Perspektif Ilmu Pendidikan
DOI: http://doi.org/10.21009/PIP.401.3
Volume 40 Issue 1
April 2026
p-ISSN: 1411-5255
e-ISSN: 2581-2297

Accepted	: January 12, 2026
Revised	: June 19, 2026
Approved	: June 22, 2026
Published	: June 22, 2026

STRATEGY FOR DEVELOPING INTERACTIVE ISLAMIC RELIGIOUS EDUCATION LEARNING MEDIA ORIENTED TOWARD DEEP LEARNING IN THE IMPLEMENTATION OF THE MERDEKA CURRICULUM

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Abstract: *This study aims to develop an interactive Islamic Religious Education (PAI) learning media oriented toward deep learning in the implementation of the Merdeka Curriculum to create meaningful, active, and student-centered learning. The study employed a Research and Development (R&D) method using the ADDIE development model, consisting of analysis, design, development, implementation, and evaluation stages. The developed product was an interactive learning media integrating visual, audio, and reflective learning activities to enhance students' engagement in learning. The research subjects consisted of students and Islamic Religious Education teachers at the junior high school level. Data were collected through observation, interviews, expert validation questionnaires, and media implementation trials. The findings revealed that the developed learning media achieved a highly valid category based on evaluations from material and media experts. In addition, the media was considered practical and effective in improving active participation, learning motivation, and students' understanding of Islamic Religious Education materials. The deep learning approach embedded in the learning media encouraged students to think reflectively and critically while connecting learning materials with real-life experiences. Therefore, the strategy for developing interactive PAI learning media oriented toward deep learning can serve as an innovative learning solution to support the implementation of the Merdeka Curriculum.*

Keywords: *development strategy, interactive learning media, Islamic Religious Education, deep learning, Merdeka Curriculum.*

INTRODUCTION

In the face of the ever-changing dynamics of modern society, education is the bedrock upon which to build human resources that are adaptable, critical, and character-driven (Ali et al., 2025). There needs to be a shift in the way people learn in the 21st century away from a reliance on memorization-based methods. As a substitute, schools should work to instill in their children the values and character traits that will serve them well in the future and the higher-order thinking abilities that will be necessary for success in the workforce and in life. Merdeka Curriculum, which places students at the center of learning via more contextual, relevant, and adaptable ways, has brought about this change in national education (Talaen et al., 2025). In response to a number of issues in education, such as uneven student competency levels, poor learning quality, and the post-pandemic learning loss phenomenon, which has had a major impact on students' numeracy and literacy abilities, the Merdeka Curriculum was implemented (Zidna et al., 2025).

According to Mujtahid et al. (2026), the Pancasila Student Profile forms the basis of the Merdeka Curriculum, which places an emphasis on student-centered learning by means of enhancing competences, providing personalised teaching, and fostering character development. Teachers must create engaging lessons that cater to students' individual needs as they grow intellectually, creatively, and emotionally in order to successfully apply the Merdeka Curriculum. The curriculum's intended aims may be impeded by the many hurdles that persist in educational practice, particularly in the teaching and learning of Islamic Religious Education (PAI), notwithstanding these expectations. Student participation is limited because many schools' PAI programs still depend on lecture-based methodologies, one-way education, and a lack of interactive learning tools. As a result, students' capacity to comprehend Islamic principles in a thoughtful and contextual way has been hindered (Syahroni et al., 2025).

Studies have shown that in order for Islamic Religious Education (PAI) to be successful within the Merdeka Curriculum framework, teachers must use active learning strategies and creative forms of media in the classroom (Fadli & Sulistiyo, 2025). The research showed that visual and audiovisual media might help instructors present course information in a more relevant way and increase student engagement. Nevertheless, interactive learning media products geared toward deep learning were not yet established since the research was still focused on the broad examination of instructional media and learning methodologies.

One of the most relevant strategies to bolster the Merdeka Curriculum's implementation is the idea of deep learning in education. By putting an emphasis on deep, introspective, contextual, and meaningful learning, this method helps students make connections between what they're studying and their own lives (Marsona & Zakir, 2025). Because religious education should focus on more than just intellectual development—including students' capacity to internalise principles, engage in spiritual contemplation, and cultivate their religious character—the deep learning method plays a crucial role in Islamic religious education (PAI).

