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DEVELOPMENT OF CANVA-BASED INTERACTIVE TEACHING MATERIALS TO ENHANCE STUDENTS' CRITICAL THINKING SKILLS IN FIQH LEARNING AT ISLAMIC HIGH SCHOOL

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Abstract This project aims to promote critical thinking abilities among eleventh-grade students in the Social Sciences curriculum at MAN 1 Medan during Fiqh (Islamic Jurisprudence) studying, leveraging interactive teaching materials based on Canva that have been designed. This research uses Research and Development (R&D). The 4-D research design, which consists of four stages—define, design, develop, and disseminate—is used in this study's instructional material development. Thirty-three eleventh-grade Social Sciences students make up the research subjects. The interactive teaching materials based on Canva are highly valid based on the research and development findings. This is supported by the material validation score of 3.07, the subject matter expert assessment score of 3.23, and the language expert validation score of 3.30. The overall recapitulation score of 3.2 further confirms this conclusion. This suggests that the interactive educational resources created by Canva meet appropriate standards and can be utilized by educators and learners alike.

Keywords Canva; Interactive Teaching Resources, Critical Thinking, Research and Development (R&D), MAN 1 Medan

INTRODUCTION

A greater effort is being made to change how technology is used in the classroom as a result of scientific and technological breakthroughs. Teachers must be able to make good use of the resources provided in the classroom in order to determine whether or not they meet the current demands and advances (Gondomulio & Suroso, 2023). Teachers are expected to begin this process by using straightforward and reasonably priced resources while making sure the learning process's goals are still met. In order to attain the intended learning outcomes, teachers are also urged to hone their skills in creating educational materials that may be maximized (Dahliani, 2023).

The 21st century, sometimes called the Fourth Industrial Revolution, incorporates information, skills, attitudes, and technical proficiency into education. As a result, education in this century is in line with the use of digital technology and learning capacities that satisfy the needs of the contemporary world. The use of technology is considered a key advancement in boosting the quality of education (Anas & Hasibuan, 2023). The integration of technology into education in the 21st century has transformed traditional teaching methods and opened up new avenues for learning (Queiros et al., 2016). With the advent of digital tools and platforms, students now have access to a wealth of information beyond the confines of the classroom (Le et al., 2024). Interactive multimedia resources, online tutorials, and virtual simulations offer immersive learning experiences that cater to diverse learning styles (Kaplar et al., 2022). Additionally, collaborative online platforms facilitate communication and teamwork among students, fostering a sense of community and enhancing peer-to-peer learning (Wijaya et al., 2020) (Bos & Anders, 1990).

Moreover, the use of technology in education enables personalized learning experiences tailored to individual student needs (Papastergiou & Mastrogiannis, 2021). Adaptive learning algorithms analyze student performance data to identify strengths and weaknesses, allowing educators to tailor instruction accordingly (Rieber, 1996). This personalized approach not only increases student engagement but also promotes greater mastery of concepts (Dickey, 2006). Furthermore, technology facilitates real-time feedback mechanisms, enabling students to receive immediate guidance and support, thereby enhancing their learning outcomes. In essence, the integration of technology in education heralds a paradigm shift towards a more dynamic, interactive, and inclusive learning environment that equips students with the skills and knowledge needed to thrive in the digital age (Kafai et al., 1998).

The capacity for critical thought is one of the most important high-level cognitive abilities in helping kids develop into competent individuals (Purba & Harahap, 2022). Students need to develop critical thinking abilities since they are very beneficial to their development in many areas, such as school, employment, and daily life (Perangin-Angin et al., 2023). Students who develop their critical thinking abilities will be better equipped to handle obstacles in the future and make valuable contributions to society (Perangin-Angin et al., 2023). Thus, fostering the growth of critical thinking skills in kids is essential to helping them realize their full potential and become productive members of society (Hasibuan et al., 2020).

