Kawanua International Journal of Multicultural Studies
Vol. 6, No. 2, December 2025, p. 235~247
ISSN: 2797-5460, E-ISSN: 2797-359X, DOI: 10.30984/KIJMS.v6i2.1865

Development of a Self-Directed Learning E-Module to Enhance Students' Critical Thinking in Islamic Cultural History

Dikriati Kamalasari[1], Hadeli[2], Misra[3], Syafruddin Nurdin[4], Milya Sari[5]

[1,2,3,4,5]Universitas Islam Negeri Imam Bonjol Padang, Indonesia
Email: diktirati0507@gmail.com[1], hadeli@uinib.ac.id[2], misra@uinib.ac.id[3], s.nurdin1991@gmail.com[4], milyasari@uinib.ac.id[5]

Article Info

Article history:
Received Jul 30, 2025
Revised Oct 1, 2025
Accepted Dec 28, 2025

Keywords:
E-Module
Self-Directed Learning
Critical Thinking
Multicultural Education

ABSTRACT

This study was motivated by the low level of students' critical thinking skills in Islamic Cultural History (ICH) learning at Madrasah Tsanawiyah, which is largely dominated by conventional, teacher-centered instructional practices. The study is theoretically grounded in constructivist learning theory and the concept of Self-Directed Learning (SDL), emphasizing learner autonomy, reflection, and responsibility. Within the context of Islamic education, critical thinking is also seen as an embodiment of ulul albab values, integrating reasoning, reflection, and moral awareness. The purpose of this study was to develop a Self-Directed Learning-based E-Module for Islamic Cultural History that is valid, practical, and effective in enhancing students' critical thinking skills, while contributing to inclusive and contextual learning. This research employed a Research and Development approach using the 4D model (Define, Design, Development, and Disseminate). The study was conducted with eighth-grade students at MTsN 2 Padang. Data were collected through observations, interviews, questionnaires, and critical thinking tests. The dissemination stage was implemented on a limited scale through digital distribution of the E-Module. The findings indicate that the developed E-Module demonstrates very high validity (94.11%), high practicality according to teachers (91%) and students (95.82%), and is effective in improving students' critical thinking skills, as shown by an average N-Gain score of 0.727 (high category). The novelty of this study lies in integrating Self-Directed Learning into Islamic Cultural History E-Modules to foster critical thinking and prepare students for constructive participation in Indonesia's multicultural society.

This is an open access article under the CC BY license.

Corresponding Author:
Dikriati Kamalasari,
UIN Imam Bonjol Padang, Indonesia,
Balai Gadang, Koto Tangah, Padang City, West Sumatra 25586
Email: diktirati0507@gmail.com

1. INTRODUCTION

Islamic Cultural History (Sejarah Kebudayaan Islam/SKI) is an integral component of Islamic education that functions not only as a medium for transmitting historical knowledge but also as a means of shaping students' ways of thinking, reflective attitudes, and social awareness (Hidayati, 2021; Zahro, 2018). Within the context of Indonesia's multicultural and pluralistic society, SKI learning plays a strategic role in equipping Muslim students with an understanding of the contributions of Islamic civilization to global history, while simultaneously fostering open-minded, tolerant, and dialogical attitudes toward cultural, ethnic, and religious diversity (Mangkurat, 2024; Mursidah, 2022).. A comprehensive and critical understanding of Islamic history enables students to perceive Islam as a religion with a rich intellectual tradition, strong humanitarian values, and significant contributions to world civilization, making it relevant for promoting intercultural dialogue in a diverse society (Mursidah, 2022; Rahardhian, 2022).

Ideally, Islamic Cultural History learning should be able to develop reflective and in-depth thinking skills, as the nature of historical material requires students to understand cause-and-effect relationships, analyze the background of the emergence of civilizations, and evaluate the roles and contributions of historical figures within their respective contexts (Gani et al., 2023; Rahim et al., 2022). One topic with strong potential to develop such skills is the intellectual advancement of Muslim scholars and scientists during the Abbasid Caliphate. This topic illustrates the dynamic development of science, philosophy, and scholarly culture in Islamic civilization, which produced many influential figures with significant global contributions (Roza et al., 2023; Saman, 2024). Understanding this material requires students not only to recognize prominent figures and their works but also to analyze the factors behind intellectual progress and its relevance to contemporary life.

However, SKI learning practices in madrasahs remain predominantly oriented toward memorization of historical facts and teacher-centered instruction, which limits the optimal development of students' critical and reflective thinking skills (Putri et al., 2025). This condition potentially constrains the role of SKI as a learning vehicle that prepares students to participate constructively in plural social life. Therefore, pedagogical innovation is needed not only to improve academic achievement but also to support the development of 21st-century competencies that are relevant to multicultural contexts.

