Thematic Electronic Module Based on Al-Quran and Hadith: A development of Teaching Material at Elementary School

Nurul Hidayah[1], Yuli Yanti[2]

[1,2]Universitas Islam Negeri Raden Intan Lampung, Lampung, Indonesia

*Correspondence address: *yuliyanti@radenintan.ac.id*

Abstract

The objective of this study is to create an electronic module focused on thematic Al-Qur'an and Hadith for third-grade students at Elementary School. The participants in this research were third-grade students from Madrasah Ibtidaiyah Negeri 2 Bandar Lampung, Sekolah Dasar IT Pringsewu, and Sekolah Dasar Negeri 1 Sumberejo. This development research follows the steps outlined by Branch using the ADDIE design model, which includes analysis, design, development, implementation, and evaluation. Data collection was conducted using interview guidelines, assessment sheets for the e-module product, and observation sheets for both teachers and students. Data analysis employed quantitative descriptive analysis techniques. The instrument used was an assessment scale to evaluate the module's feasibility and to gauge student responses regarding its appeal, utilizing a Likert scale formatted as a checklist. Validation results from six experts indicated that the two media experts rated the module with an average score of 90%, categorizing it as very feasible; the two material experts scored an average of 93%, also in the very feasible category; and the two language experts gave an average score of 94%, again classified as very feasible. The responses from educator I to the electronic module yielded a score of 90% (very feasible), educator II received a score of 86% (very feasible), and educator III scored 93% (very feasible). In the small group test conducted at school A, the module achieved a score of 97% in the very appropriate category, while the large-scale tests at two schools resulted in scores of 94% at school B and 96% at school C, both categorized as very appropriate. Therefore, it can be concluded that the developed electronic module aligns with the teachings of Al-Qur'an Hadith and environmental education, adheres to the national education curriculum, and is highly suitable for use as instructional material.

Keywords: Electronic Module, Thematic, Al-Quran Hadith, Environmental Education

Abstrak

Tujuan penelitian ini adalah untuk membuat modul elektronik bertema Al-Qur'an Hadits dan pendidikan lingkungan hidup untuk siswa kelas III SD Negeri Pringsewu. Partisipan penelitian ini adalah siswa kelas III Madrasah Ibtidaiyah Negeri 2 Bandar Lampung, Sekolah Dasar IT Pringsewu, dan Sekolah Dasar Negeri 1 Sumberejo. Penelitian pengembangan ini mengikuti langkah-langkah yang telah dijabarkan oleh Branch dengan menggunakan model desain ADDIE yang meliputi analisis, perancangan, pengembangan, implementasi, dan evaluasi. Pengumpulan data dilakukan dengan menggunakan pedoman wawancara, lembar penilaian produk e-modul, dan lembar observasi guru dan siswa. Analisis data menggunakan teknik analisis deskriptif kuantitatif. Instrumen yang digunakan adalah skala penilaian untuk menilai kelayakan modul dan mengukur respons siswa terhadap daya tariknya, dengan menggunakan skala likert yang diformat sebagai daftar periksa. Hasil validasi dari enam orang ahli menunjukkan bahwa dua orang ahli media memberikan nilai rata-rata modul sebesar 90%, dengan kategori sangat layak; dua orang ahli

materi memberikan nilai rata-rata sebesar 93%, dengan kategori sangat layak; dan kedua ahli bahasa memberikan skor rata-rata 94%, kembali diklasifikasikan sangat layak. Tanggapan pendidik I terhadap modul elektronik menghasilkan skor 90% (sangat layak), pendidik II mendapat skor 86% (sangat layak), dan pendidik III mendapat skor 93% (sangat layak). Pada uji coba kelompok kecil yang dilakukan di sekolah A, modul memperoleh skor 97% dalam kategori sangat layak, sedangkan pada uji coba skala besar di dua sekolah menghasilkan skor 94% di sekolah B dan 96% di sekolah C, keduanya dikategorikan sangat layak. Dengan demikian, dapat disimpulkan bahwa modul elektronik yang dikembangkan selaras dengan ajaran Al-Qur'an Hadits dan pendidikan lingkungan hidup, mematuhi kurikulum pendidikan nasional, dan sangat layak untuk digunakan sebagai bahan ajar.

Kata Kunci: *Modul Elektronik, Tematik, Al-Qur'an Hadits, Pendidikan Lingkungan Hidup*

INTRODUCTION

In the era of the 4.0 industrial revolution, technological advancements significantly impact the field of education. The development in education can be observed through the learning process, including curriculum development, the application of teaching models, the determination of methods, and the use of instructional materials, among other aspects (Risdianto et al., 2021). Educators need to develop a method or tool to create interesting, active, and easy-to-remember learning materials so that communication and interaction between educators and students are more effective (Li & Li, 2023). This development encompasses all levels of education, from early childhood education to higher education. One of the challenges for educators is to deliver more creative and innovative learning experiences while also considering the cognitive and psychological development of students, particularly in the creation of teaching materials (Sugiyarti et al., 2018).

Teaching materials can also be defined as all types of resources that are systematically organized to enable students to learn independently, and are crafted in alignment with the relevant curriculum (Hidayah et al., 2023; Magdalena et al., 2020; Ritonga et al., 2022). The use of teaching materials is continuously updated according to the readiness of schools and students and technological developments. This aligns with the research conducted by (Artal, 2021) research indicates that handwriting is more engaging than static images and positively influences learning, likely due to cueing effects. The findings of this study enhance our understanding of the sustainability of digital resources for education. Today's technological advancements provide alternatives for developing a variety of teaching materials. One effective teaching resource in the current learning environment is the electronic module (e-module). E-modules serve as teaching tools that facilitate independent learning for students, featuring communicative language and interactive elements that simplify the process of understanding the subject matter (Lastri, 2023).

