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Development of an e-module in basic physics II integrated with the alquran based on a saintific approach

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Abstract

This research is motivated by students' need for teaching materials that can be used as a guide to study independently anywhere and at any time in the Basic Physics II course. One of the teaching materials that can be used is E-Module. It is hoped that the Basic Physics II E-Module can help students understand lecture material, reduce student confusion and boredom in studying the large amount of Basic Physics II material. This research aims to produce a Basic Physics II E-module integrated with the Al-Quran based on a scientific approach that is valid and practical. This development research uses the ADDIE development model which consists of the Analysis, Define, Design, Implementation and Evaluation stages. The research instrument is a product validation sheet which was validated by several experts in the fields of media, materials and interpretation. The instrument is a response questionnaire sheet to measure product practicality by students. Data analysis was carried out in the form of analysis of validation results and analysis of student responses as users. This analysis was carried out descriptively. The data obtained from the questionnaire is tabulated and presented in tabular form, then the percentage is searched according to the formula, then the results of this percentage are compared with each value with the validity and practicality categories. Based on the results of data analysis, the average validity of the E-module according to material experts, media experts and interpretation experts was respectively 83%, 94% and 91.67% in the very valid category. The results of the student practicality questionnaire analysis were worth 84.48% in the very practical category. Thus, the E-module developed can be used as teaching material in Basic Physics II lecture activities.

Keywords: development; e-modul; basic physics; al-quran integration; scientific approach

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INTRODUCTION

Physics is a science whose truth is discovered through research or scientific methods. Physical concepts, laws and theories are considered correct if they can be proven experimentally (Murdani 2020). Physics learning is a branch of science that underlies technological progress and the concept of living in harmony with nature (Afrinaldi and Rifai 2019). Therefore, it is appropriate for students to be encouraged to discover physics concepts independently. Physics concepts should not be recorded, or given in their entirety by educators, but educators should be facilitators, and encourage students to be

active in discovering concepts. This can be done through a learning process that uses a scientific approach.

The scientific approach is also called the scientific approach, because it is an interpretation of the scientific method. The scientific approach is designed so that students actively build concepts, principles and laws of physics through scientific steps such as: observing, asking questions, proposing hypotheses, collecting data, analyzing, making conclusions and communicating (Musfiqon and Nurdyansyah 2015). Through a scientific approach, scientific process skills can be developed (Marjan, Prof. Dr.Ida Bagus Putu Arnyana, and Dr.I Gusti Agung Nyoman Setiawan 2014)

Science process skills are intellectual skills that can produce information through experience and activities in researching natural phenomena in the form of mental, physical and social skills (Lepiyanto 2017). Science process skills have several very important roles in science learning, especially physics, including: 1) helping develop students' thinking, 2) helping students learn through discovery, 3) students' memory increases, 4) students' intrinsic satisfaction arises when succeed in doing something, 5) help students understand science concepts, (Suryaningsih 2017). By applying science process skills in learning, interaction occurs between concepts, principles and theories discovered and developed by previous scientists. This interaction gives rise to the attitudes and values required in the process of scientific discovery itself, such as: accuracy, creativity, perseverance, responsibility, critical, honest, objective and discipline.

Facing the industrial revolution 4.0, students are the spearhead of the Indonesian nation facing industrial competition. In order for graduates to be competitive, the learning system outlined in the curriculum needs a new orientation, not just old literacy (reading, writing and mathematics). Universities must also be able to prepare graduates who also have: data literacy, technological literacy, and humanistic literacy (Lukita, et al., 2020). Through learning physics, the soft skills needed in the 4.0 era, such as: the ability to solve complex problems, the ability to think critically, creativity, the ability to make decisions under pressure, and the ability to spontaneously compose knowledge can be developed. Physics learning that is built on scientific steps can of course also train data literacy, technological literacy and humanistic literacy skills which are really needed in this industrial era.