Research conducted by (Marsona & Zakir, 2025) Previous research revealed that the implementation of a deep learning approach in Islamic Religious Education (PAI) enabled the creation of more meaningful, reflective, and contextual learning environments through project-based learning activities and the internalization of Islamic values. The study highlighted the effectiveness of deep learning in improving the overall quality of PAI instruction under the Merdeka Curriculum. Nevertheless, its scope remained limited to pedagogical implementation, leaving a gap in the development and utilization of interactive learning media as a strategic tool to facilitate and strengthen deep learning outcomes.

Furthermore, research conducted by (Meirina et al., 2021) revealed that the *deep learning* approach in Islamic Religious Education (PAI) was capable of enhancing students' learning motivation, critical thinking skills, and religious character. Learning activities involving reflection, problem-solving, and the connection between learning materials and real-life situations provided students with more meaningful learning experiences. However, the study primarily focused on the implementation of the learning approach and had not yet developed interactive learning media specifically designed based on the principles of *deep learning.*

On the other hand, the advancement of digital technology has opened up significant opportunities for developing more innovative and interactive learning media. Learning media is no longer understood simply as a teaching aid, but rather as an integral part of creating effective and meaningful learning experiences (Pinilih et al., 2024). The use of interactive learning media can increase student attention, motivation, and engagement during the learning process. In the context of Islamic Religious Education (PAI) learning, interactive media can also help students understand abstract material through more engaging visualizations, simulations, videos, and reflective activities.

Sari's study demonstrated that the use of technology-enhanced learning media in Islamic Religious Education (PAI) under the Merdeka Curriculum contributed positively to increasing student engagement and enriching learning experiences. Through the application of instructional videos, interactive digital applications, and online learning platforms, students were encouraged to learn more actively and independently. Despite these contributions, the research primarily focused on technological integration and did not explicitly incorporate the principles of deep learning into media development. As a result, the cultivation of meaningful, reflective, and in-depth learning remained insufficiently explored, highlighting a gap that warrants further investigation (Sari, 2025).

The urgency of this research is further reinforced by various learning challenges emerging in today's digital era. Students tend to be closely connected to digital technology; however, the use of technology in education has not yet been optimized to create meaningful learning experiences (Sabilla & Prayitno, 2025). Many learning processes remain textual and informational in nature without involving reflective and contextual learning experiences. As a result, students often encounter difficulties in relating learning materials to their daily lives. In the context of Islamic Religious Education (PAI), this condition causes religious materials to be understood merely at a theoretical level without being effectively internalized into students' behavior and real-life practices (Ali Wafa et al., 2025).

The phenomenon of low student engagement in the learning process has also become a serious challenge in the implementation of the Merdeka Curriculum. Several public discussions have highlighted criticisms of the curriculum's implementation, suggesting that it has not yet been fully effective in creating deep learning experiences and improving the quality of students' learning outcomes (Cahyaningrum & Diana, 2023). Discussions within digital platforms further indicate that some students experience decreased learning focus due to the dominance of social media and the lack of active participation in classroom learning. These conditions underscore the importance of innovating learning media capable of fostering active student engagement while simultaneously providing more meaningful learning experiences (Yusra & Sesmiarni, 2025).

Based on these various challenges, a strategy for developing Islamic Religious Education (PAI) learning media is needed that is not only visually interactive but also capable of supporting deep learning. The development of interactive learning media oriented toward deep learning represents a relevant solution because it can integrate reflective activities, problem-solving, contextual material exploration, and active learning experiences within a single learning platform (Slamet Panuntun et al., 2025). Through such media, students are expected not only to understand PAI materials conceptually, but also to internalize Islamic values in their daily lives.

The novelty of this study lies in its attempt to bridge the gap identified in previous research. Prior studies primarily focused either on the application of deep learning strategies in Islamic Religious Education (PAI) or on the broader use of instructional media without explicitly incorporating deep learning principles. In contrast, this study integrates the development of innovative learning media with a deep learning approach, aiming to create more meaningful, reflective, and student-centered learning experiences within the implementation of the Merdeka Curriculum. In

contrast, this study specifically develops interactive PAI learning media designed based on the principles of *deep learning* within the implementation of the Merdeka Curriculum (Ependi et al., 2026). The novelty of this research lies in the integration of interactive learning media, the *deep learning* approach, and PAI instruction within a single development model oriented toward meaningful learning. Furthermore, the developed media not only presents learning materials visually, but also incorporates reflective activities, contextual case studies, interactive evaluations, and experience-based learning designed to encourage active student engagement (Giovanny & Istanto, 2025).