Electronic modules or e-modules have advantages in terms of flexibility, interactivity, and accessibility. However, the existence of e-modules that are in accordance with the curriculum and specific needs of students, especially at the elementary school level, is still limited. One important aspect that must be considered in the development of electronic modules is the integration of religious and moral values, especially for elementary school students who are in an Islamic-based educational environment. Therefore, a thematic electronic module is needed that not only integrates general knowledge, but is also based on the teachings of the Qur'an and Hadith.

Developing E-modules based on the Qur'an and hadith is very important because it can provide learning resources that are relevant and in accordance with Islamic values. This E-module can be integrated between religious teachings in education, so that students not only gain academic knowledge, but also a deep spiritual understanding. With this approach, students can learn about the ethics and morals contained in the Qur'an and hadith, which are very necessary in everyday life. In

addition, E-modules that are interesting and interactive and can increase student engagement, make the learning process more enjoyable and meaningful. The use of technology in delivering Islamic teaching materials can also disseminate information more widely, reaching the younger generation who are more familiar with digital devices. With this E-module, Islamic-based education can be presented in an innovative and easily accessible way, supporting holistic education and strong character. In general, the development of e-modules based on the Qur'an and hadith contributes to efforts to create a generation with noble morals and understand Islamic teachings in a modern context. Furthermore, with Environmental Education, students are able to form awareness, attitudes, and behaviors that are responsible for the environment.

Therefore, it is essential to have teaching materials that draw from the Qur'an, enabling students to directly learn from it and apply the values conveyed within the Qur'an, which are then developed into educational resources. The teaching materials that will be developed will be a supporting source of learning for teachers and students in the learning process, so that educational goals are connected as a whole with the existence of these teaching materials. Based on initial research data, the author interviewed an educator from school A who said that in thematic learning, the teaching materials used were only government textbooks so that learning seemed less innovative. The second educator from school B explained that during the teaching and learning process, the resource person utilized government textbooks and printed modules; however, these materials were not very diverse and primarily relied on resources available on specific platforms, which had not been integrated with the verses of the Qur'an and Hadith. Understanding these verses is crucial for students, as integrating teaching materials with Qur'anic and Hadith content enables them to grasp the foundations of their faith. Additionally, through environmental education, students can develop awareness, attitudes, and behaviors that promote environmental responsibility. Sabardila et al., (2020) In his research on the formation of environmentally conscious character in elementary school students, he found that students were not concerned about the environment even though educators had provided environmental education. The reason was that some participants were unable to connect what they had learned with their experiences.

The development of this module will greatly assist students in carrying out the learning process that will be carried out. Integrated modules of the Qur'an and Hadith are still rarely found. The importance of e-modules can teach students to be able to understand the material and abilities related to the Qur'an and Hadith. There is a similar study related to the development of modules based on the Qur'an and Hadith (Yusid et al., 2020), where in this study only refers to the verses of the Qur'an, while in this study it is also integrated with the Hadith, then the development of e-modules by (Dewi Pendit et al., 2022; Fachrie Rizali et al., 2021; Febrista & Efrizon, 2021; Herawati & Muhtadi, 2020; Irawati & Setyadi, 2021; Khomaria & Puspasari, 2022; Laili et al., 2019; Rama et al., 2022; Ricu Sidiq & Najuah, 2020; Sa'diyah, 2021; Silvia Oksa & Soenarto, 2020; Sureni et al., 2023), in this study developed an electronic learning module (e-module), However, in the development of the e-module, none have incorporated the Qur'an and Hadith, particularly in thematic material for theme 2, which focuses on loving plants and animals for third-grade elementary school students. Furthermore, research (Kusumawati et al., 2023) which created an e-module focused on a sustainable environment but did not connect it to the Qur'an and Hadith.

As for the opinion of those (Syahputri & Dafit, 2021) who say that during the learning process there are several difficulties experienced by teachers, namely 1) in the learning process, the teacher's explanation method is limited, 2) the media made is not varied enough so that students are less interested, 3) the school has inadequate facilities and infrastructure. This is consistent with research conducted by (Hew et al., 2020) who stated that effective design and preparation can provide valuable guidelines for the learning process, allowing for the application of approaches that align with students' characteristics. In this context, the design includes media and the educators' preparation for delivering the material. This encompasses not only the content but also the instilling

25

of fundamental Islamic principles through the Qur'an and Hadith. Collaboration between parents and educators is essential as a means of reinforcement, ensuring that educators impart spiritual values that are consistent with practices at home. Various efforts and innovations are anticipated to effectively support the instillation of character values through Islamic religious education, guided by the teachings of the Qur'an and Hadith (Santy Afriana, 2022). In addition to the Al-Quran and Hadith, the study highlights the importance of instilling environmental education in students by Jufri et al., (2018) elementary schools serve as a vital setting for teaching environmental education to students, fostering attitudes and behaviors that promote a love for the environment by introducing these concepts to the younger generation from an early age. Consequently, further research is necessary to create thematic electronic modules based on the Al-Quran and Hadith that can be effectively utilized in third-grade elementary classrooms. This study aims to develop these thematic electronic modules for third-grade students.

