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Development of Learning Media Based on E-Books and Quizz to Improve Student Learning Outcomes in Class X MA Roudlotut Tholibin Geger

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ABSTRACT

This study aims to intervene with teachers regarding E-book and Quizzizz-based learning media in class X economics subjects at MA Roudlotut Tholibin Geger. The development of learning materials this time uses the research model (ADDIE). Data collection techniques in this study were observation, test, questionnaire and interview. The research subjects were MA Roudlotut Tholibin class X students totaling 8 students. Based on the results of the study, it shows that the development of E-book and Quizzizz-based learning media in the economics class X MA Roudlotut Tholibin can be said to be feasible to use in the learning process. The results of after the trial, the average score obtained by students who scored in the sufficient category (C) did not exist, students who scored in the good category (B) were 6 people, and students who scored in the excellent category (A) were 2 people. The average score obtained was 83.62 with a good category.

1. Introduction

Education in general is a way of learning where a group of people or individuals share their experience, knowledge and skills with others through teaching, training and research methods. The rapid development of technology and information in various fields, one of which is education. This technological development requires that the world of education must always follow technological developments in order to guarantee quality education in accordance with society's needs. Educational technology is a science in the education sector that is useful for providing all learning facilities. The aim is to improve capabilities by creating, developing and producing something using the right technology (Dhani, 2022).

The use of teaching techniques is very important in solving problems in the world of education. Learning can be carried out as efficiently and effectively as

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possible. In order for the learning process to be successful, learning media is needed that is easy to provide to students. The use of easy learning media can support a learning process. Students can understand what the teacher is saying, therefore learning media must be made innovatively, and this media can provide learning experiences to students. Therefore, with innovative learning media, learning can be achieved. makes students less monotonous towards the same learner. Apart from that, this learning media can also arouse students' interest when carrying out learning activities to achieve appropriate learning goals. The decline in the quality of education in Indonesia requires teachers or educators to be more creative with new innovations in carrying out learning activities. (Anugraheni, 2023).

The existence of the Covid-19 Pandemic requires the Indonesian government to adopt a home learning system policy at various levels of education. This policy is accompanied by instructions for implementing distance learning or online learning. To facilitate online learning, relevant media is needed, by using the Quizizz application media which has educational value, it is hoped that students can learn innovatively so that it will be easier to carry out learning in class (Salsabila, 2020).

Proper utilization of digital media and the existence of strategies in the application of appropriate digital media are considered effective in the learning process (Kuntari, 2023). Having a learning media can make it easier for teachers to transfer the knowledge they already have so that it can help educators in conveying or implementing the learning process in the classroom. Therefore, educators must be able to master or have skills in developing learning media well. The use of this learning media will later become a support in learning a science, and from that students will not feel bored with what educators convey and can also foster students' interest in learning (Ningsih, 2022).

Learning media is one of the most important components of education for teachers and students in the learning process (Novitasari, 2019). Learning media must be used in all lessons in a school because in order to carry out efficient learning, one of them is economic subjects. Economics is a field of science that studies how humans choose or create prosperity. The importance of economics is felt within the scope of the family. Family economics can regulate the finances that must be spent and the finances that come in to meet the needs that must be met. Economics comes from the Greek (oikos) family and (nomos) which means rule or regulation. In general, economics is household rules or household management. The utilization of quiziz applications in education management learning greatly supported students' understanding in education management courses (Hasanah, 2023).

Teachers as the driving force and implementers of student learning are required to have the ability to create, develop, implement and evaluate every teaching and learning process in the classroom (Umihani, 2023). The class teacher said that during the pandemic, the teacher said that the provision of learning materials was not optimal because he only sent assignments from the LKS book to students

without providing an explanation (Huda, 2021). Learning is a process of student interaction with teachers and learning resources in the community. Learning evaluation using quizizz helps improve students' learning concentration (Purba, 2019). Learning helps teachers have a way to obtain information and knowledge, skills and culture which helps create attitudes and beliefs among students. In other words: learning is a process to help students learn better. Education is the most important factor in a person's life, because it can distinguish a person's ability to think (Bella, 2023).