To support physics learning, apart from requiring an approach, media is also needed. One of the media that can be used in accordance with current developments is Electronic Modules (E-Modules). E-Module is a form of presenting independent learning materials that are systematically arranged into the smallest learning units to achieve certain learning objectives which are presented in electronic format which includes images, animations, videos and simulations (Damayanti, Hendri, and Wardana 2018). E-Module is a form of presentation of independent learning resources which are systematically arranged into the form of the smallest learning units and presented in electronic format which includes animation, audio, navigation to achieve certain learning objectives, which makes users more interactive with the program (Arnila, Purwaningsih, and Nehru 2021).

From the author's experience so far teaching Basic Physics II courses, many students have difficulty understanding Basic Physics II material. This can be seen from the low value of Basic Physics II students. Through interviews and questionnaires with students taking Basic Physics II courses, information was obtained that students' difficulties were caused by the characteristics of Basic Physics II material which was in the difficult category. The scope of the material is too broad, while the teaching materials are in the form of reference books in English and are limited. The book is thick and heavy to carry, so students are reluctant to use this book in lecture activities.

So we need a medium that is easy for students to understand and can be carried and studied anytime, anywhere. E-Modul is one media that can overcome this problem. E-Modules as a source of lecture references are easy to carry anywhere because you just need to store them on your cellphone. Learning physics is no longer bound by time and space. E-Modules will guide students to study physics independently anytime and anywhere. This is in accordance with research (Chandra et al. 2023) that E-Modules can help students understand lesson material, increase interest and motivation to learn for users.

The increasingly intense use of the internet among pupils and students due to online learning has indirectly eroded students' ethical values and attitudes. The value of politeness and respect for parents and teachers has been greatly reduced. Even things that were previously considered taboo, and violating the ethics of politeness and religion are considered normal things. So that Indonesia's young generation does not lose the nation's noble values which always pay attention to values, social norms and religious teachings, education in Indonesia should instill character values. One effort to instill these character values is by integrating courses with the Al-Quran which is enriched with quotations of relevant Al-Quran verses. According to Rashed et al, an integration or dualism between the Al-Quran and science is needed so that humans have a balance between the world and the homeland (Rashed et al. 2016). The existence of this Al-Quran-based teaching material will increase religious attitudes and belief in the majesty of Allah. According to Suparno Satira (Satira 2013), physics must be able to build an individual's value system, traits and attitudes as a scholar, and be responsible for forming the character of a society that has a scientific attitude. Physics learning should be integrated with religious knowledge (the Al-Quran), so that the resulting graduates have broad knowledge, reliable skills, and good attitudes/character (scientific attitudes and religious attitudes). Based on Lizelwati's research results, it is said that almost all students like it if physics learning is integrated with the Al-Quran (Lizewati, et al., 2019). Furthermore, from Fadzila's research (Binti Rahman and Che Noh 2021) it was found that a learning approach that integrates the Al-Quran and science (PIQS) can actually improve students' higher order thinking skills (KBAT) in Malaysia.

Based on these problems, the author is interested in developing an E-Module for Basic Physics II Integrated with the Al-Quran based on a Scientific Approach for Physics Department Students that is valid and practical.

METHODS

This research is a type of Research and Development research, namely research to produce certain products and test the practicality of these products (Sugiyono 2015). This development research uses the ADDIE model which is carried out through 5 stages, namely analysis, design, development, implementation, and evaluation. The stages of the ADDIE model can be seen more clearly with the diagram in Figure 1.

