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Learning Greetings Made Fun: Developing Gamified E-Learning Media with PowerPoint

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Abstract. This research aims to develop PowerPoint-based Gamified E-Learning media on greeting material in the Islamic Religious Education class IV SDIT Darul Khaerat Padang Sappa. The research uses the Research and Development (R&D) method with the ADDIE development model, which includes the Analyze, Design, Development, Implementation, and Evaluation stages. The subjects of the study were 15 grade IV students and 1 Islamic Religious Education teacher. Data collection was carried out through observations, interviews, validation sheets, practicality questionnaires, and learning motivation questionnaires. The results of the study showed: (1) media validity reached 75% (valid) from media experts and 95.8% (very valid) from material experts, an average of 85.4%; (2) the practicality test obtained 91.7% from teachers and 87.1% from students (very practical, average 89.4%); (3) the effectiveness test showed an increase in learning motivation from 69.02% (pre-treatment) to 88.1% (post-treatment) with an N-Gain value of 0.616 (medium category). The final prototype is a PowerPoint-based interactive learning medium that integrates VBA features with gamification elements, including alphabetical games, interactive quizzes, and an automatic scoring system.

Keywords: Gamified E-Learning; Learning Media; PowerPoint; Greeting Material; Learning Motivation

1. Introduction

Education is a conscious and planned effort to create a learning atmosphere and process so that students actively develop their potential, including religious and spiritual strength, self-control, personality, intelligence, noble character, and the skills necessary for themselves, society, the nation, and the state (Law Number 20 of 2003). In the context of Islamic teachings, the pursuit of knowledge holds a very noble position, as affirmed by Allah Swt. in QS. Al-Mujadalah/58:11 that those who believe and have knowledge will be raised in their ranks (M. Quraish Shihab, 2005). This makes education a necessity that must continue to be developed, including through the use of technology in the digital era.

The use of technology in the teaching and learning process is now a trend in various educational institutions (Widia Winata, Farid Haluti, Muqarramah, & Sulaiman Kurdi, 2023). However, the reality in the field shows that many educators, especially in Islamic Religious Education, are not proficient in using technology as a learning medium. Islamic Religious Education subjects encompass not only cognitive aspects (knowledge) but also affective and psychomotor aspects, which demand a more comprehensive and engaging approach to learning (Muhaemin,

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2021). Students' low motivation to learn is often caused by monotonous learning methods and less varied media (Yarun dkk., 2023) (Pintrich, 2003).

Based on the results of initial observations and interviews at SDIT Darul Khaerat Padang Sappa, most fourth-grade students were less enthusiastic about participating in Islamic Religious Education, particularly in the Salam material. Learning is still dominated by lecture methods and the use of packaged books, which contributes to students' low focus and interest in learning. Students are more interested in learning that contains elements of games or moving visuals. This condition reinforces the urgency of the need for interactive learning media that can stimulate learning motivation (Zamiri & Esmaeili, 2024).

One innovation to develop is PowerPoint-based Gamified E-Learning media. Gamification in e-learning is the application of game elements into an electronic-based learning system to increase involvement, motivation, and learning effectiveness (Ermalianti, 2025). Wijaya and Prasetyo stated that gamification media can increase students' motivation to learn on e-learning platforms, both in person and online (Promise, 2025). The use of PowerPoint as a development base was chosen because of its high accessibility and its ability to be modified with features to create interactivity, like an educational game application (Saputri, 2022) (Permatasari & Tandiayuk, 2023)

The Salam material was chosen as the development content because it is an important part of the formation of students' Islamic character. Salam is not just a social or ethical greeting but a form of worship and prayer that reflects the values of love, peace, and brotherhood in Islam, as enshrined in the Quran. An-Nur/24:27 and HR. Muslim no. 54 (Ministry of Religion of the Republic of Indonesia, 2018) (Abu ihsan al-Atsari, 2008). The gamification approach in delivering this material is expected to transform learning that was previously abstract into more concrete, visual, and meaningful (Dwi Adelia Indrayani et al., 2024). Based on this presentation, this study aims to determine the validity, practicality, effectiveness, and the final prototype of the PowerPoint-based Gamified E-Learning media for the Greeting material for grade IV SDIT Darul Khaerat Padang Sappa.