METHOD

Using the Development (R&D) method, this study focuses on creating thematic e-modules that integrate environmental education with the teachings of the Qur'an and Hadith. This study began with the problems and needs of students who became gaps that were felt by researchers to conduct research. The gap occurs because of the difference between actual conditions and expected conditions. From this gap, researchers look for appropriate theories to solve the problems that occur. By tracing the cause of the problem. Research using this research and development method is a stage when developing new products or perfecting existing products. The goal is to produce new product designs and test the effectiveness of the product (Da Silva et al., 2020; Rau et al., 2023). The study was conducted on integrated thematic learning theme 2 loving plants and animals in grade III at elementary school. This study was conducted with third-grade elementary school students in Bandar Lampung and Pringsewu Regency. At MIN 2 Bandar Lampung, there were 24 respondents, while SD IT Pringsewu had 26 respondents, and SD N 1 Sumberejo in Kemiling, Bandar Lampung, included 26 students. The research utilized a Development (R&D) approach based on the ADDIE model, which consists of five stages: 1) Analysis, 2) Design, 3) Development, 4) Implementation, and 5) Evaluation. This research model features straightforward and systematic stages, ensuring that the resulting products are both effective and efficient. This is illustrated in Figure 1.
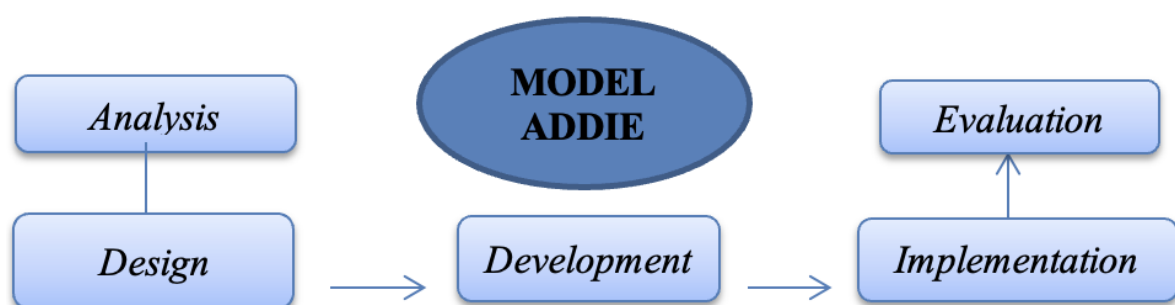
Figure 1. ADDIE Development Model Chart

Data collection used in this development is interviews, observations, documentation, and questionnaires. Validity analysis is used to determine the accuracy of the product or development results in the form of learning media. Data from these figures are qualitative data, which are quantified using a *Likert scale* with a five-level standard, then analyzed by calculating the percentage of the average score of each item answer in the questionnaire (Denzin, 2008; Milinki, 2016; Spindler & Hammond, 2000). During the development phase, the validation stage is conducted by material and language experts. This process aims to assess the feasibility of the

learning plan created by the researcher. The criteria for validating the learning plan development are outlined in Table 1 below.

Table 1. Likert Scale (Likert, 2017)

No	Quantitative Analysis	Score
1	Excellent	5
2	Good	4
3	Enough	3
4	Less	2
5	Very Lacking	1

The assessment results are then averaged to convert the percentage into a qualitative statement, which helps determine the quality and value of the produced product. This allows educators to use it as a reference for teaching. The process of converting scores into assessment criteria is detailed in Table 2 below.

Table 2. Scale Suitability (Aiken, 1980)

Percentage Score (%)	interpretation	Description
81% - 100%	Very Worth It	No revisions
61% - 80%	Worthy	No revisions
41% - 60%	Quite Decent	Partial Revision
21% - 40%	Less Worthy	Partial Revision
0% - 20%	Very Less Worthy	Revision

Based on the feasibility scale above, the development of the learning plan will receive an assessment score that has the required feasibility with the level of suitability of the material, suitability of language use, and suitability of the product when used by educators.

RESULT AND DISCUSSION

The study resulted in the creation of an e-module focused on theme 2, which is about loving plants and animals. The product development is outlined according to the steps of the ADDIE model. The research data is as follows:

Analysis Stage

The outcomes of the definition stage consist of the following activities: (1) analyzing themes, sub-themes, basic competencies, and learning indicators; and (2) assessing student needs through data collection methods such as observations and interviews conducted during the pre-research phase, along with questionnaires from media, material, and language experts, as well as feedback from educators and students during the study. In this research, the developed product was an e-module that integrates the Al-Quran and Hadith. The analysis revealed that the school involved in the study had never utilized teaching materials in the form of e-modules integrated with the Al-Quran and Hadith. The introduction of electronic teaching materials is crucial, as it facilitates students' use of these resources, allowing them to reflect Islamic values through their religious foundations, namely the Al-Quran and Hadith. This integration helps students better comprehend the learning context and its connection to the verses of the Al-Quran and Hadith.

27

Design Stage

Thematic Electronic Module based on the Qur'an and Hadith is created to offer an engaging and comprehensive learning experience for third-grade elementary school students. The design of this module includes several important elements that ensure the relationship between learning materials and Islamic values contained in the Qur'an and Hadith.

The module is divided into several main themes, each integrating various subjects such as Islamic Religious Education, Indonesian Language, Natural and Social Sciences. Each theme begins with an introduction that links the material to relevant Quranic verses or Hadith, providing spiritual and moral context for students. The module interface is designed to be attractive and child-friendly, with the use of bright colors and appropriate illustrations. Intuitive navigation makes it easy for students to navigate through the various sections of the module, such as the subject matter, quizzes, and interactive activities.

Each theme is complemented by interactive activities, such as quizzes, educational games, and simulations that support the application of the concepts learned. These activities are designed to increase student engagement and encourage active learning. The module uses various forms of media, including video, audio, and animation, to explain complex concepts in an engaging way. For example, an animation about Islamic values or a short video explaining the importance of literacy in Islam.

At the end of each theme there is an evaluation in the form of a quiz that uses a Likert scale to measure student understanding. The results of this evaluation can be used to provide feedback and further recommendations in the learning process. The module also provides supporting materials, such as worksheets and study guides for parents, which help them support their children's learning at home. This includes explanations of how to apply the values taught in everyday life.

Prior to its release, this module underwent a validation process conducted by material and language experts to ensure that the content was both scientifically accurate and easy for students to comprehend. Expert feedback was utilized to implement necessary revisions and enhancements. The module is designed to be accessible on multiple devices, including computers, tablets, and smartphones, allowing students to learn anytime and anywhere.