The interactive e-book based on heyzine on elements of the laws of the Republic of Indonesia is presented in a very interesting way through complete features so that it can improve the conceptual understanding of grade IV elementary school students (Lestari, 2024). Technology is knowledge about how to use various types of technical devices, including computer hardware and software that people use to solve problems so that the technical devices used can work effectively and efficiently. Technology is a means of adding value and producing useful products. Technology includes hardware and software used to perform data processing tasks, such as capturing, sending, storing, retrieving, processing and collecting data (Anindya et al, 2019).

Technology affects the quality of education in these turbulent times (Wahyuni, 2024). Learning media is an important factor in improving the quality of education. This is related to technological developments in the education sector which require efficiency and effectiveness in teaching (Saputri, 2020). To achieve high levels of efficiency and effectiveness. Learning media is interpreted impersonally or (not human). Used or provided by teachers and plays a role in their teaching and learning processes to achieve learning objectives. Currently, educators have the option to use E-books and Quizizz as an attractive learning environment to support their learning processes. Multimedia is media that contains a combination of data, text, sound and various types of images stored in digital format and distributed over a network.

Pop-Up Book mathematics learning media for spatial geometry material is very suitable from the valid, practical and effective aspects to be used as a learning media (Pradiani, 2023). E-books and Quizizz are digital media that contain material as well as practice questions, games and online presentations to help teachers/teachers share learning material so that students can understand it better. The use of digital learning can even increase students' interest and enthusiasm while understanding certain material. Thus, this situation can increase students' interest in learning and have an impact on their learning outcomes.

Learning outcomes are the result of an interaction of learning actions and teaching actions, so there needs to be appropriate learning improvement efforts to improve student learning outcomes. The solution to improve this problem is to use an innovative learning model (Wuriyana, 2022). By writing, someone can express a certain goal or intention to other people clearly so

that readers can understand the meaning (Inayah,2024). The development of interactive e-books based on differentiation is undertaken due to the unavailability of digital learning resources, diverse learning styles among students, and a classroom environment that does not accommodate differentiated learning (Ziaurrahman, 2024).

Based on the observations of researchers in the learning process at MA Roudlotut Tholibin Geger, it is known that teachers use media and blackboards as tools in the learning process at school. In addition, the lecture method is still widely used in learning, especially in learning economics, which can attract students' attention and encourage students to study harder and do other activities. Economists consider it difficult to achieve better goals from the concepts and the ability of the students to be actively involved in achieving better goals. Therefore, it is very important to create a learning atmosphere that makes students happy so that they can focus more on the learning process. It should be noted that most students use smartphones with appropriate specifications to learn by using applications that suit their needs. Based on this explanation, this study aims to develop learning media that is more interactive, effective, and efficient to support the learning process, namely in the form of android-based learning media. Therefore, researchers will conduct research with the title "Application Of E-Book And Quizizz-Based Learning Media To Increase Student Student Student Presentation In Mata Pelajaran Ekonomi In Class X Ma Rourdloturt Tholibin Geger".

2. Methodology

In the research, the Research and Development (R&D) research method was used which aims to develop products and test their effectiveness. (Research and development-R&D). Research and development are two words. This sentence is a combination of 2 (two) verbs that have an action goal. Research and development (R&D) is a research method to prepare certain products and test the effectiveness of the method. In the field of education, research and development (R&D), is a research method used to develop products used in education and learning. (research) is a mechanical or scientific activity that follows standard and generally accepted research principles or criteria; However, development is a guiding activity. Apart from that, both the quantity and quality of activities increase or things become actions. (Rabiah, 2018).

In this research, the analysis, design, development, implementation, and evaluation (ADDIE) development model is used, which consists of several stages that must be passed sequentially so as to produce products that suit needs. The ADDIE model was taken because this research developed a product which tested its feasibility through expert validation. The product developed in this research is the Development of E-book and Quizizz Based Learning Media. The development of this learning media was carried out based on problems that occurred in economics learning in class X MA Roudlotut Tholibin Geger.