Theoretically, this study is expected to contribute to the development of *deep learning* based Islamic Religious Education (PAI) learning theories and interactive learning media within the implementation of the Merdeka Curriculum. This research is also expected to strengthen scholarly discussions regarding the importance of meaningful learning in Islamic education in the digital era. Practically, this study is anticipated to serve as a reference for PAI teachers in developing innovative and effective learning media that are aligned with the characteristics and learning needs of contemporary students (Aribah et al., 2025).

The objective of this study is to design and develop interactive Islamic Religious Education (PAI) learning media based on a deep learning approach within the implementation of the Merdeka Curriculum. The study seeks to ensure that the developed media are valid, practical, and effective in promoting student engagement, supporting active participation, and facilitating deeper and more meaningful learning experiences (Yadi & Subando, 2026). This study also aims to determine the feasibility level of the developed media based on expert validation, teachers' and students' responses, as well as the effectiveness of the media in supporting the PAI learning process. Therefore, the findings of this research are expected to become a relevant educational innovation in addressing contemporary educational challenges while simultaneously supporting the transformation of PAI learning toward approaches that are more adaptive, reflective, and meaningful (Aminah et al., 2025).

RESEARCH METHODOLOGY

This research adopted the ADDIE instructional design model, encompassing five sequential phases: analysis, design, development, implementation, and evaluation. The model was chosen due to its systematic, adaptable, and comprehensive nature, making it particularly appropriate for the development of technology-enhanced learning media. In addition, the ADDIE framework supports the production of instructional materials that meet the criteria of validity, practicality, and effectiveness, thereby ensuring their quality and applicability in educational settings. This study employed a Research and Development (R&D) approach aimed at producing an interactive Islamic Religious Education (PAI) learning media product oriented toward deep learning within the implementation of the Merdeka Curriculum. The R&D method was chosen because this study focuses not only on testing theories but also on developing, validating, and implementing learning products that can be directly used in the learning process. The present developmental research was conducted using the ADDIE model, a systematic framework comprising five key stages: analysis, design, development, implementation, and evaluation. The ADDIE model was selected because it provides systematic and flexible procedures suitable for developing technology-based learning media and is capable of producing learning products that are valid, practical, and effective.

The research was carried out from January to April 2026 at SMP Negeri 1 Kajen. This school was selected as the research site because it had implemented the Merdeka Curriculum, particularly in Islamic Religious Education (PAI) learning, which was closely aligned with the objectives of the study. Furthermore, the school provides adequate digital learning facilities and has student characteristics that support the development and implementation of interactive learning media.

The research subjects consisted of a media expert, a material expert, an Islamic Religious Education (PAI) teacher, and eighth-grade students. The media expert was one individual with competencies in technology and instructional media design, while the material expert was one lecturer or senior teacher in the field of Islamic Religious Education who understood the implementation of the Merdeka Curriculum and the deep learning approach. The product trial subjects consisted of one PAI teacher and 32 eighth-grade students selected using a purposive sampling technique. This technique was employed because the subjects were chosen based on specific considerations, namely their direct involvement in PAI learning based on the Merdeka Curriculum and their readiness to use digital learning media.

The research procedure followed the five phases of the ADDIE model. The first phase was the analysis stage, during which learning needs were identified through classroom observations, interviews with Islamic Religious Education (PAI) teachers, and questionnaires administered to students. This stage aimed to examine existing learning challenges, student characteristics, the need for instructional media, and obstacles encountered in implementing the Merdeka Curriculum in PAI subjects. The findings revealed that classroom instruction was still largely teacher-centered and dominated by lecture-based methods, while the utilization of learning media remained limited. As a result, student engagement in the learning process was relatively low. The analysis also indicated a need for more interactive and engaging learning media capable of connecting instructional content with students' real-life experiences.

The second stage was design. At this stage, the researcher designed the concept of interactive learning media oriented toward deep learning, which included the formulation of learning objectives, media display design, material structure, learning activities, interactive evaluations, and the preparation of research instruments. The media were designed by integrating visual elements, audio, videos, interactive quizzes, contextual case studies, and reflective activities that encourage students to think critically and deeply. The learning materials were adjusted to the learning outcomes of Islamic Religious Education (PAI) in the Merdeka Curriculum.