2. Methods

This research uses the Research and Development (R&D) method with the ADDIE development model developed by Dick and Carry (1996). The selection of the ADDIE model is based on its systematic structure and is highly relevant to producing technology-based learning media products (Waruwu, 2024) & Wahyuni, D, 2023) . The ADDIE model consists of five stages: (1) Analysis, (2) Design, (3) Development, (4) Implementation, and (5) Evaluation.

The research was carried out at SDIT Darul Khaerat Padang Sappa, Ponrang District, Luwu Regency, South Sulawesi, in May 2025. The research subjects included 15 grade IV students and 1 Islamic Religious Education subject teacher. The research object is a PowerPoint-based gamified e-learning media on the topic of greetings.

Data collection techniques use: (1) observation to identify media availability and learning conditions; (2) interviews to gather information from teachers related to learning problems; (3) validation sheets from media experts and subject matter experts to assess the feasibility of the product; (4) practicality questionnaires given to teachers and students; and (5) effectiveness questionnaire in the form of a learning motivation questionnaire based on six indicators according to Hamzah B. Uno (2006), which was given before (pre-treatment) and after (post-treatment) media use (Hamzah B. Uno, 2006).

Data analysis uses two techniques, namely qualitative thematic analysis to process data on suggestions and input from experts, and quantitative descriptive analysis to process data on

validation, practicality, and effectiveness. Validity and practicality are calculated using a percentage of the Likert scale of 1–4 with the formula: (Febrinita et al., 2025)

$$Persentase = \frac{\Sigma\ skor\ per\ item}{maximum\ score} X\ 100\%$$

Effectiveness is measured using Normalized Gain (N-Gain) according to Hake (1999) with the formula: (Hake, R. R., 1998)

$$N - Gain = \frac{Post - treatment\ -\ Pre - treatment}{Maksimal\ Ideal\ -\ Pre - treatment}$$

N-Gain interpretation criteria: (Richard R. Hake, 1999)

≥ 0.7 (high); 0.3 ≤ N-Gain < 0.7 (moderate); < 0.3 (low).

3. Results

This development research produced a PowerPoint-based Gamified E-Learning media on Greetings for grade IV. The results of the research are presented in accordance with the stages of the ADDIE model: needs analysis, design, development (validation), implementation (practicality), and evaluation (effectiveness).

Analysis Stage

The analysis stage was carried out through observation, interviews with Islamic Religious Education teachers, and the distribution of needs-analysis questionnaires to 15 students. The results showed that the Islamic Religious Education learning on the Salam material still uses a monotonous lecture method, lacks game-based interactive media, and that students show high interest in game-based learning. Grade IV students aged 9–10 years are in the concrete operational stage, which makes it easier for them to absorb information through visualization and play activities. The results of the needs analysis obtained an average percentage of 87.5% (very needy).

Table 1. Results of Student Needs Analysis

Yes	Aspects Assessed	Score	Max Score	Percentage	Criteria
1	Greeting Material	3,0	4	75,0%	Need
2	Teaching materials	3,5	4	87,5%	Very Necessary
3	Learning Media Development	4,0	4	100%	Very Necessary
	Average			**87,5%**	**Very Necessary**

Source: Primary data processed

Design Stage

In the design stage, the researcher compiled a storyboard and media flowchart using Microsoft PowerPoint 2021. The media is designed to contain 22 slides, including the opening page, main menu, developer profile, instructions, learning objectives, greeting material (3 sub-materials), typesetting games, quiz instructions, interactive quizzes (10 multiple-choice questions), and final score slides. Integrated gamification elements include an automated points system via VBA (+10 points per correct answer), visual/audio feedback (true/false), and final-score rewards. The file format is .pptm (PowerPoint Macro-Enabled) to support VBA.

Development Stage

After the product is completed, validation is conducted by media experts and material experts using a Likert-scale validation sheet with a 1–4 scale.