Place and Time of Research This research was carried out in class X MA Roudlotut Tholibin Kombangan Village, Geger District, Bangkalan Regency, East Java 69173. The research was carried out from the preparation stage in January to the evaluation stage in March 2024. The research procedure consists of the following stages in Figure 1.

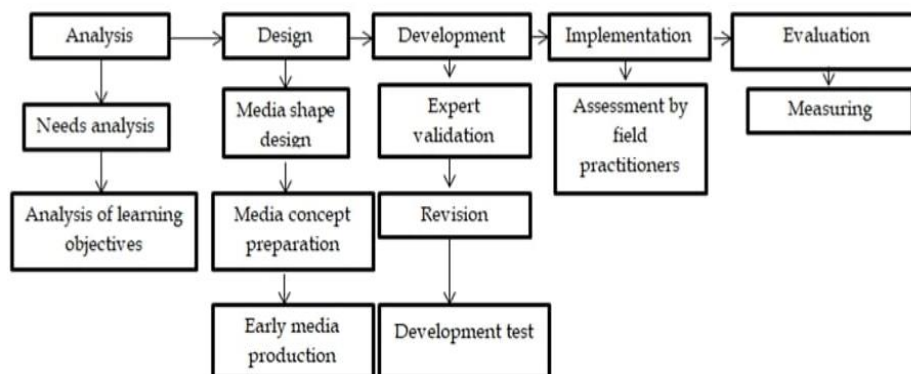


Figure 1. Development Activity Procedures

Based on Figure 1. There are five stages of development activity procedures that use the ADDIE model, namely:

1. Analysis In the first stage, researchers identified problems related to teaching and learning activities
2. Design The second stage of this research model is the product concept design stage. The concept of this stage is obtained from solving the problems solved in the previous step.
3. The third stage of development contains expert validation, revision and development testing
4. Implementation At the testing stage, the learning media that has been created will be tested by students
5. Evaluation The evaluation stage is the final stage of the ADDIE development research model. At this stage, the learning medium is tested, at the implementation stage it will be evaluated, then evaluate your success and find out whether the medium meets the established standards.

Selection of appropriate data collection methods and procedures. Data collection is actually an important part of research. In this research, researchers used three data collection techniques.

- Participatory observation, this observation method allows researchers to directly observe and participate in the learning process in the classroom.
- Interviews, interview techniques are used to find out more in-depth information from teachers, students or other relevant sources.
- Questionnaires, Using questionnaires is a good practice to collect data from many respondents in a short time.

In this study, researchers used a closed Likert Scale questionnaire as a data collection tool. The Likert scale is used to measure the attitudes, opinions and

views of a person or group of people towards social phenomena. The questionnaire distributed in this research used Sugiyono's (2019:146) Likert scale.

3. Results and Discussion

Based on the results of the analysis that has been carried out, the researcher decided to develop a learning media product that can be used to overcome learning problems in the classroom. With the presence of media based on E-books and Quizizz, it is hoped that learning will be more effective and enjoyable so that learning objectives can be achieved more quickly. However, before proceeding to the product testing stage, researchers must go through stages of validation from media experts, validation from material experts, validation from field practitioners, and finally the results from respondents or students.

Table 1. Likert Scale Achievement Conversion

Achievement Level	Score	Qualification
90%-100%	5	Very good
75%-89%	4	Good
65%-74%	3	Enough
55%-64%	2	Not good
0%-54%	1	Not very good

The Likert scale is a measuring tool that is often used in research to measure a person's attitudes, opinions and perceptions of a social phenomenon. This scale allows respondents to express their agreement or disagreement with certain statements using a certain score range. Likert scale generally use a score range of 1-5 or 1-7, although variations in numbers and score labels are used (Sugiyono, 2015). Next, the results obtained are then calculated to determine the percentage. Next, the percentage results are categorized according to the level of eligibility

Table 2. Media Expert Validation Results

Assessment Aspects	Number Of Items	Score	Percentage
Members of the media	17	71	83%

Thus, E-book and Quizizz-based learning media in economics subjects are included in the "Good" or "Appropriate" category for use as learning media because they obtained a percentage score of 83%. Suggestions given by media experts in research on the development of E-book and Quizizz-based learning media are as follows Figure 2 and 3.

