

Feasibility test of teaching materials for mathematics learning evaluation integrated with Al-Quran

Nuril Huda ^{a*}, Imam Sujarwo ^b

Universitas Islam Negeri Maulana Malik Ibrahim Malang. Jl. Gajayana No. 50 Malang, 65144, Indonesia

^a nurilhuda26@uin-malang.ac.id; ^b imamsujarwo@yahoo.com

* Corresponding Author.

Received: 21 December 2023; Revised: 27 January 2024; Accepted: 3 February 2024

Abstract: Evaluation is one of the important components in the sustainability of the learning process that needs to be understood and can be applied by prospective teachers before entering the world of education at school. This study aims to describe the validity and practicality of mathematical learning evaluation materials integrated with the verses of the Qur'an as a provision for the students of mathematics education who are future teachers. The type of research was research & development (R&D) with the ADDIE model. Data collection techniques were validation sheets and lifting of practicality teaching materials evaluation of mathematical learning integrated verses al-Qur'an. The results of the study showed that the test results of material and language, media, material integration, and practicality of teaching materials in sequence were 59.25% (high): 55.55% (current): 75.00% (height):80% (practical with little revision). Based on the assessment, the mathematical learning evaluation material is integrated with the verses of the Qur'an and is practical so that it can be applied to facilitate the learning activities of students of mathematics education.

Keywords: teaching materials, learning evaluation, mathematics, integrated, verses al-quran

How to Cite: Huda, N., & Sujarwo, I. (2024). Feasibility test of teaching materials for mathematics learning evaluation integrated with Al Quran. *Psychology, Evaluation, and Technology in Educational Research*, 6(2), 139-150. <https://doi.org/10.33292/petier.v6i2.198>



INTRODUCTION

Education is an effort to improve individual skills in terms of behavior and attitudes that apply in their environment. Education aims to improve an individual's cognitive, psychomotor, and affective abilities. This ability is useful to build an individual's personality to become people who believe and are devoted to God Almighty, have high knowledge, have noble character, and master certain skills.

Allah SWT says in the Al-Quran, Surah Al-Mujadila verse 11, which explains the importance of knowledge and the virtues of those who have knowledge. This verse contains an encouragement for humans to seek knowledge and Allah will increase their position by several degrees. Science continues to develop over time. Science and education are an integral part of changing human thought patterns to become a quality resource. Science should guide humans to think positively, constructively, with a holistic view, and apply this knowledge in overcoming various problems in life. This explanation and description is a function of education that has an important role in life.

Efforts to achieve a quality education certainly involve the role of educational institutions, which are carried out through the learning process. Interaction among teachers or educators,

students, and learning materials occurs in the learning process. Law no. 14 of 2005 concerning Teachers and Lecturers states the main task of teachers as professional educators is to educate, teach, train, guide, direct, evaluate, and assess the students. The existence of teachers as professional educators is absolutely necessary for a country. Preparing the nation's future successors as professional teacher candidates also needs to be pursued through the Education Personnel Education Institute (LPTK) at the Faculty of Tarbiyah and Teacher Training with professional, social, pedagogical, and personality. A teacher's professional competency is the teacher's ability to master learning which includes planning as outlined in an RPP (lesson plan) document, implementing learning, and evaluating learning. According to Arifin (2009), evaluation is the main component that needs to be carried out by a teacher in learning to determine the success of learning at a certain time and level. According to Arikunto (2015), evaluation is the process of collecting information or data to find out the matters and to what extent the learning process has been achieved under the learning objectives. Referring to Law Number 20 of 2003 concerning the National Education System (2003), Article 57 paragraph 1 states that "evaluation is carried out in the context of controlling the quality of education nationally as a form of accountability of education providers to interested parties, including students, educational institutions and programs." Based on this statement, it is concluded that evaluation has an important position in learning. With evaluation, the level of success of an education is known. Apart from that, the evaluation might be used as a guide for decision-making regarding policies to improve the quality of education.