The third phase was the development stage. During this phase, the learning media were created based on the design specifications established in the previous stage. The product was developed as interactive multimedia that

could be accessed through digital devices, including laptops and smartphones. Once the development process was completed, the media underwent validation by both material experts and media experts to evaluate its content quality, language appropriateness, visual design, interactivity, and alignment with the principles of deep learning and the Merdeka Curriculum. Feedback obtained from the validation process served as the basis for revising and improving the product prior to its implementation and testing with students

The fourth stage was implementation. At this stage, the revised learning media were implemented in the Islamic Religious Education (PAI) learning process in eighth-grade classes. The teacher used the interactive learning media during several learning sessions according to the predetermined materials. At this stage, the researcher conducted observations of students' activities, learning engagement, and students' responses to the use of the learning media. In addition, students were also asked to complete response questionnaires to determine the level of practicality and attractiveness of the developed learning media.

The fifth phase was the evaluation stage. Evaluation was conducted through both formative and summative approaches to assess the overall quality of the developed learning media. Formative evaluation was carried out throughout each stage of the development process by gathering feedback from media experts, subject matter experts, teachers, and students. In contrast, summative evaluation focused on determining the effectiveness of the media in improving students' engagement and enhancing their learning experiences. The findings from both evaluation processes were utilized to make final revisions and refinements, resulting in a learning media product that was valid, practical, and suitable for implementation in Islamic Religious Education (PAI) learning.

Data were collected using four techniques: observation, interviews, questionnaires, and documentation. Observation was employed to examine the implementation of Islamic Religious Education (PAI) learning and to assess students' engagement during the use of the developed learning media. Interviews with PAI teachers were conducted to gather information regarding learning needs and challenges encountered in implementing the Merdeka Curriculum. Questionnaires were administered to obtain validation data from media experts and subject matter experts, as well as to collect feedback from teachers and students regarding the developed learning media. In addition, documentation was used to gather supporting evidence, including photographs of research activities, learning instruments, and records of media implementation.

The research instruments employed in this study consisted of observation sheets, interview protocols, expert validation forms, and student response questionnaires. These instruments were designed to collect comprehensive data regarding the development process, the validity of the learning media, and users' perceptions of its implementation and effectiveness.The expert validation sheets were used to assess aspects of material content, media appearance, interactivity, language, and the suitability of the media with the deep learning approach. The student response questionnaire employed a five-point Likert scale consisting of the categories strongly agree, agree, moderately agree, disagree, and strongly disagree. Prior to data collection, the research instruments were reviewed and validated by the academic supervisor and expert validators to ensure their content validity and appropriateness for the research objectives. The data obtained in this study were analyzed using both quantitative and qualitative approaches. Quantitative data analysis was employed to evaluate the validity, practicality, and effectiveness of the developed learning media, while qualitative data analysis was used to interpret findings from observations, interviews, and participants' feedback. Qualitative data were obtained from observations, interviews, comments, and suggestions from validators, which were then analyzed descriptively to identify learning needs and evaluate the quality of the developed media. Meanwhile, quantitative data were obtained from expert validation questionnaires and students' response questionnaires, which were analyzed using percentage techniques. The validation scores were calculated using the following formula:

$$p = \frac{\sum x}{\sum xi} \text{ x } 100\%$$

Description:

P = Feasibility percentage

$\sum x$ = Total score obtained

$\sum xi$ = Maximum score total

The percentage results were then categorized into the levels of media feasibility, namely very valid, valid, fairly valid, less valid, and invalid. In addition, the effectiveness analysis of the media was conducted through a comparison of students' engagement and responses during the use of the interactive learning media oriented toward deep learning.

Through these research stages, the developed interactive Islamic Religious Education (PAI) learning media are expected to become a valid, practical, and effective learning innovation in supporting the implementation of the Merdeka Curriculum and in creating more meaningful learning experiences for students.

RESULTS AND DISCUSSION

This study resulted in the development of an interactive Islamic Religious Education (PAI) learning media based on the principles of deep learning within the framework of the Merdeka Curriculum. The product was systematically developed using the ADDIE model, which consists of five stages: analysis, design, development, implementation, and evaluation. The learning media were designed to create active, reflective, contextual, and meaningful learning experiences for students. The media product was developed in the form of interactive multimedia that can be

accessed through laptops and smartphones, thereby facilitating students in participating in the learning process both inside and outside the classroom.

Results

Results of the Analysis Stage

The analysis stage was conducted through learning observations, interviews with Islamic Religious Education (PAI) teachers, and the distribution of student needs questionnaires. Based on the observation results, the PAI learning process was still dominated by the lecture method, resulting in relatively low student engagement in learning activities. Students tended to be passive and less enthusiastic during the learning process. In addition, the use of learning media was still limited to textbooks and simple presentations, which had not yet been able to create engaging and in-depth learning experiences.