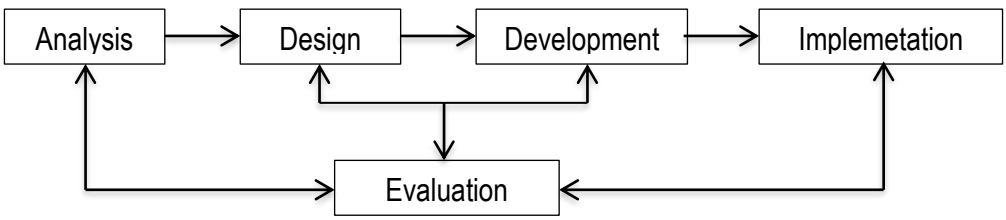

Figure 1. ADDIE development model diagram

At the Analysis stage, student needs are analyzed and literature studies are used as guidelines for product development. At the Design stage, product design was carried out in the form of a Basic Physics II E-Module integrating the Koran with a scientific approach as well as designing research data collection instruments, namely in the form of product validation questionnaires and student response questionnaires. The third stage is Development, this stage refines the draft of the Basic Physics II E-module integrated with the Al-Quran with a scientific approach that has been prepared in the previous step, revisions are based on suggestions from experts, then product validation tests are carried out by experts, so that it becomes a product that is ready to be implemented. Filling out the validation sheet uses a Likert scale with a range of 1 to 4 with aspects of validation assessment including suitability of content, presentation, language, suitability of graphics. The data obtained was then analyzed according to the validity criteria as in Table 1.

Table 1. Validation and Practicality Criteria

(%) Interval	Validation Category	Practicality Category
0–20	Invalid	Impractical
21–40	Less Valid	Less Practical
41–60	Fairly Valid	Quite Practical
6–80	Valid	Practical
81–100	Very Valid	Very Practical

Source (Riduwan 2007)

Next, the Implementation stage is carried out through limited trial activities using the Basic Physics II E-Module product integrated with the Al-Quran with a scientific approach by physics students in lecture activities. At this stage, a practicality test was carried out on the use of the E-Module which had been developed in Basic Physics II lecture activities for students. The instrument used to test product practicality is in the form of a response questionnaire with aspects tested in the form of ease of use of the product, appearance, presentation and benefits of the product produced. The test result data is then analyzed according to the practical criteria as in Table 1.

Finally, after using the Basic Physics II E-Module integrated with the Al-Quran with a scientific approach in real activities in the field, an Evaluation Phase was carried out regarding the usability of the product. This stage is carried out to see whether the E-Module that has been created can be used for further learning.

RESULTS AND DISCUSSION

Research Result

Analysis Stage

At the analysis stage, a needs analysis was carried out for development through lecturers and students using interviews and distributing questionnaires. From this activity, it was found that Basic Physics II is a mandatory subject for Physics Education students. As a basic science, this course equips students with basic concepts to take advanced physics courses. The reference books available in the library are in English and are large and thick. So it's difficult to carry around. Students also do not have complete teaching materials that can serve as a guide for students to study independently, so they have difficulty understanding the lecture material. Apart from that, students have difficulty learning

because the characteristics of Basic Physics II material are in the difficult category, and the scope of the material studied is too large. It is hoped that the development of the Basic Physics II E-Module will certainly help students understand the material, lecture reference sources are easy to carry because they can be stored on a cellphone, so studying physics can be done anywhere.

Apart from that, to fulfill the vision of an Islamic-based university, courses should be integrated with the Al-Quran. Therefore, it is very necessary to have teaching materials that are enriched with relevant quotations of Al-Quran verses. The existence of this Al-Quran-based teaching material will increase religious attitudes and belief in the majesty of Allah.

The next step is to review the literature needed for the development of Basic Physics II E-Module teaching materials. This aims to ensure that the E-Module that the author designs is truly in accordance with the elements of good E-Module writing. At this stage the author also looked for various references about software that can be used in making electronic modules. The author tries to find software that is practical and easy to use. The author chooses professional flip builder or flip pdf software as software to convert pdf files to digital publication turning pages.

Define Stage

At the Define stage, the following are carried out: (1) Formulation of Goals. The objectives of the Basic Physics II course are formulated in the Learning Outcomes of Study Program Graduates, and Course Learning Outcomes as in Table 2 and Table 3.