Development Stage

At this development stage, the module includes the feasibility results validated by various experts, including material, media, and language specialists, as well as feedback from educators and students. The electronic module has undergone feasibility testing by several validators, consisting of 2 material experts, 2 media experts, and 2 language experts. The results of the first and second validation of the e-module development are presented in Table 3 below.

Table 3. Validation Results I and II

| No	Validation	I	Category	II	Category
1.	Media	84%	Worthy	90%	Very Worth It
2.	Material	81%	Worthy	93%	Very Worth It
3.	Language	78%	Worthy	94%	Very Worth It

It can be seen in the table above that each validation has a different percentage of each aspect. The diagram of the final model results table above is as follows:
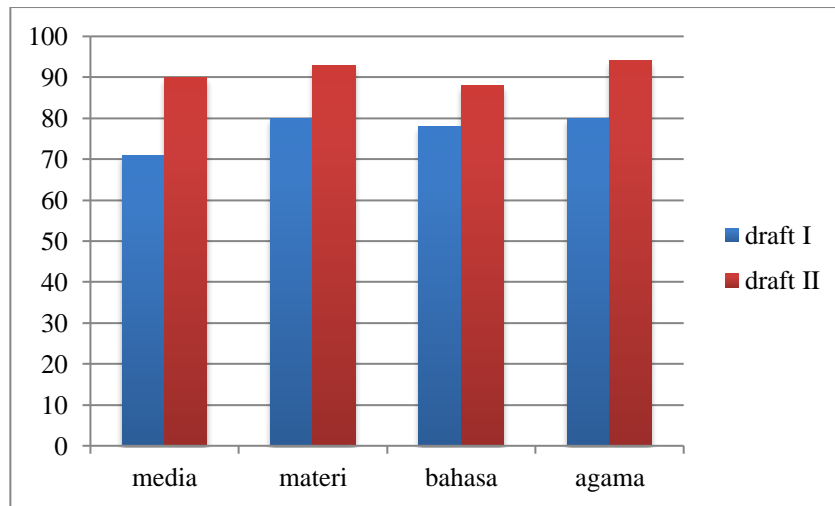
(b)

Figure 2. Final Model Result Diagram

Based on the table and figure above, it can be concluded that after conducting 2 validation stages (I and II) consisting of 2 media experts, 2 material experts, 2 language experts. Media experts get a score of 80% and 90%. Material experts get a score of 81% and 93%. Language experts get a score of 78% and 94%. This is a change in product development, from the category of feasible to very feasible.

Here is the product development before and after the product was developed:
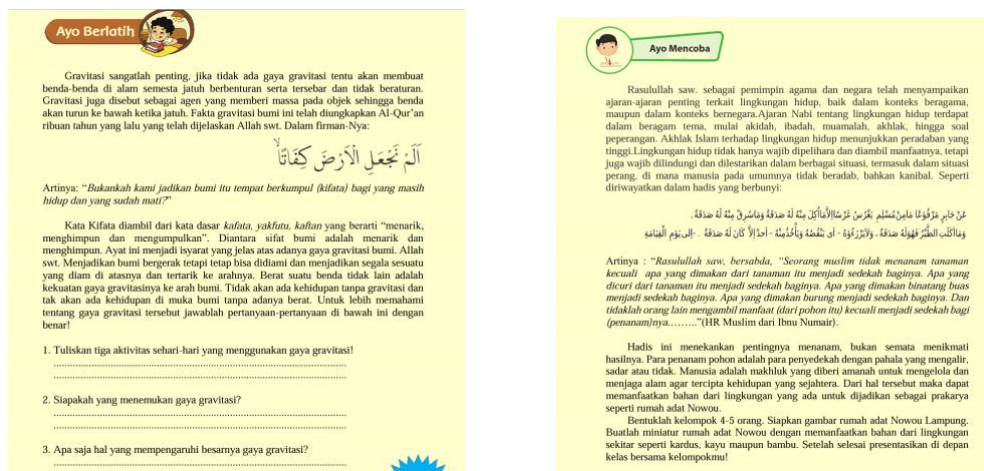
Figure 3. Product Before and After Development

The picture above shows that before the revision of the Hadith, there was no explanation narrated by the companions of the Prophet SAW. Then the picture after that already has the name of the companion of the Prophet SAW who narrated the hadith.

Implementation **Phase**

After the e-module product passed the validation stage by material experts, media, response language from educators and students, then at the implementation stage, the researcher tested the product at MIN 2 Bandar Lampung which had 24 respondents. The research conducted at SD IT Pringsewu had 26 respondents and SD N 1 Sumberejo Kemiling Bandar Lampung had 26 respondents.

29

Educator Trial

The educator trial consisted of 2 educators with the distribution of questionnaires containing statements consisting of 4 aspects of assessment, namely learning materials, content, language, appearance. The educator trial aims to determine the response to the e-module that the researcher developed.

Table 4. Educator Response Result I

MIN 2 Bandar Lampung				
Aspect Evaluation	∑X Per Aspect	Score Max	Score %	Category
Learning materials	13	15	87%	Very Worth It
Contents	27	30	90%	Very Worth It
Linguistics	18	20	90%	Very Worth It
Appearance	19	20	95%	Very Worth It
Average Percentage			90.5%	Very Worth It

According to Table 4, the results of educators' responses indicate that the learning media aspect received a percentage of 87%, the content aspect scored 90%, the language aspect also achieved a score of 90%, and the display aspect received a score of 95%. From this data, it can be concluded that the average score across the four assessment aspects is 90.5%, which falls into the "Very Eligible" category.

Table 5. Educator Response Results II

SD IT Pringsewu				
Aspect Evaluation	∑X Per Aspect	Score Max	Score %	Category
Learning materials	13	15	87%	Very Worth It
Contents	25	30	83%	Very Worth It
Linguistics	18	20	90%	Very Worth It
Appearance	17	20	85%	Very Worth It
Average Percentage			86%	Very Worth It

According to Table 5, the educators' responses indicate that the learning media aspect received a percentage of 87%, the content aspect scored 83%, the language aspect achieved a score of 90%, and the display aspect received a score of 85%. From this data, it can be determined that the average score across the four assessment aspects is 86%, which falls into the "Very Eligible" category.

