The Development of Student Worksheets Procedure Text Using Virtual Games in Class VII Students of SMP Negeri 1 Tanah Jawa Tp 2021/2022

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Abstract. Efforts to realize independent, creative and innovative learning are the main things behind this research. This study aims to determine the feasibility of LKPD with the use of Virtual Games through the results of expert validation and to determine the response of educators and students to the attractiveness of LKPD with the use of Virtual Games. This research is a type of instructional design development research (Instructional Design) using the ADDIE model. The research results obtained are the feasibility of LKPD with the use of Virtual Games. based on expert judgment, it is categorized as very feasible, with a very good percentage, with a material validation percentage of 96.25% and a percentage of media experts 94%. Educators and students gave a positive response to the attractiveness of LKPD by using virtual games as learning media, with the percentage of educators responding 98.8%, small group testing 89.09%, and field testing 93.14%. The development of LKPD with the use of virtual games was declared very feasible and received a positive response to be used as a learning medium.

Keywords: Student Worksheets Using Virtual Games, Procedure Text

1 Introduction

Improving human resources (HR) we can start by improving the quality of education. Education must be improved by initiating creative and innovative learning. The 2013 curriculum summarizes the competencies of attitudes, knowledge, and skills in an integrated manner (Kemendikbud, 2013: 72). The 2013 curriculum not only teaches right or wrong, but demands character education that instills good habits so that students are able to understand good and wrong knowledge (cognitive domain), have good skills in the community or in the school environment (cognitive domain). affective), and can do it in everyday life (psychomotor domain).

The process of achieving the cognitive, affective, and psychomotor domains is inseparable from the use of student worksheets (LKPD). Synchronous with what Majid said, (2013: 176) student worksheets (LKPD) are a collection of learning activities and must be completed by students. The

worksheet contains guidelines for learning, activities to complete learning problems written on the worksheet according to the competencies to be achieved. Student worksheets (LKPD) are used to assist students in learning so as to facilitate teachers in teaching and learning activities (KBM) in schools. In line with the above opinion, Prastowo (2015: 204) argues that the student worksheet (LKPD) is learning material in written form in the form of a row of material written on paper, an overview, and directions on learning that must be prepared by students, according to the instructions in the text. basic competencies (KD) to be achieved.

Procedure text is a text whose purpose is to show teaching about the steps to do something that has been determined. Procedure text means text that signifies a series of actions or steps that are regular and must be carried out to make something desired (Deni Herman Permadi 2014: 70). Procedure text contains an experience of observation and experimentation, procedure text has a thinking structure: title, objectives, list of materials, sequence of stages of implementation, observations, and conclusions. Thus, procedure text means text that contains the purpose of conveying directions and steps in doing or forming something that is presented in a coherent or structured manner.

Game (game) in this study is an educational game in the form of virtual reality (VR). based on Sahulata, Wahyudi, Wuwungan, and Nayoan (2016), VR is usually presented in a visual experience and can be felt by the user, the form of VR is displayed on a computer. VR can be created as if the person playing it can feel the situation in the game. With this VR-type educational game, students are expected to be able to experience the learning situations contained in the game firsthand, resulting in students gaining new experiences and knowledge. Virtual reality educational games that are designed are limited to two-dimensional forms but are still designed based on real-world learning situations.

Based on the results of observations at SMP Negeri 1 Tanah Jawa Kab. Simalungun, it is known that there are several obstacles regarding learning Indonesian, especially in procedural text material. Constraints faced by teachers include the limitations of teachers in developing LKPD with creative and innovative learning media based on Android. In addition, there are also many students who have difficulty understanding the procedural text material, the teacher is still the center of learning and students are less active.

The obstacles experienced by teachers at SMP Negeri 1 Tanah Jawa in developing LKPD can be seen when researchers see that the LKPD used by teachers has not been developed effectively. It can be seen in the picture below that the worksheets used in schools still use essay questions only and have never used virtual game media.

Given the importance of digital learning in the current era of technological development 4.0, research is needed on "Development of Procedure Text Student Worksheets (LKPD) by Utilizing Virtual Games for Class VII Students of SMP Negeri 1 Tanah Jawa TP. 2021/2022". This research was conducted because the development of procedural text material already exists but has never been accessed through virtual game media at SMP Negeri 1 Tanah Jawa. This research activity is an effort made by researchers to create innovative learning by introducing virtual games so that they can be easily accessed by students through their androids anytime and anywhere.