Table 2. Learning Achievements of Graduates of the Basic Physics II Study Program

No	Learning Achievements of Study Program Graduates
SU1	Have faith in God Almighty and be able to show a religious attitude
P9	Mastering the concepts, principles, laws and theories of physics that support physics learning at school
KU1	Able to apply logical, critical, systematic and innovative thinking in the context of developing or implementing science and technology that pays attention to and applies humanities values in the field of physics education.
KU2	Able to demonstrate independent, quality and measurable performance
KU7	Able to be responsible for the achievement of group work results, supervise and evaluate the completion of work assigned to groups under their responsibility

Table 3. Learning Achievements in Basic Physics II Course

No	Course Learning Outcomes
1	Students are able to explain the basic concepts of static electricity, dynamic electricity, magnetic phenomena, alternating current and induced emf, wave phenomena and general properties of waves, geometric optics and optical instruments, special theory of relativity and wave-particle dualism.
2	Students are able to apply the basic concepts of static electricity, dynamic electricity, magnetic phenomena, alternating current and induced emf, wave phenomena and general properties of waves, geometric optics and optical instruments, special theory of relativity and wave-particle dualism in solving problems
3	Students have logical, critical and systematic thinking skills in applying the concepts of static electricity, dynamic electricity, magnetic phenomena, alternating current and induced emf, wave phenomena and general properties of waves, geometric optics and optical instruments, special theory of relativity and wave-particle dualism

No	Course Learning Outcomes
4	Students have an honest attitude, a spirit of independence, do not give up easily, are responsible, have good character and cooperation.

(2) Analysis of Basic Physics II course material. The Basic Physics II course discusses material about magnetic electricity and optical waves which includes: static electricity phenomena, dynamic electricity and electrical circuits, magnetic phenomena, alternating current circuits, harmonic vibrations, wave phenomena, geometric optics and optical instruments. (3) Identify verses from the Al-Quran that are relevant to Basic Physics II material. The process of identifying Al-Quran verses that are relevant to the Basic Physics II material outlined in the Basic Physics II E-Module is carried out by linking the physics material with the interpretation of Al-Quran verses. The verses from the Al-Quran that are relevant to the basic physics material in the E-Module being developed are described in Table 4.

Table 4. Main material and verses from the Al-Quran that are relevant to physics material

Subject matter	Relevant Al-Quran verses
Electrostatic	QS. Al-Baqarah verses 19 and 20
Electrodynamics	QS. Ar Rum verse 24
Magnetostatic	QS. Yassin verse 36, QS. Al Kahfi verse 96
Alternating current electrical circuit	QS. Al Baqarah verse 20, QS. Annur verses 24 and 35
Harmonious vibrations	QS. Al Kahf verse 54

(4) Designing a prototype of the basic physics II E-Module integrating the Al-Quran with a scientific approach. The steps in the E-Module design process are carried out according to the theory of Rudi Susilana and Cepi Riyana (Riana 2012) as follows: a) Creating a media program outline (GBPM). b) Making an E-Module flowchart. c) Preparing the overall product design (story board) so that the relationship in each part of the product can be seen. d) Collection of design objects in the form of material text, images, questions, backgrounds, images, music according to the E-Module design which will be processed in the flip builder application. e) Carry out the programming and editing process. f) Finishing, in this activity a review and readability test of the program or product that has been developed is carried out to see whether it meets expectations.

Develop Stage

After the Design stage is carried out, it continues to the Develop Stage. In the Develop stage, this was done by designing a basic physics E-Module II integrated with the Al-Quran with a scientific approach. The E-Module that has been developed can be seen at the link https://online.flipbuilder.com/gvboi/typf/. After the E-Module was designed, the author then carried out activities to prepare research data collection instruments, namely in the form of product validation sheets and student response questionnaires as product users. This validation sheet is used as an instrument to measure the validity of the product that the author is developing. Product validation was carried out by three experts, namely, material experts, learning media experts, and Al-Quran exegesis experts. Product validation results by material experts are shown in Table 5.