The success of learning in the subject of learning evaluation cannot be separated from the availability of quality teaching materials. The definition of teaching materials according to the Ministry of National Education (Hernawan et al., 2008) is all forms of materials used to support teachers in performing the teaching and learning process. Furthermore, according to the Ministry of National Education (Hernawan et al., 2008) states that teaching materials are classified into four types, namely (1) print-based, (2) hearing-based (audio), (3) viewing and hearing-based (audio-visual), and (4) interactive teaching material). This research used the category of printed materials as the teaching materials. The purpose is to make it easier for students to understand the material that is conveyed by the lecturer (Prastowo, 2011). Teaching materials contain material according to competencies to be achieved in the learning objectives. By using teaching materials, an educator gains efficiency in teaching time and becomes a facilitator in learning. And, the learning process becomes effective. Likewise, the presence of teaching materials also makes it easier for students to study independently, choose the subject matter to be studied, and carry out activities following the learning activities of the teaching materials.

The feasibility and practicality of teaching materials are the main points that must be met before it applied to learning activities. Teaching materials that are "feasible and practical" help to achieve learning objectives optimally. This is influenced by the importance of teaching materials in improving the quality of human resources to contribute to the progress of education in Indonesia. The feasibility and practicality of teaching materials must also pay attention to educational needs that continue to develop and require innovations, such as teaching materials for the evaluation of mathematics learning integrated with verses from the Quran. This integration is a crucial step to support the vision of UIN Maulana Malik Ibrahim Malang in carrying out the Tridharma of Higher Education, namely in the field of teaching within the UIN Maliki environment. Thus, the research aims to describe the feasibility and practicality of teaching materials for the evaluation of mathematics learning integrated with verses from the Quran.

METHODS

The research was research and development (R & D) with the ADDIE model. This research was carried out by considering and following the ADDIE research sequence. The ADDIE development model, which was previously developed by Molenda (2003), has 5 main stages, namely Analysis, Design, Development, Implementation, and Evaluation (Buhungo et al., 2021; Hasyim & Haling, 2017; Navarro et al., 2016; Pribadi, 2009). The stages in this research can be observed as presented in Table 1.

Table 1. Teaching Material Development Stages

Stages	Activities
Analysis	<ul style="list-style-type: none"> • Analysis of student's needs in the subject of learning evaluation • Review the materials in the subject of learning evaluation • Analyze learning in the subject of learning evaluation • Analyze learning outcomes and verses related to the material in the subject of learning evaluation
Design	<ul style="list-style-type: none"> • Create an outline of the content of the teaching material • Compile reference books, images, and materials that are appropriate to learning outcomes • Determine teaching material specifications • Designing the content format of teaching materials • Developing instruments for teaching material assessment • Validation of research instruments
Development	<ul style="list-style-type: none"> • Developing the concept of designed teaching materials • Validity assessment by media and material experts • Revision • Testing the content of teaching materials according to learning outcomes • Designing the layout and appearance of teaching materials • Producing teaching materials that will be applied in learning programs • Testing the suitability of teaching materials before implementing in learning programs
Implementation	<ul style="list-style-type: none"> • Testing the practicality of teaching materials
Evaluation	<ul style="list-style-type: none"> • Evaluation of the results of the feasibility and practicality test of teaching materials

The analysis stage of teaching materials was carried out for students of mathematics education at PTKIN throughout East Java with a sample of students from UIN Maulana Malik Ibrahim Malang (UIN MALIKI), UIN Sayyid Ali Rahmatullah Tulungagung (UIN SATU), and UIN KH. Achmad Siddiq Jember (UIN KHAS). Then, the design of teaching materials is performed based on the determined stages following Table 1.

The development stages of teaching materials are validated for their suitability by material and language expert lecturers, media experts, and material experts that integrated with Al-Quran verses and book (teaching material) pre-reviews.

The implementation stage was carried out three times at PTKIN throughout East Java, namely all students in the 4th semester of Tadris Mathematics UIN Maliki Malang, 5th-semester students of UIN KHAS Jember, and 5th-semester students of UIN SATU Tulungagung who are taking the subject of learning evaluation in the academic year of 2021/2022. The selection of respondents and the duration of implementation of teaching materials consider the needs, background, and research objectives to describe the feasibility and practicality of teaching materials broadly and sustainably so that they could be used optimally to support the implementation of learning activities.

The evaluation stage is performed by analyzing the validation results of the feasibility of teaching materials and the results of questionnaires on the practicality of teaching materials using the Aiken formula, in the form of an item validity index. The validity test uses the Aiken formula (Fajaruddin et al., 2021; Retnawati, 2016).

$$V = \frac{\sum s}{n(c - 1)}$$

Where:

V : item validity index

s : the score determined by each rate (expert) minus the lowest score in the category

n : number of raters (experts)

c : number of the option categories

Validation analysis using Aiken's V formula shows that the coefficient for each item passed the valid criteria of 0.30 (Aiken, 2000). In this condition, an item is considered valid if the validity coefficient is ≥ 0.30 (Azwar, 2014). Interpretation of the content validity results. Then, the validity classification performed as presented in Table 2.