Strengthening critical thinking skills aligns with the demands of 21st-century education and national education policies through the implementation of the Merdeka Curriculum, which emphasizes a shift from teacher-centered to student-centered learning and promotes meaningful, contextual learning oriented toward the development of 21st-century competencies (Anis Zohriah, Hikmatul Fauzjiah, Adnan, 2023; Nadhiroh S & Anshori I, 2023; Putri et al., 2025). In this paradigm, students are positioned as active subjects in the learning process, while teachers act as facilitators (Nurhasanah & M. Yemmardhotillah, 2022; Shofiyah et al., 2023).

Critical thinking enables students to process information deeply, evaluate its accuracy and relevance, and draw logical and reflective conclusions (Fikri & Munfarida, 2023; Fonna & Nufus, 2024). Theoretically, critical thinking is grounded in cognitive and constructivist theories proposed by Piaget (1969) and Vygotsky (1986) which emphasize higher-order thinking processes beyond mere memorization and comprehension (Rahardhian, 2022; Sidmewa et al., 2021).

From the perspective of Islamic education, critical thinking is not only a demand of modern education but also has a strong theological foundation. The Qur'an encourages Muslims to use reason, think critically, and reflect upon the signs of Allah through tafakkur, tadabbur, and tafaqquh, as reflected in the concept of ulul albab (Fikri & Munfarida, 2023; Inggriyani & Fazriyah, 2018; Ngatminiati et al., 2024). These values are in line with the Self-Directed Learning (SDL) approach, which positions students as active, independent individuals who are responsible for their own learning processes and outcomes (Knowles, 1975). Self-Directed Learning has been shown to enhance learning autonomy, active participation, and the development of students' critical thinking skills (Syihada et al., 2025). Along with advances in information technology, the SDL approach can be effectively integrated into digital learning materials in the form of E-Modules that provide interactive, flexible learning environments and support independent learning (Fujiarti et al., 2024; Salsabila & Darwis, 2023; Syaiful et al., 2023; Zinnurain, 2021).

Although numerous studies indicate that E-Modules are effective in improving learning outcomes and critical thinking skills (Janna et al., 2023; Wirawan et al., n.d.) their application in Islamic Cultural History learning at the Madrasah Tsanawiyah level remains limited. Previous research by Rahma Adilla Daeng Pratty (2023) developed an E-Module based on Self-Directed Learning without focusing on critical thinking improvement, while Nugroho Dwi Yunianto et al., (2023) developed an E-Module to enhance critical thinking using a Project-Based Learning approach. Furthermore, observations and interviews conducted at MTsN 2 Padang revealed that Islamic Cultural History learning is still dominated by conventional methods, limited digital teaching materials, low student engagement, and suboptimal development of critical thinking skills (Al Ayyubi et al., 2024). Therefore, this study aims to develop an E-Module based on the Self-Directed Learning approach to enhance students' critical thinking skills in Islamic Cultural History learning, particularly on the topic of intellectual advancements of Muslim scholars during the Abbasid Caliphate.

The development of the Islamic Cultural History (Sejarah Kebudayaan Islam/SKI) E-Module in this study is grounded in the integration of Western educational theories and Islamic educational philosophy. This integration is particularly important in the context of contemporary Islamic education within multicultural societies, as it enables the design of learning experiences that remain rooted in Islamic values while being responsive to modern, inclusive, and learner-centered pedagogical approaches (Al Ayyubi et al., 2024; Nurhasanah & M. Yemmardhotillah, 2022; Risti Pratami, 2024).

The purpose of this study is to develop an Islamic Cultural History E-Module using the Self-Directed Learning approach for Madrasah Tsanawiyah students. The developed E-Module is expected to support independent and active learning and improve students' critical thinking skills. The findings of this study are expected to serve as a reference for the development of innovative digital teaching materials in Islamic Cultural History learning at madrasahs.

This research employed a Research and Development (R&D) method using the 4D model, which consists of the Define, Design, Development, and Disseminate stages (Solikin & Amalia, 2019). Data were collected through observations, interviews, questionnaires, and critical thinking tests. The research subjects included experts, teachers, and Madrasah Tsanawiyah students. The dissemination stage was conducted on a limited scale by distributing the E-Module to teachers and students within the research school through a digital link. Data were analyzed to determine the validity, practicality, and effectiveness of the developed E-Module.

2. METHODS

This study employed a Research and Development (R&D) approach aimed at producing an Islamic Cultural History E-Module based on the Self-Directed Learning approach. The development process followed the 4D model, consisting of the Define, Design, Development, and Disseminate stages (Hariyanto et al., 2022; Thiagarajan, 1974). This model was selected due to its systematic structure in ensuring product validity, practicality, and effectiveness in educational innovation research.