Table 5. Recapitulation Results of Validation Questionnaires by Material Experts on Products

No	Indicator	Lecturer 1 2 Questionnaire Score		% Validity	Category
A. Content Feasibility Aspect					
1	Suitability of material to learning objectives	19	24	79,17%	Valid
2	Accuracy of Material	47	56	83,93%	Very valid
3	Update of Material	14	16	87,50%	Very valid
4	Impact on science process skills/scientific performance	37	48	77,08%	Valid
Amount		117	144	81,25%	Very valid
B. Aspects of Feasibility of Presentation					
1	Presentation technique	20	24	83,33%	Very valid
2	Presentation support	13	16	81,25%	Very valid
3	Presentation and sequence of thought flow	6	8	75,00%	Valid
Amount		39	48	81,25%	Very valid
C. Feasibility Aspect of Language					
1	Straightforward	14	16	87,50%	Very valid
2	Communicative	14	16	87,50%	Very valid
3	Accuracy of sentence spelling	14	16	87,50%	Very valid
4	In accordance with student development	15	16	93,75%	Very valid
Amount		57	64	89,06%	Very valid
Amount		213			
MAX SCORE		256			
% Material Expert Validation		83%			
CATEGORY		Very Valid			

Based on the data in Table 5, the average product validity percentage according to material experts is 83% with the Very Valid Category. Apart from validation carried out by material experts, validation is also carried out by media experts. Product validation results by media experts are shown in Table 6.

Table 6. Recapitulation Results of Validation Questionnaires by Media Experts on Products

No	Indicator	Score		% Validity	Category
		Total	Maximum		
A. Graphic aspects					
1	Module size	15	16	93,75%	Very Valid
2	Cover	44	48	91,67%	Very Valid
3	Module Content Design	67	72	93,06%	Very Valid
4	Operational design	40	40	100,00%	Very Valid

No	Indicator	Score		% Validity	Category
		Total	Maximum		
Amount		166	176	94,62%	Very Valid
B. Language Aspects					
1	Language	22	24	91,67%	Very Valid
Amount		22	24	91,67%	Very Valid
TOTAL		188			
MAX SCORE		200			
% Media Expert Validation		94%			
CATEGORY		Very Valid			

Based on the data in Table 6, the average product validation based on media experts has a value of 94% in the Very Valid category. Furthermore, validation was carried out by interpretive experts whose data recapitulation is depicted in Table 7.

Table 7. Recapitulation of Expert Interpretation Validation Questionnaire on Products

No	Indicator	Qty	Max Score	% Validity	Category
A. Content quality aspects					
1	Appropriateness of the selection of verses to the material	4	4	100,00	Very valid
2	The correct interpretation of the verses of the Al-Quran	3	4	75,00	Valid
3	Verse function in achieving goals	7	8	87,50	Very valid
Amount		14	16	87,50	Very valid
B. Aspects of presentation feasibility					
4	Presentation technique	4	4	100,00	Very valid
		4	4	100,00	Very valid
Amount		8	8	100,00	Very valid
C. Aspects of Language Quality					
5	Straightforward	12	12	100,00	Very valid
6	Communicative	7	8	87,50	Very valid
7	In accordance with student development	3	4	75,00	Valid
Amount		22	24	91,67	Very valid
TOTAL		44			
MAX SCORE		48			
% Validation of Interpretation Experts		91,67%			
CATEGORY		Very Valid			

In Table 7, the average % product validation based on expert interpretation is obtained with a value of 91.67% in the Very Valid category. At this stage, suggestions for the E-Module being developed are also obtained, which are then used to revise the product. The revisions that the researcher made to the E-Module in accordance with suggestions from the validator were revisions to

the E-Module cover, adding conclusions at the end of each chapter of the E-Module, changing the material content and example questions that were developed according to students' level of understanding, correcting errors. writing, quantity symbols, indices, and writing vector signs.

