International Journal of Multidisciplinary Research of Higher Education (IJMURHICA)
http://ijmurhica.ppj.unp.ac.id/index.php/ijmurhica

Contextual Financial Literacy Module with Flipped Classroom for Elementary Students

Asti Hardianti[1], Lusiani Dewi Assaat[1], Toni Yudha Pratama[1]
[1]Universitas Sultan Ageng Tirtayasa, Indonesia
astihardianti1992@gmail.com*

Article Information:
Received August 12, 2026
Revised September 15, 2026
Accepted October 19, 2026

Keywords: *Financial literacy, flipped classroom, contextual learning, elementary education*

Abstract

Financial literacy is an essential competency for elementary students as they encounter daily financial decisions such as managing pocket money, distinguishing needs from wants, and developing saving habits. However, preliminary findings reveal that many students still struggle to understand basic financial concepts and apply them in everyday contexts. This study aims to develop and evaluate the validity and effectiveness of a contextual financial literacy module integrated with the Flipped Classroom model for elementary students. The research employed a Research and Development (R&D) approach using the ADDIE model. The product consisted of a printed module supported by QR-linked instructional videos and contextual activities. Effectiveness testing involved 36 fourth-grade students using a one-group pretest–posttest design. Data were collected through interviews, expert validation, and financial literacy tests, analyzed with Aiken's V, paired-sample t-test, Cohen's d, and N-Gain. Results showed an overall Aiken's V of 0.73, indicating validity. Students' mean scores improved from 58.47 (pretest) to 84.31 (posttest), with a mean difference of 25.84 points. The paired t-test confirmed significant improvement, $t(35) = -18.276$, $p < 0.001$, with Cohen's $d = 3.04$ and N-Gain = 0.62 (moderate). These findings imply that the developed module provides a valid and effective contextual resource to strengthen financial literacy through independent pre-class learning and active classroom engagement.

INTRODUCTION

Financial literacy is an essential competence that needs to be developed from an early age because it equips individuals with the knowledge, skills, attitudes, and behaviors necessary to make responsible financial decisions (Amagir et al., 2018; Kaiser & Menkhoff, 2020; OECD, 2024). In the context of elementary education, financial literacy is increasingly important because students are already involved in various financial activities, such as saving, spending, distinguishing needs from wants, and making purchasing decisions (Batty et al., 2015; OECD, 2024). Early financial education can contribute to the

How to cite:	Hardianti, A., Assaat, L. D., Pratama, T. Y. (2026). Contextual Financial Literacy Module with Flipped Classroom for Elementary Students. *International Journal of Multidisciplinary of Higher Education (IJMURHICA)*, *9*(4). 1375-1388.
E-ISSN:	2622-741x
Published by:	Islamic Studies and Development Center Universitas Negeri Padang

development of financial knowledge and positive financial attitudes among children and adolescents (Amagir et al., 2018; Kaiser et al., 2022). Therefore, introducing financial literacy through meaningful learning experiences at the elementary school level provides an important foundation for developing responsible financial behavior in the future (Frisancho, 2023a; OECD, 2024).

Financial literacy is increasingly understood as a multidimensional construct involving financial knowledge, attitudes, skills, and behaviors related to financial decision-making (OECD, 2024). For children, these competencies can be introduced through simple and age-appropriate experiences, such as managing pocket money, distinguishing needs from wants, and developing saving habits (Amagir et al., 2018; Batty et al., 2015). Financial literacy is increasingly understood as a multidimensional construct involving financial knowledge, attitudes, skills, and behaviors related to financial decision-making (OECD, 2024). For children, these competencies can be introduced through simple and age-appropriate experiences, such as managing pocket money, distinguishing needs from wants, and developing saving habits (Amagir et al., 2018; Batty et al., 2015). Recent evidence also indicates that financial knowledge and financial attitudes are associated with better financial management behaviors, including budgeting, saving, recording expenses, and controlling spending (Batubara et al., 2025). Therefore, financial literacy education at the elementary school level should provide opportunities for students to connect financial concepts with concrete decision-making situations in their everyday lives.

Early exposure to financial concepts is also important because financial education can influence financial knowledge and related downstream behaviors (Kaiser & Menkhoff, 2020). School-based financial education has been shown to improve students' financial knowledge and may also contribute to changes in financial attitudes and behaviors, although the magnitude of these effects varies across programs and implementation conditions (Batty et al., 2015; Kaiser & Menkhoff, 2020; Molin et al., 2025). These findings suggest that financial literacy learning should move beyond the transmission of concepts and provide students with opportunities to practice financial decision-making in meaningful contexts.