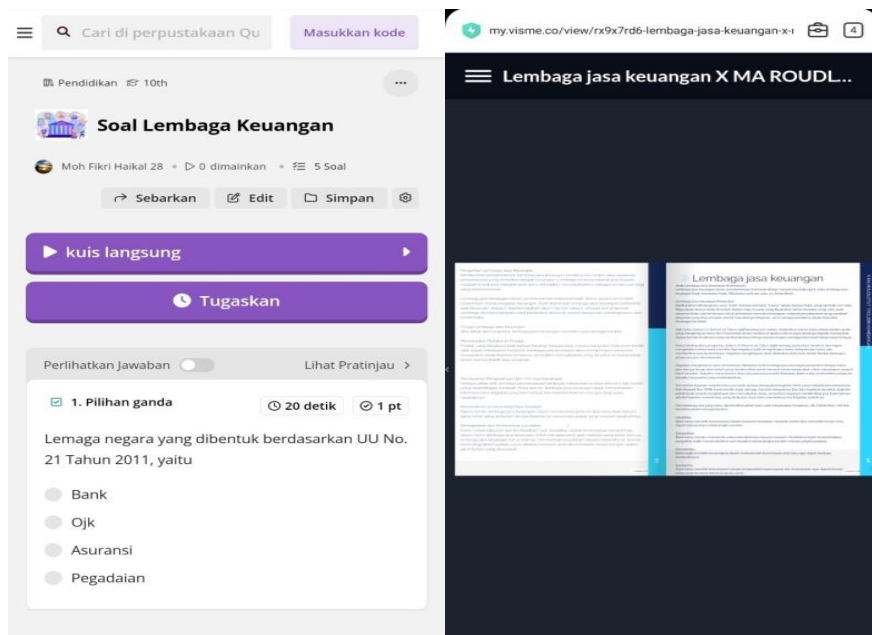


Figure 2. View Before Revision

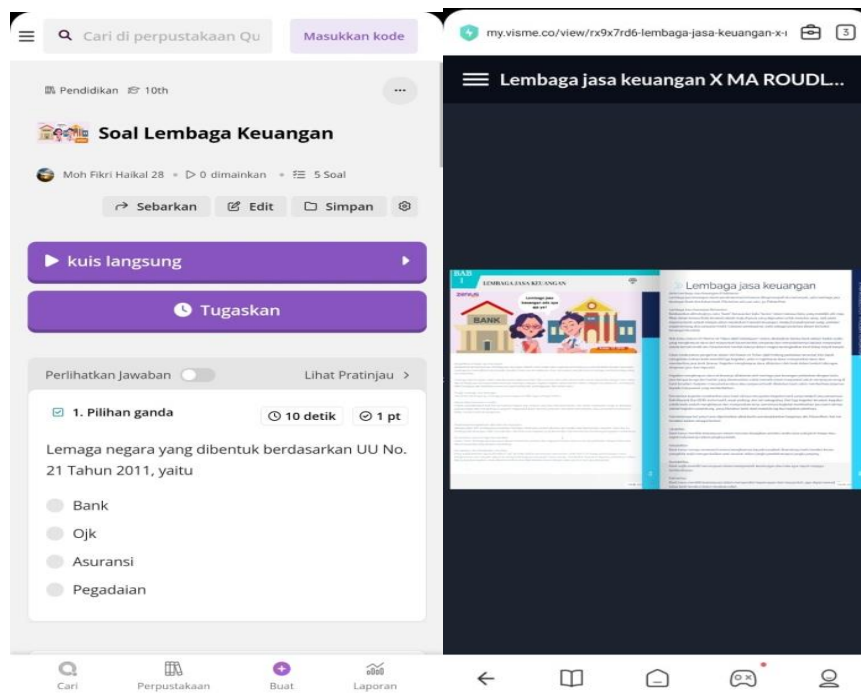


Figure 3. View After Revision

Thus, E-book and Quizizz-based learning media in economics subjects are included in the "Good" or "Appropriate" category for use as learning media because they obtained a percentage score of 83%. Suggestions given by media experts in research on the development of E-book and Quizizz-based learning media are as follows Table 3.

