

# **APPLICATION: Applied science in Learning Research**

Development of Student Worksheet Learning Media Based on Project Based Learning Materials of The Prophet Hijrah to Madinah and The Struggle of Khulafa'u Ar-Rasyidin

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### **ABSTRACT**

This study aims to determine the development process and the feasibility of Project Based Learning-based student worksheets (LKPD) on the material of the Prophet Hijrah to Medina and the Struggle of Khulafa'u Ar – Rasyidin. LKPD Development Research adapting the ADDIE model includes the stages of analysis, design, development, implementation and evaluation. The research instruments used were observation sheets, interviews, student response questionnaires, product results from the development of validation by media experts, design, and material followed by teacher assessment and responses to students as well as trials on students. Based on the research results obtained Based on the validity analysis obtained by the media expert validation results of 80% with valid criteria, then the material expert validation results were 80% With valid criteria, based on the results of students' responses to the LKPD media, a percentage of 80% of all students gave a response positive. Based on the results of the posttest assessment, 88% of students scored above the KKM. Based on these data, student worksheets (LKPD) based on Project Based Learning on the material of the Prophet Migration to Medina and the Struggle of Khulafa'u Ar-Rasyidin are suitable for use as PAI learning media.

Keywords: Development, student worksheets, Project Based Learning

### INTRODUCTION

Education is a complex learning process, not only conveying learning material but also being able to change the character and nature of students in accordance with educational goals, quality learning can make developments in the personality of students to become students who have character and personality and character, such as as well as being a responsible person to himself and society and the environment (Chomaidah & Salamah, 2018).

Learning is a process of change to gain new knowledge, abilities and something that is directed at a goal, learning is a process of carrying out various experiences by seeing and observing something that is learned so that it becomes understandable. Based on the results of observations and interviews conducted by researchers with teachers in the field of PAI VII SMP Madinatul Ulum, researchers saw that there were various problems that occurred during teaching and learning activities. PIE Students have a score below the minimum learning completeness ranging from 60%. There are some students who have learning abilities that meet the criteria of completeness, on average students just sit, remain silent, and receive the material taught by the teacher, there is no student effort to ask questions, find and learn to solve problems (Pertiwi & Sholihah, 2019). Project based learning is a learning model that can be applied in all aspects of the field of study, including the field of Islamic religious education, because in the field of Islamic studies new problems are often found in accordance with the times (Amrulloh, 2019).

Through the PiBL learning model, a project will be designed from which a product will be produced so that students have space to express their creative ideas (Juwanti et al., 2020). In projectbased learning, the teacher's role is very much needed because the teacher's task is to present various authentic problems so that it is clear that the activeness of students is required to be able to solve these problems. After the problem is obtained, then the next step is to formulate the problem, from the problems - these problems are then solved together - discussed, project-based learning a learning model that provides opportunities for teachers to manage classroom learning by involving project work (Irsyaad, 2022).

With the help of LKPD, students are easier and more effective in solving the problems given. In addition, learning using project-based learning worksheets can train students to learn independently, study in groups, and can help students explore and develop problem-solving skills, by understanding the material and building their knowledge (Meishanti, 2019). Project based learning is a learning model that requires students to express creative and innovative ideas by working on the projects they do (Juwanti et al., 2020)

The test in this LKPD development research is used to measure the learning outcomes achieved by students, including pre-test and post-test. Observation sheets were used to collect data about needs analysis, student characteristics. later as a process that will be used as a benchmark for feasibility to be tested. This project-based learning also requires students to develop skills such as collaboration and reflection. According to research studies, project-based learning can help learners to improve their social skills, often leading to less absenteeism and fewer disciplinary problems in the classroom.

From the description above, the researcher intends to provide solutions related to obstacles in the learning process of students by conducting research, namely with the title "Development of Project Based Learning LKPD on the Material of the Prophet's Hijrah to Medina and the Struggle of Khulafa'ur Ar - Rashidin Class VII". Research and development is a process or steps used to develop or improve an existing product, which can be accounted for. As for the Student Worksheet (LKPD) is part of the teaching materials that support the learning process in the form of sheets containing the identity of the LKPD, materials, summaries, and instructions for implementing tasks that must be done by students (Maarif & Afidah, 2018).

