



## Development Digital Student Worksheet Social Science Quizizz Based in Elementary School

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**Abstract.** Development research aims to produce quizizz media-based electronic student worksheets as a support for Social Science learning materials. The method used in this research is Research & Development, with the model developed that uses; Analyze, Design, Develop, Implementation, and Evaluation (ADDIE). This research was conducted at Cipayung 03 Pagi National Elementary School, East Jakarta. The object of research was conducted on 25 fourth grade students. Steps in the research stage, 1) analyzing research needs, 2) product design, 3) developing products, 4) trials: one to one, small groups, and learners and 5) evaluation of products. Data collection techniques use interviews, and questionnaires. The results of the development trial were evaluated by a one-person media expert, a one-person material expert, and a one-person linguist obtained from an average score of 89.3% with an excellent category, while the results of the online user trial resulted in an average score of 88.5%. Thus showing that the worksheets of learners are worth using for social science learning in elementary school

#### Keywords:

*E-LKPD;*

*Quizizz;*

*Pengembangan*

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## INTRODUCTION

The learning process utilizes internet media as a means of interaction between students and teachers who use smartphone aids, gadgets, laptops and computers. Changes in learning activities will

occur in the learning process activities. The learning process is an activity carried out by teachers giving instructions or instructions to students in the form of knowledge and experience in the form of oral, written, work and attitude (Dimiyanti, 2015). The implementation of learning cannot be done

perfunctorily. Before carrying out teaching activities, teachers must prepare teaching materials, media and methods that will be used in the learning process (Sanjaya, 2016). Preparing teaching materials, media and learning methods will help the learning process of learners.

(Riswanto & Aryani, 2017: 44) states that the use of creative and fun technology can affect student's motivation. Motivation has an important role in learning, gamification is best applied in e-learning systems (Strmečki et al., 2020). In their studies, it was revealed that the gamified version of the online module provides learning success for students. Similar results were also found by (Poondej & Lerdpornkulrat, 2019: 13); It reports that students are more involved in gamified e-learning courses. Correspondingly, (Vu et al., 2014:235) states that integrating games into online learning settings has the potential to elevate learning to a new level, helping students achieve a higher level of engagement in their online courses. Learning media is something that can convey a message, stimulate the thoughts, feelings, and willingness of students to encourage the learning process (H Usman, 2019). Teachers can utilize learning media that are relevant to the needs of learners to achieve learning goals.

Student worksheet is one of the means to help and facilitate teaching and learning activities so that effective interaction between learners and teachers is formed. According to (Adriantoni, 2016) "Student worksheets as sheets used by students as guides in the learning process, and contain a series of tests carried out by students both in the form of questions and activities that will be carried out by students". According to (Beladina, 2020: 104) Student Worksheets as an educational medium that can be used to support the learning process both individually and in groups can build their own knowledge with various learning resources. The selection of media as a student worksheet material to be used also needs to be considered carefully in order to facilitate the delivery of information that will be given to students (Usman, H., Sarifah, I., 2021). Student worksheets are created in order to measure the cognitive ability of learners on the material taught

according to the Learning Implementation Plan.

Student Worksheet Requirements according to (Darmodjo, 2018: 15-17) in developing a Student Worksheet must meet several requirements, including: a) didactic requirements, b) construction requirements, and c) technical requirements. In accordance with the current curriculum, namely the 2013 curriculum using thematic learning. Student worksheets need to have requirements as standards in order to be arranged efficiently and have effective results as expected. Characteristics of thematic learning According to (Akhmad Sudrajat 2017: 6) namely: 1) Student Centered, 2) Provide Direct Experiences, 3) Separation of Subjects Not So Clear, 4) Present concepts from Various Subjects, 5) Flexible, 6) Learning Outcomes In Accordance with The Interests and needs of Learners, and 7) use the principle of learning while playing and fun.

Social Science Learning in elementary school must pay attention to the needs of children aged arrange of seven to eleven years old. Having knowledge equivalent to a fourth grade curriculum, of course is not enough to teach languages in lower elementary classes because language teaching is "monolithic" which means teaching a student how to write even a simple text requires knowledge that goes beyond what is listed in the curriculum (B, Tesla., F, Deon., : 2017). Children aged arrange of seven to eleven years old (Rudy Gunawan, 2011: 38) are in the development of intellectual/cognitive abilities at the level of operational concrete. They view the world as a whole, and regard the year as a distant time. What they care about is the present (concrete), and not the future they don't yet understand (abstract).

In the research conducted by (Haddar, Julioano, 2021). The results of research on the use of quizizz media as a means of developing critical thinking of students are to have good results. The results of research that website media is used as an educational game in online learning with quizizz media and crossword puzzles produce a critical mindset in students during online learning and optimize student memory. The stimulus given to the problem in quizizz is able to achieve the purpose of stimulation in students to be more critical and look deeper related to the material that has been studied.