The results of the interviews with Islamic Religious Education (PAI) teachers indicated that the implementation of the Merdeka Curriculum requires innovative learning media capable of increasing students' active participation and supporting more reflective and contextual learning. The teachers also stated that some students experienced difficulties in understanding the relationship between PAI materials and their daily lives.

The results of the student needs assessment indicated that 87% of students preferred the use of interactive learning media over conventional instructional methods. Furthermore, 82% of the respondents reported that visual media and interactive videos facilitated a better understanding of the learning materials, making the learning process more engaging and accessible.These findings indicate that the development of interactive learning media has become an important necessity in Islamic Religious Education (PAI) learning within the implementation of the Merdeka Curriculum.

Results of the Design Stage

At the design stage, the researcher developed the design of interactive learning media based on deep learning by considering the learning outcomes of Islamic Religious Education (PAI) in the Merdeka Curriculum. The media were designed by integrating visual elements, audio, instructional videos, interactive quizzes, contextual case studies, and reflective activities. The structure of the media consisted of:

1. Opening page and instructions for using the media.
2. Learning outcomes and learning objectives.
3. Interactive multimedia-based learning materials.
4. Reflective videos and contextual real-life case studies.
5. Interactive evaluation quizzes.
6. Students' reflective activities.
7. Students' reflective activities.

The concept of deep learning was integrated through learning activities that encouraged students to analyze problems, connect the learning materials with real-life situations, and reflect on the Islamic values being studied. Results of the Development Stage The development stage resulted in an interactive learning media product that was subsequently validated by media experts and material experts. The validation was conducted to determine the feasibility level of the product before it was implemented in the learning process.

Table 1. Media Expert Validation Results

No	Assessment Aspect	Percentage	Category
1	Media Appearance	92%	Very Valid
2	Media Interactivity	94%	Very Valid
3	Design Suitability	90%	Very Valid
4	Ease of Use	93%	Very Valid
	Average	92,25%	Very Valid

Based on Table 1, the results of the media expert validation obtained an average percentage of 92.25%, which falls into the very valid category. This indicates that the learning media have an attractive appearance, are easy to use, and are capable of supporting students' active engagement in the learning process.

Table 2. Material Expert Validation Results

No	Assessment Aspect	Percentage	Category
1	Material Suitability	91%	Very Valid
2	Material Depth	89%	Valid
3	Suitability with the Merdeka Curriculum	94%	Very Valid
4	Deep Learning Integration	93%	Very Valid

	Average	91,75%	Very Valid

The results of the material expert validation indicated that the learning media possessed good material quality and were appropriate for the implementation of the Merdeka Curriculum. The integration of the deep learning approach within the media was considered capable of supporting more reflective and meaningful learning. After the validation process, the researcher conducted revisions based on the validators' suggestions, such as simplifying the media navigation, adding visual illustrations, and strengthening students' reflective activities.Hasil Tahap Implementasi (Implementation)

The revised learning media were subsequently implemented with eighth-grade students in Islamic Religious Education (PAI) learning. The implementation was carried out over three meetings with the topic of morals (akhlak) in daily life. During the learning process, the students demonstrated high enthusiasm in using the interactive learning media. The students became more active in discussions, answering questions, and participating in the reflective activities included in the learning media.

Table 3. Students' Responses to the Learning Media Results

No	Assessment Aspect	Percentage	Category
1	Attractive Media Appearance	95%	Very Good
2	Ease of Use	93%	Very Good
3	Helping Students Understand the Material	91%	Very Good
4	Increasing Learning Motivation	94%	Very Good
5	Creating Meaningful Learning	92%	Very Good
	Average	93%	Very Good

Based on the results of the students' responses, the learning media obtained an average percentage of 93%, which falls into the very good category. This indicates that the interactive learning media were able to enhance students' motivation, engagement, and learning experiences.

Figure 1. Display of the Interactive Learning Media

Results of the Evaluation Stage

The evaluation was carried out to assess the effectiveness of the learning media in promoting meaningful learning experiences and enhancing students' engagement throughout the learning process.The evaluation results showed that students were better able to connect Islamic Religious Education (PAI) materials with their daily lives through reflective activities and contextual case studies included in the learning media. In addition, the Islamic Religious Education (PAI) teacher reported that the use of interactive learning media contributed to a more engaging and dynamic classroom environment. The media helped increase student participation and reduced the monotony often associated with conventional instructional methods. Furthermore, it enabled teachers to explain abstract concepts more effectively through visualizations and interactive simulations, thereby enhancing students' understanding of the learning materials.