This activity sheet is in the form of instructions for the steps to complete in the form of tasks and the task is clear about the basic competencies that must be achieved. From this information, of course, we can know that LKPD is a printed teaching material in the form of sheets of paper containing material, summaries, and instructions for implementing learning that must be done by students both theoretically and practically which refers to the basic competencies that students must achieve and their use. depend on other teaching materials. Project Based Learning is a learning method that uses problems as the first step in collecting and integrating new knowledge based on experience in real activities. Project Based Learning is designed to be used on complex problems that require lessons to investigate and understand them (Apriliani & Radia, 2020).

#### **METHOD**

This research is a research development or Research and Development (R&D) with the aim of producing a learning product. The resulting product is a project-based learning LKPD in PAI subjects. The research location is at SMP Madinatul Ulum which will be held on August 09 to August 15, 2022 This study adapts the ADDIE development model with five stages, namely Analysis, Design, Development, Implementation and Evaluation.

### Analysis

The first stage that must be done is to analyze the need for the development of new learning media and analyze the feasibility and requirements for developing learning media. In this stage the researcher collects information that can be used as material for making products in the form of Project Based Learning-based LKPD Development.

# Design

The second stage is the design stage, at this stage the researcher designs the LKPD according to the data obtained from the analysis stage. The design process is carried out by designing the LKPD by paying attention to the LKPD structure which includes six components consisting of titles, learning instructions, competencies to be achieved, supporting information, work steps, and practice questions. The material is designed and adapted to the basic competencies to be achieved and the presentation of questions based on Project Based Learning as a learning evaluation.

#### Development

The third stage is the development stage, in this stage, researchers realize development products in the form of Project Based Learning-based worksheets based on information that has been obtained from the

analysis stage and compiled based on the planning that has been carried out at the design stage, which is then developed according to the needs of students. The fourth stage, namely the implementation stage, at this stage, will be carried out face-to-face to class VII students of SMP Madinatul 'Ulum Jombang. At this stage, feedback is obtained from students on the LKPD by using a feasibility test instrument in the form of a validated student response questionnaire.

### Evaluation

The last stage is the evaluation stage, in this evaluation stage, it is carried out based on the results of student research related to products developed through student response questionnaires given after the product is used in learning.

In this development research, the researcher uses two types of data, namely: Quantitative data, which can be measured or calculated directly, where the data is in the form of information or explanations expressed by numbers or numbers and Qualitative data, namely data in the form of descriptions in sentences. This qualitative data is in the form of criticism and suggestions from the two validators.

The data collection instruments in this study were interviews, questionnaires, and tests. In this interview, the researcher conducted a preliminary study to obtain initial data in the form of information from Islamic Religious Education teachers related to PAI learning at the school. The results of interviews conducted are used as input in developing LKPD to suit the needs of students.

In this study, LKPD is said to be feasible if it meets the criteria of being valid, practical and effective. The following is a data analysis of validity, practicality and effectiveness.

## • Validity data analysis

Before carrying out the implementation in the research instrument class, the validity test was carried out by the validator. The validity test was carried out by 2 lecturers, namely material experts and media experts. The material experts and media experts were given a validation sheet to provide an assessment of the media's validity level. In each validation there are validation score criteria as follows: (a) very inappropriate, (b) not suitable (c) appropriate (d) very suitable.