However, financial literacy learning in schools still faces several challenges. Previous research has shown considerable variation among financial education programs in terms of content, instructional approaches, duration, learning objectives, and assessment methods (Amagir et al., 2018; Kaiser & Menkhoff, 2020; Molin et al., 2025). The effectiveness of financial education may also depend on the quality and design of the learning intervention (Frisancho, 2023; Kaiser et al., 2022). Recent research further indicates substantial diversity in the financial literacy topics and measurement approaches used in school-based programs, which may make it difficult to establish consistent conclusions about effective instructional designs (Molin et al., 2025). In elementary education, these challenges highlight the importance of providing learning resources that are contextual, accessible, developmentally appropriate, and connected to students' everyday experiences.

Research on contextual financial literacy learning in elementary education also indicates the potential of structured learning modules. For example, Oktaviani et al., (2024) developed a Contextual Teaching and Learning-based module supported by Big Book media for Phase B students and reported high feasibility as well as improvement in students' financial literacy achievement. Similarly, recent initiatives focusing on elementary students have emphasized the importance of introducing financial literacy through practical and contextual activities related to money management and financial decision-making (Nanda et al., 2023). These studies reinforce the need for instructional resources that enable students to connect financial concepts with situations they can recognize in their daily lives.

One learning approach that has potential to address these challenges is the Flipped Classroom model. The Flipped Classroom changes the conventional sequence of instruction by providing learning materials before classroom activities and using classroom time for active learning, discussion, practice, and problem solving (Bergmann & Sams, 2012; Bishop & Verleger, 2013; Van Alten et al., 2019). This approach allows students to access learning materials before class while providing teachers with greater opportunities to facilitate interactive and student-centered activities during classroom sessions (Bishop & Verleger, 2013; Cheng et al., 2019; van Alten et al., 2019). Meta-analytical and systematic-review evidence has reported positive effects of flipped instruction on student learning, particularly when pre-class learning is connected with active and interactive classroom activities (Cheng et al., 2019; Ponce et al., 2022; Strelan et al., 2020).

Research focusing specifically on elementary education also indicates that the Flipped Classroom has potential to support student learning, although implementation at the primary-school level remains less extensive than in other educational contexts (Halimah et al., 2025; Utami et al., 2025). Recent reviews have highlighted potential benefits such as increased engagement, comprehension, motivation, and student participation, while also identifying challenges related to technology access, teacher preparation, and parental support (Susanti et al., 2024). These findings indicate that the Flipped Classroom requires learning materials that are carefully structured and accessible to elementary students.

The combination of contextual financial literacy learning and the Flipped Classroom model therefore offers a promising instructional direction for elementary education. A contextual approach can help students relate financial concepts to familiar situations, while the Flipped Classroom can provide opportunities for independent preparation before class and more active learning during classroom sessions. This combination is particularly relevant to financial literacy because students need not only to understand concepts such as needs, wants, saving, and spending but also to apply these concepts when making every day financial decisions.

Based on this rationale, the present study focuses on the development of a contextual financial literacy module integrated with the Flipped Classroom model for elementary school students. The module is designed to provide students with accessible learning materials for independent preparation before classroom sessions, while classroom activities are used to facilitate discussion, practice, decision-making, and problem solving. The study contributes to elementary financial literacy learning by integrating contextual financial concepts with a Flipped Classroom instructional structure in a module-based learning resource. In practical terms, the module is intended to provide teachers with a structured resource for facilitating financial literacy learning that connects classroom instruction with students' everyday financial experiences.

METHODS

This study employed a Research and Development (R&D) method using the ADDIE development model, which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation. The R&D approach was selected because the study aimed to develop a Flipped Classroom-based learning module to improve elementary school students' financial literacy. The ADDIE model provides a systematic framework for identifying learning needs, designing and developing instructional materials, implementing the developed product, and evaluating its quality and effectiveness (Aryasutha et al., 2025; Efendi et al., 2026; Engkizar et al., 2025; 2026; Kaema & Ulwi, 2025; Muhlasin et al., 2026).

