# DEVELOPMENT OF PAI MATERIALS BASED ON QUIPER SCHOOL APPLICATION TO IMPROVE STUDENTS' LEARNING OUTCOMES MADRASAH ALIYAH YASPIB 1 BITUNG

**Nurhayati[1]\*, Wadan Y. Anuli[2], Abrari Ilham[3]**
[1,2,3]IAIN Manado Sulawesi Utara, Indonesia
Corresponding Email::nurhayati.sahibe@iain-manado.ac.id

## Abstract

This research aims to reveal the stages in developing school based on learning materials quipper effective for studying the subject of Islamic religious education. The material developed has the following characteristics: it is online, and includes a variety of media components, namely text, images, sound, and video, which is inputted through the application quipper school, from the aspect of learning, materials, and media, and the percentage of students who achieve mastery learned after using this learning media. This research is a research and development. The development of these materials is done through five stages consists of analysis, design, production, testing, and distribution. The analysis phase includes the analysis of the purpose of making and shape the product manufacture. The design phase includes procedures for inputting text material in the form pdf / powerpoint, instructional videos shaped material, exam, homework (PR). The production stage includes the income of all the ingredients are there, synchronization and test the flow of the program. Test phase consists of a limited due diligence review by subject matter experts and media specialists, and field tests that include: preliminary field testing, playing field testing, and operational field testing. The distribution stages disseminate the revised product to the user. Data were collected using observation sheets, questionnaires and tests, and analyzed with descriptive statistics. The trial results are used to improve school quipper based on learning materials development results. The results of expert validation Morals Aqeedah material shows that the material quality is good, with a score of 3.69. Likewise, media experts assess media quality is very good, with a score of 4.65. The trial results showed that the students' ratings of the quality of materials are well developed. Aspects of learning had a mean score of 4.51 (very good), the material aspects of 4.55 (very good) and media aspects of 4.77 (very good). The mean overall score of 4.61 that is included in the criteria very well. Total percentage of students who achieve mastery learning (minimum value "75") after the use of learning materials based on quipper school, as many as 90% with a mean score of pre-test of 52.33 and its mean score of post-test of 98.66 and is included in the category of "Very Good".

**Keywords:** *On lineLearning, quipper school and Islamic education.*

## INTRODUCTION

Online learning through Quipper School is not yet popular among education circles because the new media appeared in Indonesia around mid-2014. In its development, especially in North Sulawesi, it can be said that it has not developed yet, it's just that this Quipper School media has only been developed at Madrasah Aliyah Yaspib Bitung City (MAN 1 Bitung) North Sulawesi Province since its emergence in mid-2014 but has been effective starting from the 2014/2015 school year. The presence of Information and Communication Technology in learning is a challenge for the world of education, especially online-based learning in this case quipper school. One of the functions of online learning is that students learn regardless of time and place. One example is if a student is unable to come to school, the school simply sends a message in the form of homework to the student via the quipper school application.

The Indonesian government has established a policy through Presidential Instruction No. 6/2001 on telematics which is expected to become an important part of the education system so that the school curriculum is gradually adjusted to the policy. To support the above policy, the government issued Presidential Decree No. 20/2006 on the realization of a knowledge-based Indonesian society in 2025 through the utilization and optimization of information and communication technology. Meanwhile, the Minister of National Education

*DEVELOPMENT OF PAI MATERIALS BASED ON QUIPER SCHOOL APPLICATION TO IMPROVE STUDENTS' LEARNING OUTCOMES MADRASAH ALIYAH YASPIB 1 BITUNG*

*Nurhayati et al*

Decree No. 50/P/2007, among others, states that 50% of SMA/SMK/MA implement technology-based learning in 2009. This will be realized if supported by the ability of teachers, facilitators, operators, and students to master technology adequately. The development model used in this study is a procedural descriptive model where in the development of learning material products, steps must be followed to produce a product. There are three stages that must be carried out by the developer, namely problem conceptualization, product creation, and product testing. If the decision is accepted, then product creation can begin and if it has not been accepted, the process must be repeated. This procedural model is the most appropriate to be applied in the research on the development of Islamic Religious Education learning material products (subject of Akidah Akhlak) based on Quipper School.