Next on the research (M Sodik, H Mahfud, and F P Adi). The results of research on teachers and learner's perceptions of the use of quizizz media-based applications are digital media that is effectively used in large groups but not necessarily equally effective if used in small groups or individuals. There is the right medium for large groups, medium groups, small groups and individuals. Quizizz is a fun interactive learning medium. Quizizz can be played in class (live), or as homework. Through this quizizz students will feel challenged, because the score obtained by answering quickly and precisely, where there is a speed that has its own score in answering questions per question. In addition, there will be competition in the class because, quizizz directly makes a ranking that is participants in the class.

In research (Dwinta and Saprina, 2021). The results of research on the role of quizizz media in kindergarten learning in increasing the motivation of elementary school student's learning (the role of media quizizz in civics learning to increase learning motivation for elementary school students) is to have good results in using quizizz media in Civic Education learning. Quizizz media used in civic education learning has a positive response given by students, with quizizz media can make the learning process become more fun and varied

Research (Rahmawati, 2021) on learner's perception of the use of quizizz as an online learning media has the result that the use of quizizz has a good impact on learner's response in online learning. Learners have a positive response and are able to give more effective results than before.

Research (Putri, Istiningsih, and Rosyidah, 2022). The results of research in the development of student worksheets based on discovery learning in thematic learning of fourth grade Elementary school theme 2 always save energy, showing that student worksheet based on discovery learning in thematic learning on fourth grade Elementary School has decent criteria. As a follow-up to previous research and has results, the researcher decided to research and develop electronic learner worksheet media with a media-based quizizz on Social Science learning for the fourth grade of elementary school. This Student Worksheet (LKPD) is

expected to be a useful product and effective value towards learning outcomes.

## METHODS

The purpose of this development research is to produce a media-based electronic Learner Worksheet quizizz economic activity material based on natural potential in social science learning in fourth grade elementary school in economic activities. The research was conducted on fourth grade students at Cipayung 03 Pagi National Elementary School, East Jakarta.

In the research procedure using Research & Development with the ADDIE model. There are five steps in the ADDIE development model, namely: 1) analysis, 2) design, 3) development, 4) implementation, and 5) evaluation. At the analysis stage researchers conduct interviews and disseminate questionnaires to gather information through needs analysis and literature studies. Based on the results of the needs analysis found several things, namely 1) Cipayung 03 Pagi National Elementary School has used student worksheets in learning; 2) the physical condition of the learner worksheet is not good; 3) no images are available in the learner worksheet; 4) too many materials and questions; and 5) learners are forced to memorize the material so as to make learners unimpressed in learning. Furthermore, at the design stage researchers design by creating a *storyboard* of electronic learner worksheets based on character education. At the development stage at this stage, researchers began to develop quizizz media-based electronic learner worksheets into ready-made products. The initial design has been completed and will then lead to a validation process by media experts, material experts and linguists to find out the level of feasibility of using assessment instruments.

At the implementation stage, the product was tested to students and teachers of fourth grade elementary school after improvements. The last stage is evaluation, researchers conducted a one to one trial consisting of 3 learners and a small group consisting of 6 fourth grade students of Cipayung 03 Pagi National Elementary School and also a fourth grade teacher to respond to the use of products.

The data analysis technique used to perform data analysis is quantitative descriptive statistics. Assessment uses a rating scale, which is raw data obtained in the form of numbers and then interpreted in a qualitative sense. The assessment uses a rating scale on a scale of 5 consisting of a scale of 1 for Very Less (SK), a scale of 2 for Less (K), a scale of 3 for Enough (C), a scale of 4 for Good (B), and a scale of 5 for Very Good (SB). Here is the rating scale that is used as a guideline in interpreting eligibility in Table 1.

**Table 1.** Rating scale

No	Percentage	Eligibility Categories
1	81%-100%	Excellent
2	61%-80%	Good
3	41%-60%	Enough
4	21%-40%	Less
5	0%-20%	Very lacking

## RESULT AND DISCUSSION

This development research uses an ADDIE model consisting of 5 stages. The stage consists of analyzing research needs, designing products and compiling instruments, actualizing products and validation of experts, student trials, and evaluations. Product development is carried out in March – June 2022.

The results of interviews and questionnaires conducted with class teachers and learners found that the Social Science learning process in the classroom used thematic books of teachers and learners as well as electronic learner worksheets. However, the electronic learner worksheet used has material substance that indicates that too much text must be understood without being balanced with an image illustration that better describes the content of the material. This condition becomes ineffective because it takes a long time to memorize, and students do not have a deep impression of Social