2 Method

Based on the opinion of Sugiyono (2009: 297), research development or research and development (R&D) is a basic research activity to obtain user needs issues (needs assessment), then continued with development activities to produce products and examine the effectiveness of these products. Development research consists of 2 words, namely

research (research) and development (development). the first activity means conducting research and literature studies to form a specific product design, and the second activity is development, namely testing the effectiveness, validation of designs that have been designed, as a result of this research are products that are tested and can be used by the wider community. According to Mulyatiningsih (2012: 161), making a new product is the goal of research and development.

The results of this development research are (1) A Student Worksheet (LKPD) by utilizing Virtual Game for class VII SMP, (2) Assessment of material content and LKPD design by material and design experts as well as questionnaire instrument experts, (3) Teacher response Indonesian language subjects and students on the LKPD that has been made, (4) The learning outcomes of students on the use of LKPD procedural text materials by utilizing Virtual Game class VII SMP.

In this study, LKPD was packaged in an attractive manner and provided a variety of colors and images, used language that was easy to understand so as to make students enthusiastic in reading and studying it, systematically by presenting material in accordance with the students' conceptual understanding abilities. At this stage the researchers developed a product of teaching materials in the form of Student Worksheets (LKPD) by utilizing Virtual Games for class VII SMP.

In developing the procedure text student worksheets by utilizing virtual games for class VII students of SMP Negeri 1 Tanah Jawa, the data needed include (1) a questionnaire on the needs of teachers and students on teaching materials for procedure texts by using virtual games for class VII SMP, (2) a questionnaire validation test of teaching materials and procedural text learning design using virtual games for seventh grade junior high school students, and (3) teacher and student responses questionnaire to procedure text student worksheets using virtual games VII junior high school.

In accordance with some of the opinions above, we can conclude that research and development (R&D) is a research model with the aim of making a product with the process starting with observing needs and then continuing with making a product that is tested. The products of this research include: media, learning materials, and learning systems. Product development in this research is product development in the form of student worksheets (LKPD) by utilizing virtual game media. The research development model in this study is the ADDIE model.

The data analysis technique in this study used descriptive qualitative analysis, namely through data exposure and data conclusions. This technique is used to obtain and analyze three data, namely (1) data on the needs of students and teachers for procedure text worksheets using virtual games, (2) analysis of expert lecturer validation test data to improve product design and procedural text worksheets using virtual games. for seventh grade students of SMP Negeri 1 Tanah Jawa, and (3) student learning outcomes tests (pre-test and post-test).

Each phase in the ADDIE model is interrelated and interacts with each other, the analysis phase is the most important phase, then refined by evaluation. To answer the formulation of the problem, the researcher will use the five stages of the research.

1. Analysis

The first stage in this development research is the analysis stage, at this stage the researcher analyzes the need for developing procedure text worksheets using virtual games and also analyzes the feasibility and requirements for developing the product.

2. Design

The second stage is the initial product design (design), which is a product design activity as needed.

3. Development

The third stage is the product development stage, at this stage the researcher realizes the product design, LKPD procedure text with the use of virtual games, then carries out product testing through validation tests by experts and responses from the teachers concerned.

Table 1. Validation Assessment Reference

Presentase	Kategori
81%-100%	Very Worthy
61%-80%	Worthy
41%-60%	quite decent
21%-40%	not feasible
0%-20%	Very Inappropriate

4. Implementation

The fourth stage is the product implementation stage (implementation), after the procedure text LKPD with the use of virtual games through a validation test by experts, the procedure text LKPD with the use of virtual games is tested on students to be able to find out the students' responses about the procedure text LKPD with the use of virtual games which has been developed.

5. Evaluation

Then the final stage is the product evaluation stage (evaluation), at this stage the product is evaluated as a form of revision of the results of student trials. If in the field trial there are still deficiencies, it is necessary to carry out an evaluation stage, where the researcher makes improvements to the procedure text LKPD by using the developed virtual game. The final product of this development research is the development of a procedure text student worksheet (LKPD) using virtual games to train students' conceptual understanding.