Table 2. Media Expert Validation Results

No	Aspects Assessed	Shoes	Score Max	Percentage	Criteria
1	Text/Text Readability	3	4	75%	Valid
2	Color composition	3	4	75%	Valid
3	Animated view	3	4	75%	Valid
4	Animation adjustments	3	4	75%	Valid
5	Accuracy of text color with background	3	4	75%	Valid
6	Layer view	3	4	75%	Valid
7	Typeface suitability	3	4	75%	Valid
8	Visualization compatibility	3	4	75%	Valid
9	Image clarity	3	4	75%	Valid
10	Music support	3	4	75%	Valid
11	Voice clarity	3	4	75%	Valid
12	Communicative	3	4	75%	Valid
13	Attractive design	3	4	75%	Valid
	Average			**75%**	**Valid**

Source: Primary data processed

Table 3. Material Expert Validation Results

No	Aspects Assessed	Shoes	Score Max	Percentage	Criteria
1	Relevance of the material to the learning objectives	4	4	100%	Highly Valid
2	Expansion of indicators	4	4	100%	Highly Valid
3	Compatibility of the indicator with the material	3	4	75%	Valid
4	Difficulty level compatibility	4	4	100%	Highly Valid
5	Systematics of material delivery	4	4	100%	Highly Valid
6	Material truth (scientific aspect)	4	4	100%	Highly Valid
7	Clarity of learning topics	4	4	100%	Highly Valid
8	Clarity of material description	4	4	100%	Highly Valid
9	Clarity of questions	4	4	100%	Highly Valid
10	Clarity of term usage	4	4	100%	Highly Valid
11	Clarity of language usage	4	4	100%	Highly Valid
12	Consistency of term usage	3	4	75%	Valid
	Average			**95,8%**	**Highly Valid**

Source: Primary data processed

Based on the validation results in Tables 2 and 3, media experts had an average validation percentage of 75% (valid), while material experts had 95.8% (very valid). The combined average of the two aspects was 85.4%, placing it in the very valid category. The media expert validator provided suggestions for improvements, including replacing the term 'Profile' with 'Profile', ensuring a consistent font size between the subheading and the material, changing the color of the navigation buttons, and adjusting the background to match the theme and characteristics of the students.

Subject-matter expert validators suggest fixing inconsistent word usage. Researchers have followed up on all suggestions.

Implementation Stage – Practicality Test Results

Table 4. Recapitulation of Practicality Test Results

No	They respond	Software Aspects	Visual Communication	Media Benefits	Average
1	Guru FATHER	90%	91,6%	93,7%	91.7% (Very Practical)
2	Students (n=15)	84,4%	92,5%	84,4%	87.1% (Very Practical)
	Combinations				**89.4% (Very Practical)**

Source: Primary data processed

Evaluation Stage – Effectiveness Test Results

Table 5. Comparison of Pre-Treatment and Post-Treatment Learning Motivation Scores

Yes	Motivation Indicators	Pre-Treatment	Criteria	Post-Treatment	Criteria
1	Ketertarikan	71,66%	Effective	90,83%	Highly Effective
2	Relevance	68,33%	Quite Effective	86,66%	Highly Effective
3	Challenge	70,00%	Quite Effective	88,33%	Highly Effective
4	Satisfaction	66,67%	Quite Effective	81,66%	Highly Effective
5	Confidence	65,83%	Quite Effective	86,66%	Highly Effective
6	Perseverance	71,66%	Effective	95,00%	Highly Effective
	Average	69,02%	Quite Effective	88,10%	Highly Effective

Source: Primary data processed

Based on Table 5, all indicators of learning motivation have increased significantly after the use of Gamified E-Learning media. The average score increased from 69.02% (pre-treatment) to 88.1% (post-treatment). The actual gain difference of 19.1 percentage points results in an N-Gain value of:

N-Gain = (88.1 − 69.02) / (100 − 69.02) = 19.08 / 30.98 ≈ 0.616

The N-Gain value of 0.616 is included in the Medium Gain category based on the Hake classification (1999), which is 0.3 ≤ N-Gain < 0.7. These results show that PowerPoint-based Gamified E-Learning media have proven effective in increasing students' motivation to learn in the Greetings material.