The study was conducted with eighth-grade students at MTsN 2 Padang, Indonesia. Data were collected through observations, interviews, questionnaires, and critical thinking tests to comprehensively capture instructional needs, product feasibility, and learning outcomes (Jaya et al., 2019). Although the empirical implementation was situated in one madrasah, the needs analysis at the define stage emphasized general instructional challenges commonly found across Madrasah Tsanawiyah contexts, such as teacher-centered learning practices, limited digital teaching materials, and insufficient support for independent and critical learning. These challenges are not unique to urban madrasahs but are also relevant to rural and resource-limited educational settings.

During the design and development stages, the E-Module was intentionally structured to be flexible and adaptable across diverse madrasah contexts. The content organization, learning activities, self-reflection tasks, and critical thinking exercises were designed to accommodate differences in students' learning pace, academic readiness, and access to learning resources. The digital format allows the E-Module to be accessed both online and offline, enabling its potential use in madrasahs with varying levels of technological infrastructure.

At the development stage, the E-Module was validated by experts in instructional models, media, content, and language, followed by practicality testing involving teachers and students (Dewy et al., 2023). Product effectiveness was examined through pretest-posttest comparisons of students' critical thinking skills using statistical analysis. These evaluation procedures were designed to ensure that the E-Module meets quality standards applicable beyca single institutional context. The product development flow in this study is illustrated in the following figure:

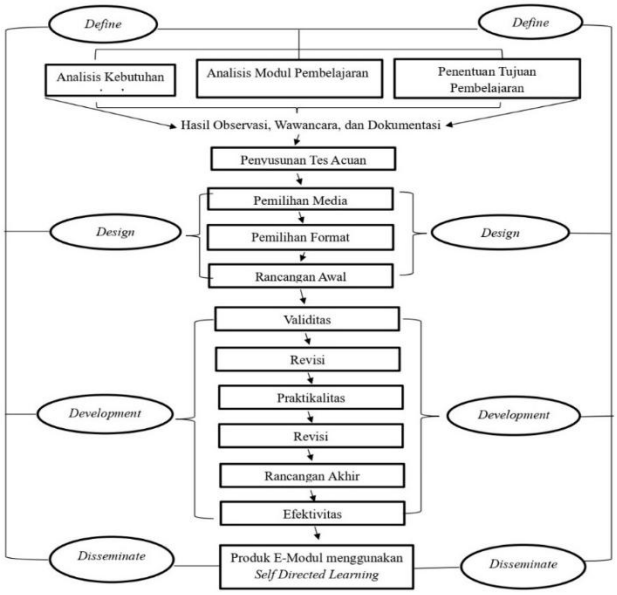

Figure 1. Research Product Development Flow

Thus, it can be understood that the product development in this study followed the 4D model implemented systematically and sequentially. Each stage was interrelated to produce an Islamic Cultural History (SKI) E-Module using the Self-Directed Learning approach that meets learning needs, with the dissemination stage conducted on a limited scale (Triana et al., 2023).

Previous studies have shown that SKI learning in madrasahs is still largely dominated by conventional methods and has not fully utilized digital technology to support active and self-directed learning. However, most of these studies focus primarily on improving cognitive learning outcomes or addressing local instructional problems, without explicitly linking SKI pedagogy to the broader challenges of Islamic education within multicultural societies.

3. RESULTS AND DISCUSSION

This section presents the results of the development research on the Islamic Cultural History (SKI) E-Module using the Self-Directed Learning approach, which includes the levels of validity, practicality, and effectiveness of the product. Furthermore, these results are analytically discussed to examine their alignment with the research objectives as well as their relevance to theoretical perspectives and previous research findings in enhancing students' critical thinking skills.

This study produced an Islamic Cultural History E-Module using Self-Directed Learning (SDL), developed through the 4D model consisting of the define, design, development, and limited disseminate stages. The developed product was designed to support independent learning and to improve students' critical thinking skills, particularly on the topic of the intellectual advancement of Muslim scholars and scientists during the Abbasid Dynasty.

At the define stage, a needs analysis was conducted through observations, interviews, and documentation, which revealed that Islamic Cultural History learning in Madrasah Tsanawiyah in Padang City specifically at MTsN 2 Padang was still predominantly teacher-centered. Learning resources were largely limited to textbooks, and the learning process had not optimally facilitated independent learning or the development of students' critical thinking skills. This is consistent with the study conducted by Azhari et al., (2023) which states that information technology–based Islamic Education (PAI) learning theory is grounded in the information processing system. This system refers to how individuals receive stimuli from the environment, organize data, develop concepts, solve problems, and utilize verbal and nonverbal symbols. Information processing theory, as part of cognitive learning theory, was pioneered by Robert Gagné.

The design stage resulted in an initial E-Module framework that included learning objectives, instructional content, critical thinking activities, self-reflection components, and evaluation tasks aligned with the principles of Self DirectedLearning. The development stage focused on product validation, practicality testing, and effectiveness testing based on empirical findings in the field. Meanwhile, the disseminate stage was conducted on a limited scale by distributing the E-Module in the form of a digital link to teachers and students, due to time constraints and the research context.