Table 6. Result of Educator III Response

SDN 1 Sumberejo				
Aspect Evaluation	∑X Per Aspect	Score Max	Score %	Category
Learning materials	13	15	87%	Very Worth It
Contents	27	30	90%	Very Worth It
Linguistics	18	20	93%	Very Worth It
Appearance	19	20	95%	Very Worth It

Average Percentage		93%	Very Worth It

According to Table 6, the educators' responses indicate that the learning media aspect received a percentage of 87%, the content aspect scored 90%, the language aspect also achieved a score of 90%, and the display aspect received a score of 95%. From this data, it is evident that the average score across the four assessment aspects is 93%, which is categorized as "Very Eligible."

Student Trial

A limited trial was conducted on 24 students from class III at MIN 2 Bandar Lampung. Then the students were given a questionnaire to assess the attractiveness of the e-module.

Table 7. Result of Small Group Test Analysis

MIN 2 Bandar Lampung				
Aspect Evaluation	∑X Per Aspect	Score Max	Score %	Category
Material	413	420	98%	Very Worth It
Appearance	308	315	97%	Very Worth It
Presentation	304	315	96%	Very Worth It
Average Percentage			97%	Very Worth It

According to Table 7, the student responses indicate that the material aspect received a percentage of 98%, the appearance aspect scored 97%, and the presentation aspect achieved a score of 96%. From this data, it is clear that the average score across the four assessment aspects is 97%, which falls into the "Very Eligible" category.

After conducting a small group trial, the product was subsequently tested on a larger group. This large group trial took place at SD IT Pringsewu and involved 26 students. To gather feedback, the researcher distributed a questionnaire to evaluate the attractiveness of the e-module. The results of the student responses are presented in Table 8.

Table 8. Result of Large Group Test Analysis

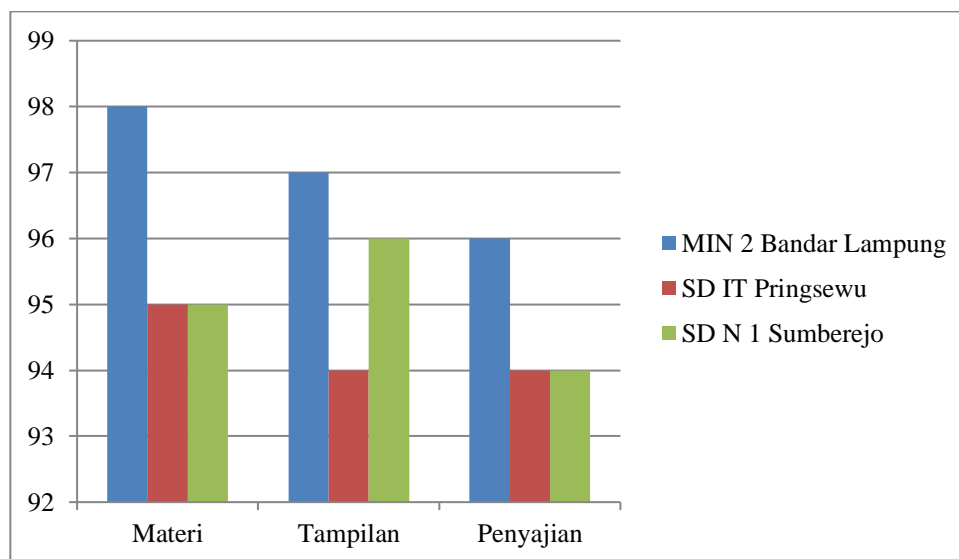| SD IT Pringsewu				
Aspect Evaluation	∑X Per Aspect	Score Max	Score %	Category
Material	475	500	95%	Very Worth It
Appearance	352	375	94%	Very Worth It
Presentation	352	375	94%	Very Worth It
Average Percentage			94%	Very Worth It

A large group trial was conducted at SD N 1 Sumberejo and was tested on 26 students. To obtain responses, researchers distributed questionnaires to assess the attractiveness of the e-module. The results of student responses are seen in table 9.

Table 9. Result of Large Group Test Analysis

SDN 1 Sumberejo				
Aspect Evaluation	∑X Per Aspect	Score Max	Score %	Category

Material	475	500	95%	Very Worth It
Appearance	360	375	96%	Very Worth It
Presentation	360	375	96%	Very Worth It
Average Percentage			96%	Very Worth It

Diagram of the table of student response results that were tested in 3 schools, namely MIN 2 Bandar Lampung, SD IT Pringsewu, and SD N 1 Sumberejo Kemiling Bandar Lampung.

(c)
Figure 4. Student Response

The results indicate that student responses in the small group trials at MIN 2 Bandar Lampung received a score of 97%. In the large-scale trial at SD IT Pringsewu, the score was 94%, while SD N 1 Sumberejo achieved a score of 96%, with both scores falling into the "Very Decent" category.

Evaluation Stage

The evaluation practices carried out by the author at the evaluation stage in the development of the Thematic Electronic Module Based on the Qur'an and Hadith involved several important steps to ensure the effectiveness and feasibility of the module. The author collected initial data through a questionnaire designed to measure students' understanding and attitudes towards the material being taught. This questionnaire uses a Likert scale to provide a measurable assessment of various relevant items.

Before the module was used, the author conducted content validation by involving material experts and language experts. This process aims to ensure that the module content is in accordance with academic standards and is easy for students to understand. Experts provide feedback on the appropriateness of the material, the language used, and its suitability to Islamic values. After obtaining feedback from experts, the module was tested in class by involving a group of students. The author observed students' interactions with the module, noted any difficulties encountered, and collected direct feedback from students regarding their experiences when using the module.

