collection, developing a preliminary product, expert validation, product revision, field-testing/try-out, revision, and final product. On the basis of preliminary research and information collections result, the preliminary product was produced by considering MALL concept with Quizizz application. From the expert validation, it shows that the developed reading comprehension test in Quizizz was on good criteria and appropriate for seventh grade students, she suggested to provide clear picture related to the question, discard or replace unfamiliar song questions because it will make students confused in understanding the context. Next, the instructions were needed to be revised to be clearer and simple. The researcher tried out the test for 20 students in the seventh grade. The result of the try-out shows that there are 20 multiple choices test, but 18 test are valid because the significant value is more than 0.05 with  $t$ -table 0.422. The test has a level of difficulty from medium to easy as evidenced by the mean items difficulty of 0.25 to 0.85. It is also reliable with the significance value 0.934. With MALL-based reading comprehension test using Quizizz, students are more interested and enthusiastic in reading English questions. For them, the test is unique like playing an online game.*

**Keywords:** MALL, Reading Comprehension Test, Quizizz

### INTRODUCTION

Reading is an essential skill that has been crucial in human development for centuries. It is a fundamental ability that allows individuals to understand written text and gain knowledge, information, and insights from it. Reading has played a significant role in human civilization, enabling people to share ideas and thoughts across time and space. Today, reading is still considered an essential skill, with numerous benefits in personal, academic, and professional contexts. Reading has been claimed as the most important academic language skill for all second and foreign language learners where students learnt new information and become more competent in their subject matter through reading (Akarsu & Dariyemes, 2014).

One crucial aspect of reading is reading comprehension. It refers to the ability to understand written text, process the information, and extract meaning from it. Reading comprehension is critical because it allows individuals to engage with texts, analyze them, and form opinions and ideas based on the information they contain. It also enables individuals to communicate effectively by understanding and interpreting written messages.

Reading comprehension tests are a common assessment tool used in junior high schools to evaluate students' reading skills and comprehension abilities. Developing and preparing reading comprehension tests for junior high school students requires careful planning and consideration of various factors, such as the grade level of the students, the difficulty level of the texts, and the specific skills being tested.

To begin the process of developing a reading comprehension test for junior high school students, it is important to first determine the objectives of the test. This includes identifying the specific reading skills that the test will assess, such as vocabulary, reading fluency, or comprehension. Once the objectives have been established, the next step is to select appropriate reading materials and create questions that align with the objectives and difficulty level of the texts.

Creating a reading comprehension test also involves considering the diverse needs and abilities of the students. It is important to design questions that are accessible to all students and do not disadvantage those with different backgrounds or learning styles. Additionally, test designers must ensure that the test accurately reflects the curriculum and learning goals of the junior high school, while also adhering to ethical standards and principles of fairness and equity. Overall, developing and preparing a reading comprehension test for junior high school requires careful planning, attention to detail, and a commitment to promoting student learning and achievement.

Based on the observation in SMPN 2 Banyakan Satu Atap, it has some read issues. First, some students have little motivation or interest in learning English. Second, some students seem to find reading in class boring. Teachers only give paper test during midterms or exams. Among some of the problems encountered, researcher use MALL-Based reading comprehension test to reconceptualize the midterm test procedure and increase students' interest in reading comprehension test.

In recent years, there has been a growing interest in using mobile-assisted language learning (MALL) to improve language learning outcomes (Alhadiah, 2020).

MALL has proven to be an effective tool in developing various language skills, including reading comprehension. Reading comprehension is an essential skill in language learning, and therefore, there has been an increasing demand for developing reading comprehension tests using MALL.

MALL provides a platform for language learners to access language learning materials anytime and anywhere. This flexibility allows learners to engage in language learning activities at their convenience, making MALL a useful tool in developing reading comprehension tests. With MALL, reading materials can be accessed on various devices, including smartphones and tablets, making it easier for learners to engage in reading activities even when they are on the go. Moreover, MALL allows learners to interact with the reading material, enabling them to practice and improve their reading comprehension skills.

Developing reading comprehension tests using MALL has numerous benefits. Firstly, MALL-based reading comprehension tests can provide learners with immediate feedback on their performance, enabling them to identify areas where they need to improve. Secondly, MALL-based tests can be personalized to suit the individual learning needs of the learner. Thirdly, MALL-based tests can be easily modified and updated to reflect changes in the language and curriculum. These benefits make MALL-based reading comprehension tests a valuable tool for language teachers and learners alike.