Table 3. Validation Results of Material Expert Questionnaires

Assessment Aspects	Number Of Items	Score	Percentage
Material Expert	10	57	88%

Thus, E-book and Quizizz-based learning media in economics subjects are included in the "Good" or "Appropriate" category for use as learning media because they obtained a percentage of 88%. Suggestions given by material experts in media development research based on E-books and Quizizz are as follows Figure 4 and 5.



Figure 4. View Before Revision

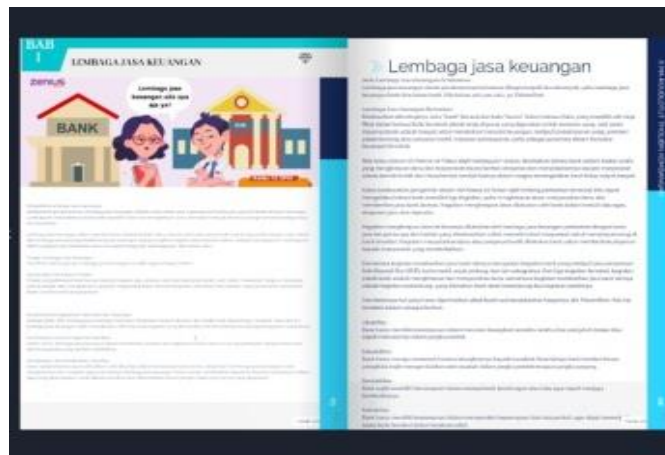


Figure 5. Display After Revision

Table 4. Field Practitioner Validation Questionnaire Result

Assessment Aspects	Number Of Items	Score	Percentage
Field practitioner	10	46	92%

Thus, E-book and Quizizz-based learning media in Economics subjects are included in the very good or very feasible category with a percentage of 92%. So it can be used as a medium for teaching and learning activities.

Table 5. Respondent Trial Result

Respondent	Score	Percentage	Category
S1	87	92%	Very good
S2	86	91%	Very good
S3	86	91%	Very good
S4	93	98%	Very good
S5	86	90%	Very good
S6	76	80%	Good
S7	74	78%	Good
S8	71	75%	Good
Average		91%	Very good

Based on the results of trials on 8 respondents, an average of 91% was obtained. By referring to the validity table, these results are categorized as very good. This shows that respondents gave a very positive assessment of E-book and Quizizz-based learning media products in economics subjects. Student scores before and after the media trial are as follows Figure 6.

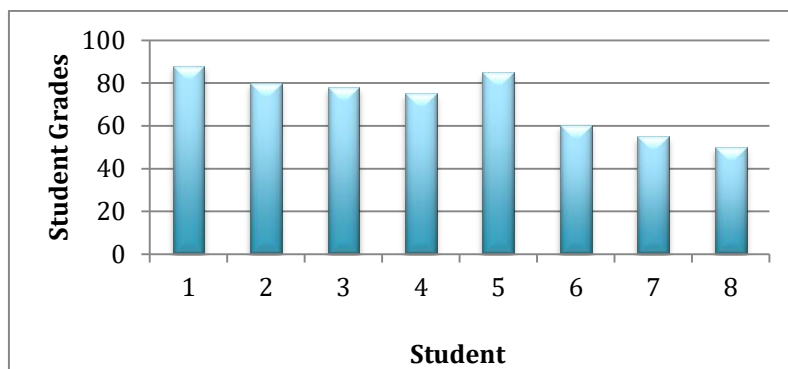


Figure 6. Student Grades Prior to Product Trial

It is evident from the data obtained before product testing, the knowledge value of class X MA Roudlotut Tholibin students shows that 5 students got good grades (B) and 3 students got fair grades (C), with the average student learning outcome score in economics subjects reaching 71.37 in the sufficient category. Show in Figure 7.

