

Roblox-Based Game-Based Learning Media for Fiqh Education: Development and Expert Validation Using the ADDIE Model

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Abstract

This study aims to develop Game-Based Learning (GBL) educational media using the Roblox platform as an alternative to conventional methods, which are often considered monotonous. The approach employed utilizes the Research and Development (R&D) method based on the ADDIE model, which includes the analyze, design, and development phases. The research findings indicate that students struggle to understand the material due to the use of methods lacking innovation, as well as student statements noting that learning is still dominated by conventional methods. The analysis phase is based on supporting research that has been conducted, revealing that students require more interactive and enjoyable learning media. The design phase involves compiling Fiqh material, designing the game flow, and creating a storyboard as the initial design for the media. Subsequently, in the development stage, the storyboard was implemented as a Game-Based Learning educational media using the Roblox platform via Roblox Studio. The product's feasibility was tested through validation by material expert, media experts, and language experts using a 1–5 Likert scale questionnaire. The results of this study demonstrate concrete validation from the experts, with an average score of 4.40 for the content aspect, 4.80 for the media aspect, and 4.50 for the language aspect—all falling within the “Highly Feasible” category. The content validity test using Aiken’s V index yielded values of 0.850 for content, 0.950 for media, and 0.875 for language. The Percentage of Agreement (PoA) reliability test yielded a value of 97.73% for content, 100% for media, and 95.56% for language; these results indicate that the research instrument is valid and reliable. Thus, the learning media on the Roblox platform can serve as an alternative solution for making Fiqh learning more enjoyable, thereby increasing students’ interest in learning.

Keywords: Game-Based Learning; Roblox; Learning Media; Fiqh Education; Islamic Education

Abstrak

Penelitian ini bertujuan untuk mengembangkan media pembelajaran Game Based Learning (GBL) menggunakan platform Roblox sebagai solusi dari penggunaan metode konvensional yang sering dianggap monoton. Pendekatan yang dilakukan menggunakan metode Research and Development (R&D) dengan model ADDIE yang meliputi tahap analyze, design, dan development. Temuan penelitian mendapatkan bahwa siswa kesulitan memahami materi akibat penggunaan metode yang minim inovasi, serta pernyataan siswa yang menyebutkan bahwa pembelajaran

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masih di dominasi oleh metode konvensional. Tahap analisis didasarkan pada penelitian pendukung yang telah dilakukan dengan hasil bahwa siswa membutuhkan media pembelajaran yang lebih interaktif dan menyenangkan. Tahap perancangan dilakukan dengan menyusun materi Fikih, merancang alur permainan, serta membuat storyboard sebagai desain awal media. Selanjutnya pada tahap pengembangan, storyboard direalisasikan menjadi media pembelajaran Game Based Learning dengan Platform Roblox menggunakan Roblox Studio. Kelayakan produk diuji melalui validasi oleh ahli materi, ahli media, dan ahli bahasa dengan menggunakan angket skala Likert 1–5. Hasil penelitian ini menunjukkan validasi yang kongkrit dari para ahli dengan rata-rata skor 4,40 pada aspek materi, 4,80 pada aspek media, dan 4,50 pada aspek bahasa yang seluruhnya berada pada kategori “Sangat Layak”. Uji validitas isi menggunakan indeks Aiken’s V menghasilkan nilai 0.850 untuk materi, 0.950 untuk media, dan 0.875 untuk bahasa. Adapun uji reliabilitas Percentage of Agreement (PoA) menghasilkan nilai 97,73% untuk materi, 100% untuk media, dan 95,56% untuk bahasa, hasil ini menunjukkan bahwa instrumen penelitian valid dan reliabel. Dengan demikian, media pembelajaran dengan platform Roblox dapat digunakan sebagai solusi alternatif pembelajaran fikih lebih menyenangkan sehingga dapat meningkatkan minat belajar pada siswa.

Kata kunci : Game-Based Learning; Roblox; Media Pembelajaran; Pelajaran Fikih; Pendidikan Islam

I. Introduction

Technological advancements in the 21st century have garnered significant interest from schools in developing educational approaches to help improve student understanding. Data from the Kementerian Pendidikan Dasar dan Menengah indicates that by the 2024/2025 school year, 316,167 schools in Indonesia had internet access supporting the use of technology in learning (Nuhanisah, 2025), and a survey by the Asosiasi Penyelenggara Jasa Internet Indonesia (APJII) indicates that internet usage rates on Java Island are approximately 83.64%, spanning both urban and rural areas (Fatika, 2024). Mulyani (2021) states that technology-based learning is easier to understand and fosters a strong desire to learn among students. A similar view was expressed by Sardila (2025), who noted that students who use technology perform better than those who still rely on conventional methods. Therefore, a technology-based approach to learning is essential for teachers to implement in their classroom instruction.