To determine the percentage of validity of the validator, the following formula can be used:

To determine the percentage of validity of the validator, the following formula can be used:

$$P = \frac{\sum x}{\sum xi} x 100\%$$

Description:

P : Eligibility presentation

 $\sum x$ : Number of answers total validator score (real value)

 $\sum x i$ : Total number of highest answer scores (expected value)

Giving meaning and making decisions to revise teaching materials used qualifications that have the following criteria:

**Table 1.** Qualification Level of validity on the validator

Percentage (%)	Validity level
80% - 100%	Valid
60% - 79%	Enough
40% - 59%	Not Valid
0% - 39%	Invalid

Based on these criteria, the LKPD is declared valid if it meets the minimum score criteria of 60% of all the elements contained in the validity assessment questionnaire

# • Practicality data analysis

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The practicality test of the media was seen from the responses of the seventh grade students of SMP Madinatul Ulum Jombang to the developed LKPD learning media. Based on data on student responses to learning media, it shows that at least 75% or more students respond in the appropriate category for each aspect that is responded to, so this media can be said to be practical to use as learning media.

## • Effectiveness data analysis

The effectiveness of the media that has been developed can be seen by the increase in student learning outcomes through the pre-test given. The level of effectiveness of the LKPD media is seen from the post-test results obtained by students with KKM scores. In this study, it is said to be effective if at least 75% of students score above the KKM

## RESULT AND DISCUSSION

The results of the development based on the ADDIE stage are presented as follows

### Analysis

At this stage several analyzes were carried out to provide an overview of the needs of the teaching materials to be developed. Researchers conducted an analysis at SMP Madinatul Ulum Jombang. The analyzes carried out to support this development process include an analysis of the needs of teaching materials, an analysis of the scope of the material, and an analysis of the existing curriculum. This stage aims to find out what teaching materials are needed in the SMP. Based on the results of interviews with teachers, learning conducted in class still uses textbook references provided by schools only. Students showed that they were less interested in reading books because there was the impression that books were thick and the learning activities in the books were less interesting. In addition, it was also found that the learning process had not used other teaching materials, for example LKPD. Even though LKPD is one of the teaching materials that can help improve student learning outcomes, especially through the application of Project Based Learning. In addition, LKPD can be developed according to the needs to facilitate students to be more active in the learning process. The result of this stage is that the researcher will develop teaching materials in the form of Project Based Learning worksheets.

Based on interviews with Islamic religious education teachers, so far the learning process carried out by Islamic religious education teachers too often races with conventional media such as textbooks, blackboards, and so on so that students get bored quickly. Therefore, teachers of Islamic religious education subjects need LKPD learning media as an effective learning medium. The results of the design, the material used in the design of this learning media is the material of the Prophet's Hijrah to Medina and the Struggle of Khulafa'u Ar - Rasyidin and the media used is Project Based Learning-based LKPD

At this stage the researchers also conducted interviews to determine the analysis of the needs of students and analyze the competencies that will be published in the media. The analysis stage consists of the results of the needs analysis based on interviews with teachers and students of class VII SMP Madinatul Ulum Jombang on February 25, 2022 showed that learning tends to be monotonous, so that students only receive passive learning during teaching and learning activities. The material analysis is adjusted to the basic competencies and material indicators of the Prophet's Hijrah to Medina and the Struggle of Khulafa'u Ar - Rasyidin curriculum 2013.

### Design

At this stage, media selection, material selection, problem design, and overall media design design are carried out by adjusting the data obtained at the analysis stage. In addition, in the second stage, namely design, where at this stage the outline of the LKPD is formulated and the design of the contents of the LKPD that will be developed and compiling the assessment instruments. The outline of LKPD is the initial concept of LKPD according to the analysis that has been done before. The developed LKPD presents examples of questions and practice questions related to problems that

students often encounter in everyday life. Students are asked to solve the problems faced individually. In addition, there are also practical activities along with work instructions to attract students' interest in the learning process. Components in the PBL-based LKPD developed in this study include LKPD covers, author profiles, prefaces, table of contents, core competencies and basic competencies, competency achievement indicators, instructions for use, student activities, and bibliography. Student activities include presenting problems, discussion activities to formulate problem solving, and activities to hone their skills