3.1 E-Module Validity

The validity assessment was conducted by six experts, consisting of one learning model expert, two media experts, two subject matter experts, and one language expert, as

well as an evaluation of alignment with critical thinking indicators (Fadriati et al., 2023). The high validity score indicates that the developed E-Module meets the standards of Islamic Cultural History learning content, uses communicative language appropriate to students' developmental levels, and presents a visual design that supports students' active engagement in the learning process. The results of the validity assessment of the E-Module developed using the Self-Directed Learning approach to improve students' critical thinking skills in Islamic Cultural History at Madrasah Tsanawiyah are presented in the following table:

Table 1. Results of Validity of E-Module Development

Aspects	Presentase (%)	Validity Level	Remarks
Models	96%	Highly Valid	No Revision
Media	90%	Highly Valid	No Revision
Material	91%	Highly Valid	No Revision
Language	97%	Highly Valid	No Revision
Total	94, 11%	Highly Valid	No Revision

Source: (Arikunto, 2015)

The validity test results show that the developed E-Module falls into the very valid category, with a percentage score of 94.11%. This finding indicates that the learning content is aligned with the competencies of Islamic Cultural History, presented systematically, supported by communicative language, and equipped with media design that facilitates independent learning. These results are consistent with previous studies by Fadly (2022) and Fujiarti et al., (2024) which reported that systematically designed E-Modules based on learners' needs tend to achieve high validity levels.

3.2 E-Module Practicality

The practicality test results indicate that the developed E-Module received a very practical response from both educators and students. These findings demonstrate that the E-Module is easy to use, features clear navigation, and effectively assists students in understanding the learning material independently. Students also reported that the E-Module provides a more engaging learning experience compared to conventional teaching materials. The following are the results of practicality and educators and students, namely:

Table 2. Results of E-Module Practicality

Practicality	Educator			Students
Score obtained	48	43	46	1,520
Maximum score	50			1600
P (final value)	96%	86%	92%	95,36%
Average Practicality	91%			
Practicality Criteria	Very Practical			Very Practical

Source: (Purwanto, 2011)

Educators evaluated the E-Module as user-friendly, supportive of the learning process, and effective in strengthening their role as facilitators. Meanwhile, students stated that the E-Module is easy to understand, visually appealing, and allows them to learn according to their own pace and ability. These results indicate that the E-Module is not only conceptually feasible but also practically applicable in real classroom contexts, in line with the characteristics of Self-Directed Learning (Knowles, 1975; Syihada et al., 2025).

3.3 Effectiveness of the E-Module on Students' Critical Thinking Skills

The effectiveness of the E-Module was examined using an Analysis of Covariance (ANCOVA) test by controlling students' pretest scores. In this study, the pretest scores functioned as the covariate variable. To further support the effectiveness findings, the analysis was complemented by the calculation of N-Gain scores for both the experimental and control groups.

Table 3. Results of the ANCOVA Test

Tests of Between-Subjects Effects
Dependent Variable: *Posttest* Scores in Islamic Cultural History

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	12168.903[a]	2	6084.452	82.242	.000	.749
Intercept	320786.709	1	320786.709	4335.991	.000	.987
Kelas	8950.938	1	8950.938	120.988	.000	.687
Pre_c	620.496	1	620.496	8.387	.005	.132
Error	4069.028	55	73.982			
Total	333550.000	58				
Corrected Total	16237.931	57				

a. R Squared = .749 (Adjusted R Squared = .740)

Source: SPSS

Based on the ANCOVA results presented in Table 4, the statistical analysis indicates that the applied model is statistically appropriate. This is demonstrated by the Corrected Model with a Type III Sum of Squares value of 12,168.903, degrees of freedom (df) = 2, a Mean Square of 6,084.452, an F value of 82.242, and a significance level (Sig. = 0.000) below the threshold of 0.05. The Partial Eta Squared value of 0.749 indicates a large effect size, showing that the model exerts a substantial influence on the dependent variable, namely students' posttest learning outcomes in Islamic Cultural History. After that, it is followed by the N-Gain test which can be seen in the following table:

Table 4. N-Gain Results of the Experimental and Control Classes

Class	N-Gain
Exsperiment	0.727
Conrtol	0.07

Source: (Lian et al., 2023)

The analysis reveals a significant difference between the experimental and control groups, with an F value of 120.988 and Sig. < 0.05, indicating that the use of the E-Module had a significant effect on improving students' critical thinking skills. Furthermore, the N-Gain results show an average value of 0.727, which falls into the high category, confirming that the E-Module is highly effective in enhancing students' critical thinking abilities.

The observed differences demonstrate that the improvement in learning outcomes among students in the experimental class was substantially greater than that of the control class. These findings indicate that the implementation of the E-Module based on Self-Directed Learning had a significant impact on the enhancement of students' critical thinking skills, whereas learning in the control class, which did not utilize the E-Module, resulted in relatively limited improvement.