Table 2. Validity Criteria for Teaching Materials

V Value	Description
$V > 0,80$	High
$0,40 \leq V \leq 0,80$	Medium
$V < 0,40$	Poor

Meanwhile, analyzing the practicality of teaching materials refer to criteria on Table 3.

Table 3. Practicality Criteria for Teaching Materials

Score	Practicality Criteria	Description
$X \geq X_i + 1,5 Sb_i$	Very practical	No revision
$\bar{X}_i + 1,5 Sb_i > X \geq X_i$	Practical	Little revision
$\bar{X}_i > X \geq X_i - 1,5 Sb_i$	Quite practical	Partial revision
$X < X_i - 1,5 Sb_i$	Not practical	Total revision

Where:

X : Achieved score

\bar{X}_i : $\frac{1}{2}$ (ideal maximum score + ideal minimum score)

Sb_i : $\frac{1}{6}$ (ideal maximum score – ideal minimum score)

RESULTS AND DISCUSSION

The results and discussion of the feasibility and practicality test of teaching materials for mathematic learning evaluation integrated with Quran verses described under the R & D research stage with the ADDIE model (analysis, design, development, implementation, and evaluation).

Result

Analysis

Based on the analysis through a questionnaire for needs analysis, which was distributed to 83 students as respondents from the Mathematics Education Department at several PTKINs in East Java, including UIN MALIKI Malang, UIN SATU Tulungagung, and UIN KHAS Jember, the result is presented in Table 4.

Table 4. Analysis Results for Teaching Material Needs

Questionnaire Results
During the lecture of mathematics learning evaluation/assessment, what type of teaching materials are used?
42 respondents answer e-book (50.6%)
39 respondents answer e-modules (47.0%)
29 respondents answer handouts (34.9%)
16 respondents answer LKM (19.3%)
29 respondents answer paper (34.9%)
4 respondents answer video for learning (from lecturer) (4.8%)
1 respondent answer lecturer's voice note of learning explanation (1.2%)
4 respondents answer ppt (4.8%)
2 respondents answer youtube (2.4%)
Most respondents answer e-books, e-modules, and handouts as teaching materials in learning evaluation courses.
Do you know/understand about the integration of science with the Quran?
65 respondents answer yes (78,3%)
Have you ever found a textbook for a mathematics learning evaluation/assessment subject integrated with verses from the Quran
62 respondents answer never/no (74,7%)
Is it important to prepare a mathematics learning evaluation/assessment book integrated with verses from the Quran!

Besides the need analysis through questionnaires, the researcher also discussed with several lecturers in the Tadris Mathematics department who organize the Tadris Mathematics study program and teach the Learning Evaluation course aiming the needs analysis can be more optimal and in-depth.

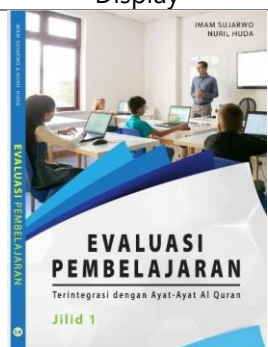

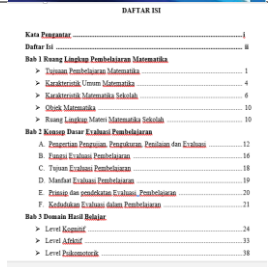

Design

The planning or design stage systematically designs the teaching and learning process, which begins with learning objectives, learning materials, and activities (learning experience). This design is conceptual and becomes the formulation for the next development stage. At this stage, a storyboard is also prepared for the materials in the textbook. The draft of teaching materials contains the following materials. Chapter 1 is the Scope of Mathematics Learning including objectives of mathematics learning, general characteristics of mathematics, characteristics of school mathematics, objects of mathematics, and the scope of school mathematics material. Chapter 2 is the Basic Concepts of Learning Evaluation, including understanding testing, measurement, assessment and evaluation, function of learning evaluation, objectives of learning evaluation, benefits of learning evaluation, principles and approaches of learning evaluation, and the role of evaluation in the learning process. Chapter 3 is Learning Outcome Domains, including the levels of cognitive, affective, and psychomotor. Chapter 4 is the Learning Evaluation Development Procedures, including evaluation planning, evaluation implementation, monitoring evaluation implementation, data processing, reporting evaluation results, and using the evaluation results. Chapter 5 is Class-Based Assessment, including the meaning of class-based assessment (PBK), the objectives and functions of PBK, the principles of PBK, the benefits of PBK results, the assessment of learning processes and outcomes, and the types of PBK. Each chapter consists of Al-Quran verses, learning objectives, explanation of material, and assignments.

