

Development of Quizizz Media Using Deep Learning on KH. Hasyim Asy'ari's Role

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ABSTRACT

Focuses This study This research focuses on the development of interactive learning media based on the Quizizz platform, integrated with a deep learning approach to (1) assess the feasibility of the media and materials, and (2) evaluate students' understanding and engagement in the material on Emulating the Role of KH. Hasyim Asy'ari in Spreading Islam at SMK Plus Umar Zaid Semelo. This study uses the Borg and Gall research and development model, which includes the stages of preliminary research, planning, product development, trials, revision, and final validation. The developed media combines educational videos with interactive quizzes and incorporates game elements to foster critical and reflective thinking skills, rather than mere memorization. The validation results by media experts and material experts showed a feasibility level of 81, 5% by the media experts and 90% by the material experts, which falls into the category of very feasible. Trials with students also showed positive responses with scores ranging from 73.3% to 82.2%, categorized from "feasible" to "very feasible" for use. The implementation of this media has been proven to increase students' motivation, interest in learning, and depth of understanding of Islamic history material. This innovative approach not only serves as a learning aid but also as a means of evaluation and motivation that aligns with the ongoing changes in (Nurhayati et al. 2024) modern educational technology, as well as contributing to a meaningful and interactive learning experience in religious education.

Keywords: *Quizizz; deep learning; Islamic education; interactive learning media; KH. Hasyim Asy'ari.*

INTRODUCTION

Education plays a vital role in shaping the intellectual and moral character of students. According to the National Education System Law No. 20 of 2003, education is a conscious and planned effort to create a learning environment and process in which students actively develop their potential, spiritual strength, self-control, intelligence, noble character, and necessary skills for themselves and society. However, in practice, many students still show low enthusiasm for learning due to monotonous teaching methods and less engaging learning media. This condition highlights a gap between the expected learning outcomes and the realities found in the classroom.

In the era of digital transformation, education must adapt to technological advances to make learning more meaningful and effective. One promising innovation is the use of *deep learning* approaches in education. Deep learning, as a branch of artificial intelligence (AI), enables learners to think critically and develop conceptual understanding rather than memorizing facts. Research has shown that 74% of students respond positively to deep learning-based education in improving learning outcomes, indicating its significant potential in the classroom (Nurhayati et al. 2024).

Among various interactive learning platforms, Quizizz has emerged as an engaging web-based application that allows teachers to create gamified quizzes that enhance student participation. Quizizz provides a fun and interactive environment with features such as real-time scoring, memes, and music options, helping to sustain motivation and focus during learning activities (Fitriani and Munawaroh 2022). Previous studies demonstrated that integrating technology-based media such as Quizizz can increase learning motivation and understanding, yet most have not integrated the deep learning approach with Islamic historical materials.

This study introduces an innovative integration of the Quizizz platform with the deep learning approach in learning Islamic history, particularly on the topic “*Meneladani Peran KH. Hasyim Asy’ari dalam Menyebarkan Islam.*” KH. Hasyim Asy’ari is an influential Indonesian Islamic scholar whose struggles and thoughts are crucial for character education. By incorporating his values and teachings into an interactive digital medium, this research aims to develop a meaningful learning experience that strengthens students’ understanding and moral reflection.

The novelty of this research lies in combining deep learning principles with interactive technology to design a contextual Islamic learning medium that promotes critical and reflective thinking. Unlike previous studies focusing merely on media attractiveness, this study emphasizes learning depth, moral engagement, and historical appreciation through digital tools. Thus, this research seeks to bridge the gap between traditional instruction and modern digital pedagogy.

The objective of this research is to describe the feasibility and practicality of the developed deep learning-based Quizizz media and to analyze students’ responses and motivation after its implementation in Islamic history learning at SMK Plus Umar Zaid Semelo.

METHOD

This study used a Research and Development (R&D) approach based on the Borg and Gall model, which is designed to create and validate educational products. The research aimed to develop an interactive learning medium using the Quizizz application integrated with a deep learning approach on the topic “*Meneladani Peran KH. Hasyim Asy’ari dalam Menyebarkan Islam.*”

The research was quantitative descriptive in nature, focusing on product design, testing, and evaluation through seven simplified development stages: research and information gathering, planning, preliminary product development, limited testing, product revision, main field testing, and final product revision.

The subjects consisted of 20 students from Class X SMK Plus Umar Zaid Semelo and three expert validators (media, material, and teacher experts). Data were collected through observations, interviews, validation sheets, and questionnaires.

The development process began with a needs analysis to identify learning challenges and student preferences, followed by the planning and production of digital learning content through Quizizz and Canva, combining visual, audio, and text elements to promote deep learning. The product was then tested in small and large groups to assess usability and effectiveness, with revisions made based on feedback.

Data were analyzed using descriptive quantitative techniques. Expert validation and student responses were converted into percentages to determine feasibility, practicality, and motivation levels. Products scoring above 81% were categorized as very feasible, 61–80% as feasible, and below 60% as less feasible. The final product was declared feasible after meeting all validation criteria and effectively enhancing students’ motivation and understanding of Islamic history.