This technological phenomenon creates an urgent need to integrate technological approaches, particularly in the realm of Islamic education. This aligns with the vision of Islamic education, which is to shape individuals who are God fearing and to achieve happiness in this world and in the afterlife (Firmansyah, 2022; Hidayah et al., 2023). One of the instruments for achieving this goal is the subject of Fiqh, which covers Islamic laws, worship practices, and daily life practices that must be conveyed and well understood by students (Fauzi & Yusuf, 2022; Huda & Maemonah, 2022). It is the complexity of this subject matter that makes Fiqh a mandatory subject at every level of Islamic education (Araniri et al., 2021).

However, the reality on the ground shows that the practice of teaching fiqh is often dominated by conventional methods that lack innovation. This approach tends to lack

integration with modern issues, resulting in Fiqh material that feels rigid, thereby triggering boredom, drowsiness, and a monotonous learning atmosphere for students (Fitriana et al., 2024; Leo et al., 2024; Ningrum et al., 2024). Qutub in (Jamaludin et al., 2026) explains that conventional learning patterns can lead to reduced student engagement, which in turn impacts a decline in interest in studying Fiqh. In line with this, Noviyanti (2025) explains that the dominance of these conventional methods is caused by limited resources, such as a lack of access to learning materials. These issues challenge the role of teachers as educators and mentors in shaping students' religious character so that they can create a more creative, innovative, and enjoyable learning experience, thereby increasing interest in Fiqh (Furmaisuri et al., 2025; Solihah et al., 2023).

The issues at hand are further highlighted by the results of a student needs analysis conducted in Riyadi's (2026) study of 11th grade students at an Islamic vocational high school in Majalengka Regency. The study's findings indicate that instruction remains dominated by conventional methods. This has led to a decline in students' interest in learning and has caused them to struggle with understanding the subject matter. Furthermore, the majority of students expressed enthusiasm for using more interactive technological media to make Fiqh education more enjoyable. These findings demonstrate that the development of interactive and engaging instructional media for Fiqh education is an urgent priority that must be addressed immediately.

The development of this media can utilize approaches such as the Game-Based Learning (GBL) model. This model is a learning approach that utilizes elements and content from games to enhance knowledge and skills (Lester et al., 2023), as Untari (2022) also notes, games encourage students to collaborate, communicate, and actively engage in the learning process. One gaming platform that can be combined with the GBL model is Roblox. This platform provides an environment that allows users to create their own virtual experiences and explore various game content (Alhasan et al., 2023; Marsha Sabila et al., 2025). Additionally, Roblox can be run on various devices such as consoles, mobile phones, computers, or VR headsets (Gupta et al., 2026). With such widespread access, Roblox can be used to create interactive learning experiences, enabling students to understand abstract material in a more concrete way (Yumna et al., 2025).

Previous research has shown positive results in the development of such learning materials. In her study, Rahmawati (2023) demonstrated that the Game-Based Learning (GBL) model in history education can enhance student engagement and make learning more enjoyable. In line with this, research by Pinthong (2024) on GBL to understand enzyme activity revealed that students gave positive responses, as evidenced by their interest in learning. Another study by Han (2023) demonstrated that Roblox can improve social skills as well as student engagement in learning. Research by Yumna (2025) explains that Virtual Reality-based Roblox is capable of developing critical thinking skills

in problem-solving to improve literacy and numeracy. Additionally, Roblox can be used as a role-play medium that helps students better understand the stages of the Hajj rituals (Askhia & Latif, 2026).

These studies indicate that the development of Game-Based Learning (GBL) educational media and the use of the Roblox platform are still dominated by general education, with few specific applications in religious education, particularly fiqh. Therefore, this study represents an innovation in the development of educational game-based learning media using the Roblox platform, specifically focused on the subject of fiqh. The resulting product aims to present religious material in a more interactive and enjoyable way, thereby stimulating students' interest in learning and enhancing their engagement.

Based on the above discussion, this study focuses on two main issues: how Game-Based Learning (GBL) educational media based on the Roblox platform for the subject of Fiqh is designed and developed; and the extent to which Roblox-based educational media for the subject of Fiqh is suitable, as determined by expert validation.

Seeing this research problem, the primary objective of this study is to develop educational media using the Game-Based Learning (GBL) approach on the Roblox platform for the Fiqh education, and to determine its suitability and feasibility based on expert validation. This study is also expected to provide benefits both theoretically in the development of technology for Islamic Religious Education and practically in the use of interactive media that can be employed to integrate religious values into the learning process.