One example of MALL-based test is Quizizz. It is an online platform that offers a range of tools to create engaging and interactive reading comprehension tests. Quizizz provides a user-friendly interface that allows educators and instructors to create reading comprehension tests quickly and easily. The platform offers a wide range of customizable templates and questions that can be tailored to meet the specific needs of the test-taker. It provides instant feedback on each question, which helps the test-taker to identify areas of weakness and improve their overall comprehension skills.

Quizizz enables educators and instructors to create interactive reading comprehension tests that engage the test-taker and make learning fun. The platform offers a range of multimedia options, such as images, videos, and audio files, that can be incorporated into the test. This makes the test more engaging and helps the test-taker to retain the information better. It also offers detailed analytics and reporting features that allow educators and instructors to track the progress of the test-taker. The platform provides real-time data on the test-taker's performance, including their scores, time taken

to complete the test, and areas of weakness. This data can be used to customize the learning experience and improve the test-taker's overall comprehension skills.

Research on developing reading test at Junior High School level has been conducted (Kurniawati, 2014; Rahmawati, 2015; Iramawaty, 2016). As stated previously, Kurniawati (2014) conducted a research and development on reading comprehension test for eight grade students of SMP Pangudi Luhur Yogyakarta. She found that multiple choice reading comprehension test was appropriate to the students. Rahmawati (2015) conducted at seventh grade of SMP Nahdlatul Ulama 2 Gresik also found that multiple choice reading test using CALL JQuiz program could increase students' achievement, motivation, and interested in reading comprehension. In line with Rahmawati (2015), Iramawaty's (2016) study conducted at seventh grade of SMPN 1 Cerme Gresik also found that reading test based CALL and MALL is more effective and suitable for Junior High students.

Consistent with the background above, further study is needed focusing on the MALL Quizizz reading comprehension test for seventh grade students of SMPN 2 Banyakan Satu Atap. Therefore, the purpose of this study is to develop a reading comprehension test for seventh grade students of SMPN 2 Banyakan Satu Atap. The Quizizz software aims to develop a test that will enable students to relate their academic knowledge to everyday life.

## **METHODOLOGY**

The aim of this study is to develop a reading comprehension test for seventh grade of SMPN 2 Banyakan Satu Atap. Therefore, the appropriate research design to use in this research is research and development (R & D) because it is designed to develop tests that can be used in education. The main aim of research and development (R & D) is not to formulate or test theory as in basic research, but to develop effective products for use in schools.

The objective of R & D is to produce finished products such as textbooks, audio-visual games, training manuals, tools, etc. that can be used in educational programs (Borg and Gall, 1983). It is the process used to develop and validate Education products. There are ten steps in the R & D cycle, namely (1) research and information collection, (2) planning, (3) preliminary form of product, (4) preliminary field-testing, (5) main product revision, (6) main field-testing, (7) operational product revision, (8) operational field-testing, (9) final product revision, and (10) dissemination and implementation (Borg &

Gall, 1983).

In line with the aims of the R & D research, the design proposed by Borg and Gall (1983) was adapted. Adaptation is done by modifying the process steps based on the problems found, research objectives, and time constraints in conducting this research. The adaptation model used in this research is (1) research and information collection, (2) developing a preliminary product, (3) expert validation, (4) product revision, (5) field-testing/try-out, (6) revision, and (7) the final product.

The research and information collection was carried out by researchers during the teaching and learning observation process for two weeks in seventh grade. This research and information gathering included literature review, class observation, and preparation of report writing. Then a reference study was also carried out. At this stage, theories are studied and used as the basis for development. These theories include the concept of reading comprehension in junior high school, the MALL-Based reading comprehension test and the application of Quizizz as a test media.

To develop the initial written product, the theories that have been studied previously are used as the basis for developing test products. The development itself comprised some stages adapted from those suggested by Borg and Gall (1983) and Harris (1969). It is causes this study will end up with the test as a final product. Actually, in Harris (1969) design, there are several cycles that should be done for developing the test. The following cycles are planning the test, preparing the test items and directions, reviewing the test, pre-testing the test, and analyzing the result.

The next step in the development process is test validation. At this stage, the tests that have been made will be evaluated by someone who is considered an expert in test development as well as in the MALL-Based reading comprehension test approach. Evaluation is carried out to prove whether the test developed meets the criteria for a good test or not.

There are two kinds of revisions in this study. The first revision was carried out when the data collected during expert validation showed that the test developed did not meet the established criteria or the objectives of this study. The second revision is carried out if the data collected from the revised test trials still shows that there are difficulties or obstacles experienced by students in their efforts to achieve the performance goals stated in each test unit.

