

THE DEVELOPMENT OF CLASH OF CHAMPIONS GAME-BASED TEACHING MATERIALS TO IMPROVE STUDENTS' CRITICAL THINKING SKILLS IN ISLAMIC RELIGIOUS EDUCATION

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Abstract

This study aims to develop student worksheet (LKPD) teaching materials based on the Clash of Champions educational game to enhance the critical thinking skills of eighth-grade students in Islamic Religious Education (PAI). The research employed the ADDIE development model, consisting of analysis, design, development, implementation, and evaluation phases. Validation instruments involved media and content experts, along with practicality questionnaires for teachers and students. The results showed media validity at 98% and content validity at 92%. Practicality scores reached 96% (teachers) and 97% (students). The effectiveness test revealed an increase in students' average scores from 63% to 98%, with an N-Gain score of 0.94 (high category). These findings indicate that the game-based LKPD is effective in fostering critical thinking in Islamic Education learning.

Keywords: LKPD, Clash of Champions, critical thinking, educational game, Islamic Religious Education

Abstrak

Penelitian ini bertujuan untuk mengembangkan bahan ajar berupa Lembar Kerja Peserta Didik (LKPD) berbasis game edukatif *Clash of Champions* guna meningkatkan kemampuan berpikir kritis siswa kelas VIII pada mata pelajaran Pendidikan Agama Islam (PAI). Penelitian menggunakan model pengembangan ADDIE yang mencakup analisis, desain, pengembangan, implementasi, dan evaluasi. Instrumen validasi melibatkan ahli media dan materi, serta angket kepraktisan guru dan siswa. Hasil validasi menunjukkan tingkat kevalidan 98% (media) dan 92% (materi). Kepraktisan memperoleh skor 96% (guru) dan 97% (siswa). Efektivitas bahan ajar ditunjukkan melalui peningkatan nilai rata-rata dari 63% menjadi 98% dengan N-Gain sebesar 0,94, tergolong kategori tinggi. Temuan ini menunjukkan bahwa bahan ajar LKPD berbasis game efektif meningkatkan kemampuan berpikir kritis dalam pembelajaran PAI.

Kata Kunci: LKPD, Clash of Champions, berpikir kritis, game edukatif, Pendidikan Agama Islam

Introduction

The rapid development of information technology, particularly the internet, has significantly impacted various aspects of life, including culture and community environments. These changes also affect the field of education, driving a transformation in learning methods and instructional media (Munti & Syaifuddin, 2020). In today's digital era, education is expected not only to adapt to technology but also to uphold religious values, particularly within Islamic education. One of the major demands of the times is the ability to think critically, which in the context of Islam involves not only logical reasoning but also deep analysis, reflection, and evaluation of information (Isnaini, 2021).

Unfortunately, students' critical thinking skills in Indonesia remain relatively low. Salahuddin & Ramdani (2021) reported that the average critical thinking ability of junior high school students is 68 out of 100, categorized as fair. This indicates a gap between the demands of Higher Order Thinking Skills (HOTS) questions and students' preparedness to address them. It highlights the need for learning strategies that effectively support the development of critical thinking.

In the 21st century, students must be equipped with critical thinking skills to navigate the complexities of life. These skills are closely linked to moral, social, and cognitive aspects. Digital literacy plays a vital role, enabling students to access, evaluate, and use information wisely (Dhewi & Ningrum, 2022; Ebiendele Ebosele Peter, 2012). The use of appropriate learning media can stimulate motivation, enhance understanding, and simplify abstract concepts.

Mayer (2002) emphasized that critical thinking skills can be developed through the use of appropriate instructional media. Teachers, as facilitators, are expected to select or create media that stimulate curiosity and student engagement.