These findings emphasize that the development of systematically designed digital teaching materials grounded in Self-Directed Learning principles plays a strategic role in supporting more meaningful learning in Islamic Cultural History. This approach encourages students to actively engage in the learning process, manage their learning independently, and construct understanding through reflective processes aligned with the demands of 21st-century education (Knowles, 1975; Nadhiroh S & Anshori I, 2023).

Moreover, the use of E-Modules as learning media serves not only as a means of content delivery but also as a pedagogical tool that supports the development of students' critical thinking skills. The integration of self-directed learning within the E-Module provides opportunities for students to explore learning materials more deeply, connect concepts to real-life contexts, and develop responsibility for their own learning processes (Azahra, 2025; Kholid, 2024; Rahmi, 2018). This aligns with the view that active and independent learning forms a crucial foundation for fostering critical thinking skills in conceptually oriented subjects, including Islamic Cultural History (Ngatminiati et al., 2024).

Another theoretical foundation of this study is constructivist learning theory, as proposed by Piaget (1969) and Vygotsky (1986) Constructivism views learning as an active process in which knowledge is constructed through the interaction between new experiences and existing cognitive structures. Vygotsky further emphasizes the role of social and cultural contexts in learning, highlighting dialogue, interaction, and reflection as essential components of meaningful learning.

In SKI instruction, a constructivist approach enables students not merely to receive historical narratives passively, but to analyze, interpret, and critically reflect on historical events (Nadhiroh S & Anshori I, 2023; Rachmantika & Wardono, 2019). This approach is highly relevant in multicultural contexts, as it encourages students to understand history as the result of interactions among diverse cultures and civilizations, while developing the ability to consider multiple perspectives.

This study demonstrates that the development of an Islamic Cultural History (Sejarah Kebudayaan Islam) E-Module based on the Self-Directed Learning (SDL) approach constitutes an innovative contribution to instructional design in Islamic education. By integrating Islamic educational philosophy with constructivist learning theory and digital pedagogy, the E-Module not only enhances students' critical thinking skills but also supports independent, reflective, and meaningful learning processes. This innovation addresses the limitations of conventional SKI instruction that is predominantly teacher-centered and less responsive to the demands of 21st-century learning.

The findings indicate that the developed E-Module is valid, practical, and effective, suggesting its strong potential for broader implementation. Importantly, the SDL-based design enables the E-Module to be adaptable and inclusive, allowing it to be utilized across diverse Madrasah Tsanawiyah contexts, including both urban and rural settings with varying levels of infrastructure, learning resources, and student backgrounds (Ricu Sidiq & Najuah, 2020). The flexible structure of the E-Module supports differentiated learning paces and capacities, making it suitable for heterogeneous student populations.

This finding is in line with the study conducted by Atris Yuliarti Mulyani (2022) which revealed that individuals who are accustomed to critical thinking are able to evaluate their own arguments and beliefs, enabling them to make the most logical and appropriate decisions.

Therefore, this research contributes not only to local instructional improvement but also to the broader discourse on innovative digital pedagogy in Islamic education within multicultural and diverse educational environments. Future research is recommended to implement this E-Module on a wider scale and across different madrasah contexts to further examine its scalability, accessibility, and long-term impact on students' critical thinking and inclusive learning outcomes.

4. CONCLUSION

Differences in regulatory paradigms in the implementation of the *Ijarah Muntahiyah Bittamlik* (IMBT) contract between Indonesia and Malaysia. Regulations in Indonesia tend to prioritize formal legal certainty as the primary objective, achieved through a clear separation of the ijarah contract and the ownership transfer contract in the contract documents and stages. This approach reflects regulatory caution in preventing the mixing of contracts (*ta'alluq*) and the potential for hidden usury, but in practice, it has implications for administrative complexity and limited contractual flexibility. In contrast, Malaysia adopts a more purpose-based regulatory paradigm, where the IMBT contract structure is designed in an integrated manner as long as the substance of the transaction remains compliant with sharia principles and *maqasid shariah*. This difference in paradigms demonstrates that sharia legal certainty can be achieved through two distinct approaches: certainty based on legal formalities and certainty based on the fulfillment of sharia objectives.