Development

This stage is the product development process as a realization of the design that was prepared in the previous stage. Currently, material has been successfully prepared for 5 chapters, out of the 10 planned chapters. Following the reviewer's suggestion, the development of this teaching material should be made into 2 (two) volumes as the content is large. In the first year, it is recommended to have volume 1 containing the first 5 chapters. At the development stage, an in-depth study was also carried out to integrate the material with Al-Quran verses. This is also quite difficult to analyze. Aiming to integrate the verses of the Quran and the material, it needs to follow the correct stages under the study of integration and interconnection theory. The display of teaching materials for learning evaluation integrated with Al-Quran verses is presented in Table 5.

Table 5. Results of developing Teaching Materials for Learning Evaluation Integrated with Al-Quran Verses

No.	Contents	Display
1.	<p>Front Cover</p> <p>The cover is designed using Microsoft Word, consisting of a title, image, author's name, and institution. The cover design is completed with illustrations of learning activities to make it clearer and more interesting.</p>	
2.	<p>Back Covers</p> <p>The back cover contains an outline of the subject matter of the materials contained in the teaching materials developed by researchers.</p>	
3.	<p>The table of contents aims to ease the readers to find the pages</p>	
4.	<p>Learning Objectives</p> <p>At the beginning of each chapter, provide the learning objectives so that students understand the learning objectives after studying the material.</p>	

Feasibility Test Results of Teaching Material

Feasibility Test of teaching materials is carried out by validating them with several expert validators, including.

Table 6. Expert Validators

Name of Validators	Institution	Description
Mrs LN (initial)	UIN Sayyid Ali Rahmatullah Tulungagung	Aspects of Material and language
Mr GPM (initial)	UIN Maulana Malik Ibrahim Malang	Aspect of media
Mr WHI (initial)	UIN Maulana Malik Ibrahim Malang	Aspect of mathematics integrated with the Verses of Quran
Mr AI (initial)	Universitas Muhammadiyah Malang	Book's Reviewer

The validation results of the evaluation teaching materials for mathematics learning integrated with verses from the Quran are presented in [Table 7](#), [Table 8](#), and [Table 9](#).

Table 7. Expert Validity Results on Material and Language Aspects of Learning Evaluation Teaching Materials (Mathematics) Integrated with AI-Quran Verses

Criteria	No.	Indicator	Score of Validators			V Aiken	Description
			I	II	III		
Material							
Aspect of material feasibility	1.	Material feasibility with CPL	4	4	3	0,8889	High
	2.	Material feasibility with CP-MK				0,8889	High
	3.	Material accuracy	4	3	3	0,7778	Medium
	4.	Consistency of material	3	4	4	0,8889	High
	5.	Material attractiveness	3	3	4	0,7778	Medium
	6.	Clarity of material	4	3	4	0,8889	High
	7.	Breadth of material	4	4	3	0,8889	High
	8.	Content depth	3	4	4	0,8889	High
	9.	Up-to-date material	4	4	3	0,8889	High
	10.	The attractiveness of presenting the material	3	3	4	0,7778	Medium
	11.	Language Conformity with PUEBI	4	4	3	0,8889	High
	12.	Material completeness	4	3	4	0,8889	High
	13.	Learning Support Material	4	3	3	0,7778	Medium
	14.	Reference completeness	4	4	3	0,8889	High
	15.	Equipped with questions	4	4	2	0,7778	Medium
	16.	Equipped with questions for practice	4	4	3	0,8889	High
Aspect of language							
Straightforward	17.	Accuracy of sentence structure	3	3	4	0,7778	Medium
	18.	Effectiveness of sentences	3	4	3	0,7778	Medium
	19.	Standardity of terms	4	3	3	0,7778	Medium
Communicative	20.	Understanding of message/information	4	3	4	0,888889	High
Dialogic and interactive	21.	Ability to motivate students	4	4	3	0,8889	High
	22.	Ability to encourage critical thinking	4	3	4	0,888889	High
Suitability of student development	23.	Suitability and intellectual development of students	3	3	3	0,666667	Sedang
Language Conformity	24.	Language Accuracy	4	3	3	0,777778	Sedang
Use of terms and symbols	25.	Spelling accuracy	4	3	3	0,777778	Sedang
	26.	Consistency of terms use	4	3	4	0,888889	High
	27.	Consistency of symbol use	4	3	4	0,888889	High