SMPN 2 Palang is one of the schools striving to improve learning quality, particularly in the subject of Aqidah Akhlak. Preliminary research and interviews with grade VIII Islamic Education (PAI) teachers revealed that various methods, including PowerPoint, have been implemented, yet the results in enhancing students' critical thinking remain suboptimal. Teachers also noted a high level of student interest in game-based learning, although such media have not yet been applied in the classroom. This opens an opportunity to develop game-based instructional media aligned with students' interests and capable of improving critical thinking skills.

A relevant approach is Game-Based Learning (GBL), which uses games as the main medium for delivering content. This approach is considered effective, efficient, and aligned with technological advancements (Putra et al., 2024). Several previous studies have demonstrated the effectiveness of GBL. For instance, Ardhani et al. (2021) found that a Monopoly-based game could enhance student engagement and critical thinking. Similarly, Wati (2021) used a snakes-and-ladders game, and Sumarni et al. (2022) developed domino cards for teaching physics concepts. However, most of these studies focused on specific game types and did not explore the use of similar media in Islamic Education subjects.

In addition, instructional media can also be developed in the form of Student Worksheets (LKPD), which are designed to help students independently understand material through structured activities. Hamdani (2011) stated that LKPDs can function both as media and instructional content, depending on their design and application. Firdaus & Wilujeng (2018) developed inquiry-based LKPDs that significantly improved critical thinking skills, with an N-Gain score of 0.43. Likewise, Herdiansyah (2018) developed a problem-based learning LKPD that resulted in significant improvements in student learning outcomes compared to conventional methods.

Although many studies have explored the development of game-based media and LKPDs, none have specifically examined the development of an LKPD based on the educational game *Clash of Champions*, an academic competition program by Ruangguru (Sanjaya, 2024). *Clash of Champions* presents intellectual challenges through competition, fostering critical, collaborative, and reflective thinking—making it highly relevant for formal education.

Each episode of this program delivers engaging and competitive educational content that emphasizes comprehension, analysis, and problem-solving, making it a potential innovative model for the learning process. These characteristics align with the goals of 21st-century education, which seeks to develop not only memorization but also critical thinking and problem-solving abilities.

By adapting elements of *Clash of Champions* into an LKPD format, students are expected to become more motivated and active in learning, particularly on the topic of "Being a Person of Integrity through Trustworthiness and Honesty" in Aqidah Akhlak. This study aims to develop a game-based LKPD using *Clash of Champions* and examine its effectiveness in enhancing junior high school students' critical thinking skills at SMPN 2 Palang.

Method

This study employed Research and Development (R&D), as defined by Gall et al. (1996) in *Educational Research: An Introduction*. Research and Development is a method used to develop, design, and implement a new product, which is then systematically tested, evaluated, and refined to meet predetermined effectiveness criteria, quality, or consistent standards.

The development model used in this research is ADDIE (Analysis, Design, Development, Implementation, Evaluation), which emphasizes the interaction and coordination of each component according to its respective phase. This model was originally developed by the instructional technology center at the University of Florida for the U.S. military (Rayanto & Sugianti, 2020).

In the analysis phase, the researcher conducted interviews with teachers to gather information about teaching material problems, and with students to identify learning difficulties in the Islamic Religious Education (PAI) subject. The design phase focused on developing teaching materials that are engaging and easy to understand. During the development phase, media and content experts validated the materials, which were then revised according to their feedback. The implementation phase involved applying the developed materials in the classroom, evaluated by both teachers and students. In the evaluation phase, pretests and posttests were administered to assess learning outcomes before and after using the materials.