Final Prototype of Gamified E-Learning Media

The final prototype of this study is a PowerPoint-based Gamified E-Learning interactive learning media developed in Microsoft PowerPoint 2021 using VBA. The media consists of 22 slides with the following structure:

Table 6. Final Prototype Structure of Gamified E-Learning Media

Yes	Menu/Slide	Content Description
1	Opening Slides	Greeting, subject, title of material; Start and Exit buttons
2	Main Menu	Navigation buttons: Profile, Instructions, Materials, Objectives, Quizzes, Exit
3	Developer Profile	Identity of the researcher; Back button and Main Menu
4	Instructions	Media usage guides: Main and Exit Menu buttons
5	Learning Objectives	CP Islamic Religious Education Phase B; Competencies achieved
6	Greeting Material	Materials 1–3: definition, QS evidence. An-Nur/24:27, the manners of salam
7	Alphabet Sorting Game	Questions, random letter choices, answer slots, true/false feedback
8	Quiz Instructions	Guide to working on interactive quizzes
9	Interactive Quiz (10 questions)	Multiple choice, VBA score (+10/correct answer), feedback
10	Final Score Slide	Final Score total, Exit button and Main Menu

Source: Primary data processed.

4. Discussion

The results of this development research show that the PowerPoint-based Gamified E-Learning media has met three product quality criteria, namely valid, practical, and effective, in increasing students' motivation to learn the Salam material for grade IV at SDIT Darul Khaerat Padang Sappa.

Validitas Media

The average media validity of 85.4% (very valid) indicates that the product developed has met the feasibility standards in terms of technical and material substance. The high validation score from material experts (95.8%) indicates that the content of Salam in this medium is scientifically accurate, systematic, and aligned with the cognitive development of grade IV students. These findings are in line with research, The Original Story of the Princess (2022), which also found a very high validation value (86.6% for materials, 80% for media) (Saputri, 2022). In the development of interactive PowerPoint media for commendable moral materials in MI. Sukmadewi et al. (2023) also confirmed that PowerPoint-based media developed using the ADDIE model consistently demonstrated high validity (average expert validation scores ranged from 0.877 to 0.930). (I Md. Suarjana, & By Wyn. Rati, 2023)

The validation value for media experts, at 75% (valid), although lower than that for material experts, indicates that the visual design aspect of media is still in the suitable-use category. Suggestions for improvement from media experts, especially regarding terminology consistency, typographic hierarchy, and visual background suitability for students' characteristics, have been followed up on and have resulted in better prototypes, both aesthetically and functionally.

These results imply that the developed media is highly feasible for use, especially in terms of content accuracy, but requires minor visual refinements. The discrepancy between material and media validation scores underscores the need for balanced attention to both substance and design in the development of interactive learning media. Moreover, the successful revision process confirms that iterative expert feedback significantly enhances product quality.

Media Practicality

The results of the practicality test, with a combined average of 89.4% (very practical), indicate that this media is easy for teachers and students to use in real classroom learning. The teacher's assessment of 91.7% (very practical) indicates that this media meets the practical needs of educators in terms of operational ease, visual communication quality, and benefits in supporting the Islamic Religious Education learning process. The highest score was achieved in the benefits of using media (93.7%), indicating that teachers recognize the positive impact of this media on student engagement.

The students' practicality score (87.4%) reflects a high level of acceptance of this media. The visual communication aspect received the highest score (92.5%), indicating that the visual display of media with bright colors, Muslim child character icons, and intuitive navigation successfully attracted students' attention and facilitated operation among students aged 9–10 years. This is consistent with the design learning principle, which states that strong visual elements contribute to ease of use and user satisfaction (Knight dkk., 2018) (Alsawaier, 2018).