The research was conducted with 36 elementary school students as the research participants. The data sources consisted of students and experts involved in the validation of the developed learning module. The students participated in the implementation and effectiveness testing of the module, while expert validators assessed the quality and appropriateness of the developed product. The selection of participants was based on their involvement in the learning process targeted by the developed module.

The Analysis stage was conducted to identify students' learning needs, characteristics, learning difficulties, and the financial literacy competencies that needed to be developed. The Design stage involved determining the learning objectives, content, learning activities, assessment components, and structure of the module. The learning module was designed based on the Flipped Classroom model by providing learning materials that students could study independently before classroom activities. The module was also equipped with barcodes linked to instructional videos to facilitate students' access to supporting learning materials (Delfianza et al., 2023; Engkizar et al., 2024; Putri et al., 2025; Utami et al., 2025a).

The Development stage involved producing the initial version of the learning module and conducting expert validation. The validation instruments were used to assess several aspects of the module, including content, presentation, language, and instructional design. The module was revised according to the suggestions and recommendations provided by the experts. After the module met the predetermined validity criteria, it proceeded to the implementation stage.

The Implementation stage was carried out with 36 students. Students accessed the learning materials and instructional videos before classroom activities. Classroom sessions were subsequently used for more active learning activities, including discussion, practice, problem solving, and reflection related to financial literacy. The Evaluation stage was conducted throughout the development process to determine the validity, practicality, and effectiveness of the developed module.

The research instruments consisted of expert validation sheets, student response questionnaires, and financial literacy tests. The financial literacy test was used to measure students' understanding of financial literacy before and after the implementation of the developed module. Quantitative data obtained from the validation sheets, questionnaires, and tests were analyzed descriptively. The validation and practicality scores were converted into percentages and interpreted based on predetermined criteria, while the effectiveness of the module was determined by analyzing changes in students' financial literacy achievement after the implementation of the module.

RESULT AND DISCUSSION

Analysis Stage

The analysis stage was conducted to identify students' learning needs, characteristics, learning difficulties, and financial literacy competencies that needed to be strengthened. The results indicated that fourth-grade students still required improvement in distinguishing needs from wants, managing pocket money, and developing saving habits. The teacher also did not yet have specific and structured teaching materials for delivering financial literacy in a contextual manner, while learning activities mainly relied on general textbooks. The analysis of students' characteristics further showed that students were more interested in learning materials presented through visual illustrations, contextual stories, simple activities, and accessible digital media. These findings became the basis for developing a child-friendly and communicative learning module that combines independent learning with classroom activities. The findings provide a relevant basis for strengthening financial literacy education at the elementary school level. Previous research has demonstrated that financial education can improve children's financial knowledge and contribute to financial attitudes and behaviors (Amagir et al., 2018; Batty et al., 2015; Kaiser & Menkhoff, 2020). Financial literacy learning therefore needs to be connected with concrete and familiar situations, including managing money, distinguishing needs from wants, and developing saving habits (Batty et al., 2015; Molin et al., 2025).

These findings are also consistent with research on contextual financial literacy modules. Oktaviani et al., (2024), for example, reported that a Contextual Teaching and Learning-based financial literacy module could achieve high feasibility and improve students' financial literacy outcomes. Thus, the analysis stage in the present study provided an important foundation for developing a learning resource that was aligned with students' characteristics and everyday financial experiences.

Design Stage

Based on the findings of the analysis stage, the learning module was designed according to the principles of the Flipped Classroom model. The module was organized into three main sections. The opening section consisted of the cover, instructions for use, learning outcomes and objectives, and a concept map. The main section contained financial literacy materials, instructional videos accessed through QR codes, individual and group activities, Flipped Classroom-based discussions, case studies, and student worksheets. The closing section consisted of practice questions, evaluation, reflection activities, a summary of the material, and references.

The content of the module focused on four main aspects of elementary financial literacy: understanding needs and wants, developing saving habits, managing pocket money, and making simple financial decisions. These topics were selected because they are closely related to financial activities encountered by elementary school students in their daily lives. The content, language, illustrations, and learning activities were designed according to the characteristics of elementary school students, who benefit from concrete and contextual learning experiences.

The design incorporated the two main phases of the Flipped Classroom approach. Before classroom activities, students were provided with opportunities to study the learning materials independently through the module and instructional videos. Classroom time was subsequently used for discussion, practice, problem solving, and reflection. This structure is consistent with the fundamental concept of the Flipped Classroom, in which students encounter instructional content before class and classroom time is used for active learning and application (Bergmann & Sams, 2012; Cheng et al., 2019; Strelan et al., 2020).