Discussion

The findings of this study demonstrate that the development strategy of interactive Islamic Religious Education (PAI) learning media based on deep learning principles within the framework of the Merdeka Curriculum successfully produced a learning medium that is valid, practical, and effective for use in the learning process. The high validity of the media indicates that the learning media fulfilled the aspects of content, design, interactivity, and suitability with the PAI learning outcomes. The development of the interactive learning media in this study supports the concept of meaningful learning by positioning students as active participants at the center of the learning process. Through interactive features and deep learning-oriented activities, the media encourages students to construct knowledge independently, engage critically with learning materials, and connect new concepts with their prior knowledge and real-life experiences (Karimah et al., 2025). The integration of visual components, audio, videos, interactive quizzes, and reflective learning activities contributed to enhancing students' attention and engagement

throughout the learning process. These findings are consistent with constructivist theory, which posits that knowledge is actively constructed by learners through meaningful experiences and interactions with their learning environment (Casfian Fian et al., 2024).

The deep learning approach integrated into the learning media provided a more profound learning experience compared to conventional learning methods. Students not only received information passively, but were also encouraged to analyze problems, connect the learning materials with real-life situations, and reflect on Islamic values (Zainur et al., 2026). This condition indicates that the learning media functioned not only as visual aids but also as a means of developing students' reflective awarenessThe findings of the study further revealed that the use of interactive learning media contributed significantly to increasing students' learning motivation. The engaging features and interactive activities embedded within the media encouraged students to participate more actively in the learning process and fostered greater enthusiasm toward learning.

This was evident from the increase in students' active participation during the learning process. Students became more enthusiastic in participating in learning activities because the media provided a more engaging and less monotonous learning experience. These findings support the notion that the integration of technology and interactive multimedia can foster a learning environment that is more responsive and adaptable to the needs and characteristics of today's digital generation (Mubaidilla, 2025). In addition to its strengths, this study also has several limitations.

First, the implementation of the learning media was still conducted on a limited scale in only one class, so the results of the study cannot yet be generalized broadly. Second, the developed learning media focused only on one PAI topic, therefore further development is needed for other materials. Third, this study placed greater emphasis on students' engagement and learning experiences, so the effect of the media on improving cognitive learning outcomes has not been analyzed in depth. Nevertheless, this study possesses novelty compared to previous studies because it integrates the deep learning approach into the development of interactive Islamic Religious Education (PAI) learning media within the implementation of the Merdeka Curriculum.

Previous studies generally only discussed the use of learning media or the implementation of deep learning separately. Meanwhile, this study combines both aspects into a single learning strategy oriented toward meaningful learning. Thus, the strategy for developing interactive Islamic Religious Education (PAI) learning media oriented toward deep learning can serve as a relevant educational innovation in supporting the transformation of education in the digital era (Anita et al., 2025).

The developed learning media is not only able to improve the quality of Islamic Religious Education (PAI) learning but also helps students build reflective, contextual, and meaningful learning experiences in accordance with the objectives of implementing the Merdeka Curriculum.

CONCLUSION

Based on the findings of this research and development study, it can be concluded that the strategy for developing interactive Islamic Religious Education (PAI) learning media grounded in deep learning principles within the framework of the Merdeka Curriculum successfully resulted in a learning medium that is valid, practical, and effective for implementation in the teaching and learning process. The developed learning media were able to create a more active, reflective, contextual, and meaningful learning experience for students through the integration of interactive multimedia elements, case studies, reflective videos, interactive quizzes, and experience-based learning activities.

The validation results from media experts and material experts indicated that the learning media achieved a highly valid category in terms of appearance, interactivity, content quality, and suitability with the principles of deep learning and the Merdeka Curriculum. In addition, the implementation results showed that the use of interactive learning media was able to improve students' learning motivation, active participation, and understanding of Islamic Religious Education materials. Students also gave positive responses to the use of the media because the learning process became more interesting, less monotonous, and easier to relate to everyday life.

Based on the findings of this research and development study, it can be concluded that the strategy for developing interactive Islamic Religious Education (PAI) learning media grounded in deep learning principles within the framework of the Merdeka Curriculum successfully resulted in a learning medium that is valid, practical, and effective for implementation in the teaching and learning process. Therefore, the interactive PAI learning media oriented toward deep learning can become a relevant learning innovation in supporting educational transformation in the digital era as well as the implementation of the Merdeka Curriculum, which emphasizes student-centered and meaningful learning.

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