The results of the questionnaire and feedback obtained during the trial were analyzed. The author calculated the average score percentage of each item in the questionnaire to determine the level of student understanding and the effectiveness of the module. This analysis included assessment categories, such as "Very Adequate," "Adequate," "Quite Adequate," "Less Adequate," and "Very Less Adequate," based on the scores obtained. Based on the results of the analysis, the

author revised the module to improve aspects that were considered less effective or inappropriate. Revisions were made to improve the quality of the module, both in terms of content and presentation. The author compiled a report that summarized the results of the evaluation, including data analysis, expert feedback, and changes made. The report also included recommendations for future use of the module and steps for continued evaluation. The author planned ongoing evaluation to monitor the effectiveness of the module after it had been used for a certain period of time. This involved collecting additional data from module users and making adjustments if necessary to ensure that the module remained relevant and effective.

DISCUSSION

The language aspect in the module is in accordance with the age development of grade III students, who are generally 8-9 years old. At this age, children begin to develop their ability to read and understand texts. The language used in the module is in accordance with the cognitive development of students. Research by (Hiver et al., 2024; Seven, 2020) shows that the use of clear and simple language is very important to ensure student understanding, especially at elementary school age. This is in line with (Garcia-Alvarado et al., 2022; Nicholas et al., 2021) the zone of proximal development, where students learn better when material is presented in language they can understand and is relevant to their daily experiences. The language used should be simple, clear, and not too complex, so that students can easily understand the concepts being taught. Use of short sentences, familiar vocabulary, and relevant examples.

The material in the module is in accordance with the cognitive development stage of third grade students. At this age, children begin to be able to think more abstractly, but they still need a concrete context to understand more complex concepts. According to research by (Hwang et al., 2022; Jääskä et al., 2022), material that links concepts to students' real-life contexts can increase their motivation and understanding. This is important for third grade students who are in the concrete cognitive development stage, where they better understand concepts through direct experience and real examples. Material that links the teachings of the Qur'an and Hadith with their daily experiences will make learning more meaningful. In addition, the material is in accordance with the applicable curriculum, so that students can link the learning in the module with what they learn in school. The design and media used in the module are attractive and in accordance with the interests of third grade students. Attractive design and media can increase student engagement.

Research by (Calvert & Abadia, 2020; Vanichvasin, 2021) shows that the use of engaging visual and audio elements can help students understand and remember information. Interactive and child-friendly designs can increase motivation to learn, which is especially important for students at this age. This is also supported by research (El-Sabagh, 2021; Hernandez-de-Menendez et al., 2020; Yan et al., 2021; Yates et al., 2021) that shows that students are more likely to engage in learning when they have control over their learning experience through interactive media. Children at this age tend to be attracted to bright colors, images, and other visual elements. Interactive designs, with the use of images and animations, can increase student engagement and make learning more fun. Engaging media can help students maintain their attention longer and make them more motivated to learn.

Electronic media based on the Qur'an and Hadith are effective for student learning outcomes because they can provide an interactive and enjoyable learning experience. The use of multimedia such as video, audio, and animation can help explain difficult concepts in a way that is easier to understand. Al-Qur'an and Hadith-based modules have been proven effective in improving student learning outcomes. Research by (Haleem et al., 2022; Timotheou et al., 2023; Wekerle et al., 2022) shows that the use of technology in education can improve learning outcomes, especially when used to support existing teaching methods. Interactive and engaging media can help students understand

33

difficult concepts in an easier and more enjoyable way. In addition, this media supports different learning styles, so that students with various learning preferences can be effectively involved. The advantages include increased motivation to learn, higher engagement, and the ability to access materials anytime and anywhere. Although there are many advantages, the use of electronic media also has disadvantages. One is the dependence on technology, which can be a problem if students do not have adequate access to devices or the internet. In addition, if the module is not well designed or does not consider the specific needs of students, this can result in confusion or frustration. Another disadvantage is the lack of social interaction that usually occurs in face-to-face learning, which is important for children's social development. Therefore, it is important to balance the use of electronic media with traditional learning methods to ensure a holistic learning experience for students.

CONCLUSION

The findings from the research and development of the e-module based on the Qur'an and Hadith indicate that the product quality is exceptionally high and appropriate for use as teaching materials. Validation scores from six experts two media experts, two material experts, and two language experts each provided an average score exceeding 90%, demonstrating that this module meets excellent quality standards. This score shows that the module is not only visually appealing but also academically and linguistically relevant. Responses from educators show good acceptance of this module, with scores above 85% indicating that educators feel this module is effective in supporting the learning process. Small group and large-scale trials provide consistent results, with average scores above 90%, confirming that this module is not only effective in the context of limited trials, but also in broader situations in several schools. The developed e-module not only meets the eligibility criteria, but also has the potential to create a fun and interactive learning atmosphere. This aligns with constructivist theory, which asserts that effective learning takes place when students are actively engaged in the learning process and when the material is delivered in an engaging and relevant manner. The importance of integrating spiritual values in education, which can increase students' awareness of character and environmental education as an education that provides direct experience with the natural environment to students so that it can increase the potential in providing students with an understanding of the environment and building a positive attitude towards the environment. Thus, this e-module not only functions as a teaching tool, but also as a means to form a generation that has a deeper understanding of the values contained in the Qur'an and Hadith.

REFERENCES

Aiken, L. R. (1980). Content validity and reliability of single items or questionnaires. Educational and Psychological Measurement, 40(4), 955–959.

Artal, C. G. (2021). Video Lectures : An Analysis of Their Useful Life Span and Sustainable Production. 22(3).

Calvert, J., & Abadia, R. (2020). Impact of immersing university and high school students in educational linear narratives using virtual reality technology. Computers & Education, 159, 104005.

Da Silva, R. H., Kaminski, P. C., & Armellini, F. (2020). Improving new product development innovation effectiveness by using problem solving tools during the conceptual development phase: Integrating Design Thinking and TRIZ. Creativity and Innovation Management, 29(4), 685–700.