The aptitude for reasoning and forming opinions are essential components of critical thinking. Students' inability to think, restricted to memorizing, may be ascribed to teachers' tendencies to conduct evaluations or assessments that only focus on testing low-level talents through written tests. High-level thinking abilities cannot be developed in students unless they are provided with the necessary resources and direction (Mallipa & Murianty, 2022). The capacity to gather data and draw conclusions from a variety of tasks, such as analysis, justification, concept formulation or selection, classification, comparison, prioritization, and prudent decision-making, is referred to as critical thinking skills (Insani et al., 2023). The ability to think critically helps people avoid being duped, manipulated, given false information, or distorted in any way. Critical thinking also keeps people from squandering time and money and from emotionally buying into false or misleading teachings, beliefs, dogmas, or ideologies (Gondomulio & Suroso, 2023).

According to Facione in Mafruhah (2022), there are six markers of critical thinking, including explanation, interpretation, analysis, evaluation, inference, and self-regulation. Critical thinking abilities are reflected in these indicators in important ways (Miswar et al., 2022). The ability of educators or teachers to create engaging lesson plans is crucial to the effectiveness of students' development of critical thinking abilities (R. T. Putri et al., 2022). It is, therefore, anticipated that teachers will be able to provide more creative learning opportunities and inspire learners to get the most out of their education (Rambe & Putri, 2023).

The insufficiency of the present educational processes, including ineffective learning media and techniques, is one of the problems influencing the quality of education in Indonesia (Höhne, 2018). Furthermore, the Minister of National Education Regulation (Permendiknas) No. 41 of 2007 states that the use of diverse learning resources is permitted under the expected learning process requirements, but the availability of teaching materials is restricted to textbooks. Teachers

themselves can create instructional materials (Clark, 1994). Since they may be customized to the unique needs and features of each student, teaching materials developed by educators are seen to be more effective when used (Zebua, 2023).

Students must study with the use of instructional resources, which are made to enhance learning activities and help students become competent (Saputro & Juntara, 2022). A variety of information formats are included in learning materials, such as text, graphics, audio, and their combinations (L. Rahmawati et al., 2024). Thus, there are a number of factors to take into account when it comes to learning materials, such as 1) their function as a tool for teaching and learning activities and 2) the development of competence through the use of teaching materials.

All of the things that instructors and students use to make learning easier can be referred to as teaching materials. Books, Student Worksheets (LKS), visual materials including newspapers, digital content, food packaging, and images, as well as face-to-face communication with native speakers, instructor directions, written assignments, cards, and even discussion starters among students, can all fall under this category. Thus, educational materials include a variety of components that are thought to improve students' experiences and knowledge (Zhao et al., 2023).

There are four categories of instructional materials based on format: 1) Printed materials are a variety of products that are available in paper format and are used to transmit information or aid in learning. These consist of student workbooks, books, handouts, wallcharts, brochures, pamphlets, pictures, models, and mock-ups; 2) Systems that use radio waves that are directly enjoyed or heard by people or groups are referred to as audio materials or audio programs. This includes radios, compact audio disks, vinyl records, and cassette cassettes; 3) Everything that makes it possible to combine auditory impulses with sequentially moving visuals is included in audiovisual materials. Films and video compact CDs are two examples: 4) Combinations of two or more media (text, audio, graphics, photos, animations, and videos) that allow users to manipulate or command a presentation or natural behavior are known as interactive instructional materials. Take interactive compact disks, for instance.

One of the most useful instructional resources at the moment is the recommendation for interactive teaching materials. These resources are specially made to encourage students to actively participate in their education (De Jesus et al., 2023). Features that promote reciprocal engagement between students and the course material, students and instructors, and students among themselves are frequently included in this kind of involvement (Palamar et al., 2023). A variety of formats,

including computer software, online learning tools, educational games, simulations, and group activities that promote conversation and cooperation, are available for interactive teaching materials (F. Rahmawati & Atmojo, 2021). Teaching materials include various elements that are considered to increase students' knowledge and experience (Kosasih, 2020). One of them is Canva Media. Apart from that, Canva can be used on a laptop/PC or mobile device to design logos or modify photos (Umam, 2023). To create a design on a computer or laptop, we can go to https://www.canva.com. Make sure you have a strong internet connection (Pratiwi, 2021).