Table 8. Expert Validation Results on Media Aspects of Teaching Materials for Mathematics Learning Evaluation Integrated with Al-Quran Verses

Criteria	No.	Indicators	Score of Validator			V Aiken	Description
			I	II	III		
Media							
Size of teaching materials	1.	Physical size of teaching materials	3	4	4	0,8889	High
Cover design of teaching materials	2.	Cover layout of teaching materials	4	4	3	0,8889	High
	3.	Conformity of the cover image of teaching materials and the material	3	3	3	0,6667	Medium
	4.	The fonts is interesting	4	3	3	0,7778	Medium
	5.	The font size is easy to read	3	4	3	0,7778	Medium
	6.	Cover Illustration of teaching materials	4	4	3	0,8889	High
	7.	Suitability of picture illustrations to learning	3	3	4	0,7778	Medium
	Content design of teaching materials	8.	Layout consistency	3	4	3	0,7778
9.		Accuracy of using images and materials	4	3	3	0,7778	Medium
10.		Elements of material sequence layout	3	4	4	0,8889	High
11.		Elements of clarity of material description	4	3	4	0,8889	High
12.		Accuracy of material integration with Islamic values (verses of the Quran)	4	3	4	0,8889	High
13.		Layout of material understanding	4	4	3	0,8889	High
14.		Typography (layout) of book contents is simple	3	3	3	0,6667	Medium
15.		Typography (layout) is readability	3	4	4	0,8889	High
16.		Accuracy in writing foreign terms and scientific names	4	3	3	0,7778	Medium
17.		Typography (grammar) of book contents is easy to understand	3	3	3	0,6667	Medium
18.		Content Illustrations	4	3	3	0,7778	Medium

Table 9. Expert Validation Results on Material Integration Aspects of Teaching Materials for Mathematics Learning Evaluation Integrated with Al-Quran Verses

Criteria	No.	Indicators	Score of Validator			V Aiken	Description
			I	II	III		
Integration							
Aspect of Content	1	Ability to present elements of Islamic integrated in a teaching materials for learning evaluation (mathematics) Islam	4	3	4	0.8889	High
	2	Correspondence between the verses of the Quran and the concept of Learning evaluation	4	4	3	0.8889	High
	3	The appropriateness of Islamic values Embedded	3	4	4	0.8889	High
	4	Ability to build the religious values (Islam)	3	3	4	0.7778	Medium

Based on the validation provided by several experts, the average of media feasibility validation results is presented in Table 10.

Table 10. Average of Media Validation Results

Description	Aspect	Result of V Aiken
Material and language	Content Feasibility	0,854167 (high)
	Language	0,818182 (high)
Media	Size of teaching materials	0,888889 (high)
	Cover design of teaching materials	0,796297 (medium)
	Design of teaching material	0,808081 (high)
Integration	Content	0,861112 (high)

Based on the validation of the feasibility of teaching materials in Table 10, the material, media, and integration of teaching materials in mathematics learning evaluation have a high average of V Aiken results. It shows that the teaching materials developed are "feasible" for use to support the learning activities in learning evaluation subjects.

Implementation

The implementation stage is performed by testing the practicality of teaching materials. The results of the practicality test are explained as follows.

Practicality Test Results of Teaching Material

The practicality test of teaching materials was performed by distributing questionnaires to respondents. They were 15 students of Mathematics Education, Faculty of Tarbiyah and Teacher Training, Sayyid Ali Rahmatullah State Islamic University, Tulungagung, because, in the odd semester, they were taking the subject of Mathematics Learning Assessment. The results of the questionnaire are presented in Figure 1.