The following are the analyses of validity, practicality, and effectiveness of the LKPD teaching materials:

This stage assesses the validity of the LKPD based on expert evaluation, both from media and content experts, using the following scoring criteria:

Table 1. Expert Scoring Criteria for Product Validity

No	Percentage	Score Description
1.	76% – 100%	Very Valid
2.	51% – 75%	Valid
3.	26% – 50%	Not Valid
4.	0% – 25%	Very Not Valid

(Source: Eko Putro Widoyoko, 2012)

Data for this analysis were obtained through teacher and student response questionnaires regarding the developed LKPD teaching materials. The scoring criteria are as follows:

Table 2. Scoring Criteria for Teacher and Student Responses

No	Percentage	Score Description
1.	76% – 100%	Very Practical
2.	51% – 75%	Practical
3.	26% – 50%	Not Practical
4.	0% – 25%	Very Not Practical

(Source: Eko Putro Widoyoko, 2012)

Gain refers to the difference between pretest and posttest scores, indicating students' understanding or conceptual improvement after instruction. The normalized gain (N-Gain) is interpreted using the following criteria:

Table 3. Scoring Criteria Using N-Gain Score

Percentage	Interpretation
< 40	Not Effective
40–55	Less Effective
56–75	Moderately Effective

(Source: Hastuti, 2023)

Results and Discussion

Teaching materials come in various forms, one of which is the student worksheet (LKPD) developed in this study. The LKPD was used in Islamic Religious Education (PAI) on the topic "Being a Person of Integrity with Trustworthiness and Honesty." The primary goal of this instructional material is to improve students' critical thinking skills during PAI learning. This study, conducted from March 11 to May 25, 2025, in class VIII A of SMPN 2 Palang, aims to establish the validity, practicality, and effectiveness of the developed LKPD. The ADDIE development model was employed, consisting of five stages: analysis, design, development, implementation, and evaluation.

Analysis Stage

In this phase, the researcher conducted a needs analysis at SMPN 2 Palang on March 15, 2025. Problem identification was carried out through interviews with teachers and students in class VIII A.

The interviews with PAI teachers aimed to gather information on students' learning conditions and identify issues related to existing teaching materials. Student interviews were conducted to explore their difficulties in studying PAI.

Design Stage

This stage addressed the problems identified during analysis and served as the basis for developing instructional products. The analysis showed that teachers often used discussions, lectures, and presentations, which students found monotonous. This motivated the researcher to redesign the materials to be more engaging and understandable by developing game-based LKPD using *Clash of Champions*.

By May 5, 2025, the LKPD design included background layout, illustrations, text colors, and appropriate fonts to attract student interest. The final LKPD product was designed to be visually appealing and content-relevant.



Development Stage

The purpose of this stage was to produce a final product revised based on expert feedback.

Media Expert Validation

The media design was validated by Mr. Irfa'i Alfian Mubaidilla, M.Pd., a lecturer in instructional technology at IAINU Tuban. The results are presented below:

Table 4. Media Expert Assessment Results

No	Component Indicator	Score	Remark
1	Design/images match the content in LKPD	5	Very Valid
2	Appealing and appropriate image/animation layout	5	Very Valid
3	Font size is appropriate	5	Very Valid
4	Attractive color combinations	5	Very Valid
5	Proper language usage	4	Valid
6	Appropriate font and text usage	5	Very Valid
7	Clarity of writing in questions and answer choices	5	Very Valid
8	Image relevance in answer options	5	Very Valid
9	Visual appeal of the LKPD	5	Very Valid
10	Usability in both print and digital formats	5	Very Valid
Total Score		49	
Average Percentage		98%	Very Valid

Content Expert Validation

The content validation was conducted by Mrs. Rr. Kusuma Dwi Nur M., M.Pd.I., a lecturer at IAINU Tuban, focusing on material accuracy and instructional alignment.

Table 5. Content Expert Assessment Results

No	Component Indicator	Score	Remark
1	Content/questions aligned with the Merdeka Curriculum	5	Very Valid
2	Content/questions match developed indicators	4	Valid
3	Content breadth and depth appropriate for students	5	Very Valid
4	Topic aligned with teaching module	4	Valid
5	Grammatically correct and proper language usage	5	Very Valid
6	Includes relevant images	5	Very Valid
7	Supports student comprehension of material	4	Valid
8	Content aligns with learning objectives	4	Valid
9	Promotes student interaction	5	Very Valid
10	Encourages critical thinking	5	Very Valid
Total Score		46	
Average Percentage		92%	Very Valid

Implementation Stage

Implementation took place from May 14–17, 2025, involving 36 students from SMPN 2 Palang.