The integration of QR codes into the module provided students with direct access to supporting instructional videos. This feature was intended to facilitate independent learning and provide an alternative representation of the learning content. The combination of printed learning materials and digital resources also supported the practical implementation of the Flipped Classroom model.

Development and Validation Stage

The development stage resulted in an initial version of the Flipped Classroom-based financial literacy learning module. The developed product was evaluated through validation by material and media experts. The validation covered the suitability of the content with the learning outcomes, conceptual accuracy, integration of Flipped Classroom stages, quality of presentation, language, visual design, readability, and ease of use.

Table 1. Results of Learning Module Validation

Validation Aspect	Aiken's V	Category
Material	0.72	Valid
Media	0.74	Valid
Average	0.73	Valid

The material aspect obtained an Aiken's V value of 0.72, while the media aspect obtained a value of 0.74. The overall average Aiken's V score was 0.73, indicating that the developed module met the predetermined validity criteria.

The validators provided several recommendations for improving the module.

These included simplifying the language to make it more communicative and appropriate for elementary school students, improving the instructions for using the module, adding a table of contents and learning activities, improving the layout, and strengthening the relationship between the instructional videos, pre-class assignments, and classroom discussion activities. The module was revised based on these recommendations before being implemented with students.

The validation results indicate that the module was appropriate in terms of content and adequately designed in terms of presentation and usability. The integration of contextual content, visual elements, and digital resources is particularly relevant for elementary students because financial literacy concepts can be abstract if presented only through theoretical explanations. Previous research has similarly emphasized the importance of contextual and developmentally appropriate approaches in financial literacy education (Amagir et al., 2018; Molin et al., 2025).

Fig 1. Development of the Financial Literacy Module

The validation results indicate that the module was not only appropriate in terms of content but also adequately designed in terms of presentation and usability. The integration of contextual content, visual elements, and digital resources is particularly relevant for elementary students because financial literacy concepts can be abstract if presented only through theoretical explanations. Previous research has similarly emphasized the importance of contextual and developmentally appropriate approaches in financial literacy education for children (Amagir et al., 2018; Batty et al., 2015).

Implementation and Practicality

The practicality of the learning module was examined during the implementation stage. The teacher reported that the module was easy to use because the learning objectives, activity sequences, and instructions were presented systematically. The QR codes also facilitated the integration of instructional videos into the pre-class learning stage without requiring teachers to prepare additional complicated media.

For students, the module was considered engaging because it contained illustrations, contextual stories, group activities, practice questions, and reflection activities. These components provided students with opportunities to learn independently before participating in classroom activities. The combination of printed and digital learning resources also supported the implementation of the Flipped Classroom approach.

The responses from the teacher and students indicated that the module was in the very good category in terms of practicality. This finding suggests that the developed module could be implemented within regular classroom learning without requiring substantial modifications to existing learning activities.

The practicality of instructional materials is an important consideration in educational product development. A learning product should not only demonstrate theoretical validity but also be feasible and accessible for teachers and students in actual classroom settings. In this study, the integration of QR-code-based videos with printed materials provided a relatively simple mechanism for implementing pre-class learning while allowing classroom time to be used for more interactive learning activities.

Effectiveness of the Learning Module

The effectiveness of the developed module was examined by comparing students' financial literacy scores before and after the implementation of the Flipped Classroom-based learning module. A pretest was administered before the learning intervention, followed by a posttest after the learning activities had been completed.

Fig 2. Pretest Administration

Fig 3. Teacher Implementing the Learning Module in the Classroom

The descriptive statistics of the pretest and posttest scores are presented in Table 2.

Table 2. Descriptive Statistics of Pretest and Posttest Scores

Validator	Instrument	Percentage	Criteria
Pretest	36	58.47	9.82
Posttest	36	84.31	7.64

As shown in table 2, the mean pretest score was 58.47 with a standard deviation of 9.82. After the implementation of the learning module, the mean posttest score increased to 84.31 with a standard deviation of 7.64. The difference between the pretest and posttest means was 25.84 points.

The increase in students' mean scores indicates an improvement in financial literacy achievement following the implementation of the developed module. The decrease in the standard deviation from 9.82 to 7.64 also suggests that students' posttest scores were relatively more concentrated around the mean than their pretest scores.