Implementation Stage

Next, in the Implementation Phase, a trial was carried out using the E-module for lecturers and students in lectures. After that, student response questionnaires and lecturer response questionnaires were distributed regarding the use of E-Modules in lectures. The respondents who filled out the questionnaire were students of Tadris/Physics Education at three universities in West Sumatra, each of whom responded 22 people, 17 people and 30 people respectively. Based on filling out student response questionnaires from three universities, the overall percentage score was 84.48% in the very practical category. This assessment was obtained based on indicators in the form of clarity of instructions for use, design and appearance of the E-module displayed, function and usability of the E-module, suitability of content, material and language.

Evaluation Stage

Last is the Evaluation stage, where the evaluation stage is in the form of several suggestions given by students through an open questionnaire after using this E-Module, namely: (1) The basic physics II E-Module can create a conducive learning atmosphere, however, educators should still pay attention to interaction. It is still created between students so that the learning atmosphere remains enjoyable, (2) The E-Module created is very good, easy to understand, and interesting because it is linked to the Al-Quran. It would be even better if the video displayed also included a video explaining how to work on the questions. by educators, because many students have difficulty and do not understand when working on questions, (3) It is best to add a conclusion at the end of each chapter to the E-Module material, (4) So that the author increases the number of example questions in the E-Module.

Discussion

E-Module Validation

Validation of the Basic Physics II E-Module integrated with the Al-Quran based on a scientific approach for students majoring in physics is given to Media, material and Tafsir experts using a validation questionnaire/instrument. This is used to assess products so that data is obtained regarding the advantages and disadvantages of the products being developed (Sugiyono 2015). The results of this validation can also be a reference for the feasibility of the E-Module in assisting the learning process because in the validation questionnaire an assessment is given in the form of points and notes that need to be paid attention to by researchers (Kadir 2023).

Based on the validation results, the product produced in the form of an E-Module for Basic Physics II integrated with the Al-Quran based on a scientific approach for students majoring in physics, according to the Material Expert, seen from the content feasibility aspect, has an average score of 81.25% in the Very Valid category. This is because several things, including the concepts and definitions presented in the E-Module, do not give rise to many interpretations and are correct according to physical theory. The examples and cases presented are in accordance with reality and are efficient in increasing student understanding. In the presentation feasibility aspect, indicators in the form of presentation technique, presentation support, and presentation flow sequence have an average

value of 81.25%. Meanwhile, in the language aspect, indicators in the form of language delivered are straightforward, communicative, and have sentence spelling accuracy, as well as suitability for student development, which has a value of 89.06%. This is what makes the total average validation by material experts 83% in the Very Valid category.

According to Suparman (Suparman, Eliyanti, and Hermawati 2020) in teaching materials it is very important to pay attention to the presentation of the material, because this presentation influences student understanding, the better the presentation of the material, the easier it will be for students to understand the material. Novitaningrum added (Novitaningrum, Parmin, and Pamelasari, D 2014), that in presenting material so that students can easily understand, the teaching material must also be clear, concise, concise and the presentation of the material must also be in accordance with good and valid content and language components.

Furthermore, product validation according to media experts seen from the graphic aspect has a value of 94.62%. This is because the module size complies with ISO standards (module size A4, A5, or B5. The appearance of the layout elements on the cover is displayed in a harmonious manner with rhythm, unity and consistency. The cover illustration matches the content of the material and creates attractiveness in terms of shape and The color, the color of the title on the cover also contrasts with the background. For the language aspect, it has a score of 91.67% because the E-module developed uses the right sentence structure, the spelling used refers to the Enhanced Spelling guidelines, the language used is easy. understood and in accordance with students' intellectual abilities.