Implications of different IMBT structures for consumer protection and balance between the parties. The contract separation model implemented in Indonesia, while providing clarity on the legal status of assets, often places customers in a weak contractual position due to the dominance of standard contracts and limited room for negotiation. This has the potential to diminish the substantive meaning of freedom of contract. On the other hand, the flexible approach in Malaysia provides greater room for transaction efficiency and transparency of obligations through concise and integrated contract designs, with strict oversight by sharia authorities. Thus, this discussion confirms that the effectiveness of IMBT is determined not only by the normative validity of the contract, but also by the extent to which the structure is able to protect customer interests and achieve contractual fairness in accordance with the principles of Islamic law. *maqasid shariah.*

ACKNOWLEDGEMENTS

The author would like to express sincere gratitude to all parties who contributed to the completion of this study. Particular appreciation is extended to academic colleagues and reviewers whose critical insights and constructive feedback significantly enriched the

comparative analysis of Islamic financing practices in Indonesia and Malaysia. The author is also grateful to various Islamic legal and financial institutions, as well as judicial bodies, whose publicly accessible regulations, fatwas, and court decisions formed an essential foundation for this normative juridical research. This study benefited greatly from scholarly discussions on Islamic contract theory, *maqasid shariah*, and sharia governance, which helped sharpen the analytical framework and comparative perspective adopted in this paper. Any remaining shortcomings or interpretations presented in this work remain the sole responsibility of the author.

REFERENCES

Al Ayyubi, I. I., Noerzanah, F., Fitriyah, D., Azizah, A., & Nuroh, A. S. (2024). Penerapan Berpikir Kritis Siswa dalam Pembelajaran Sejarah Kebudayaan Islam berdasarkan Asal Sekolah. *Piwulang: Jurnal Pendidikan Agama Islam*, *6*(2), 114–129.

Anis Zohriah, Hikmatul Fauzjiah, Adnan, M. shofwan M. N. B. (2023). Jurnal Dirosah Islamiyah Jurnal Dirosah Islamiyah. *Jurnal Dirosah Islamiyah Volume*, *5*, 704–713. https://doi.org/10.17467/jdi.v6i3.4503

Arikunto, S. (2015). *Dasar-Dasar Evaluasi Pendidikan*. Bumi Aksara.

Atris Yuliarti Mulyani. (2022). Pengembangan Critical Thinking Dalam Peningkatan Mutu Pendidikan di Indonesia. *DIAJAR: Jurnal Pendidikan Dan Pembelajaran*, *1*(1), 100–105. https://doi.org/10.54259/diajar.v1i1.226

Azahra, A. (2025). *Pengaruh Model Kooperatif Tipe Team Games Tournament (TGT) Berbantuan Media Interaktif Educandy Terhadap Kemampuan Berpikir Kritis Mata Pelajaran Pendidikan Agama Islam Dan Budi Pekerti Di SMPNegeri I Ampek Angkek Agam*. Universitas Islam Negeri Imam Bonjol Padang.

Dewy, M. S., Isnaini, M., Simamora, Y., Silitinga, A. I., & Astrid, E. (2023). Implementasi Model 4d Dalam Pengembangan Buku Digital Mata Kuliah Elektronika Dasar. *Jurnal TIK Dalam Pendidikan*, *10*(2), 97–105.

Fadly, W. (2022). *No TitleModel-model pembelajaran unruk Implemnetasi Kurikulum Merdeka*. Bening Pustaka.

Fadriati, Muchlis, L., & BSS, I. A. (2023). Model Pembelajaran PAI Dengan Project Basedbelajar Berbasis ICT Untuk Meningkatkankemampuan Berfikir Kritis Siswa Sma. *Jurnal Keislaman Dan Ilmu Pendidikan*, *5*(1), 177–188.

Fikri, M., & Munfarida, E. (2023). Konstruksi Berpikir Kritis dalam Pendidikan Islam : Analisis Tafsir Maudhu ' i Berdasarkan Al- Qur ' an. *Jurnal Pendidikan Agama Islam: Al-Thariqah*, *8*(1), 108–120. https://doi.org/10.25299/al-thariqah.2023.vol8(1).11469

Fonna, M., & Nufus, H. (2024). Pengaruh Penerapan Problem Based Learning (PBL) Terhadap Keterampilan Abad 21. *Ar-Riyadhiyyat: Jurnal Pendidikan Matematika*, *5*(1), 22–30.

Fujiarti, A., Meilania, D. K., Angraeni, M., & Umah, R. N. (2024). Literatur Review : Pengaruh Penggunaan E-Modul Terhadap Hasil Belajar Siswa Sekolah Dasar. *Jurnal Jendela Pendidikan*, *4*(01), 83–89. https://doi.org/10.57008/jjp.v4i01.694

Gani, A., Nasution, J., Rika, A., Siregar, F., Putriana, A., Rahman, A., Siregar, R. F., Daulay, S. A., Islam, U., & Sumatera, N. (2023). Pembelajaran Ski Di Mis Nurul Fadhillah. *Tsaqofah, Jurnal Penelitian Guru Indonesia*, *3*(1), 59–68.

Hariyanto, B., MZ, I., SU, W., & Rindawati. (2022). 4D Model Learning Device Development Method of the Physical Geography Field Work Guidance Book. *MATEC Web of Conferences*, *372*, 05008. https://doi.org/10.1051/matecconf/202237205008

Hidayati, L. (2021). Pembelajaran Sejarah Kebudayaan Islam (Ski) Berperspektif. *La-Tahzan: Jurnal Pendidikan Islam*, *XIII*(2).