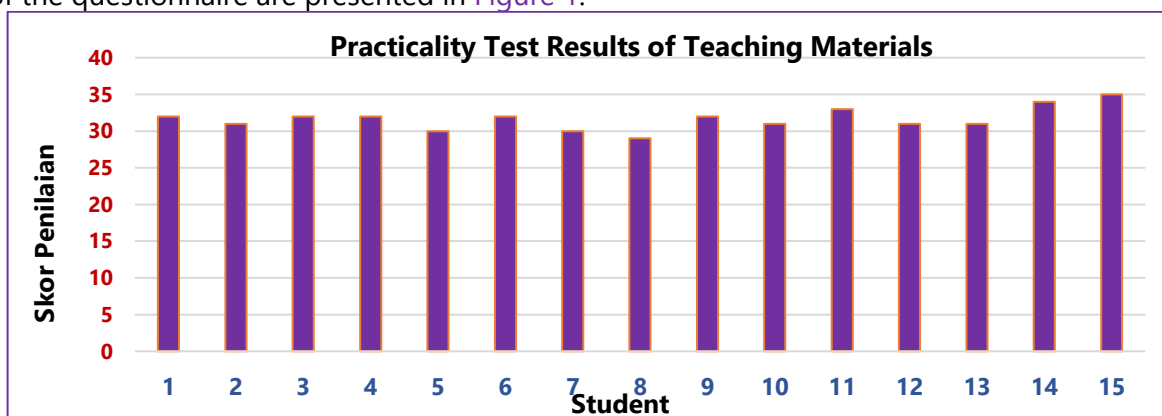


Figure 1. Practicality Test Results of Teaching Materials

The graph in Figure 1 showed 12 modes with practical criteria and little revision (25-32.5), and 3 scores with very practical criteria and no revision (32.5-40). It concluded that the developed teaching materials for mathematics learning evaluation integrated with Al-Quran verses received a positive response from students. Also, it is stated to be practical with little revisions. Students assess that the developed teaching materials are interesting, and motivate students to study the subject of learning evaluation by including Islamic treasures in teaching materials that show the signs of Allah's greatness and remind them about life. Thus, it is hoped that the developed teaching materials can be used in the subject of the Learning Evaluation, especially in the Tadris Mathematics study program.

Evaluation

Based on the results of the feasibility and practicality test through validation and the results of media practicality questionnaires by students, the developed teaching materials for mathematics learning evaluation integrated with Al-Quran verses in this research are "feasible" to be used to support learning activities in learning evaluation course. Also, it received a positive response from students. And, it was declared practical with little revisions.

Discussion

The results of the research and development of teaching materials for mathematics learning evaluation integrated with Al-Quran verses follow the previous research carried out by [Febrianto and Puspitaningsih \(2020\)](#). [Febrianto and Puspitaningsih \(2020\)](#) used the R & D (Research & Development) research method with the ADDIE (Analysis, Design, Development, Implementation and Evaluation) model. Also, teaching materials were prepared and developed. And, it was feasible so that students could use them to support their learning activities. However, this research has not integrated the material with Islamic values. Another research conducted by [Winarso and Wahid \(2020\)](#). The method used the R & D (Research & Development) research method with the 4-D model (Definition, Design, Development and Dissemination). In the research, a mathematics learning tool was developed with Al-Quran values that met good criteria in terms of valid, practical, and effective aspects.

This shows that the development of teaching materials and learning devices is still a topic that is often developed by many researchers to support improving the quality of education and optimizing learning activities. [Kharisma and Asman \(2018\)](#) support this where in their research stating that it is urgent to develop teaching materials due to the availability of teaching materials must follow the aims, characteristics, and targets of an evolving education. However, the research developed teaching materials for mathematics learning evaluation integrated with verses from the Quran that meet the criteria of valid/feasible and practical. As the output, they can be used as teaching materials in mathematics learning assessment/evaluation at various universities, especially under PTKI, which supports the efforts to integrate science and Islam. In line with [Yayuk \(2019\)](#), good teaching material meets curriculum needs in achieving learning goals. Apart from that, the developed teaching materials fulfill the function of classical, individual, and group teaching materials. This conclusion refers to [Lestari](#), quoted in [Yayuk \(2019\)](#) that the function of teaching materials is divided into three, namely classical, individual, and group. This means that teaching materials can be used as sources of information, media, and tools for obtaining information for individual students, and also in a study group.