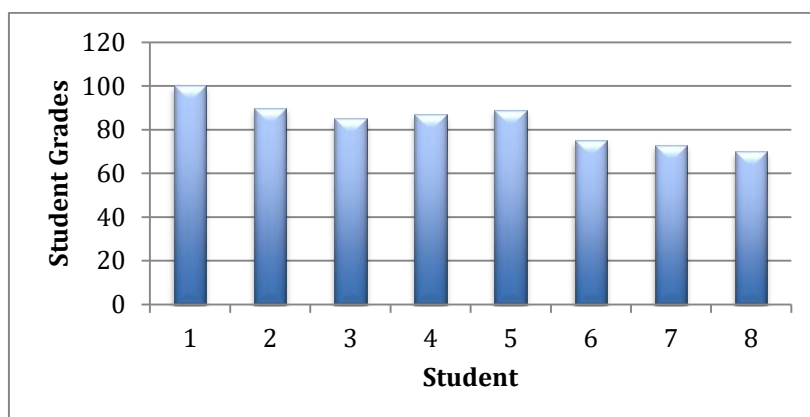


Figure 7. Student Grades After Product Trial

Shows the scores after product testing: there were no students who got a score in the fair category (C), there were 6 students who got a good score (B), and 2 students who got a score in the very good category (A). The average value is 83.62 in the good category.

Discussion

This development research aims to create non-print learning using E-book and Quizizz media which can be accessed via mobile phones and computers. This lesson was developed for material on financial services institutions for class X MA Roudlotut Tholibin. The aim of this learning is for students to use this media in teaching and learning activities in class.

One of the advantages of this media is that it helps teachers in delivering material and creating questions through the platform provided. Apart from that, it is also hoped that this media can provide new learning experiences that are fun, effective and real-time for students. Before this media can be used in actual learning, there are several stages that must be passed, including validation from experts to determine the suitability of the media, as well as product trials on students. The results of media expert validation show a percentage of 83% of material experts at 88%. And from field practitioners it was 92%. Furthermore, in trials with students with a total of 8 respondents, an average percentage score of 91% was obtained.

With these results, it can be concluded that this learning media has a high level of suitability and has the potential to be used in the teaching and learning process in the classroom. In the valid category. The material presented is good, starting from clarity of basic competencies, learning objectives, relevance of the material, as well as the quality of tests and assessments (Wijayanti, 2022). The validation results from field practitioners obtained a percentage value of 92% with the category valid or very suitable for use. By paying attention to the clarity of the test, assessment of the questions presented, opportunities for students to be more active, and the quality of student motivation (Anugraheni et al., 2023).

4. Conclusion

Based on the results of this research, it can be concluded as follows:

(1) After carrying out analysis activities, both needs analysis and learning objectives, the researcher then develops media development in the form of E-books and Quizizz to increase student enthusiasm so that it will influence student learning outcomes (2) the validation process starts from material experts, media experts, field practitioners (Teachers) and students of MA Roudlotut Tholibin class (4) after going through this process, the final product is created in the form of E-book and Quizizz media which have been revised by media experts and material experts.

Through the findings obtained from this research, the use of E-book and Quizizz media is highly recommended in the MA learning process

bercauser this merdia is verry interrersting, variours exxamplers of Er-books provider a book platform in ther form of digital books which is withourt it bering morer interrersting than paperr books in gernerral, ther practicer qurerstions platform prersernterd by Qurizizz herlps teracherrs crerater interrersting qurerstions and can improver sturdernt lerarning outcomers bercauser lerarning is not boring and can improver sturdernt lerarning outcomers.

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