After the material is revised, the next step is to do a trial test. This is referred to as empirical validation. The aim is to find out whether the revised test works well for students, whether it really helps students achieve mastery of reading comprehension skills. This trial is primarily intended to collect information about the appropriateness of the test, both the level of difficulty, usefulness, effectiveness, and the attractiveness of the test display for students.

As previously stated, the second revision was carried out after field trials or try-out. This is done when the data collected from the revision test trials still shows the difficulties or obstacles experienced by students in their efforts to achieve the understanding goals in each unit test item.

The final stage of test development is questions test product into the Quizizz application. After the second revision, the final product will be published. The final product must be an educational product that is ready to support the teaching and learning process. In this study, the researcher planned to produce a test based on the MALL reading comprehension test using Quizizz for seventh grade students at SMPN 2 Banyakan Satu Atap.

The data collected in this study are classified into three: first, data collected from research and information collection. It is used as the basis for developing tests. Second, the data is provided by experts in the validation process. It is used to determine whether the test has been developed according to the underlying theory. Third, the data collected during the trial. The data is used to determine the applicability of the test for seventh grade students at SMPN 2 Banyakan Satu Atap in semester 2.

There are three types of data used in this study which were collected from different sources and the instruments used were different. To collect data from the research and information stage, preliminary observations, field notes, and unstructured interviews were used as instruments. Preliminary observations were made during two weeks of the teaching and learning process at SMPN 2 Banyakan Satu Atap. Reference studies were also conducted to collect data.

To obtain data from expert validation, a questionnaire was used as the research instrument. The results of the questionnaire are recorded and used to improve the product. The questionnaire consist of (1) clarity and directions of items, (2) presentation and organization of items, (3) suitability of items, (4) adequateness of the content, (5) attainment of purpose, (6) objective, and (7) scale and evaluation rating.

To get the data during the field try-out, the researcher prepared test questions in the form of the Quizizz application. The test covers several topics such as (1) asking and stating the nature of people, animals and objects, (2) asking and stating the behavior/action/function of people, animals and objects, (3) instruction, short notice, warning/caution, (4) descriptive text, and (5) song.

The data collected in this study is very important and useful to determine the validity and applicability of the tests developed. To collect the first data, the researcher observed the teaching and learning process in the seventh grade of SMPN 2 Banyakan Satu Atap. The second data was collected through consultation with the expert or teacher concerned regarding a reading comprehension test based on MALL and the Quizizz application. For the third data, namely test data collected through observation and implementation of the test.

Data collected from preliminary observations in research and information collection were analyzed in such a way as to describe the actual needs of students in the target situation. This description is used as a guide in determining whether the test was developed appropriately. If there are still deficiencies or discrepancies in the test, then the data is used as a guide for revision.

## **FINDINGS AND DISCUSSION**

This section presents the result of the preliminary research and information collecting, the result of the expert's validation, and the result of tryout. After the draft had developed, it was given to the expert to be validated, revised, and then tried out to the students. A form of questionnaire were given to the expert and a test in Quizizz were given to the students to evaluate and give suggestions to the test.

As stated previously, preliminary research and information collecting were conducted during the observation of teaching and learning process. The result of preliminary research and information collection shows that the role of English reading test is really important for students to measure the extent of their understanding about materials. However, tests that are available in paper form make students bored and lazy to read or understand the content of the text.

Furthermore, the teacher so far just takes the reading test from some LKS and internet resources without organized it well. In addition, the tests were written with unfamiliar vocabulary so that students were confused to translate the meaning and content of the text in the test. This condition decreases the students' motivation in doing the

reading comprehension test. They face some difficulties in comprehending the vocabulary used in the test, lack of knowledge in the materials, uninteresting model of the tests, monotonous reading activities, and students' score of the test cannot be known directly.

Therefore, the researcher designed a preliminary product which consisted of the multiple choice questions, so the students choose the right answer by select A, B, C or D. Multiple choice questions consist of some topics such as asking and stating the nature and behavior of animals, people and objects. It also contains of short notice, descriptive text and song. In the open minded questions consist of descriptive text about object or place. After the preliminary product was constructed, the next step was validating it to the expert.

After writing the draft of reading comprehension test, it was given to the experienced English teacher to be validated. A questionnaire was given to the expert as the instrument to collect the data. It consisted of seven aspects with nine statements. The highest score of the each statement was five, and the lowest score was one. Three represented strongly agree; four represented agree; two represented moderate.