II. Research Method

This study was conducted using the Research and Development (R&D) method. This method is used to create a product and to test its effectiveness. In this study, the R&D method employed was the ADDIE model (Analyze, Design, Development, Implementation, Evaluation) (Branch & Varank, 2009). However, the research stages carried out only reached the development stage. This was done because the study focused on the process of designing and developing an educational media product in the form of a Roblox-based educational game for the subject of Fiqh.

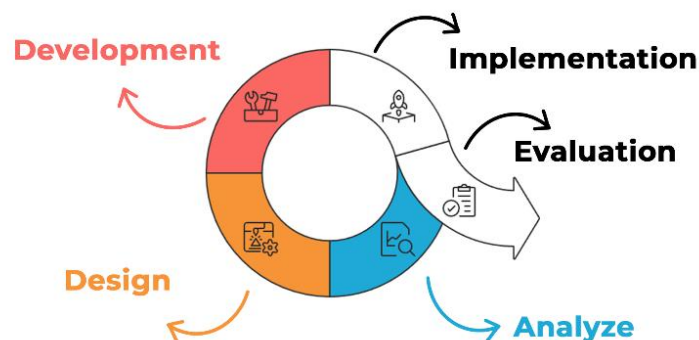


Figure 1. The ADDIE Model R&D Process

The analysis phase was conducted by the researchers in a previous study (Riyadi & Jamaludin, 2026) as supporting research. The results of the analysis, which indicated that students require GBL learning media using Roblox for the Fiqh education, served as the basis for product design. Consequently, this study proceeded to the next stages: product design, development, and validation to determine the feasibility of the developed learning media.

The design phase involved compiling Fiqh learning materials to be included in the media, designing the game flow, and creating the visual layout for each game level. This design was organized into a storyboard, which served as the initial design for the media. During the development phase of the storyboard, it was transformed into a Game-Based Learning educational media product using the Roblox platform and Roblox Studio features. The resulting product is an educational game containing Fiqh material that can be used in the classroom to aid understanding and boost students' interest in learning.

The product validation phase in this study involved six validators selected based on their respective fields of expertise, namely content experts, media experts, and language experts. The content experts were faculty members holding doctoral degrees in Islamic Religious Education who possessed a deep understanding of the substance and appropriateness of the content developed in this research product. Media experts are lecturers and instructors with a research track record focused on the development of learning media and who possess practical experience in the field. Based on this expertise, these validators are well-suited to assess the product's visual presentation, design, and the suitability of the media from both aesthetic and technical usability perspectives. Language experts are Indonesian language instructors with linguistic competence in accordance with established standards. This validator will examine the language used in the product, including spelling accuracy, sentence structure, and interactivity, to ensure it is easily understood by students.

Data collection for product validation is conducted through the completion of questionnaires by the experts. The questionnaire results will be used to determine the

feasibility of the developed product. Categories for interpreting the product feasibility test results are calculated using a 1–5 Likert scale. The average score from each validator will be categorized as shown in Table 1.

Table 1. Questionnaire Score Categories

Scale	Category	Decision
4,21 – 5,00	Highly Feasible	Can be used
3,41 – 4,20	Feasible	
2,61 – 3,40	Quite Feasible	Can be used with revisions
1,81 – 2,60	Not Feasible	
1,00 – 1,80	Highly Not Feasible	Cannot be used

To strengthen the results of the validator assessment, content validity and inter-rater reliability tests were conducted. The content validity test was conducted using Aiken's V formula, which is commonly used to calculate the content validity coefficient based on expert evaluations of each instrument (Aiken, 1985). The formula applied is

$$V = (\sum s) / ((nxc))$$

The formula is $s = r - lo$, where r is the score given by the validator, lo is the lowest score on the scale (1), n is the number of validators, and c is the number of categories on the scale minus 1 ($5-1=4$). The V value ranges from 0 to 1, and the criterion for validity is $V \geq 0.60$. The categories, as per the reference, are as follows:

Table 2. Aiken's V Validity Categories

Scale	Category
0,80 - 1,00	High Validity
0,60 - 0,79	Moderate Validity
< 0,60	Low Validity (Invalid)

The reliability test was conducted using the Percentage of Agreement (PoA) formula. This test was conducted to measure the level of agreement among validators in evaluating the same instrument (Borich, 2016). The formula used is:

$$PoA = ((1 - |A - B|) / ((A + B))) \times 100\%$$

A is the average score of the first validator and B is the average score of the second validator, and $|A-B|$ is the difference between the two. An instrument is considered reliable if the PoA value is $\geq 75\%$ (Borich, 2016). The higher the value, the greater the consistency and agreement among validators in evaluating the developed instrument.