## RESEARCH METHODS

Knowing the quality of quipper school media products from the development results, reviewed from three aspects, namely: learning aspects, materials and media. The percentage of students achieving learning completion after students use quipper school learning media, is obtained through the increase in student scores from pre-test to post-test. The concluded data is qualitative data in the form of student response scores to the development of learning media based on the quipper school application and student scores on the pre-test and post-test.

### Data Collection Instruments

To find out the quality development products and be able to dig what is desired in product development. As a media product that requires high time and cost, researchers dig up data with instruments that are often used by other experts or are found in existing literature and validated by material experts or media experts.

### Trial Data and Product Revision Suggestions

Product trials are conducted in two stages, the first is limited feasibility testing by material experts and media experts, the second is field testing consisting of preliminary field testing, main field testing, and operational field testing. From the results of the trial, five types of data are generally obtained, namely limited feasibility test data from material experts and media experts, preliminary field testing data, main field testing data, and operational field testing data.

Limited feasibility test from material experts evaluates PAI (belief and morals) learning materials resulting from the development of learning aspects and material aspects. Limited feasibility test from media experts evaluates learning media based on the Quipper School application resulting from the development of media aspects. The results of limited trials from material experts and media experts are used to revise learning materials based on the Quipper School application resulting from the development of measuring the feasibility of the material for use in field tests consisting of preliminary field testing, main field testing, and operational field testing.

The results of preliminary field testing are used to improve the product before being used for main field testing, the results of main field testing in addition to improving the product before being used for operational field testing, are also used to determine the impact of using learning materials based on the quipper school application developed on improving student learning outcomes in mastering the material of faith and morals. Operational field testing is used to measure the quality of learning materials based on the quipper school application in the subject of faith and morals.

### Data Analyst

Data analysis of assessment and product revision results from material experts based on data in table 4, it can be explained that from the learning aspect it obtained an average score of 3.60 and from the material aspect it obtained an average of 3.70. The overall average score (learning aspect and material aspect) is 3.65, which means that in the five-point scale table (table 2), it gets a score of "B", with the category "Good". Product revision based on suggestions from material experts, was carried out for approximately two days because there were improvements to the development of learning materials based on the Quipper School application. Analysis of Student Response Data and Product Revision Results in operational field testing.

## RESULTS AND DISCUSSION

Data Analysis of Motivation and Benefits Aspects

In general, students stated that the learning material based on Quipper School fostered motivation and provided significant benefits in the learning process of faith and morals. To provide a clearer picture, the following is data on the motivational and benefit aspects, obtained in the field trial. To make it easier to analyze, the data is

*DEVELOPMENT OF PAI MATERIALS BASED ON QUIPER SCHOOL APPLICATION TO IMPROVE STUDENTS' LEARNING OUTCOMES MADRASAH ALIYAH YASPIB 1 BITUNG*

*Nurhayati et al*

presented in the form of a presentation.

**Table 1. Data Analysis of Motivation and Benefits Aspects in Operational Field Testing**

| No | Indicator | Yes (%) | No (%) |
|----|-----------|---------|--------|
| 1 | The material on Creed and Morals is easy for me to understand via quipper school | 100 | 0 |
| 2 | The concepts presented are easy for me to understand. | 96.6 | 3.3 |
| 3 | The material on faith and morals presented challenges me to study better. | 90 | 10 |
| 4 | I want to learn a lot through quipper *school*because it can be accessed anywhere | 100 | 0 |
| 5 | *Quipper school*This gives me the opportunity to learn at my own pace. I | 100 | 0 |
| 6 | *Quipper school*this helps me in learn the material of faith and morals | 100 | 0 |
| 7 | Do evaluation help I know whether indeed IUnderstanding the material of faith and morals | 100 | 0 |
| 8 | The material on faith and morals presented through *quipper school*makes me learn faster | 86.6 | 13.3 |
| 9 | I enjoy using quipper school To study online | 100 | 0 |
| 10 | I want to learn to use quipper school in other subjects | 90 | 10 |
| 11 | Without the guidance of a teacher, I still study | 50 | 50 |
| 12 | The materials and questions provided enable me to learn more actively and easily. | 96.6 | 3.3 |
| 13 | *Quipper school* make Study I comfortable, relaxed and serious to learn | 100 | 0 |
| 14 | With Quipper School my cellphone becomes useful to learn | 90 | 10 |
| 15 | With Quipper School I don't miss any of the material assigned by the teacher. | 90 | 10 |