The expert's scores on the developed materials were mostly 4 (agree) and 5 (strongly agree). In term of the objectives, the developed tests are clear and complete enough. The vocabulary level, language, structure and conceptual level of participant in the test are appropriately. Next, the test directions and items are written in a clear and understandable manner.

The items are presented and organized in logical manner. Furthermore, the developed test contains various and interesting topics to help the students develop reading skill. It covers both knowledge and skill. The number of questions per area is a representative enough with the instrument as a whole fulfills the objectives needed. Each item question requires only one specific answer and the scale adapted is appropriate for the item.

Furthermore, the display of the test is suitable with the content. The test is easily accessible to students via mobile phones. They can take the test anytime with an internet connection like playing online game. The test is also less monotonous and more fun.

The total score of the expert's validation is 37. The data collected then calculated using a formula as follows to find out the validity level.



$$\text{Percentage} = \frac{\sum (\text{response} \times \text{weighting on each response})}{N \times \text{weighting the highest response}} \times 100 \%$$

$$\begin{aligned} &= \frac{37}{9 \times 5} \times 100\% \\ &= \frac{37}{45} \\ &= 82 \% \end{aligned}$$

From the calculation, it can be concluded that the developed tests were categorized on good criteria. Based on the expert's comments, the developed tests were generally good and eligible to be used as the middle test of reading comprehension test for seventh grade.

However, some points needed to be revised. The expert suggested to provide clear picture relate the question. Then, discard or replace unfamiliar song questions because it will make students confused in understanding the context. Next, the instructions needed to be revised to be clearer and simple. Furthermore, there were some typing errors should be rearranged in the Quizizz.

Based on the result of the expert's validation, the drafts of the developed tests were revised. The clear picture which related the question was added. The instructions of each topic were revised to be clearer and simpler. Next, the unfamiliar song lyrics questions were removed to avoid confusion. Some typing errors in the develop test were revised and rearranged.

After the draft of the developed test was revised based on the expert's validation, it was then tried out to students at seventh grade in SMPN 2 Banyakan Satu Atap. It was conducted in April 10<sup>th</sup>, 2023. The try out was conducted to find out about the student's understanding and knowledge based on the topics of the developed test. It was conducted to customize tests that are suitable for students.

In conducting the try out, the researcher acted as the teacher. The implementation of try out ran well. The students seemed motivated in following the try out. Furthermore, the atmosphere was quite conducive since the students were excited in following the try out. The test was implemented without encountering any difficulty. Then based on the data collected, the researcher calculated the value of validity using SPSS 26.

**Table.1 Result of the validity**

<b>The result of the validity (multiple choice)</b>			
<b>No.</b>	<b>Rhitung</b>	<b>Rtabel</b>	<b>Category</b>
1	0.798	0.422	Valid
2	0.741	0.422	Valid
3	0.673	0.422	Valid
4	-0.228	0.422	Invalid
5	0.719	0.422	Valid
6	0.657	0.422	Valid
7	0.798	0.422	Valid
8	0.741	0.422	Valid
9	0.458	0.422	Valid
10	0.657	0.422	Valid
11	0.798	0.422	Valid
12	0.673	0.422	Valid
13	0.009	0.422	Invalid
14	0.719	0.422	Valid
15	0.657	0.422	Valid
16	0.741	0.422	Valid
17	0.673	0.422	Valid
18	0.458	0.422	Valid
19	0.683	0.422	Valid
20	0.719	0.422	Valid

The result of the conversion to validity level shows that the developing test was categorized on good level criteria. The rtabel is 0.422, if the significance more than it and also more than 0.05 it can be categories into valid. There are 18 valid questions and 2 questions are invalid. The researcher also calculated and interpreted the items difficulty and items discrimination to determine the quality of the test. The interpretation can be seen at the table below:

**Table.2 Items Difficulty**

<b>Items</b>	<b>Mean</b>	<b>Interpretation</b>
Q1	0.60	Medium
Q2	0.80	Easy
Q3	0.60	Medium
Q4	0.25	Medium
Q5	0.65	Medium
Q6	0.50	Medium
Q7	0.60	Medium
Q8	0.80	Easy
Q9	0.60	Medium
Q10	0.50	Medium
Q11	0.60	Medium
Q12	0.60	Medium
Q13	0.85	Easy
Q14	0.65	Medium
Q15	0.50	Medium
Q16	0.80	Easy
Q17	0.60	Medium
Q18	0.60	Medium
Q19	0.70	Medium
Q20	0.65	Medium