This study only reached the development stage, specifically the expert validation stage; therefore, the implementation and evaluation stages were not conducted. This constitutes a limitation of the study, which aims to ensure that the discussion regarding development and feasibility testing the focus of this study can be presented in an empirical and in-depth manner.

III. Result and Discussion

A. Research Findings

Based on the Research and Development (R&D) approach with reference to the ADDIE model, the findings of this research are compiled with stages that are carried out systematically in accordance with development procedures. Through these stages, this study examines the development of learning media with a Game-Based Learning model using the Roblox Platform which can be used to provide new experiences in fiqh education. This learning media is developed through stages that have been arranged so that the elements in the game and learning aspects can be well integrated. The stages carried out in this study are as follows:

1. Students Needs Analysis (Analyze)

The results of a needs analysis conducted by distributing questionnaires to students at Islamic vocational high schools in Majalengka Regency indicate that, from a pedagogical perspective, learning is still dominated by conventional methods that tend to be monotonous and boring this is clearly at odds with the students' expressed desire for more engaging and interactive learning. Furthermore, regarding the technical aspect, it was found that students are already accustomed to using smartphones, which makes learning that does not integrate technology less appealing.

In terms of cognitive aspects, it was found that students struggled to understand Fiqh material using conventional teaching methods. Students tended to understand better when Fiqh material was presented in an interactive visual format. This situation highlights a gap between students' learning styles and the methods used by teachers. In response, the development of Game-Based Learning media using the Roblox platform which can integrate Fiqh learning materials with students' needs has become an urgent necessity. By presenting learning materials within an interactive game, it is hoped that this approach will provide an engaging and enjoyable learning experience, thereby increasing students' interest in learning (Riyadi & Jamaludin, 2026).

2. Product Design

The outcome of this phase is a development plan for a Game-Based Learning media using the Roblox platform, titled "Misi Fikih: Ekspedisi Mencari Masjid," designed to address the issues identified during the needs analysis phase. This design is organized into a storyboard that serves as both an initial design and a guide for the development phase. This storyboard integrates various key components, including objectives, content, game structure, and the visual interface of the developed game. Through the creation of a structured storyboard, a comprehensive representation of the game is provided, enabling researchers to carry out the product development stages more systematically and efficiently.

The game interface begins with several main menus: the game title, the “Play” button, the “About” button, and the “Objectives” button. The “Play” menu directs students to the first area before the challenges begin; the “About” menu provides a brief overview from the developer; and the ‘Objectives’ menu explains the purpose for which the game was developed. To exit the game, students can use the built-in “Settings” button in Roblox, located in the top-left corner of the screen. When students start the game, a character acting as a narrator will guide them on which direction to proceed.

The learning material integrated into the obstacle course is Fiqh material from the Jinayat chapter, which is one of the learning focuses for 11th grade vocational high school students. The material in these challenges is divided into several questions, which are then distributed across two challenge themes. The first challenge is a maze with doors that students must open by answering questions. The second is a platformer challenge where students must select the correct answer to proceed in the game. If a student chooses the wrong answer, the character in the game will die, forcing the student to restart the challenge.

The game’s scoring system is based on the number of character deaths in the game, and there are gold coins that can be collected to improve one’s ranking as the top coin collector. Additionally, supporting characters have been added to explain the material to students within the game. The inclusion of these characters is intended to provide an interactive experience by making the characters feel like friends within the game. These designs provide an overview of the development stages. Here is the storyboard used.