Denzin, N. K. (2008). The landscape of qualitative research (Vol. 1). Sage.

Dewi Pendit, S. S., Amelia, C., Azizah, A., Pilok, N. A., & Sitepu, M. S. (2022). Pengembangan E-Modul Discon Berbasis Android (E-Modul Disroid) Materi Bunyi bagi Siswa Sekolah Dasar. Scaffolding: Jurnal Pendidikan Islam Dan Multikulturalisme, 4(3), 175–191. https://doi.org/10.37680/scaffolding.v4i3.1941

El-Sabagh, H. A. (2021). Adaptive e-learning environment based on learning styles and its impact on development students' engagement. International Journal of Educational Technology in Higher Education, 18(1), 53.

Fachrie Rizali, Sudarman, & Made Ngurah Partha. (2021). Pengembangan E-Modul Pembelajaran Ekonomi Berbasis Colt Di Sma Negeri 5 Samarinda. Jurnal Prospek: Pendidikan Ilmu Sosial Dan Ekonomi, 3(2), 12–21. https://doi.org/10.30872/prospek.v3i2.810

Febrista, D., & Efrizon, E. (2021). Pengembangan e-Modul Interaktif Berbasis Android pada Mata Pelajaran Penerapan Rangkaian Elektronika Kelas XI Teknik Audio Vidio. Voteteknika (Vocational Teknik Elektronika Dan Informatika), 9(3), 102. https://doi.org/10.24036/voteteknika.v9i3.113750

Garcia-Alvarado, S., Arreguín, M. G., & Ruiz-Escalante, J. A. (2022). Mexican-American preschoolers as co-creators of zones of proximal development during retellings of culturally relevant stories: A participatory study. Journal of Early Childhood Literacy, 22(2), 232–253.

Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. Sustainable Operations and Computers, 3, 275–285.

Herawati, N. S., & Muhtadi, A. (2020). Pengembangan Modul Elektronik (E-Modul) Interaktif Pada Mata Pelajaran Kimia Kelas XI IPA SMA. Jurnal At-Tadbir STAI Darul Kamal NW Kembang Kerang, 4(1), 57–69.

Hernandez-de-Menendez, M., Escobar Díaz, C. A., & Morales-Menendez, R. (2020). Educational experiences with Generation Z. International Journal on Interactive Design and Manufacturing (IJIDeM), 14(3), 847–859.

Hew, K. F., Jia, C., Gonda, D. E., & Bai, S. (2020). Transitioning to the " new normal " of learning in unpredictable times : pedagogical practices and learning performance in fully online flipped classrooms. International Journal of Educational Technology in Higher Education. https://doi.org/10.1186/s41239-020-00234-x

Hidayah, N., Sumarno, S., & Dwijayanti, I. (2023). Analisis bahan ajar terhadap kebutuhan guru dan peserta didik kelas V. Jurnal Ilmiah Pendidikan Dasar, 10(2), 128. https://doi.org/10.30659/pendas.10.2.128-142

Hiver, P., Al-Hoorie, A. H., Vitta, J. P., & Wu, J. (2024). Engagement in language learning: A systematic review of 20 years of research methods and definitions. Language Teaching Research, 28(1), 201–230.

Hwang, G., Chang, C., & Chien, S. (2022). A motivational model-based virtual reality approach to prompting learners' sense of presence, learning achievements, and higher-order thinking in professional safety training. British Journal of Educational Technology, 53(5), 1343–1360.

Irawati, A. E., & Setyadi, D. (2021). Pengembangan E-Modul Matematika pada Materi Perbandingan Berbasis Android. Jurnal Cendekia : Jurnal Pendidikan Matematika, 5(3), 3148–3159. https://doi.org/10.31004/cendekia.v5i3.467

Jääskä, E., Lehtinen, J., Kujala, J., & Kauppila, O. (2022). Game-based learning and students' motivation in project management education. Project Leadership and Society, 3, 100055.

Jufri, Fua, J. La, & Nurlila, R. U. (2018). Pendidikan Lingkungan Di Sekolah Dasar Negeri 1 Baruga Kota Kendari. Al-TA'DIB: Jurnal Kajian Ilmu Kependidikan, 11(2), 164–181.

Khomaria, I. N., & Puspasari, D. (2022). Pengembangan E-modul Berbasis Model Learning Cycle pada Materi Media Komunikasi Humas Kelas XI OTKP Universitas Pahlawan Tuanku Tambusai. Jurnal Pendidikan Dan Konseling, 4(5), 2492–2503.

Kusumawati, P. R. D., Aristiyanto, R., & Muflikhah, I. K. (2023). Pengembangan E-Modul Berbasis Pendidikan Lingkungan Berkelanjutan Dalam Pembelajaran Ipa. LENSA (Lentera Sains): Jurnal Pendidikan IPA, 13(2), 149–155. https://doi.org/10.24929/lensa.v13i2.366

Laili, I., Ganefri, & Usmeldi. (2019). Efektivitas pengembangan e-modul project based learning pada mata pelajaran instalasi motor listrik. Jurnal Imiah Pendidikan Dan Pembelajaran, 3(3), 306–315.

Lastri, Y. (2023). Pengembangan Dan Pemanfaatan Bahan Ajar E-Modul Dalam Proses Pembelajaran. Jurnal Citra Pendidikan, 3(3), 1139–1146. https://doi.org/10.38048/jcp.v3i3.1914

Li, M., & Li, J. (2023). Using Perusall to motivate students' curriculum-based academic reading. Journal of Computers in Education, 10(2), 377–401.

Likert, R. (2017). The method of constructing an attitude scale. In Scaling (pp. 233–242). Routledge.