3 Results and Discussion

The material expert validator provides an assessment based on the questionnaire that has been provided. Several aspects that become an assessment of the LKPD with the use of virtual games are (1) the aspect of the feasibility of the content/material. The aspect of the feasibility of the content/materials in the LKPD obtained an average score of 97% with the criteria of "very good". (2) the aspect of presentation feasibility. The presentation feasibility aspect of the developed LKPD obtained an average score of 97% with the criteria of "very good". (3) aspects of language feasibility. The aspect of language feasibility in the LKPD obtained an average score of 97% with the criteria of "very good" and (4) the suitability aspect of teaching materials with the theme of procedure text by utilizing virtual games obtained an average score of 94% with the criteria of "very good". Based on the discussion on the validation of the material as a whole, it is explained that the LKPD procedure text with the use of virtual games is declared feasible to be used or applied in learning even with minor revisions/rules.

Design validators provide input and comments on the developed teaching materials. As for some inputs and comments from design expert validators, namely (1) the color of the LKPD cover was changed, (2) the introduction page should not be too empty, (3) the LKPD title circle was changed, (4) the concept map was colored to make it attractive. The assessment carried out by design experts on the graphic aspect obtained an average score of 96% with the criteria of "very good". Furthermore, the design assessment was based on the aspect of the suitability of the procedure text with the use of virtual games with an average score of 92% with the criteria of "very good" . Based on the discussion on design validation as a whole, it is explained that the LKPD with the use of virtual games for class VII students of SMP Negeri 1 Tanah Jawa is declared feasible to be used in the learning process with revisions.

Based on the results of the data on the responses of the Indonesian language teacher to Mrs. Klara Parhusip, S. Pd and Mrs. Henisa Nainggolan, S.Pd at SMP Negeri 1 Tanah Jawa, the score based on the fable text material indicators obtained an average of 98.8% with the "very good" criteria, the assessment based on the attractiveness indicator obtained an average score of 98% with the "very good" criteria and the assessment based on the language indicator obtained an average score of 99% with the "very good" criteria. Based on the data from the responses of the subject teachers, the LKPD with the use of virtual games is declared suitable for use in the learning process with an average score of 98.1 % with the criteria of "very good".

The test results of all indicators show that (1) in the individual trial as many as 3 students obtained the total average percentage was 88.10% with the category "very good". (2) a small group trial of 9 students obtained a total average percentage of 89.09% in the "very good" category. (3) a limited field trial of 32 students obtained a total average percentage of 93.14% in the "very good" category. The test results on students as a whole explained that the LKPD with the use of virtual games for class VII students of SMP Negeri 1 Tanah Jawa was declared eligible to be used as additional teaching materials or supporting teaching materials in learning Indonesian subjects.

At the pretest (before using the LKPD with the use of virtual games) students obtained an average score of 69.91, while at the posttest (after using the LKPD with the use of virtual games) the average

score was 84.38. This means that there is an increase in student learning outcomes before and after using the canva-shaped fable text module by 14.47. The increase in test results is evidence that the developed LKPD can have a positive impact on student learning outcomes, especially in procedural text material.

Based on the results of the gain test conducted on 32 students of class VII SMP Negeri 1 Tanah Java, it can be seen that as many as 5 students (15.63%) showed high effectiveness criteria, as many as 27 students (84.37%) showed effectiveness. currently. While the average gain index gain is 0.48 with moderate effectiveness criteria. So, it can be concluded that the LKPD using virtual games is used by students in class VII SMP Negeri 1 Tanah Java.

4 Conclusion

The conclusions that can be drawn from this development research are as follows: The feasibility of the procedure text worksheet with the use of virtual games based on the assessment of material experts reached an average percentage of 94% with very decent interpretation criteria and media experts gave an average percentage of 92% with very feasible criteria. The level of attractiveness of the procedure text worksheet with the use of virtual games based on the teacher's response is 98.8% with very interesting criteria. The level of attractiveness based on the responses of SMP/MTs students in both small group trials and field tests got very interesting interpretations with percentages of 88.10% and 89.09%. This shows that the LKPD developed is very attractive to educators and students, so it can be used as one of the supporting media in learning.

Suggestions

Suggestions for use. The researcher hopes that the results of the study in the form of procedure text worksheets with the use of virtual games can be used in the learning process in schools so that the quality of the worksheets as a whole becomes more useful.

Implementation suggestions. The researcher hopes that the procedural text LKPD product with the use of virtual games can be implemented to train students' conceptual understanding, because this LKPD contains evaluation questions that are adjusted to indicators of concept understanding.

Suggestion for further product development. It is hoped that the procedure text worksheets with the use of virtual games that were developed this time will be redeveloped not only on procedural text materials, but can be developed on other materials.

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