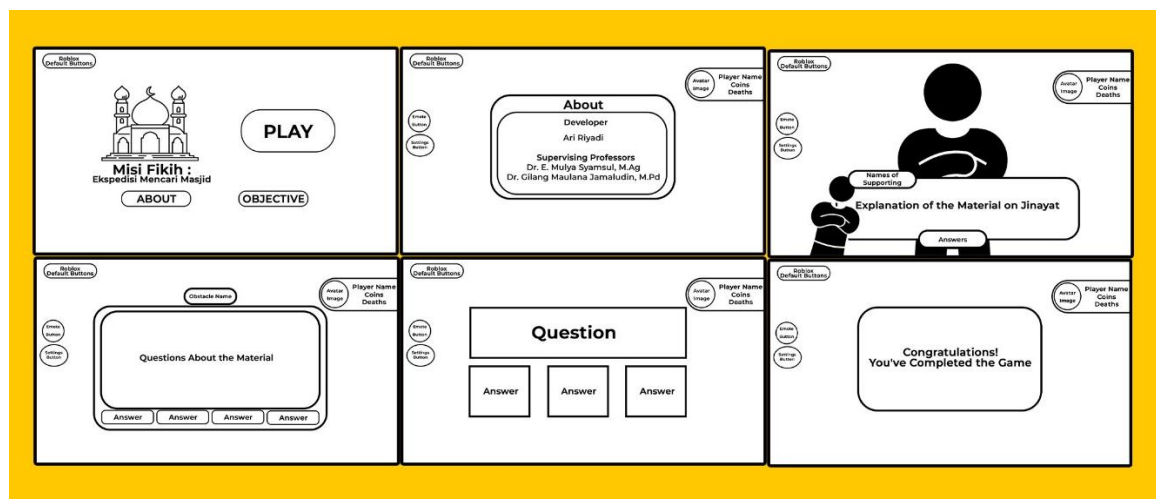


Figure 2. Product storyboard

3. Product Development

At this stage, the product design developed during the design phase is implemented as an educational game ready for use by students. This development phase is carried out using Roblox Studio, a game development software (game engine) that is directly integrated with the Roblox platform. The resulting game is published on the Roblox

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platform, where it can be accessed by all students on their smartphones or computers. Here is a screenshot of the game:

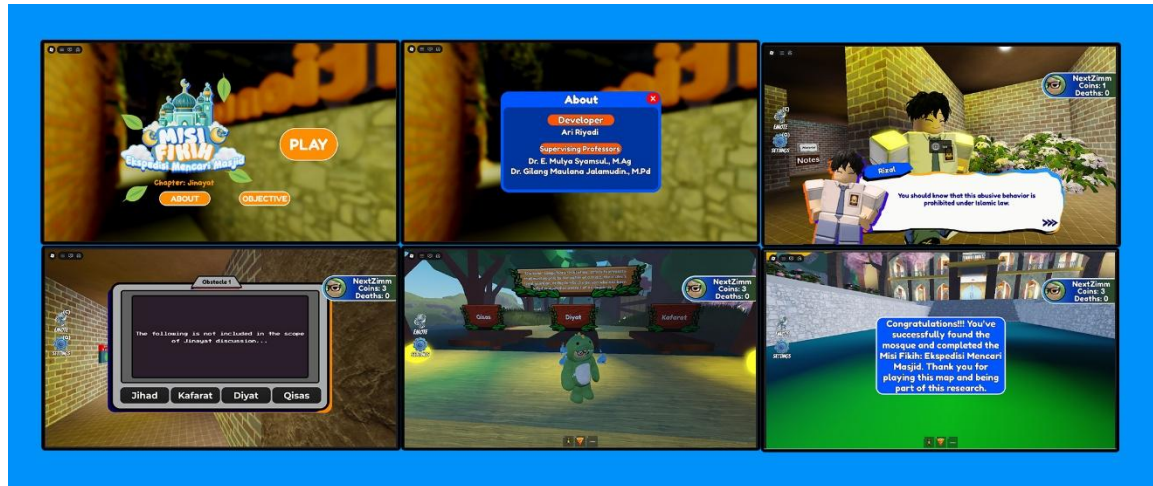


Figure 3. Product interface display

Once the product has been fully developed, it undergoes validation testing by material experts, media experts, and language experts to determine its suitability before it is implemented in the classroom. This is intended to minimize errors and inaccuracies when the product is used. The results of the experts' validation are shown in the table below:

Table 3. Results of Material Expert Validation

Aspect	Indicator	Question Item	Expert 1	Expert 2	Value	Average
Content suitability	Alignment of material with the current curriculum	The game content aligns with the core competencies and learning objectives of Fiqh	4	4	8	4.00
		The content of the material is in accordance with the principles of Islamic teachings.	4	5	9	4.50
		The depth of the fiqh material in the game is appropriate for the students' grade level.	4	4	8	4.00
	Accuracy of the substance and precision of the presented material	The accuracy of the Fiqh concepts presented is consistent with the authoritative texts and reference books.	5	4	9	4.50
		The material presented is objective and does not contain any elements that conflict with Islamic values.	5	5	10	5.00
		The questions and exercises in the game are relevant to the material being taught.	5	4	9	4.50

Aspect	Indicator	Question Item	Expert 1	Expert 2	Value	Average
Appropriateness of Pedagogical Aspects	Appropriateness of the material in the learning process	The accurate use of fiqh terms in the game does not lead to ambiguity for students.	4	4	8	4.00
		The game stimulates students' critical thinking skills in solving the given problems or cases in Islamic jurisprudence.	5	4	9	4.50
		The narrative or story in the game helps connect fiqh concepts to students' real-life experiences.	5	4	9	4.50
		Overall, the game's content is worth using.	4	5	9	4.50
Amount			45	43	88	4.40

The results of the validation of material expert presented in the table above show an average score of 4.40, indicating that the content in the developed product falls into the “highly feasible” category. These results demonstrate that the product can present the subject matter accurately, clearly, and in alignment with the learning objectives for Fiqh in Grade 11.