Teacher Response Results

Validation was conducted by Mr. Fery Dwi Prasetya, S.Fil.I. Results are shown below:

Table 6. Teacher Response Results

No	Aspect	Indicator	Score	Remark
1	Effective	Material explained clearly	5	Very Valid

		Quizzes help evaluate student understanding	5	Very Valid
2	Interactive	LKPD can be used effectively	5	Very Valid
		Text is easy to read	5	Very Valid
		Scores are calculated accurately	4	Valid
3	Efficient	LKPD is easy to use anywhere	4	Valid
		LKPD is portable	5	Very Valid
4	Creative	Story-based questions attract students	5	Very Valid
		LKPD encourages active participation	5	Very Valid
	Total Score	43		
	Average Percentage	96%		Very Valid

Student Response Results

Student responses were gathered using a Likert-scale questionnaire.

Table 7. Student Response Results

No	Aspect	Indicator	1	2	3	4	5
1	Usefulness	LKPD helps explain learning material				2	34
		LKPD supports learning in PAI					36
2	Usability	LKPD is easy to use					36
3	Satisfaction	Students felt satisfied using the LKPD			3	33	
		LKPD made learning enjoyable					36
	Total Score					175	
	Average Percentage					97%	

Evaluation Stage

The evaluation phase was conducted on May 19, 2025, using 10-item pretest and posttest assessments.

Table 8. Pretest Results

Number of Students	Highest Score	Lowest Score	Total Score	Average
36	70	60	2298	63%

Table 9. Posttest Results

Number of Students	Highest Score	Lowest Score	Total Score	Average
36	100	90	3370	98%

Table 10. N-Gain Score Results

Number of Students	Lowest Pretest Score	Highest Posttest Score
36	60	100
Total Score (Pretest)	2298	3370
Average	63%	98%

N-Gain Calculation:

$N\text{-Gain} = (\text{Posttest Score} - \text{Pretest Score}) / (\text{Maximum Score} - \text{Pretest Score})$

$N\text{-Gain} = (98 - 63) / (100 - 63)$

$N\text{-Gain} = 35 / 37$

$N\text{-Gain} = 0.94$

This score indicates a high level of effectiveness in improving students' critical thinking. The average score improved from 63% to 98%, and the N-Gain of 0.94 places it in the "very effective" category.

These findings align with previous research, such as Firdaus & Wilujeng (2018), who developed inquiry-based LKPD that resulted in an N-Gain of 0.43, and Herdiansyah (2018), who found significant improvement using Problem-Based Learning LKPD.

Therefore, this study suggests that game-based LKPD is an effective tool to enhance student motivation, critical thinking, and active participation in PAI, particularly in the Aqidah Akhlak topic: "Being a Person of Integrity with Trustworthiness and Honesty."

Conclusion

Based on the results of this study, it can be concluded that the validation by media experts yielded a score of 98%, categorized as very valid and feasible for use. The content expert validation resulted in a score of 92%, also categorized as very valid and suitable for implementation.

The practicality analysis, obtained through teacher questionnaires, reached 96%, categorized as very practical, while student responses scored 97%, also indicating a very high level of practicality.

In terms of effectiveness, students' average critical thinking scores increased from 63% before using the LKPD to 98% afterward. This reflects an improvement of 35%, with an N-Gain score of 0.94, placing it in the high category.

Thus, the LKPD teaching material based on the *Clash of Champions* educational game demonstrates high validity, practicality, and effectiveness, making it suitable for classroom use. However, due to certain limitations, future research is recommended to expand and adapt the product to different educational levels and more diverse learning contexts in line with the dynamics of educational development.

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