Based on the data in the table above, it can be explained as follows:

1) All students who were respondents in the field trial stated that the material on faith and morals presented in the Quipper School product was easy to learn. (100%)
2) Most of the students who responded to the field trial stated that the concepts presented in the media product were easy to learn (96.6%).
3) Most of the students who were respondents in the field trial stated that the material on faith and morals presented in the Quipper School-based product made the students feel challenged to learn better because the material was relatively easy to learn and they could be actively involved in the learning process because worksheets were provided that could be filled in by the students. (90%)

*DEVELOPMENT OF PAI MATERIALS BASED ON QUIPER SCHOOL APPLICATION TO IMPROVE STUDENTS' LEARNING OUTCOMES MADRASAH ALIYAH YASPIB 1 BITUNG*

*Nurhayati et al*

4) All students who were respondents in the field trial stated that they wanted to learn a lot through Quipper School. (100%)

5) All students who responded to the field trial stated that by using Quipper School they could learn according to their respective abilities. (100%)

6) All students who responded to the field trial said that Quipper School helped them in learning the material on faith and morals (100%).

7) All students who were respondents in the field trial said that they could measure their understanding by working on the evaluation questions that had been provided because after all the questions had been worked on they could see the results directly (100%)

8) Most of the students who were respondents in the field trial said that they could learn the material of faith and morals faster through Quipper School. (86.6%)

9) All students who responded to the field trial said that they enjoyed learning through Quipper School (100%)

10) Most of the students who responded to the field trial said that they wanted to study with Quipper School in other subjects (90%)

11) Most of the students who responded to the field trial said that they continued to study without being accompanied by their teacher (50%)

12) Most of the students who responded to the field trial said that the materials and questions provided made it possible for them to learn more actively and easily (96.6%)

13) All students who responded to the field trial said that Quipper School made them more comfortable, relaxed, and serious (100%).

14) Most of the students who were respondents in the field trial said that with Quipper School their cellphones became useful for studying. (90%)

15) Most of the students who were respondents in the field trial said that with Quipper School they did not miss the material assigned by the teacher. (90%)

In general, it can be concluded that students can benefit from learning using quipper school. Students also become more motivated in learning the material presented. So this quipper school has a positive contribution to the learning process.

## Pre-test and Post-test Data Analysis

As explained above, to determine whether the use of the product development has a positive impact on the expected learning outcomes. To find out, students are given a per-test and post-test to see if there is a significant development in student learning outcomes before and after using the product. The processing of per-test and post-test scores is done with the help of the excel program and SPSS version 23, so that it can be done faster. By looking at the student's score on the post-test, the percentage of students who achieve the learning requirements with a minimum score of "75" can be obtained. From the data in table 10, it can be explained that the number of students who achieve the learning requirements (minimum score of 75) after students use quipper school-based learning materials, as many as 27 students out of 30 students who took the test, so that 90,000% of students are stated to have achieved the learning requirements on the material. In the five-scale table (table 2) in Chapter 3, the percentage is included in the "very good" category. The data can be concluded that the impact of using Quipper School-based learning materials on improving student learning outcomes in the material on faith and morals is in the "very good" category by looking at the percentage of students who achieve learning completion of 90%.

**Table 2.** *Paired Samples Test* Pre-test and Post-test Results

| | Paired Differences | | | | | t | df | Sig. (2-tailed) |
| | Mean | Std. Deviation | Std. Error Mean | 95% ConfidenceInterval of the Difference | | | | |
| | | | | Lower | Upper | | | |
| Pair 1 Pretest-Posttest | -7,800 | 2,397 | ,536 | -8,922 | -6,678 | -14,550 | 19 | ,000 |

*DEVELOPMENT OF PAI MATERIALS BASED ON QUIPER SCHOOL APPLICATION TO IMPROVE STUDENTS' LEARNING OUTCOMES MADRASAH ALIYAH YASPIB 1 BITUNG*

*Nurhayati et al*

Based on the results of the SPSS analysis above, it can be seen that the Sig. (2-tailed) value = 0.000 (see the table above) which means it is smaller than 0.05. Thus it can be concluded that H0 is not accepted and Ha is accepted, so there is a significant difference. So statistically it can be said that: "there is a difference in student abilities before and after using quipper school-based learning materials".