Before conducting the paired-samples t-test, the data were examined for normality. The results indicated that the data met the assumption required for parametric analysis. A paired-samples t-test was then conducted to determine whether the difference between the pretest and posttest scores was statistically significant.

Table 3. Results of the Paired-Samples t-Test

Mean Difference	t df Sig. (2-tailed)	Interpretation
-25.84	-18.276 35 < 0.001	Significant difference

Table 3 shows that the paired-samples t-test produced a mean difference of - 25.84, with a *t* value of -18.276 and a significance value of less than 0.001. Because the significance value was below 0.05, there was a statistically significant difference between students' pretest and posttest scores.

These findings provide evidence of improvement in students' financial literacy achievement within the study sample after the implementation of the developed module. However, because the research employed a one-group pretest–posttest design without a comparison group, the findings should be interpreted as evidence of improvement following the intervention rather than definitive evidence that the module alone caused the improvement.

N-Gain Analysis

In addition to the paired-samples t-test, the normalized gain (N-Gain) was calculated to examine the magnitude of students' improvement between the pretest and posttest.

Table 4. N-Gain Results and Improvement in Students' Financial Literacy

Indicator	Result	Interpretation
Pretest–Posttest	58.47 → 84.31	Increase of 25.84 points
Sig. paired-samples t-test	< 0.001	Significant difference
N-Gain	0.62	Moderate

The N-Gain analysis produced a score of 0.62, which falls within the moderate category. This result indicates a moderate level of improvement in students' financial literacy achievement following the implementation of the developed module.

The improvement can be interpreted in relation to the structure of the Flipped Classroom learning process. During the pre-class phase, students were introduced to the learning content through the module and instructional videos. This initial exposure provided students with opportunities to become familiar with the concepts before classroom activities. During the in-class phase, the teacher could then devote more time to clarifying concepts, conducting discussions, providing practice activities, solving problems, and facilitating reflection.

This learning sequence is consistent with the conceptual foundation of the Flipped Classroom, in which students study instructional materials before class and use classroom time for active learning and application of the (Bergmann & Sams, 2012). Previous meta-analyses have also reported positive effects of the Flipped Classroom on students' learning outcomes, with the effectiveness of the approach being associated with opportunities for active learning and problem solving (Amagir et al., 2018; Cheng et al., 2019; Strelan et al., 2020).

The results of the present study are particularly relevant to financial literacy learning because the topics addressed in the module require students to apply concepts to everyday situations. Concepts such as distinguishing between needs and wants, managing pocket money, saving, and making simple financial decisions can be more meaningful when presented through familiar contexts. The developed module incorporated simple stories, illustrations, and case-based activities that enabled students to connect financial concepts with situations they may encounter in their daily lives.

The use of contextual learning activities may also help students move from understanding financial concepts to applying them in simple decision-making situations. For example, students can be encouraged to determine whether an item is a need or a want, prioritize spending, and consider the benefits of saving. Such activities are consistent with previous research emphasizing the importance of connecting financial education with children's everyday financial experiences (Amagir et al., 2018; Batty et al., 2015; OECD/INFE, 2020).

The findings of this study demonstrate that the developed Flipped Classroom-based financial literacy learning module achieved the required validity criteria and showed positive results in its classroom implementation. The Aiken's V score of 0.73 indicates that the module was considered valid by the expert validators. Meanwhile, the improvement from a mean pretest score of 58.47 to a posttest score of 84.31, supported by a significant paired-samples t-test result ($p < 0.001$), indicates an improvement in students' financial literacy achievement after the implementation of the module. The N-Gain score of 0.62 further indicates a moderate level of improvement.

These findings are in line with the broader literature on the Flipped Classroom. Meta-analytical studies have indicated that flipped instruction can have positive effects on student learning outcomes because it provides opportunities for students to engage with instructional content before class and use classroom time for more active learning (Cheng et al., 2019; Strelan et al., 2020; Van Alten et al., 2019). In the present study, these characteristics were integrated into a specific learning module rather than being implemented solely as a teaching strategy.

The findings also reinforce the importance of developing specific learning resources for financial literacy education. Financial literacy programs for children vary in their content, instructional approaches, duration, and assessment methods (Amagir et al., 2018; Molin et al., 2025). Therefore, the development of a structured learning module can provide teachers with a more systematic resource for introducing financial concepts through age-appropriate and contextual activities. The present study also extends previous research on the application of the Flipped Classroom in elementary education. Previous studies have reported that the Flipped Classroom has potential to support student learning in elementary schools, although research in primary education remains less extensive than research at other educational (Halimah et al., 2025; Utami et al., 2025). The present study contributes to this area by integrating the Flipped Classroom model with financial literacy content and developing a dedicated learning module containing pre-class materials, instructional videos, classroom activities, exercises, and reflection.