In recent years, the use of Canva as a teaching material has gained significant traction due to its user-friendly interface and versatile features. Canva offers a wide range of templates, graphics, and design elements that educators can leverage to create visually appealing presentations, infographics, posters, and other educational materials (Gijlers et al., 2013). By incorporating Canva into their teaching repertoire, educators can enhance the visual appeal of their instructional content, making it more engaging and accessible to students with diverse learning preferences (Prastyana et al., 2023). Furthermore, Canva's compatibility across multiple devices, including laptops, PCs, and mobile devices, adds to its appeal as a teaching tool (Chen et al., 2021). This flexibility allows both educators and students to access and utilize Canva's features anytime, anywhere, thus promoting seamless collaboration and interaction in the learning process (Mpungose & Khoza, 2022). Whether designing logos, modifying photos, or creating multimedia presentations, Canva provides a user-friendly platform that empowers educators and students alike to unleash their creativity and effectively communicate ideas (Santiana et al., 2021).

Moreover, the accessibility of Canva through a web browser simplifies the process of creating designs, eliminating the need for complex software installations (Black et al., 2019). This accessibility, coupled with its intuitive interface and extensive library of design resources, lowers the barriers to entry for educators who may not have extensive graphic design skills. As a result, Canva democratizes the creation of visually compelling teaching materials, enabling educators to enhance the quality and impact of their instructional content without requiring specialized expertise. In conclusion, Canva emerges as a versatile and accessible tool for creating engaging teaching materials that cater to the diverse needs of today's learners. Its intuitive interface, compatibility across devices, and extensive library of design resources make it a valuable asset in modern education, empowering educators to enhance the learning experience and foster creativity in the classroom.

Based on observations made at MAN 1 Medan, it was discovered that Student Worksheets (LKS), Independent Learning Activity Unit (UKBM) books, and school-provided support books are among the instructional materials frequently utilized by instructors and students during the learning process. However, since communication only happens in one direction—from teacher to student—there is a propensity for both the LKS and UKBM books to be non-interactive. It's interesting to note that the school has resources in place to help multimedia learning grow. Each classroom has Wi-Fi, projectors, digital TVs, and media access, among other amenities. However, because they don't always have enough time to create interactive learning materials, some teachers at the school only sometimes use these resources (R. T. Putri & Rambe, 2023).

Given this, it is clear that traditional methods still dominate the way that Fiqh is taught in schools. The most common mode of instruction is lecture-based, in which students listen to the teacher impart knowledge to them passively. Students don't interact with one another as a result of this circumstance (Zebua, 2023). In addition, the Student Worksheets (LKS) that are utilized by educators and learners do not sufficiently stress conceptual comprehension, do not include visual components, and have uninteresting image displays and colors. Students consequently have trouble understanding visually oriented content (Sumarno et al., 2023).

Therefore, a more dynamic approach to learning is required. Teachers and learners require educational resources that are more than just exercises and thorough content—especially for areas that are abstract or visually oriented. These resources should also be interactive in the field (Putra & Filianti, 2022). Additionally, new opportunities in education have been made possible by developments in the field of information and communication technology (Nur Laillni Roma et al., 2023). Canva is a user-friendly graphic design tool that makes it possible to create engaging, interactive, and visual teaching materials in the field (Rosmiati & Hendriani, 2023). Using Canva to create educational materials may transform conventional teaching techniques into engaging, interactive learning environments (Sapri et al., 2022).

Canva is a graphic design platform that makes it easier for anyone, even beginners, to create various creative projects online (Tiara Melinda & Erwin Rahayu Saputra, 2021). Canva, which can be accessed by web browsers such as Firefox, Google Chrome, and Mozilla, provides a range of tools for creating greeting cards, posters, brochures, infographics, and presentations (Tennyson, 2010). After downloading Canva from the App Store or Play Store, customers can use it on their Android smartphones (W. P. Putri, 2023). Canva makes it easier to create content for book covers, reports,

brochures, articles, and even social media sites like Facebook and Instagram (Idawati et al., 2022). Canva may also be used on mobile devices or laptops/PCs for photo editing and logo design (Ikbal & Nurjannah, 2017).