Table 4. Results of Media Expert Validation

Aspect	Indicator	Question Item	Expert 1	Expert 2	Value	Average
Visual Design and Communication	Aesthetics, layout, and composition (color, text, and images)	The game's interface design is engaging and tailored to the users' preferences	5	5	10	5.00
		The layout of the menu and navigation buttons is neat and aesthetically pleasing	5	5	10	5.00
		The combination of colors, text, and images in the game is well-balanced and visually appealing	5	5	10	5.00
Functionality	Ease of access and media stability	The media is easily accessible and usable by students.	5	5	10	5.00
		The media runs smoothly without any crashes or annoying bugs.	4	4	8	4.00
Interactivity	Audio-visual quality and game feedback	The use of avatars and animations in games can support the learning process	5	4	9	4.50
		The use of audio in the game is appropriate and helps create a positive learning environment.	5	5	10	5.00
		The game provides informative feedback to students.	4	5	9	4.50

DLE Model						
Aspect	Indicator	Question Item	Expert 1	Expert 2	Value	Average
Use of Media	Effectiveness of media in conveying material	Media can convey information more clearly and in a way that is easier to understand.	5	5	10	5.00
		Media is highly effective at motivating students to keep learning.	5	5	10	5.00
Amount			48	48	96	4.80

The table above shows the results of the validation of media experts with a total average score of 4.80 which falls into the category of very feasible to use. Thus, the educational game learning media with the Roblox platform has a good suitability in terms of appearance, functionality, and interactivity that can support the learning process.

Table 5. Results of Language Expert Validation

Aspect	Indicator	Question Item	Expert 1	Expert 2	Value	Average
Grammatical Accuracy	Use of sentences, loanwords, and spelling in accordance with PUEBI guidelines	The sentences follow the rules of proper and correct Indonesian grammar (PUEBI).	5	5	10	5.00
		Consistent use of technical terms (especially Fiqh/Arabic terms) throughout the game.	4	4	8	4.00
		Accuracy in spelling, punctuation, and capitalization in dialogue and on information boards.	5	4	9	4.50
	Language appropriate to the students'	Vocabulary selection appropriate to the students' skill level	5	3	8	4.00
		The language used is polite and consistent with the norms of Islamic religious education.	5	5	10	5.00
		The use of language (diction) can motivate students and spark their interest in reading through games	5	5	10	5.00
		The sentences used are effective, straightforward, and easy for students to understand.	4	3	7	3.50
	Communication and Interactivity	The dialogue between the characters is natural and fluid (not stiff).	5	5	10	5.00
		The guidelines or instructions are presented in clear and unambiguous language.	5	4	9	4.50

and learning materials	The learning material is presented in a logical and coherent sequence.	4	5	9	4.50
Amount		47	43	90	4.50

The average score of 4.50 from the language experts' validation indicates that the language used in the product falls into the "highly feasible" category. These results clearly demonstrate that this educational game uses language that is appropriate for students' comprehension levels, employs accurate terminology, and is capable of providing a more engaging learning experience through character interactions.

Each of these instruments underwent content validity testing by calculating the coefficient using Aiken's V index based on the scores from each expert validation. The results of the validity test are shown in the following table

Table. 6 Results of the Aiken's V Validity Test for Each Instrument

Validation Instrument	Average ($\bar{x}$)	s (r-lo)	$\sum s$ (s×n)	nxc	V	Category
Material Expert	4.40	3.40	6.80	8	0.850	High
Media Expert	4.80	3.80	7.60	8	0.950	High
Language Expert	4.50	3.50	7.00	8	0.875	High

The results of the validity test using Aiken's V coefficient showed a value of 0.850 for content expert validation, 0.950 for media expert validation, and 0.875 for language expert validation. All three results fall into the "high validity" category, indicating that every aspect of the developed product is appropriate based on expert assessment. The reliability test of the expert validation instrument was conducted using the Percentage of Agreement (PoA) formula. This test calculates the average score from Expert 1 and Expert 2 to determine the consistency and agreement among validators. The results of the reliability test are as follows:

Table. 7 .Results of the Percentage of Agreement (PoA) Reliability Test

Expert Validator	Average Expert 1	Average Expert 2	A-B	A+B	PoA%	Status
Material Expert	4.50	4.30	0.20	8.80	97.73%	Reliable
Media Expert	4.80	4.80	0.00	10.00	100%	Reliable
Language Expert	4.70	4.30	0.40	9.00	95.56%	Reliable

The Percentage of Agreement (PoA) score for each expert validation was above 75%, meaning the assessment can be deemed "highly reliable." The values of 97.73% for content expert validation, 100% for media expert validation, and 95.56% for language expert validation indicate that the two validators for each instrument demonstrate high consistency and agreement regarding their assessment results.