Inggriyani, F., & Fazriyah, N. (2018). Analisis Kemampuan Berpikir Kritis Siswa Dalam Pembelajaran Menulis Narasi Di Sekolah Dasar. *Jurnal Pendidikan Dasar*, *3*, 12.

Janna, R. D., Yovita, & Rian Vebrianto. (2023). Pengembangan E-Modul Berbasis Problem Based Learning Untuk Meningkatkan Kemampuan Berpikir Kritis Dan Hasil Belajar Siswa. *Jurnal Literasi*, *7*(1).

Jaya, S., Maezora, S., & Muchlis, E. E. (2019). PENGEMBANGAN LKPD DENGAN PENDEKATAN SAINTIFIK DI SMANEGERI 4 KOTA BENGKULU. *Jurnal Penelitian Pembelajaran Matematika Sekolah (JP2MS)*, *3*(3). https://doi.org/10.33369/jp2ms.3.3.285-292

Kholid, I. (2024). Karakteristik Berpikir Kritis Siswa Dalam Pemecahan Masalah Matematika. *Jurnal Ilmiah Wahana Pendidikan*, *10*(9), 268–279.

Knowles, M. . (1975). *Self-directed learning; A guide for learners and teachers.* Follet Publishing Company.

Lian, Tahroni, I., Jayanti, D., Rahmatullah, Wahab, A., Mukhtar, Nurjannah, Hasyim, S. H., Nursaeni, Darodjat, & Indra, I. M. (2023). *Evaluasi Pembelajaran*. Tahta Media Group.

Mangkurat, U. L. (2024). *Analisis Pembelajaran Dalam Sejarah*. *1*(1).

Mursidah, M. (2022). Dimensi Pendidikan Moral Pada Mata Pelajaran SKI Pada Jenjang Madrasah Tsanawiyah. *Al Qalam: Jurnal Ilmiah Keagamaan Dan Kemasyarakatan*, *16*(6), 1975. https://doi.org/10.35931/aq.v16i6.1257

Nadhiroh S, & Anshori I. (2023). Implementasi Kurikulum Merdeka Belajar Dalam Pengembangan Kemampuan Berpikir Kritis Pada Pembelajaran Pendidikan Agama Islam. *Fitrah: Journal of Islamic Education*, *4*(1), 56–68.

Ngatminiati, Y., Hidayah, Y., & Suhono, S. (2024). Keterampilan Berpikir Kritis Untuk Mengembangkan Kompetensi Abad 21 Siswa Sekolah Dasar. *Jurnal Review Pendidikan Dan Pengajaran (JRPP)*, *7*(3), 8210–8216.

Nugroho Dwi Yunianto, Mutia, Putri Raudhah Heros, & Dase Erwin Juansah. (2023). Studi Pendahuluan atau Kajian Relevan. *Pendas : Jurnal Ilmiah Pendidikan Dasar*, *8*(3), 6092–6098.

Nurhasanah, & M. Yemmardhotillah. (2022). Pembelajaran Mata Pelajaran Sejarah Kebudayaan Islam (Ski) Di Madrasah Ibtidaiyah Negeri (Min) Bawan Kecamatan Ampek Nagari Kabupaten Agam. *El-Rusyd : Jurnal Sekolah Tinggi Ilmu Tarbiyah STIT Ahlussunnah Bukittinggi*, *5*(1), 267–275. https://doi.org/10.58485/elrusyd.v5i1.51

Piage, J. (1969). *The Theory of Stages in Cognitive Development*. CTB/McGraw-Hill.

Purwanto. (2011). *Statistik untuk Penelitian*. Pustaka Belajar.

Putri, S. T. F., Rosmiati, R, M. A. S., Subaedah, & Nengsih, R. (2025). ENERAPAN MODEL CRITICAL THINKING DALAM MENINGKATKAN HASIL BELAJAR Mts BHAYANGKARA TALLO MAKASSAR. *Pendas : Jurnal Ilmiah Pendidikan Dasar*, *10*, 167–186.

Rachmantika, A. R., & Wardono. (2019). Peran Kemampuan Berpikir Kritis Siswa Pada Pembelajaran Matematika Dengan Pemecahan Masalah. *Prosiding Seminar Nasional Matematika*, *2*(1), 441.

Rahardhian, A. (2022). Kajian Kemampuan Berpikir Kritis (Critical Thinking Skill) Dari Sudut Pandang Filsafat. *Jurnal Filsafat Indonesia*, *5*(2), 87–94. https://doi.org/10.23887/jfi.v5i2.42092

Rahim, I., Iswantir, Junaidi, & Wati, S. (2022). Pengembangan E-Modul Sebagai Sumber Belajar Praktek Sholat. *Jurnal Multidisiplin Ilmu*, *1*(22), 283–293.