The findings are also consistent with previous research concerning financial literacy interventions. Earlier studies have demonstrated that financial education can improve children's financial knowledge and related outcomes (Batty et al., 2015; Kaiser & Menkhoff, 2020). The present study complements these findings by showing how financial literacy content can be incorporated into a Flipped Classroom-based instructional resource specifically designed for elementary school students.

An important contribution of the developed module is its integration of printed and digital learning resources. The printed module provides structured learning materials that students can access independently, while the QR-code-linked instructional videos provide additional explanations and visual support. This combination enables students to encounter the learning content before classroom activities and subsequently apply and discuss the concepts during face-to-face learning.

Overall, the findings suggest that the developed module has potential as an alternative learning resource for elementary financial literacy education. Its strengths lie in the integration of contextual financial literacy content, Flipped Classroom activities, visual illustrations, instructional videos, student worksheets, exercises, and reflection activities within a single learning resource.

Taken together, the findings indicate that the Flipped Classroom-based financial literacy learning module developed in this study was valid and practically applicable, and its implementation was accompanied by a significant improvement in students' financial literacy achievement. The Aiken's V value of 0.73 confirmed the validity of the developed product, while the increase in the mean score from 58.47 to 84.31 and the N-Gain score of 0.62 indicated a moderate improvement in students' learning achievement.

The findings highlight the potential of combining structured printed learning materials with digital instructional resources to support financial literacy learning at the elementary school level. By providing students with opportunities to study materials before class and engage in active learning during classroom sessions, the developed module creates a learning environment that is more contextual, participatory, and student-centered.

Thus, the developed module can serve as an alternative instructional resource for elementary teachers who seek to integrate financial literacy into meaningful learning experiences. Further research with stronger experimental designs and broader samples is nevertheless required to establish the effectiveness and generalizability of the module across different educational contexts.

CONCLUSION

This study developed a Flipped Classroom-based learning module designed to support the improvement of elementary school students' financial literacy. The development process followed the ADDIE model, consisting of Analysis, Design, Development, Implementation, and Evaluation stages. The developed module was designed to integrate contextual financial literacy materials, pre-class learning activities, instructional videos accessed through QR codes, classroom discussions, practice activities, problem solving, and reflection. The validation results indicated that the module met the required validity criteria, with an average Aiken's V score of 0.73. Its implementation also showed that the module was practically applicable for teachers and students. Furthermore, students' mean financial literacy score increased from 58.47 in the pretest to 84.31 in the posttest. The paired-samples t-test showed a statistically significant difference between the pretest and posttest scores ($p < 0.001$), while the N-Gain score of 0.62 indicated a moderate level of improvement. These findings suggest that the developed module has potential to support the improvement of students' financial literacy within the context of the study.

The developed module can be applied as an alternative learning resource for elementary school teachers, particularly in introducing financial literacy through contextual and student-centered learning. The integration of printed materials and QR-code-linked instructional videos can also provide students with opportunities for independent preparation before classroom activities. Future research is recommended to involve larger and more diverse samples and to employ experimental or quasi-experimental designs with comparison groups to further examine the effectiveness and generalizability of the module.

ACKNOWLEDGEMENT

We would like to express our deepest gratitude to everyone who contributed to the success of this research.

DECLARATIONS

Author contribution

Asti Hardianti: data curation, writing-original draft preparation and editing, conceptualization, **Lusiani Dewi Assaat**: methodology, **Toni Yudha Pratama**: validation, visualization, supervision, software.

AI Statement

The data and the grammatical structure in this article have been validated and verified by English language experts and no AI-generated sentences are included in this article.

Funding statement

The author(s) declare that no financial support was received for the research,

authorship, and/or publication of this article.

Conflict of interest
The authors declare that this research was conducted without any conflict of interest in the research.

Ethical clearance
The research company has agreed to carry out the research and is willing if the results of this research are published.

Publisher'sand Journal's Note
Islamic Studies and Development Center Universitas Negeri Padang as the publisher and Editor of International Journal of Multidisciplinary Research of Higher Education (IJMURHICA) state that there is no conflict of interest towards this article publication.