The interactive teaching materials that will be created will cover a wide range of learning topics, including text, pictures, animations, and videos. They will be a very useful tool for educating students about Islamic marriage (Graha et al., 2023). The researcher is doing research and development in an attempt to show originality or inventiveness in comparison to earlier studies (Tri Wulandari & Adam Mudinillah, 2022). Consequently, the researcher is keen to carry out a thesis entitled "Development of Canva-Based Interactive Teaching Materials to Enhance Students' Critical Thinking Skills in Fiqh Learning at MAN 1 Medan." The aim of the research is to create something new that can be packaged and implemented in the fiqh learning process at MAN 1 Medan.

METHOD

The research method to be applied is Research and Development (R&D), which aims to create a specific product and evaluate its effectiveness (Sugiyono, 2015). The research model used is the Thiagarajan, Semmel, and Semmel learning device development model, specifically the 4-D model (define, design, develop, and disseminate). This can be explained in the figure.

Figure 1. The 4-D Model

The planning stage is completed in order to create the interactive instructional materials that will be created using Canva. Organization of the writing format for the created instructional materials is one of the development activities. Producing instructional materials that satisfy students' demands in terms of look, substance, organized structure, and conformity to preset forms is the goal of this planning.

Figure 2. Layout Design of Interactive Teaching Materials

The Interactive Teaching Materials are amended at this development stage in response to input from the validators, who are knowledgeable lecturers. Media specialists, subject matter experts, and language specialists —specifically, instructors from FITK UIN North Sumatra— will conduct the validation. A small-scale experiment will be carried out in the relevant class directly following the production of the instructional materials.

Larger-scale use of the created instructional materials is part of the dissemination stage. Here, the intended instructional materials are disseminated by the researcher through an upload to the official school website.

FINDINGS AND DISCUSSION

Findings

Development of Canva-based interactive teaching materials on the topic of Islamic marriage in the Fiqh subject for grade XI at MAN 1 Medan. The author will summarize the findings of the research in this part. The 4-D development model was previously used in this study's design and development processes.

Validation (Feasibility) of the Product by Content Experts

Material experts assess whether interactive educational materials built using Canva are eligible. The following are the outcomes of the material experts' validation.

Table 1. Material Expert Validation Results

No.	Aspect	Indicator	Assessesnt Score
1.	Introduction	Clarity of Learning Instructions	3
		Clarity of Learning Outcomes Criteria Related to the Discussed Material	3
2.	Content	Coherence and Coverage of Material Descriptions	3
		Relevance and Appeal of Content	3
3.	Learning	Relevance of Material to the Characteristics of 11th Grade Students	4
		Clarity in Writing Learning Outcomes	3
		Appropriateness of Material Structure	3
		Consistency Between Objectives and Tasks	3
		Clarity of Material Descriptions	3
		Completeness of Material	3
		Ease of Understanding Material	3
		Relevance of Images, Animations, Videos to the Material	3
		Material Difficulty Level Adjusted to the Characteristics of 11th Grade Student	3
		Coherence of Exercises with the Material	3
		Average score	3,07

With an average score of 3.07, the expert validation results place it in the very valid category, falling within the range of $2.51 < \bar{x} \leq 3.26$. As a result, the Fiqh teaching materials are appropriate for use by MAN 1 Medan 11th-grade students and can be used with change as long as they meet the goals and indicators of the desired learning outcomes.

Validation (Feasibility) of the Media Product by Media Experts

The validation (feasibility) of the media in the developed product can be determined through the validation by media experts, as follows.

Table 2. Results of Media Expert Validation

No.	Aspect	Indicator	Assessment Score
1.	Display/Appearance	Clarity of Title and Instructions for Using Interactive Teaching Materials	3
		Readability of the Layout that Facilitates Student Learning	3
		Accuracy in Choosing Background Colors	3
		Appropriateness of Font Type Selection	3
		Appropriateness of Font Size Selection	3
		Clarity of Supporting Multimedia Material Display	3
		Attractiveness of Image Display in Interactive Teaching Materials	3
		Suitability of Cover Design with Material	4
		Suitability of Navigation Button Shapes	4
		Consistency of Display	3
2.	Utilization/Usage	User-Friendliness of the Product	4
		Accuracy in Using Buttons and Navigation	3
		Ease of Accessing Product Menus	3
		Ease of Interaction with the Product	4
		Ease of Exiting the Product	3
3.	Utilization/Exploitation	Alignment of Interactive Teaching Material Components and Language Aspects	3
		Quality and Attractiveness of Content in Interactive Teaching Materials	3
Average score			3,23