## Development

At The development stage, LKPD is developed based on the design that has been designed. This stage aims to get the initial product from the LKPD to be developed. This stage has steps as follows. First, collecting sources or references, where researchers collect sources for material based on the 2013 Curriculum syllabus in accordance with the material to be developed. Sources or references in this case are in the form of math books that contain topical angles and literature reviews from books and scientific articles about Project based learning which will be used as the basis for developing worksheets. Researchers also collect visual assets from online sources that will be used in developing LKPD. Second, writing LKPD, in which researchers start writing LKPD in accordance with the outline of the LKPD that has been planned at the design stage. The development and layout of worksheets is done with the help of Macromedia Flash 8 and Microsoft Word software. Furthermore, LKPD is consulted with the supervisor. If there are errors in writing, the LKPD will be revised and consulted again with the supervisor. Third, the preparation of instruments consisting of material expert questionnaires, media expert questionnaires, and student response questionnaires. Material and media expert questionnaires are used for LKPD validation purposes before the LKPD is tested on student. At this stage the development is carried out by making project-based learning LKPDs. All components that have been prepared at the design stage, which are then produced into LKPD, after the LKPD is completed then the validity is tested against experts, namely media experts and material experts.

Based on the assessment table from the media expert above, it can be concluded that the overall assessment aspect gets a percentage of 80% which is included in the valid category. So that the media is suitable for use with revisions according to suggestions. At this stage, a field trial was conducted to determine the level of practicality of the media. Field trials were carried out on 27th grade students of SMP Madinatul Ulum Jombang. At this stage, after being given the material, students are given a worksheet in the form of a post test. After understanding the material, answering the questions in the LKPD and working on the post-test questions, students are asked to provide an assessment or response related to the media that has been tested as a learning medium. Based on the results of the student response questionnaire, 80 percent of the students agreed on each aspect, thus meeting the practical criteria.

The resulting product is a project-based learning worksheet based on the Prophet's Hijrah to Medina and the khulafa'u ar-rasyidi struggle. The development results based on the ADDIE stage are presented as follows. In the analysis stage, LKPD learning media as an effective learning media. The results of the design, the material used in designing this learning media is the material of the Prophet Hijrah to Medina and the Struggle of Khulafa'u Ar - Rasyidin and the media used is LKPD based on Project Based Learning. Designat this stage media selection, material selection, question design, and overall media design are carried out by adjusting the data obtained at the analysis stage. Development At this stage the development is carried out by making project-based learning worksheets. All components that have been prepared at the design stage, which are then produced into LKPD, after the LKPD is completed are then tested for validity against experts, namely media experts and material experts. Implementation At this stage field trials were carried out out to determine the level of practicality of the media. Field trials were carried out on 27 class VII students of SMP Madinatul Ulum Jombang. Evaluation at this stage, after being given the material, students are given a worksheet in the form of a

post test. Based on the results of the post test, the results of the post test.

The development of LKPD learning media based on student project based learning is good for use as learning media, especially in PAI learning. Based on the analysis of the validity of the results obtained by the media expert validation of 80% with valid criteria, then the results of the validation of material experts by 80% With valid criteria, based on the results of student responses to the LKPD media, 80% of all students gave a positive response. Based on the results of the posttest assessment, 88% of students scored above the KKM.

### CONCLUSION

Based on the exposure of the research results, the results of the analysis and discussion can be concluded as the process of developing valid and practical project-based learning LKPD learning media, it refers to the ADDIE development model which consists of five stages, namely Analysis, Design, Development, Implementation, and Evaluation. The average score of expert validity on project-based learning media based on project-based learning materials of the Prophet's Hijrah to Medina and the Struggle of Khulafa'u Ar - Rashidin is 80% with a valid category. Based on the results of student responses to project-based learning LKPD based on the Prophet's Hijrah to Medina and Khulafa'u Ar-Rashidin Struggle, it shows that 80% of students gave a positive response to every aspect of the project-based learning media based on project-based learning of the Prophet's Hijrah to Medina and The struggle of Khulafa'u Ar - Rashidin. In other words, students respond well to learning by using the LKPD media. Based on the results of the posttest assessment, 88% of students scored above the KKM. so that this LKPD meets effectiveness. based on the data above, this project-based learning project-based LKPD material about the Prophet's Hijrah to Medina and the Struggle of Khulafa'u Ar - Rashidin is valid, practical and effective to use.

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