Magdalena, I., Sundari, T., Nurkamilah, S., Ayu Amalia, D., & Muhammadiyah Tangerang, U. (2020). Analisis Bahan Ajar. Jurnal Pendidikan Dan Ilmu Sosial, 2(2), 311–326.

Milinki, A. K. (2016). Cases in qualitative research: Research reports for discussion and evaluation. Routledge.

Nicholas, M., Veresov, N., & Clark, J. C. (2021). Guided reading–Working within a child's zone of proximal development. Learning, Culture and Social Interaction, 30, 100530.

Rama, A., Putra, R. R., Huda, Y., & Lapisa, R. (2022). Pengembangan e-modul menggunakan aplikasi flip pdf professional pada mata kuliah analisis kurikulum pendidikan dasar. Jurnal Riset Tindakan Indonesia, 7(1), 42–47.

Rau, H., Wu, J.-J., & Procopio, K. M. (2023). Exploring green product design through TRIZ methodology and the use of green features. Computers & Industrial Engineering, 180, 109252.

Ricu Sidiq, & Najuah. (2020). Pengembangan E-Modul Interaktif Berbasis Android pada Mata Kuliah Strategi Belajar Mengajar. Jurnal Pendidikan Sejarah, 9(1), 1–14. https://doi.org/10.21009/jps.091.01

Risdianto, E., Syarkowi, A., & Jumiarni, D. (2021). Analisis data respon mahasiswa terhadap sistem pembelajaran berbasis moocs pada matakuliah ilmu lingkungan menggunakan rasch model. JINOTEP (Jurnal Inovasi Dan Teknologi Pembelajaran): Kajian Dan Riset Dalam Teknologi Pembelajaran, 8(1), 47–57.

Ritonga, A. P., Andini, N. P., & Iklmah, L. (2022). Pengembangan Bahan Ajaran Media. Jurnal Multidisiplin Dehasen (MUDE), 1(3), 343–348. https://doi.org/10.37676/mude.v1i3.2612

Sabardila, A., Budiargo, A. D., Wiratmoko, G., Himawan, J. A., Triutami, A., Intansari, A., Setiyowati, D., Cahyani, D. H. T., Handayani, R., & Suistri, S. (2020). Pembentukan Karakter Peduli Lingkungan melalui Kegiatan Penghijauan pada Siswa MIM Derasan Sempu, Boyolali. Buletin KKN Pendidikan, 1(2), 35–41. https://doi.org/10.23917/bkkndik.v1i2.10763

Sa'diyah, K. (2021). Pengembagan E-Modul Berbasis Digital Flipbook Untuk Mempermudah Pembelajaran Jarak Jauh Di SMA. Edukatif : Jurnal Ilmu Pendidikan, 3(4), 1298–1308. https://doi.org/10.31004/edukatif.v3i4.561

Santy Afriana, M. A. R. (2022). Innovation of Basic Education Curriculum to Optimize Learners Spiritual Character. 14(1), 195–206. https://doi.org/10.37680/qalamuna.v14i1.1479

Seven, M. A. (2020). Motivation in Language Learning and Teaching. African Educational Research Journal, 8, 62–71.

Silvia Oksa, & Soenarto, S. (2020). Pengembangan E-Modul Berbasis Proyek Untuk Memotivasi Belajar Siswa Sekolah Kejuruan. Jurnal Kependidikan, 4(1), 99–111.

Spindler, G., & Hammond, L. (2000). The use of anthropological methods in educational research: Two perspectives. Harvard Educational Review, 70(1), 39.

Sugiyarti, L., Arif, A., & Mursalin. (2018). Pembelajaran Abad 21 di SD. Prosiding Seminar Dan Diskusi Nasional Pendidikan Dasar, 439–444.

Sureni, S., Suroso Mukti Leksono, & Lulu Tunjung Biru. (2023). Pengembangan Modul Elektronik (E-Modul) Berbasis Flip PDF Profesional pada Tema Pencemaran Lingkungan untuk Meningkatkan Literasi Sains Siswa SMP Kelas VII. Jurnal Pendidikan Mipa, 13(2), 350–357. https://doi.org/10.37630/jpm.v13i2.944

Syahputri, I., & Dafit, F. (2021). Pengembangan E-Modul Membaca Siswa Kelas 3 SDN 029 Pekanbaru. Qalamuna: Jurnal Pendidikan, Sosial, Dan Agama, 13(2), 671–686. https://doi.org/10.37680/qalamuna.v13i2.1081

Timotheou, S., Miliou, O., Dimitriadis, Y., Sobrino, S. V., Giannoutsou, N., Cachia, R., Monés, A. M., & Ioannou, A. (2023). Impacts of digital technologies on education and factors influencing schools' digital capacity and transformation: A literature review. Education and Information Technologies, 28(6), 6695–6726.

Vanichvasin, P. (2021). Effects of Visual Communication on Memory Enhancement of Thai Undergraduate Students, Kasetsart University. Higher Education Studies, 11(1), 34–41.

Wekerle, C., Daumiller, M., & Kollar, I. (2022). Using digital technology to promote higher education learning: The importance of different learning activities and their relations to learning outcomes. Journal of Research on Technology in Education, 54(1), 1–17.

Yan, L., Whitelock-Wainwright, A., Guan, Q., Wen, G., Gašević, D., & Chen, G. (2021). Students' experience of online learning during the COVID-19 pandemic: A province-wide survey study. British Journal of Educational Technology, 52(5), 2038–2057.

Yates, A., Starkey, L., Egerton, B., & Flueggen, F. (2021). High school students' experience of online learning during Covid-19: the influence of technology and pedagogy. Technology, Pedagogy and Education, 30(1), 59–73.

Yusid, U. H., Filahanasari, E., & Mahmudi, Moh. R. (2020). Pengembangan Modul Tematik Terintegrasi Al-Qur ' an dan Hadis Pada Tema Cuaca di Kelas III Sekolah Dasar. Scholastica Journal, 3(2), 16–22.