REFERENCES

Amagir, A., Groot, W., Maassen van den Brink, H., & Wilschut, A. (2018). A review of financial-literacy education programs for children and adolescents. *Citizenship, Social and Economics Education*, *17*(1), 56–80. https://doi.org/10.1177/2047173417719555

Aryasutha, R., Azizah Ria Kusrini, N., Nurul Ulya, J., & Syamsiah Septiani, N. (2025). Opportunities and Challenges for Islamic Education Teachers in Using Artificial Intelligence in Learning. *Muaddib.Intischolar.Id*, *2*(1), 43. https://muaddib.intischolar.id/index.php/muaddib/article/view/6

Batty, M., Collins, J. M., & Odders-White, E. (2015). Experimental evidence on the effects of financial education on elementary school students' knowledge, behavior, and attitudes. *Journal of Consumer Affairs*, *49*(1), 69–96. https://doi.org/10.1111/joca.12058

Batubara, A. N. R., Harahap, I., & Aisyah, S. (2025). The influence of parents' attitudes, knowledge and income on students' financial management behavior. *International Journal of Multidisciplinary Research of Higher Education*.

Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*. International Society for Technology in Education.

Bishop, J. L., & Verleger, M. A. (2013). The flipped classroom: A survey of the research. *ASEE Annual Conference and Exposition, Conference Proceedings*. https://doi.org/10.18260/1-2--22585

Cheng, L., Ritzhaupt, A. D., & Antonenko, P. (2019). Effects of the flipped classroom instructional strategy on students' learning outcomes: a meta-analysis. *Educational Technology Research and Development*, *67*(4), 793–824. https://doi.org/10.1007/s11423-018-9633-7

Delfianza, E., Mawardi, M., & Suryani, O. (2023). Development of Flipped Classroom Based Guided Inquiry Learning System with Digital Literacy Using Discord Application on Thermochemistry. *Jurnal Penelitian Pendidikan IPA*, *9*(7), 5228–5235. https://doi.org/10.29303/jppipa.v9i7.4245

Efendi, E., Jaafar, A., & Engkizar, E. (2026). Muslim Women's Leadership in Conflict Management in Higher Education. *Tadris: Jurnal Keguruan Dan Ilmu Tarbiyah*, *11*(2), 826–838. https://doi.org/https://doi.org/10.24042/tadris.v11i2.30474

Engkizar, E., Jaafar, A., Hamzah, M. I., Syafril, S., Febriani, A., Oktavia, G., & Satrial, A. (2026). Quran Teachers' Skills as Pedagogical Foundations: Conceptual and Practical Insights into Nine Competencies. *Muaddib:*

Journal of Islamic Teaching and Learning, *2*(1), 22–38. https://doi.org/10.67055/xt598c43

Engkizar, E., Jaafar, A., Hamzah, M. I., Syafril, S., Oktavia, G., Febriani, A., & Albizar, A. (2026). Tartil Method as an Effective Strategy for Transforming Students' Positive Attitudes in Learning the Qur'an. *Journal of Quranic Teaching and Learning*, *2*(1), 50–63. https://doi.org/10.67055/y3htyp95

Engkizar, E., Jaafar, A., Muslim, H., Mulyadi, I., & Putra, Y. A. (2025). Ten Criteria for an Ideal Teacher to Memorize the Quran. *Journal of Theory and Research Memorization Quran*, *1*(1), 26–39. https://doi.org/10.67055/kjn18a62

Engkizar, E., Jaafar, A., Sarianto, D., Ayad, N., Rahman, A., Febriani, A., Oktavia, G., Puspita, R., & Rahman, I. (2024). Analysis of Quran Education Problems in Majority Muslim Countries. *International Journal of Islamic Studies Higher Education*, *3*(1), 65–80. https://doi.org/10.24036/insight.v3i1.209

Frisancho, V. (2023a). Is School-Based Financial Education Effective? Immediate and Long-Lasting Impacts on High School Students∗. *Economic Journal*, *133*(651), 1147–1180. https://doi.org/10.1093/ej/ueac084

Frisancho, V. (2023b). Spillover effects of financial education: The impact of school-based programs on parents. *Journal of Financial Literacy and Wellbeing*, *1*(1), 138–153. https://doi.org/10.1017/flw.2023.2

Halimah, N., Fahri, M., Genta Munggarani Basri, R., Penulis, lembaga, & Ibn Khaldun Bogor Alamat, U. (2025). *Implementasi Literasi Finansial Pada Peserta Didik Kelas 5 Di Sekolah Alam Al Giva Kota Bogor*.