This is in line with (Permendikbud 2016) that the standards that must be considered in a book as teaching material are seen from the aspects of material, language, presentation and graphics with indicators including encouraging independence and innovation, good and correct use of Indonesian in spelling. , words, sentences and paragraphs, clarity of the language used, and ease of reading in its use according to age development level. The material in interesting teaching materials is characterized by being straightforward, easy to understand, interactive, coherent and straightforward and coherent, equipped with illustrations in the form of pictures or text. As well as the appropriate cover layout, colors and letters. A similar opinion was also explained by Fika (Fika Salsabilla Madani, Dewi Utami, and Iis Humaeroh 2023) that the quality of teaching materials such as E-Modules has a big influence on the quality of learning, so there is a need to assess the suitability of teaching materials, so that they can be used in learning.

In the validation questionnaire based on expert interpreters which includes aspects of content quality with indicators of suitability of the selection of verses to the material, correctness of interpretation of verses from the Koran, function of verses in achieving goals which has a validation value of 87.50%. The aspect of appropriateness of presentation with a score of 100% and the aspect of language quality with a score of 91.67%. This means that in terms of Al-Qur'an integration, the E-Module is suitable for use in line with research (Mastuang et al. 2019) which states that teaching materials such as modules with the integration of Al-Qur'an verses are good to use and can improve results. student learning. Thus, the module is ready to be used as a learning resource that can help students in their learning. And overall the average validity of the product, both according to material experts, media experts and Al-Quran exegesis experts, is 89.55% in the very valid category.

These results are in line with research conducted by Nini Noor Hafiza (Hafiza 2017) who developed the Islamic Physics E-Module and obtained results that were suitable for use to improve students' cognitive learning outcomes. The addition of Al-Quran verses in the module also provides new insights for students where physics material is explained and related to the Koran, so students do

not feel bored. The results of other research by Resi Anggraini (Anggraini, Hendri, and Basuki 2017) who developed a physics e-module based on a scientific approach to circular motion material for high school class X, which obtained valid results and is suitable for use as a teaching material for students in high school class Based on expert validation, it is stated that the design in the form of colors, cover, background, images and videos used is in accordance with the title of the material and purpose.

Practicality of E-Modules

The practicality of the E-Module being developed is analyzed based on questionnaires and suggestions given by users, namely students in lectures that use the E-Module. The questionnaire was distributed to physics education/teaching students at three universities in West Sumatra, namely UIN Mahmud Yunus Batusangkar, UIN Imam Bonjol Padang and Universitas PGRI West Sumatra. Based on data analysis, it was found that the practicality percentage value of the E-Module according to students was 84.48% in the very practical category. According to research (Chandra et al. 2023), it is explained that a product can be said to have high practicality if it has practical properties. The practicality or usability of a product can be seen if it has been tested on test subjects.

Judging from the aspect of function and usefulness, the E-Module has an attractive appearance, is easy to use and helps students understand the material. The material is presented sequentially and systematically. The work steps on the activity sheet are presented clearly. Students also commented that integrating the Koran with physics material could increase students' belief in the greatness of Allah. This is in line with Firdaus' opinion (Firdaus 2023) that the integrated module of AL-Qur'an verses can increase motivation for students. This is also in line with research from (Husna et al. 2020) which obtained a very good response from students towards the product developed in the form of a physics module based on science-Islam integration with an average practicality of 83.73%.

CONCLUSION

Based on the development and trials that have been carried out, it is concluded that the results of the validity of the Basic Physics II E-Module integrated with the Al-Quran based on a scientific approach for students majoring in physics according to media experts, material experts and interpretation experts are in the very valid category with a percentage value of 89.55% . The results of practicality trials on student response questionnaires with percentage values of 84.48% in the very practical category. Furthermore, it is recommended that this E-Module can be used in lecture activities so that the effectiveness of the Basic Physics II E-Module integrating the Al-Quran with a scientific approach can be tested.

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