These practicality results imply that the developed media is not only theoretically sound but also readily usable in authentic classroom settings. The high teacher score (91.7%) suggests low implementation barriers, while the strong student acceptance (87.4%) confirms age-appropriate design. The exceptionally high visual communication rating (92.5%) underscores the critical role of intuitive, culturally relevant visuals (e.g., Muslim child character icons) for young learners' independent use. Aligned with design learning principles (Knight dkk., 2018) (Alsawaier, 2018) These findings imply that future Islamic religious education media should prioritize visual usability alongside content accuracy to maximize both teacher adoption and student engagement.

The Effectiveness of Media in Increasing Learning Motivation

The most important finding in this study is the proven effectiveness of Gamified E-Learning media in increasing students' motivation to learn. The average increase in learning motivation was 19.08 percentage points (from 69.02% to 88.1%), and an N-Gain value of 0.616 (medium category) provided strong empirical evidence. All six motivational indicators, namely interest, relevance, challenge, satisfaction, confidence, and perseverance, were upgraded to the very effective category after the implementation of the media (Hamzah B. Uno 2006).

The most significant increase occurred in the Perseverance indicator (71.66% → 95.00%), indicating that gamification elements, such as a point system and interactive quizzes, successfully encouraged students to engage in learning activities for longer. These findings support the theory of intrinsic motivation, where well-designed elements of play can evoke learning impulses from within learners (Fishbach & Woolley, 2022); (Iqbal et al., 2023). This is in line with the findings of Wijaya and Prasetyo (2023), who stated that gamification media can effectively increase students' motivation and activeness in learning, both in person and online (Promise, 2025) (Suparmini et al., 2024).

In the Islamic perspective, this media pedagogically also implements the message of the hadith 'afsyu as-salām' (spread salam) narrated by Abu Hurairah (HR. Muslim no. 54) (Abu ihsan al-Atsari, 2008). With interactive features that simulate giving greetings and giving rewards (scores) as a form of appreciation, learners not only memorize texts cognitively, but also experience the internalization of the value of greetings through meaningful learning experiences (Pangarti & Yaswinda, 2023). This approach is in line with Islamic Religious Education's goal of emphasizing the formation of Islamic character in an integrative manner (Ach. Syaiful et al., 2025) (Marwiyah, 2023)

When compared to previous research, Sufa's (2023) study, which used interactive PowerPoint without gamification elements, increased motivation by up to 82.5% (Sufa, 2023). While this study,

which integrated full gamification elements (VBA scoring system, alphabetization games, instant feedback), resulted in 88.1% post-treatment. This difference indicates that the addition of gamification elements significantly enhances the effectiveness of PowerPoint media in Islamic Religious Education. The uniqueness of this research lies in: (1) the development of special media for Salam material at the elementary level in accordance with the Independent Curriculum Phase B; (2) the integration of VBA features in PowerPoint to create an automatic scoring system; and (3) implementation in the Integrated Islamic Elementary School (SDIT) environment, which has distinctive Islamic Religious Education learning characteristics.

5. Conclusion

Based on the research results and discussion, it is concluded that the PowerPoint-based Gamified E-Learning media developed using the ADDIE model has been proven to be valid, practical, and effective for Islamic Religious Education learning on the Salam material in grade IV at SDIT Darul Khaerat Padang Sappa. The product's validity averaged 85.4% (very valid), with 75% of media experts and 95.8% of material experts rating it very valid. The product's practicality received a combined average of 89.4% (very practical) from teachers (91.7%) and students (87.1%). The effectiveness of the media was demonstrated by an increase in learning motivation from 69.02% to 88.1%, with an N-Gain value of 0.616 (medium category). The final prototype in the form of interactive PowerPoint media with VBA features that contains gamification elements, namely typesetting games, interactive quizzes based on automatic scores, visual/audio feedback, and a point reward system, has succeeded in transforming Islamic Religious Education learning that was originally monotonous into more interesting, interactive, and meaningful.

This study recommends that Islamic Religious Education teachers use Gamified E-Learning media as an alternative to innovative learning media. For future researchers, it is recommended to develop similar media for other Islamic Religious Education materials, expand the trial to include a control group, or develop a mobile application version that students can access independently outside the classroom.

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