B. Discussion

This study successfully developed a Game-Based Learning educational tool using the Roblox platform, titled "Misi Fikih : Ekspedisi Mencari Masjid." This tool was created as a solution to address the lack of innovation in teaching methods, which has led to a decline in students' interest in the subject of Fiqh. The development process was carried out

through a Research and Development (R&D) approach using systematic procedures in accordance with the ADDIE model, which was implemented up to the development stage. Branch (2009) explains that this model is flexible, allowing for continuous revisions based on evaluations at each stage. In line with this, (Arnab et al., 2022) states that the ADDIE model can be applied to development in all learning environments. This makes this approach highly suitable for use in the development of game-based learning media.

In the initial stage, a needs analysis was conducted to identify the problems and needs of students at the school. From a pedagogical perspective, it was found that learning was still dominated by conventional methods that tended to be monotonous and boring. Meanwhile, from a technical perspective, it was noted that students were already accustomed to using smartphones and therefore desired learning that integrated technology and offered a more engaging and interactive experience. In other aspects, such as the cognitive aspect, students tended to have difficulty understanding the material when it was presented using conventional methods. These findings indicate the need for media that can create a more interactive learning environment and enhance students' interest and understanding of Fiqh material. This need is supported by research indicating that interactive media can help increase students' interest in learning and facilitate their understanding of the subject matter (Bahrudin & Yogihati, 2022; Febrina & Setiawan, 2024).

The findings of the needs analysis highlight the urgency of developing Game-Based Learning (GBL) educational media. GBL places games at the center of the learning process. This approach can certainly provide students with a more interactive, enjoyable, and meaningful learning experience (Nadeem et al., 2023; Pinthong et al., 2024). By leveraging game elements, GBL is capable of addressing existing challenges. Therefore, during the design phase, a plan was developed to create educational media using the Game-Based Learning approach.

During the design phase, the interactive media required by students were first organized into a Game-Based Learning instructional media design using the Roblox platform. This design was then developed into a storyboard serving as an initial outline for media development, which included the content to be explained, the game flow, in-game interactions, and rough visuals that could systematically minimize errors during the development phase. The use of storyboards in product design aligns with the theory of visual thinking developed by Rudolf Arnheim, which explains that visual representations are effective in aiding the thinking process compared to using text alone (Arnheim, 2023; Bai, 2020). In line with this, Utari (2023) notes in her research that the depiction of the flow and rough design in a storyboard can facilitate the development process.

The development phase involves translating the storyboard into a tangible form of the educational game being developed. This process is carried out using Roblox Studio software. This software provides tools that can be used to create virtual experiences directly integrated with the Roblox platform, thereby facilitating the development process (Kang et al., 2022). Additionally, during this development phase, expert validation is conducted to test the feasibility of the developed game. Suharsimi (2006) explains that expert evaluation is necessary to identify the product's shortcomings, thereby serving as a reference for improvements to make it a more viable product.

The results of the material expert validation indicate that the game's content is highly suitable and appropriate for use in learning, although there were differences in evaluation among the validators regarding each aspect. These differences suggest that each validator applied different standards when assessing the content's suitability in terms of curriculum alignment, factual accuracy, and pedagogical appropriateness. This is understandable because the presentation of content in the game has space limitations compared to textbooks, so the scope of the content is not yet optimal. Nevertheless, regarding pedagogical suitability, both validators showed more consistent agreement, demonstrating that the methodological delivery of the content has met educational standards well. Additionally, the average rating falls into the "highly suitable" category, indicating that the content in the game aligns with the curriculum and educational objectives. This aligns with Wina Sanjaya's (2015) assertion that the relevance of content to the curriculum is a hallmark of quality educational materials. Consistent with this, research findings (Purwati et al., 2018) suggest that well-presented content aligned with religious values can enhance students' achievement and understanding in learning.