By developing this teaching material, lecturers can minimize students' lack of readiness in lecturing activities. [Gazali \(2016\)](#) states that students with a good understanding background can participate in learning activities optimally, but students with a poor understanding background tend to experience difficulties in learning. Therefore, they need teaching materials that can facilitate students in increasing their understanding of the material.

CONCLUSION

Based on the results and discussion, it concluded that the feasibility test of teaching materials was analyzed using the Aiken formula obtained from the validation results. The results show that the feasibility test of the aspects of material and language, media, and integration were in the high category. In short, the developed teaching materials for mathematics learning evaluation integrated with the verses of Al-Quran are declared feasible and used to support the lecturing process. Moreover, the results of the practicality test concluded that the

teaching materials received a positive response from students and were declared practical with little revisions.

REFERENCES

- Aiken, L. R. (2000). *Psychological testing and assessment*. Pearson.
- Arifin, Z. (2009). *Evaluasi pembelajaran*. Remaja Rosdakarya.
- Arikunto, S. (2015). *Dasar-dasar evaluasi pendidikan (Revisi)*. Bumi Aksara.
- Azwar, S. (2014). *Reliabilitas dan validitas*. Pustaka Pelajar.
- Buhungo, T. J., Mustapa, D. A., & Arbie, A. (2021). Pengembangan perangkat pembelajaran team based learning- inquiry pada pembelajaran daring berbantuan WhatsApp Dan Zoom Meeting pada materi gerak lurus. *Jurnal Pendidikan Fisika Dan Teknologi*, 7(2), 147–152. <https://doi.org/10.29303/jpft.v7i2.3079>
- Undang-undang Republik Indonesia No. 20 Tahun 2003 tentang Sistem Pendidikan Nasional, (2003).
- Fajaruddin, S., Retnawati, H., Wijaya, T. T., Ramadhan, S., & Prihatni, Y. (2021). Alhamdulillah, butir pengembangan instrumen penilaian artikel jurnal ilmiah dikatakan valid oleh para rater. *Measurement In Educational Research (Meter)*, 1(2), 89–96. <https://doi.org/10.33292/meter.v1i2.156>
- Febrianto, R., & Puspitaningsih, F. (2020). Pengembangan buku ajar evaluasi pembelajaran. *Education Journal: Journal Educational Research and Development*, 4(1), 1–18.
- Gazali, R. Y. (2016). Pembelajaran matematika yang bermakna. *Math Didactic: Jurnal Pendidikan Matematika*, 2(3), 181–190. <https://doi.org/10.33654/math.v2i3.47>
- Hasyim, N., & Haling, A. (2017). The e-learning needs analysis in graduate programs of Universitas Negeri Makassar. *Journal of Educational Science and Technology (EST)*, 233–242. <https://doi.org/10.26858/est.v3i3.4748>
- Hernawan, A. H., Permasih, P., & Dewi, L. (2008). *Panduan pengembangan bahan ajar*. Departemen Pendidikan Nasional Republik Indonesia.
- Kharisma, J. Y., & Asman, A. (2018). Pengembangan bahan ajar matematika berbasis masalah berorientasi pada kemampuan pemecahan masalah matematis dan prestasi belajar matematika. *Indonesian Journal of Mathematics Education*, 1(1), 34. <https://doi.org/10.31002/ijome.v1i1.926>
- Molenda, M. (2003). In search of the elusive ADDIE model. *Performance Improvement*, 42(5), 34–36.
- Navarro, S., Zervas, P., Gesa, R., & Sampson, D. (2016). Developing teachers' competences for designing inclusive learning experiences. *Educational Technology and Society*, 19(1), 17–27.
- Prastowo, A. (2011). *Panduan kreatif membuat bahan ajar inovatif*. DIVA Press.
- Pribadi, B. A. (2009). *Desain sistem pembelajaran*. PT Dian Rakyat.
- Retnawati, H. (2016). *Analisis kuantitatif instrumen penelitian*. Parama Publishing.
- Winarso, W., & Wahid, S. (2020). Development of mathematics teaching device integrated with Quranic values: Issues, challenges, and implementation model. *International Journal of Learning, Teaching and Educational Research*, 19(1), 95–117.

<https://doi.org/10.26803/ijlter.19.1.6>

Yayuk, E. (2019). Pengembangan bahan ajar pembelajaran matematika untuk mahasiswa PGSD Semester 6. *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, 9(2), 172–182.

<https://doi.org/10.24246/j.js.2019.v9.i2.p172-182>