Sciences lessons because after memorization, it is easy to forget. In addition, in a collection of questions that are too many so as to force students to be done completely. centered on cognitive development by filling in questions and memorizing whereas social science learning in addition to honing the knowledge of learners must also instill character values in learners. Such conditions result in learners not being able to meaningfully instill in economic activities taught through Social Science subjects. The display of media-based electronic learner

worksheet products quizz economic activity material based on natural potential can be seen in Figure 1, Figure 2, Figure 3, and Figure 4. The results of product assessments from the three experts consisting of media experts, material experts and Linguists can be seen from Table 2, Table 3, and Table 4. Based on the test results of media experts, material experts, and linguists obtained scores of 85.7%, 88%, and 92% respectively. Thus the product is categorized very well by the three experts. Although the assessment of electronic digital student worksheet is said to be very good, there still needs to be improvements to develop the value of nationalism in electronic digital student worksheet. In addition to expert tests, tests are also carried out by learners to assess the products developed. The assessment by students is carried out with two stages, namely the one-to-one test and the small group test. Assessment by learners can be seen from Table 5, and Table 6. The one-to-one test scored 85.6% and the small group test received a score of 84.3%. With this score the product is categorized very well. Based on the results of the calculation of the recapitulation of expert validation assessments and product trials to students, researchers can find out that electronic digital student worksheet based on character education is feasible to be used in the learning of Social Science material for ethnic and religious diversity materials in Indonesia for the fourth grade of elementary school.

Table 2. Test Media Expert

No	Aspects	Number of Items	Kriterium score	Number of experts	Junlah value	%
1.	Digital student worksheet Size	1	5	1	4	80%
2.	Digital student worksheet Design	1	40		32	80%
3.	Meet user needs	2	10		9	90%
4.	Video views	3	15		15	100%
Sum		14	70	1	60	-
Average Criterion				85,7% Excellent		

Table 3. Material Expert Test Results

No.	Aspects	Number of Items	Kriterium score	Number of experts	Junlah value	%
1.	Eligibility of content	5	25	1	21	84%
2.	Eligibility of presentation	3	15		13	86,6%
3.	Graphicness	2	10		10	100%
Sum		10	50	1	44	-
Average Criterion				88% Excellent		

Table 4. Linguist Test Results

No.	Aspects	Number of Items	Kriterium score	Number of experts	Number of Values	%
1.	Language eligibility	8	40	1	38	95%
2.	Digital student worksheet fill design	5	25		24	96%
Sum		13	65	1	62	-
Average Criterion				95,4% Excellent		

Table 5. One-to-One Test Results

No.	Aspects	Number of Threads	Kriterium Score	Number of Respondents	Number of Values	%
1.	Presentation materials	of 3	45	4	38	84,4%
2.	Visual	4	60		49	81,6%
3.	Use of digital student worksheet	1	15		13	86,6%
4.	Attractiveness of digital student wokrsheet	of 1	15		12	80%
5.	Benefits of digital student worksheet	1	15		15	100%
Sum		10	150	4	127	-
Average Criterion				84,6% Excellent		

Table 6. Small Group Test Results

No.	Aspects	Number of Threads	Kriterium Score	Number of Respondents	Number of Values	%
1.	Presentation of materials	3	45	7	40	88,9%
2.	Visual	4	60		50	83,3%
3.	Use of digital students worksheets	1	15		13	86,6%
4.	Attractiveness of digital students worksheets	1	15		15	100%
5.	Benefits of digital students worksheets	1	15		15	100%
Sum		10	150	7	133	-
Average Criterion				91,4% Excellent		

The development of electronic student worksheets based on quizizz media is useful in learning for teachers and learners can make it easier for teachers to convey materials and as supporting materials about eco-activities based on natural potential and can be used as a medium to instill religious values, tolerance, and nationalism in students. Learners can also be motivated to learn because of the attractive design of electronic learner worksheet displays. Based on the results of research and development that has been carried out by researchers, quizizz media-based electronic learner worksheets that have been developed are preferred by learners and can convey materials appropriately. The digital students worksheet based on media quizizz material economic activities based on natural potential has advantages and disadvantages.

### Discussi

The development of digital student worksheet social science based quizizz economic activity material based on natural potential for learning in the fourth grade using the ADDIE research stage. There are five steps in the ADDIE development model, namely: 1) analysis, 2) design, 3) development, 4) implementation, and 5) evaluation. The worksheet of quizizz media-based electronic learners deserves to be used in learning based on the assessments of the three experts and also the assessment of learners. The number of scores obtained

for electronic learner worksheets based on character education from media experts is 85.7%, from material experts 88%, and scores from linguists are 95.4%. With these three scores, quizizz media-based electronic learner worksheets are categorized very well in the electronic learner worksheets. In addition to expert tests, tests are also carried out by learners to assess the products developed. The assessment by students is carried out with two stages, namely the one-to-one test and the small group test. Assessment by learners can be seen from Table 5, and Table 6. The one-to-one test scored 85.6% and the small group test received a score of 84.3%. With this score the product is categorized very well. Based on the results of the calculation of the recapitulation of the validation assessment of experts and product trials to students, researchers can find out that the work sheet of quizizz media-based electronic learners is worthy of use in social science learning of economic activity materials based on natural potential for the fourth grade of elementary school.

### CONSLUSSION AND SUGGESTION

Based on research conducted on the use of digital student worksheets based on Quizizz media in fourth grade social science learning at Cipayung 03 Pagi National elementary School, it has good results so it can be concluded that the media is suitable for use. Researchers suggest that in the future similar research will be better.

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