It is evident from the evaluation in the above table that, out of a possible maximum score of 4.00, the average validation score attained is 3.23. With a classification within the range of $2.51 < \bar{x} \leq 3.26$, it is classified as legitimate. Consequently, it is decided that the media experts' feedback on the interactive teaching materials that were created is appropriate for usage with revisions.

Validation (Feasibility) of the Product by Language Experts

The validation (feasibility) of the language in the developed product can be determined through language experts' validation as follows:

Table 3. Results of Language Expert Validation

Rated Aspect	Indicators	Assessment Score
Clear	Accuracy of sentence structure	3
	Effectiveness of sentences	3
	Rigidity of terms	3
Communicative	Understanding of the message or information	3
	Effectiveness of conveying messages/information visually, with the help of pictures, illustrations, and cartoons	4
Interactive Dialogical	Ability to motivate learners	4
	Motivating learners to encourage curiosity	4
Appropriate for Students' Development	Suitability with the intellectual development of learners	4
	Suitability with the emotional development of learners	3
Adherence to Language Rules/Standards	Accuracy in using Standard Indonesian Spelling (EYD - Ejaan Yang Disempurnakan)	3
	Spelling accuracy	3
	Precision of language in the material	3
Use of Terms, Symbols, or icons	Using standardized, clear, and unambiguous terms	3
	Average score	3,30

It is evident from the assessment in the above table that, on average, a validation score of 3.30 out of a possible 4.00 was received. It is classified within the range $3.26 < \bar{x} \leq 4.00$, which places it in the very valid group. As a result, it has been decided that the language experts' feedback on the interactive teaching materials is quite appropriate for use.

The phase of implementation comes next. Pre-test and post-test questions from the developed instructional materials are given to students at this point in order to gather information for analysis. Teachers provide students with the knowledge they need to succeed at this time.

Table 4. Recapitulation of Post-test and Pre-test Scores

Data	Minimum Value	Maximum Value	Sum	Mean	Standard Deviation
Pretest	32	94	2295	65,57	13,718
Post-test	66	98	2961	84,60	6,554
N			35		

We learned that there were 35 students who took the test based on the description in Table 4 above. In addition, the pre-test has a maximum score of 94 and a lowest score of 32. Meanwhile, in the post-test, the lowest score is 66, and the highest score is 98. By studying these values, it can be inferred that there is an improvement in students' critical thinking skills after using interactive instructional materials based on Canva.

The difference between the average scores on the pretest and posttest is 84,60-65,57=19,03, based on Table 4. The outcomes of the product efficacy test conducted with N-Gain are as follows:

Table 5. Results of the Effectiveness of Interactive Teaching Materials

N-Gain Score	Criteria
0,5133	Moderate

It is evident from Table 5 above that the Interactive Teaching Materials have a moderate level of effectiveness.

The information shown in the above table leads to the conclusion that the interactive teaching materials derived from Canva are thought to be highly effective and can be used in the educational process for MAN 1 Medan's 11th-grade students. The comparison of the pre-test and post-test average scores yielded an N-Gain score (g) of 0,5133, which falls within the interval category of 0.3 to 0.7 and indicates a significant improvement in learning outcomes.

Specialists in media, language, and content have assessed this educational material's suitability. The assessment procedure has started, and the findings show that this interactive educational resource, which is on a Canva basis, satisfies the evaluation requirements quite well. With a recapitulation score of 3.2, it falls into the extremely valid category (Maharani & Kurniawan, 2023). The material validation score is 3.07, the media validation score is 3.23, and the language expert evaluation score is 3.30.

Thus, it can be said that this interactive teaching resource from Canva is both legitimate and appropriate for use as instructional material by instructors and students in the MAN 1 Medan learning environment.