Heredia Ponce, H., Romero Oliva, M. F., & Romero Claudio, C. (2022). Language Teaching through the Flipped Classroom: A Systematic Review. *Education Sciences*, *12*(10), 675. https://doi.org/10.3390/educsci12100675

Kaema, M. T., & Ulwi, K. (2025). Exploration Solutions to the Problem of Quranic Education in Muslim Minorities. *Journal of Quranic Teaching and Learning*, *1*(3), 93–107. https://joqer.intischolar.id/index.php/joqer/article/view/12

Kaiser, T., Lusardi, A., Menkhoff, L., & Urban, C. (2022). Financial education affects financial knowledge and downstream behaviors. *Journal of Financial Economics*, *145*(2), 255–272. https://doi.org/10.1016/j.jfineco.2021.09.022

Kaiser, T., & Menkhoff, L. (2020). Financial education in schools: A meta-analysis of experimental studies. *Economics of Education Review*, *78*, 101930. https://doi.org/10.1016/j.econedurev.2019.101930

Molin, F., Lipsch-Wijnen, I., Vandebeek, A., & Peters, G. J. (2025). Financial literacy programs in school settings: a scoping review. *Educational Research Review*, *49*, 100732. https://doi.org/10.1016/j.edurev.2025.100732

Muhlasin, M., Silawati, S., Syaifuddin, M., Engkizar, E., Nurjanis, N., Sabrina, R., & Jaafar, A. (2026). Negotiating Tradition and Modernity in the Management of Student Care at Islamic Boarding Schools. *EDUKASI: Jurnal Penelitian Pendidikan Agama Dan Keagamaan*, *24*(2), 259–273.

Nanda, H. I., Yudhistiro, K., Putri, S. F., Oktavia, G., & Mustofa, M. I. A. (2023). Preparing for the future: Enhancing financial literacy for elementary school students. *Community Empowerment*, *8*(10), 1569–1578. https://doi.org/10.31603/ce.10196

OECD/INFE. (2020). *Financial literacy of youth and adults*. Organisation for

Economic Co-operation and Development. https://www.oecd.org/finance/financial-education/

OECD. (2024). PISA 2022 Results (Volume IV): How Financially Smart Are Students? In *Journal Pendidikan: Vol. IV*. OECD Publishing. https://doi.org/10.1787/5a849c2a-en

Oktaviani, D. A., Robandi, B., & Somantri, M. (2024). Pengembangan Modul Ajar Berbasis CTL dengan Berbantuan Big Book Untuk Meningkatkan Literasi Finansial Peserta Didik Fase B. *Social, Humanities, and Educational Studies (SHES): Conference Series*, *7*(3), 399–411. https://doi.org/10.20961/shes.v7i3.91601

Putri, N., Noprianti, A., & Oktavia, G. (2025). The Qur'an as a Source of Solutions for the Global Moral Crisis. *Journal of Quranic Teaching and Learning*, *1*(2), 90–105. https://joqer.intischolar.id/index.php/joqer

Strelan, P., Osborn, A., & Palmer, E. (2020). The flipped classroom: A meta-analysis of effects on student performance across disciplines and education levels. *Educational Research Review*, *30*, 100314. https://doi.org/10.1016/j.edurev.2020.100314

Susanti, S., Maftuh, B., & Dwiputra, D. F. K. (2024). A Systematic Literature Review on Flipped Classrooms in Elementary Schools for Advancing 21st-Century Learning. *Education and Human Development Journal*, *9*(2), 173–184. https://doi.org/10.33086/ehdj.v9i3.6158

Utami, U., Ghufron, A., & Setiawati, F. A. (2025). Effectiveness of Flipped Learning Model in Improving Students' Critical Thinking Skill. *Kalam Cendekia: Jurnal Ilmiah Kependidikan*, *13*(3). https://doi.org/10.20961/jkc.v13i3.111450

Van Alten, D. C. D., Phielix, C., Janssen, J., & Kester, L. (2019). Effects of flipping the classroom on learning outcomes and satisfaction: A meta-analysis. *Educational Research Review*, *28*, 100281. https://doi.org/10.1016/j.edurev.2019.05.003