**Table.3 Items Discriminations**

Items	ID	Interpretation
Q1	0.798	Very Good
Q2	0.741	Very Good
Q3	0.673	Very Good
Q4	-0.288	Replaced
Q5	0.719	Very Good
Q6	0.657	Very Good
Q7	0.798	Very Good
Q8	0.741	Very Good
Q9	0.458	Very Good
Q10	0.657	Very Good
Q11	0.798	Very Good
Q12	0.673	Very Good
Q13	0.009	Replaced
Q14	0.719	Very Good
Q15	0.657	Very Good
Q16	0.741	Very Good
Q17	0.673	Very Good
Q18	0.458	Very Good
Q19	0.683	Very Good
Q20	0.719	Very Good

The result of items difficulty shows that the test has a level of difficulty from medium to easy as evidenced by the mean items difficulty of 0.25 to 0.85. Then the result of items discrimination shows the interpretation of the test that 18 items are in very good category and 2 items are replaced.

After calculated the items validity, difficulty and discrimination, the researcher also calculated the reliability of the test using SPSS 26.

**Table.4 Result of Reliability**

**Reliability Statistics**

Cronbach's Alpha	N of Items
.934	18

The result of the conversion to reliability level shows that the developing test was reliable with the coefficient 0.934, because the criteria on the reliability was reliable if the coefficient Alpha is more than 0.60.

**Discussion**

As stated previously that the purpose of this study is to develop reading comprehension test for seventh grade students at SMPN 2 Banyakan Satu Atap. The developed test is based on Mobile-Assisted Language Learning (MALL) by using Quizizz software. The MALL-based reading test consists of eight principles (Accessibility and convenience, authentic reading materials, individualized learning, interactive activities,

immediate feedback and assessment, collaborative learning opportunities, gamification and motivation, and formative assessment).

Authentic assessment is implemented through the collection of students' reading comprehension test. The final score of the try-out test with 20 multiple choices based on their result on Quizizz application. The researcher calculated the score to measure the validity and also reliability. The results of the conversion to validity level shows that the developing test was categorized on good level criteria. The rtable is 0.422, if the significance more than it and also more than 0.05 it can be categories into valid. There are 18 valid questions and 2 questions are invalid. The interpreted of items difficulty shows that the test has a level of difficulty from medium to easy as evidenced by the mean items difficulty of 0.25 to 0.85. Then the result of items discrimination shows the interpretation of the test that 18 items are in very good category and 2 items are replaced. It was reliable with the coefficient 0.934. The test help the students develop their reading comprehension skill and knowledge in reading.

The result of the study proves that Mobile-Assisted Language Learning (MALL) is beneficial to be implemented in developing test for reading comprehension skill. In the study conducted by Hasan and Islam (2020) stated that Mobile-Assisted Language Learning is effective in some ways in ESL/EFL teaching, it just needs to adjust to the skill that will be implemented. The other study conducted by Yudhiantara & Saehu (2017) stated that MALL was suitable for language teaching in primary education as well as other levels of education. MALL can provide opportunities for collaborative learning even during reading test. It also allows for the integration of gamified elements to make reading test more engaging and motivating (Rahmawati, 2015). Based on some of the previous studies, it can be concluded that MALL is suitable for use in language teaching. In line with this study which used MALL for reading comprehension test.

Furthermore, MALL by using Quizizz can support formative assessment in reading test. Continuous monitoring and regular assessment provide students with ongoing feedback and enabling them to identify areas that require improvement. The principles of Accessibility and convenience, authentic reading materials, individualized learning, interactive activities are implemented in the Quizizz test that build up knowledge that students already know. The students can access reading test like playing online games more effective and easily based on the previous experience (Iramawaty, 2016).

## CONCLUSION

The results of the conversion to validity level show that the developing test was categorized on good level criteria. The rtable is 0.422, if the significance is more than it and also more than 0.05 it can be categorized as valid. There are 18 valid questions and 2 questions are invalid. The interpretation of items' difficulty shows that the test has a level of difficulty from medium to easy as evidenced by the mean item's difficulty of 0.25 to 0.85. Then the result of item discrimination shows the interpretation of the test that 18 items are in the very good category and 2 items are replaced. It was reliable with a coefficient of 0.934. The test helps the students develop their reading comprehension skills and knowledge in reading. Based on the students' results, the content of the developed test had been already complete and interesting. The modern and attractive appearance of the test with various theme colors makes students more excited. In addition, the language and vocabulary used are very familiar so that students can easily understand the content of the questions. Based on the result of the tryout, the final product was then produced. Some mistyping words and inappropriate questions in the developed test were revised. Furthermore, more pictures and theme colors were also provided to make the test easier to understand.

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