RESULT AND DISCUSSION

This research produced an interactive learning media using Quizizz integrated with the deep learning approach for the topic “*Meneladani Peran KH. Hasyim Asy’ari dalam Menyebarkan Islam.*” The product underwent several stages of validation and testing to determine its feasibility, practicality, and effectiveness in improving students’ learning interest and motivation.

Material Expert Validation

The material validation focused on content accuracy, relevance to learning objectives, and clarity of presentation. Based on the validation results, the average score reached 90%, categorized as very feasible. The validator noted that the content was in accordance with the 2013 Curriculum (K13), clearly structured, and able to encourage reflective and critical learning about KH. Hasyim Asy’ari’s role in spreading Islam. Minor revisions were made in wording and question clarity to improve comprehension. Media Expert Validation

The media validation assessed design quality, readability, interactivity, and ease of access. The media expert provided an average score of 81,5%, which falls into the very feasible category. The validator stated that the layout, color combination, and navigation in Quizizz were attractive and user- friendly. The integration of multimedia elements such as images, sound, and animation was considered effective in increasing engagement and reducing learning monotony.

Student Response Results

After revisions based on expert input, the product was implemented in a classroom setting involving 20 students of Class X SMK Plus Umar Zaid Semelo. Students were given a questionnaire assessing their responses on aspects of attractiveness, clarity, ease of use, and motivation. The overall result showed an average score of 92%, categorized as very positive.

Students expressed that learning using Quizizz felt more enjoyable and interactive. They were more eager to participate and paid greater attention to the lesson. The gamification elements, such as scoring and feedback, made them feel challenged and motivated to learn.

Table 1 Assessment

Assessment Aspect	Validator/Responden	Average Score (%)	Category
Material Validation	Material Expert	90%	Very Feasible
Media Validation	Media Expert	81,5%	Very Feasible
Student Response	Students (Class X)	92%	Very Positive

Based on these results, the developed Quizizz-based deep learning media is categorized as very feasible and practical to use in the learning process, especially in increasing students' learning interest and motivation toward Islamic history topics.

DISCUSSION

The validation results from experts and students demonstrate that the developed learning media meets the standards of feasibility and effectiveness. The high validation scores from both media and material experts indicate that the product has strong content quality and technical performance. The combination of deep learning principles and the Quizizz platform successfully created a meaningful and engaging learning experience.

The findings align with Munawaroh (2022) who found that Quizizz can enhance student engagement through interactive and game-based learning environments. Similarly, Nurhayati et al. (2024) emphasized that deep learning strategies improve critical thinking and long-term understanding. This study strengthens both findings by integrating deep learning into digital Islamic education media—an area rarely explored in previous research.

Students' highly positive responses (92%) show that the use of Quizizz significantly increased their enthusiasm and interest in learning. The use of visual and auditory stimuli in the quiz encouraged active participation, while the deep learning approach guided students to analyze and reflect on the historical and moral values of KH. Hasyim Asy'ari. This indicates that technology-based media not only improves motivation but also builds meaningful understanding.

Pedagogically, this result supports the theory of constructivist learning, where students construct knowledge through experience and reflection. The use of Quizizz as a digital medium enables learners to engage cognitively, emotionally, and socially, leading to more active and independent learning.

In conclusion, the integration of Quizizz and deep learning creates a synergistic effect that enhances both engagement and comprehension. This product innovation contributes to Islamic education by providing an attractive, interactive, and value-oriented learning medium that bridges traditional teaching with modern digital pedagogy.

CONCLUSION

This research concludes that the development of Quizizz-based learning media integrated with the deep learning approach is very feasible, practical, and effective to be used in Islamic education learning, particularly in the topic "Meneladani Peran KH. Hasyim Asy'ari dalam Menyebarkan Islam." Validation results from material and media experts showed excellent quality, while student responses indicated a highly positive level of motivation and interest in learning.

The integration of deep learning principles into the Quizizz platform successfully created an interactive, meaningful, and value-based learning experience. Students not only understood the historical aspects of KH. Hasyim Asy'ari's struggle but also internalized his exemplary moral and spiritual values such as sincerity, perseverance, and responsibility. This innovation bridges traditional religious learning with modern digital pedagogy, aligning with current educational transformations.

The results of this study imply that integrating technology and deep learning strategies can enhance student engagement, motivation, and moral understanding. Therefore, teachers are encouraged to adopt similar digital media to foster creative, reflective, and student-centered learning environments.

However, this study is limited to small-scale implementation within one school, and the data were collected using descriptive quantitative methods. Future research may expand the scope by testing this media in different institutions and combining it with qualitative approaches to explore deeper aspects of

learning behavior and long-term impacts.

Overall, the developed Quizizz-based deep learning media provides a promising alternative for Islamic education, supporting active, character-oriented, and technology-integrated learning in the modern classroom.

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