The results of the media expert validation yielded a higher average score compared to the material expert validation, with both validators reaching full agreement on the aspects of visual design, communication, and media utilization. This indicates that the media interface was rated as intuitive, user-friendly, and effective in conveying the game's content. The similarity in average scores between Expert 1 and Expert 2 indicates a high level of agreement in the evaluation of every aspect of the game, particularly regarding the media. This suggests that the game's media is user-friendly and provides good feedback, making it suitable for educational use. These expert validation results align with those presented by Richard E. Mayer (2005), who states that information presented visually and in a structured manner can enhance understanding. This finding is further supported by research indicating that delivering content through game-based learning media can help improve students' interest in learning, engagement, social skills, and understanding of the subject matter (Anggraini, 2023; Okra, 2023; Rochmat et al., 2025; Ulpri et al., 2025).

In the language validation, the assessment results revealed that this educational game meets the standards for language use, although there were differences in assessment

among validators on several aspects. The highest score of 5.00 on the item regarding sentence conformity with PUEBI indicates full agreement that the game features polite language in accordance with Islamic norms, the use of motivating vocabulary, as well as communicative and flexible character dialogue. However, the lowest score of 3.50 was found in the item regarding the effectiveness of sentences that are easily understood by students, indicating that some sentence constructions are still considered not straightforward enough for students. These validation findings align with Lev Vygotsky's sociocultural theory, which emphasizes that social interaction with language as the primary learning tool can influence students' cognitive development. (Masrura et al., 2024; Wardani et al., 2023).

To address differences in assessment among validators, validity and reliability tests were conducted to ensure agreement among them. The results of the validity tests showed that all validation instruments used by material experts, media experts, and language experts were classified as valid. This means that each item in the validation instruments was capable of measuring the aspects intended to be assessed. Furthermore, the reliability test results indicate that the instruments used in all three validations fall into the reliable category. This indicates a high level of agreement among validators in their assessments, ensuring consistent validation results. Consequently, the experts' assessment results are deemed valid and can serve as the basis for determining the suitability of this GBL learning media on the Roblox platform.

The consistently high ratings from subject matter experts, media experts, and language experts demonstrate that integrating the Fiqh curriculum with game-based media using the Roblox platform is highly viable. Game elements such as text, animation, audio, and interactive features can help make the delivery of material more enjoyable and engaging (Jamaludin et al., 2026; Purwianto & Fahyuni, 2021). These results indicate that educational media utilizing a Game-Based Learning (GBL) approach on the Roblox platform has significant implications, both practically and theoretically. Practically, Fiqh teachers are encouraged to shift their roles to that of facilitators in the learning process, providing students with greater autonomy so that learning becomes more meaningful through the use of platforms such as Roblox. Additionally, curriculum developers and policymakers in Islamic education can use these findings as a basis for integrating the GBL approach into regulations governing the use of digital media that convey Islamic values. Theoretically, this study strengthens the framework for using GBL in Islamic education while opening opportunities for the development of more interactive Fiqh learning media tailored to the needs of the digital generation.

Based on the discussion above, this study has successfully developed and tested the feasibility of Game-Based Learning (GBL) educational media using the Roblox platform. However, there are several limitations that need to be noted. First, the implementation

and evaluation stages in the ADDIE model have not yet been carried out. Second, no empirical testing has been conducted with students in real-world learning settings. This occurred because the research focused on the development and expert validation stages, so not all stages of the ADDIE model were implemented. Therefore, further research is needed to further develop and refine this learning medium.

IV. Conclusion

This research on the development of Game-Based Learning educational media using the Roblox platform successfully created an interactive educational game titled “Misi Fikih: Ekspedisi Mencari Masjid” as an effective alternative solution to address the issue of Fiqh teaching methods that tend to be monotonous and boring. Through a Research and Development (R&D) approach using the ADDIE model, implemented up to the development stage, this product successfully integrated Fikih material on the chapter of Jinayat into the ecosystem of an educational game using the engaging Roblox platform. Expert validation results showed an average score of 4.40 for material validation, 4.80 for media validation, and 4.50 for language validation, meaning all fall within the “Highly Feasible” category. Content validity testing using Aiken’s V index yielded a score of 0.850 for material, 0.950 for media, and 0.875 for language, all of which fall into the high validity category. The Percentage of Agreement (PoA) reliability test yielded a value of 97.73% for material, 100% for media, and 95.56% for language, indicating that all instruments are reliable.

These results indicate that this Roblox-based educational media product has been empirically proven to be feasible and consistent in terms of content, presentation, and language readability, making it suitable for application in Fiqh instruction. However, this study still has limitations because the implementation and evaluation stages of the ADDIE model have not yet been carried out. Therefore, further research is needed in the form of empirical trials with students, the completion of the full ADDIE cycle, and the expansion of the material to other levels and subjects. This study is expected to serve as a foundation for innovation in the integration of technology into Islamic education in Indonesia.

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