**Final Product Review and Dissemination**

After going through several stages of trials, both limited feasibility tests from material experts and media experts, as well as field tests including preliminary field testing, the PAI material product based on Quipper School, the result of the development, is worthy of being a final product that can be distributed and implemented to users. The feasibility is seen from the average assessment of almost all stages giving a score of "B" with the category "Good". This is in accordance with the researcher's expectations in chapter 3 of this thesis, that the feasibility determined by the researcher, at least gets a score of "C" with the category "quite good". In addition to the Quipper School-based lesson material product, the result of the development is worthy of use, the product that can be accessed online also has several other advantages and several disadvantages. The first advantage is that this Quipper School-based material can be accessed anytime, anywhere there is an Internet connection. So there is no need to watch in a classroom or a certain room. The second advantage is that the material can be made in the form of video, text, writing, pdf, powerpoint, this experience is because Quipper School has been equipped with its management application. The results of this development have been published in online form "and can be accessed at any time. Another advantage of the Quipper School-based learning materials developed is that they also have real benefits, namely that until now there has been no PAI material that has been inputted into Quipper School.

**CONCLUSION AND SUGGESTIONS**

Conclusion

Based on the results of the research and the learning material products, the following conclusions can be drawn:

- The development of PAI learning materials based on Quipper School, based on the results of the researchers obtained the following results: in the primary field testing, it was tested on 10 students included in the "Good" category. Which consists of learning aspects with the "Good" category, material aspects with the "Good" category, and media aspects with the "Good" category in the main field testing, it was tested on 20 students included in the "Good" category consisting of learning aspects with the "Good" category, material aspects with the "Good" category and media aspects with the "Good" category. While in the operational field testing, 30 students were tested in the "Good" category.
- The quality of the learning materials based on Quipper School development, from the learning aspect, is included in the "Good" category. And the material aspect is also included in the "Good" category and the media aspect is also included in the "Good" category. Overall, the quality of this learning material is included in the "Good" category.
- The product of the learning material based on Quipper School, the result of this development is effective to use. This can be seen from the t-test of the average score of the pre-test and post-test, it can be seen that the sig. (2-tailed) value = 0.000, which means it is less than 0.05 (P = <0.05) at a significance level of 0.05 (alpha 0.05), the calculated t value = 14.55 is greater than the t table = 1.729, so it can be said that H0 is not accepted (H0 is rejected) and Ha is accepted. So it can be said that: "there is a difference in student abilities before and after using Quipper School media" From the material aspect, it is also included in the "Good" category. And from the media aspect, it is also included in the "Good" category. Overall, the quality of this learning material is included in the "Good" category.
-

**Suggestion**

- This Quipper School-based learning material product is the result of this development which is utilized in the learning process of the subject of faith and morals so that the learning process is more effective and efficient, and has attractiveness and the independence of student learning can be increased.
- Given that there are still shortcomings and weaknesses in this media, it is still necessary to make improvements and take anticipation to overcome existing weaknesses. For example, it is necessary to strengthen the evaluation instrument for evaluators, both material expert evaluators and media expert evaluators, so that the instrument test for evaluators is truly optimal and the products produced are also optimal.

*DEVELOPMENT OF PAI MATERIALS BASED ON QUIPER SCHOOL APPLICATION TO IMPROVE STUDENTS' LEARNING OUTCOMES MADRASAH ALIYAH YASPIB 1 BITUNG*

*Nurhayati et al*

- Further research needs to be conducted involving a control group, so that fraud in the trial will not occur.
   This product is recommended to be utilized optimally, both for students in particular and for educators in general, so that every student, teacher and the general public will gain insight into educational technology correctly and practically. So that the next hope is that students can easily understand educational technology and teachers do not bother to explain the material being taught because it has been explained in this product.

## REFERENCES

AM, Sardiman, Interaction and Motivation in Teaching and Learning, Jakarta: PT Rajagrafindo Persada, 2010.