Rahma Adilla Daeng Pratty. (2023). *Pengembangan Media E-Modul Interaktif Berbasis Self*

Directed Learning Pada Materi Akidah Akhlak. Universitas Islam Negeri Syarif Hidayatullah.

Rahmi, L. (2018). Perancangan E-Module Perakitan Dan Instalasi Personal Komputer Sebagai Media Pembelajaran Siswa SMK. *TA'DIB*, *21*(2).

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

Risti Pratami. (2024). Pendekatan Konstruktivisme dalam Kebijakan Pembelajaran Berbasis Proyek : Transformasi Pendidikan Menuju Kreativitas dan Kolaborasi Constructivism Approach in Project-based Learning Policy : Transforming Education Toward Creativity and Collaboration. *JAB JEJARING ADMINISTRASI PUBLIK*, *16*(c), 76–87. https://doi.org/10.20473/jap.v16i2.60539

Roza, Y. M., S., I. A. B., Wahyuni, N., & Andani, K. F. (2023). Pembelajaran Sejarah Kebudayaan Islam (SKI) Integratif di MTsN Padang Panjang. *Jurnal Abdimas Peradaban*, *4*(1), 1–6. https://doi.org/10.54783/ap.v4i1.16

Salsabila, F., & Darwis, M. (2023). Implementasi Metode Wahdah Dalam Peningkatan Hafalan pada Mata Pelajaran Al-Qur'an Hadis. *JLEB: Journal of Law, Education and Business*, *1*(2), 764–771. https://doi.org/10.57235/jleb.v1i2.1059

Saman, T. (2024). Urgensi Pembelajaran Sejarah Kebudayaan Islam Di Madrasah. *Literasi Kita Indonesia*, *5*(1), 2745–5432.

Shofiyah, S., Wafi, A., Wijaya, A., Damara, E. J., & Nugroho, H. (2023). *Pendidikan Agama Islam Pembelajaran Sejarah Kebudayaan Islam (SKI) di MTs Darur Roja Depok*. *01*(01), 33–38.

Sidmewa, A. A. N., Susanti, Y., & Putra, R. A. (2021). Pengaruh Model Self Directed Learning Terhadap Hasil Belajar Siswa Pada Mata Pelajaran Ekonomi. *J-KIP (Jurnal Keguruan Dan Ilmu Pendidikan)*, *2*(3), 197. https://doi.org/10.25157/j-kip.v2i3.6228

Solikin, I., & Amalia, R. (2019). Materi Digital Berbasis Web Mobile Menggunakan Model 4D. *Sistemasi*, *8*(3), 321. https://doi.org/10.32520/stmsi.v8i3.461

Syaiful, S., Salam, U., & Maria, H. T. (2023). Pengembangan E-Modul Interaktif Dalam Meningkatkan Hasil Belajar Sistem Ekskresi Pada Manusia. *Academy of Education Journal*, *14*(2), 854–872. https://doi.org/10.47200/aoej.v14i2.1936

Syihada, G. N., Sugilar, H., Ihsan, M., Matematika, S. P., Studi, P., Matematika, P., Matematika, L., & Pembelajaran, M. (2025). Pendekatan Pembelajaran Berbasis Self Directed Learning dalam Membangun Kemampuan Literasi Matematika. *Religious and Social Humanitis*, *2*(1), 25–40.

Thiagarajan, S. (1974). *Instructional development for training teachers of exceptional children*. A sourcebook.

Triana, H., Yanti, P. G., & Hervita, D. (2023). Pengembangan Modul Ajar Bahasa Indonesia Berbasis Interdisipliner Di Kelas Bawah Sekolah Dasar Pada Kurikulum Merdeka. *Jurnal Ilmiah Mandala Education (JIME)*, *9*(1), 504–514. https://doi.org/10.58258/jime.v9i1.4644/http

Vygotsky, L. (1986). *Thought and Language.* MA: MIT Press.

Wirawan, I., Sudarma, I. K., & Mahadewi, L. P. P. (n.d.). Pengembangan e-modul berbasis Problem Based Learning untuk mata pelajaran IPA siswa kelas VII semester ganjil. In *2017*. In Teknologi Pendidikan.

Zahro, S. U. (2018). *Pengembangan Bahan Ajar Sejarah Kebudayaan Islam Untuk Meningkatkan Hasil Belajar Siswa Kelas VII Di Madrasah Tsanawiyah Unggulan Program Excellent Pondok Pesantren Amanatul Ummah Pacet*. Universitas Islam

Negeri Sunan Ampel Surabaya.
Zinnurain. (2021). Pengembangan E-Modul Pembelajaran Interaktif Berbasis Flip Pdf Corporate Edition Pada Mata Kuliah Manajemen Diklat. *Academia : Jurnal Inovasi Riset Akademik, 1*(1).