Discussion

Based on the test results, the average pre-test score was 65.57, and the post-test was 84.60. From these data, it can be concluded that there is a significant increase in the mastery of the material of students who use Canva-based interactive teaching materials. This can be seen from the comparison of the average pre-test and post-test scores. Meanwhile, the pretest and post-test data that were carried out on MAN 1 Medan students were normal data with a significance value of 0.200. Based on the test results, it can be concluded that there is a significant increase in the mastery of the material of students who use Canva-based interactive teaching materials. The average pre-test score was 65.57, and the post-test score was 84.60, indicating a positive change in students' understanding of the material. The comparison of these average scores supports the idea that the use of Canva-based interactive teaching materials has been effective in improving students' learning outcomes. However, it should be noted that the pretest and post-test data for MAN 1 Medan students were normal data with a significance value of 0.200. This means that there is a 20% chance that the observed difference in scores could have occurred by chance, even if there is no real difference in students' mastery of the material. Further analysis of additional data may be needed to confirm the significance of the observed increase in students' mastery of the material.

After obtaining the average value, a t-test was carried out using SPSS software. From the results of the paired sample t-test output, it is revealed that the significance (Sig. 2-tailed) is 0.000, which is less than 0.05. Based on the basis of decision-making from the paired sample t-test, it can be concluded that the Alternative Hypothesis (Ha) is accepted while the Null Hypothesis (H0) is rejected. This means that Canva-based interactive teaching materials are effective in improving students' mastery of the material at Madrasah Aliyah Negeri 1 Medan. Thus, this interactive teaching material plays a very positive role in helping improve the critical thinking skills of class XI students at MAN 1 Medan.

According to Facione in Mafruhah (2022), there are six markers of critical thinking, including explanation, interpretation, analysis, evaluation, inference, and self-regulation. Critical thinking abilities are reflected in these indicators in important ways (Miswar et al., 2022). Critical thinking also keeps people from squandering time and money and from emotionally buying into false or misleading teachings, beliefs, dogmas, or ideologies (Gondomulio & Suroso, 2023). The ability of educators or teachers to create engaging lesson plans is crucial to the effectiveness of students' development of critical thinking abilities (R. T. Putri et al., 2022). It is, therefore, anticipated that

teachers will be able to provide more creative learning opportunities and inspire learners to get the most out of their education (Rambe & Putri, 2023). Since they may be customized to the unique needs and features of each student, teaching materials developed by educators are seen to be more effective when used (Zebua, 2023).

From the data from the questionnaire regarding students' responses to the interactive teaching materials that have been developed, it is known that the average percentage score is 87% after rounding. So it can be seen that the students' assessment criteria for Canva-based interactive teaching materials are very practical and received positive responses (agree) that Canva-based interactive teaching materials can be used and are very effective in the learning process in the classroom. The data from the questionnaire indicates that the students' assessment criteria for Canva-based interactive teaching materials are positive, as shown by an average percentage score of 87%. This suggests that the students found the materials to be practical and effective in the learning process in the classroom.

Interactive instructional resources based on Canva satisfy assessment standards according to research and development findings. The fact that the language expert validation score is 3.30, the recapitulation score is 3.2, the media expert validation score is 3.23, the material validation score is 3.07, and all of these scores fall into the very valid group. This fact suggests that interactive teaching materials based on Canva satisfy validity requirements and can be used by educators and learners alike. It is anticipated that these interactive teaching resources based on Canva will be useful in the educational process, particularly as a substitute for traditional teaching materials on the topic of fiqh. These educational resources can also be expanded to include additional topics, demonstrating their adaptability to assist many facets of learning.

CONCLUSION

Interactive instructional resources based on Canva satisfy assessment standards according to research and development findings. The fact that the language expert validation score is 3.30, the recapitulation score is 3.2, the media expert validation score is 3.23, the material validation score is 3.07, and all of these scores fall into the very valid group. This fact suggests that interactive teaching materials based on Canva satisfy validity requirements and can be used by educators and learners alike. It is anticipated that these interactive teaching resources based on Canva will be useful in the educational process, particularly as a substitute for traditional teaching materials on the topic of

fiqh. These educational resources can also be expanded to include additional topics, demonstrating their adaptability to assist many facets of learning.

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