Arsyad, Azhar, Learning Media, 18th edition, Jakarta: Rajawali Press, 2015

Arsjad, H. Rizal, Improving the Quality of Social Studies Learning with a Contextual Approach for Slow Learning Children, Thesis, Muhammadiyah University of Yogyakarta, 2009)

Arikunto, Suharsimi, Research Procedures: A Practical Approach, Jakarta: Bina Aksara, 2010

Ahmadi, Khoroiru, Lif, Construction of Learning Development Influence on Curriculum Mechanisms and Practices, Jakarta: Prestasi Pustaka Publisher, 2010.

A. Harahap, P. Hrp, NKAR Dewi, Macrozoobenthos diversity as an bioindicator of the water quality in the River Kualuh Labuhanbatu Utara, International Journal of Scientific & Technology Research, 9(4), 2020, pp. 179-183.

Baharuddin, H, Wahyuni, Nur, Esa, Learning and Teaching Theory, Jakarta: Ar-Ruzz Media, 2010.

Darmawan, Deni, Technology, Information and Communication Education, Theory and Application, Bandung: Remaja Rosda Karya, 2012.

Grolier International, Popular Science, Volume 10, Jakarta, Eternal Independence Pledge, 2004.

HP, Emansa, *Access Internet GPRS Through Laptop, MOBILE PHONE,*New Delhi:AndiYogyakarta, 2016.

Harahap, Arman ,2018, Macrozoobenthos diversity as bioindicator of water quality in the Bilah river, Rantauprapat, Medan. J. Phys.: Conf. Ser. 1116 052026.

Harahap, et, all, Macrozoobenthos diversity as an bioindicator of the water quality in the Sungai Kualuh Labuhanbatu Utara, AACL Bioflux, 2022, Vol 15, Issue 6.

Harahap, A. 2020. Species Composition & Ecology Index Of The Family Gobiidae At The Mangrove Belawan Of Sicanang Island International Journal of Scientific & Technology Research Volume 9, Issue 04, April 2020.

Harahap, A., et all (2021), Monitoring Of Macroinvertebrates Along Streams Of Bilah River International Journal of Conservation Science this link is disabled, 12(1), pp. 247–258.

Idris Husni, Computer Assisted Multimedia Development for Educational Technology Course, Thesis: Yogyakarta State University, 2007.

Kasiram, Moh, Research Methodology, (2nd printing, Malang: UIN Maliki Press, 2010) Martini, H. Mimi and Hadari, Quality Humans, 1st printing, Jakarta; Gadjah Mada University Press, Yogyakarta, 1994.

Murni, Distance Learning Based on Information and Communication Technology, Bandung: Alfabeta, 2009

Mudjiono, Ricky, Prihermono, Dicky, FX, Latest Edition of the General Dictionary of the Indonesian Language, Scientific Press, 2008.

Rusman, Learning Models to Develop Teacher Professionalism, (2nd ed., Jakarta: PT Rajagrafindo Persada, 2011)

Sadiman, S. Arif, Educational Media: Definition, Development, and Utilization, 17th Edition, Jakarta: PT Raja Grafindo Persada, 2014

Sadiman, S. Arif, et al., Educational Technology Library Series, No. 6, Educational Media: Definition, Development and Utilization, 6th Edition, Jakarta: Pustekom Dikbud and PT Raja Grafindo Persada, 2003

Singgih Santoso, Statistics in the Information Age with SPSS version 23, Jakarta: PT Elex Media Komputindo, 2015

Sitepu, BP, Development of Learning Resources, Jakarta: PT Raja Grafindo Persada, 2014

Sutrisno, Introduction to Innovative Learning Based on Information and Communication Technology, Jakarta: Gaung Persada Press, 2011

Sugiyono, Quantitative, Qualitative and R8D Research Methods, Bandung: Alfabeta, Tirtaraharja, Umar, Introduction to Education, 2nd printing, Jakarta: PT Rineka Cipta, 2005

Usman, Basyiruddin, M. Learning Media, Jakarta: Ciputat Press, 2002. Warsita, Bambang, Learning Technology: Foundations and Applications, Jakarta: Rineka Cipta, 2008.