



The Impact of Using Interactive Whiteboards in Learning Fiqh at Elementary School

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ABSTRACT

Fiqh is one of the important subjects in elementary school that aims to equip students with knowledge and practical skills about worship and daily life in accordance with Islamic law. Effective and interesting fiqh learning is very important to foster students' love for religion and encourage them to practice Islamic teachings in their daily lives. The learning media used in fiqh learning is often less interesting and interactive, making students easily bored and not excited. To find out the extent of students' understanding of the material in the use of interactive and fun whiteboards and to find out how the influence of Interactive whiteboards in increasing a child's learning motivation using quantitative methods to find out the extent of students' understanding of the material in the use of interactive and fun whiteboards and to find out how the influence of Interactive whiteboards in increasing a child's learning motivation. And allows students to interact directly with learning materials, so they are more active and involved in the learning process. the results of this study indicate that the use of interactive whiteboards in fiqh learning can increase the learning interest of elementary school students. The results showed that students taught with interactive whiteboards were more interested in learning fiqh compared to students taught with traditional methods can help students understand the material more easily and enjoyably through interactive presentation of material, such as images, videos, animations, and simulations. Therefore, the use of interactive whiteboards can be one of the alternatives to improve student learning achievement in learning fiqh in elementary schools. However, it is important to note that teaching tools in the form of interactive whiteboards must be used accurately and creatively to achieve optimal results.

Keywords: *Fiqh, Interactive, Whiteboard*

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INTRODUCTION

Education is an effort to organize learning activities for students to develop their opportunities for the better (McDonagh et al., 2021). Education is very important in

developing the ability to think and behave, education is certainly a foundation that must be considered (Elahi et al., 2022). One of the goals of education is as a practice in worship. To realize the objectives of Islamic education, students are required to study fiqh education (Lu et al., 2021). Fiqh learning refers to the process of understanding and learning Islamic laws relating to religious teachings, worship and daily behavior. Fiqh is a branch of Islamic science that studies the procedures for worship and the rules that govern the daily lives of Muslims, based on sources of Islamic law such as the Qur'an, Hadith, ijtihad (legal reasoning), and Islamic principles. Fiqh learning includes understanding the principles of Islamic law, interpreting the texts of legal sources and applying them in the practical lives of Muslims (Wang et al., 2021). Fiqh learning is an important part of Islamic religious education and helps people understand and apply Islamic principles in their lives to achieve closeness to Allah SWT and realize a just and harmonious society.

Fiqh learning is a branch of Islamic science that studies Islamic law, Fiqh is a branch of Islamic science that studies worship, muamalah (social relations), morals, and Islamic customary rules in general. Fiqh seeks to understand and apply the principles of the Qur'an, Hadith (traditions of the Prophet Muhammad SAW), and the opinions of scholars in the daily lives of Muslims. The main purpose of Fiqh is to provide clear instructions to Muslims on how to live their lives in accordance with the teachings of Islam (Girometti et al., 2022). Fiqh can also be explained as the study of the procedures and laws relating to the Islamic religion. This includes everything from rituals of worship such as prayer and fasting to laws relating to marriage, inheritance, business and the like (A. Rahman, 2022). So in more general terms, fiqh is the study of the practical application of Islamic teachings in everyday life. Therefore, to support the learning of fiqh, there is a need for good learning media.

Learning media is anything that can be used to convey or distribute planned material from teachers to students so that students learn effectively and efficiently (Lee et al., 2021). Learning environment refers to all tools and devices used to facilitate learning. The purpose of learning media is to help students better understand and master learning materials (Aizawa et al., 2023). Learning media can be in the form of print media, audio-visual media, digital media or a combination of several media. The main purpose of using educational media is to increase students' understanding, analytical abilities and critical skills in processing educational materials (Akther & Nur, 2022). Learning media can be explained as tools or materials that support the learning process with the aim of increasing students' understanding, skills and knowledge (Elareshi et al., 2022). It can be anything from books and pictures to videos, games and digital programs. In essence, learning media helps teachers deliver material in a more interesting and interactive way and helps students better understand and master learning concepts....

One of the learning media that supports this fiqh material is an interactive whiteboard, which is a learning tool that combines digital technology with traditional whiteboards. It usually consists of a large whiteboard and touch-sensitive surfaces, or pens, as well as hardware and software connected to a computer (Shamsuddin et al., 2023). With an interactive whiteboard, teachers can write, draw, and display multimedia

content directly on the whiteboard just like a regular whiteboard (Hassan et al., 2022). However, interactive whiteboards also allow direct interaction with digital elements, such as displaying images, videos, diagrams or games, and allow users to write, edit or highlight text directly on the screen (Sugihara, 2021). This makes it a very useful tool in today's learning environment, as it allows for more dynamic interactions between teachers and students and offers different ways to convey information and capture students' attention (Gonzales & Gonzales, 2021). Interactive whiteboard is also a learning tool that combines modern technology with the traditional whiteboard. It consists of a flat screen where you can write or draw and is connected to a computer (Houzangbe et al., 2022). With a special pen or finger, teachers can write, draw or control apps and digital content directly on the screen. This allows for more interactive and dynamic teaching as teachers can easily display images, videos or multimedia presentations and combine these elements with real-time explanations on the whiteboard. Thus, interactive whiteboards bring traditional teaching to a more modern and engaging level.

The same research was made by Saefudin AM (2022) entitled *The Effectiveness of Power Point Learning Media on Student Learning Outcomes*. He stated "The use of appropriate teaching aids can improve student learning outcomes. One of the most commonly used teaching tools is Power Point. The purpose of this study was to analyze the effectiveness of Power Point tutorials on student learning outcomes using a qualitative literature approach. This research uses secondary data in the form of teaching journals to discuss the effectiveness of the Power Point teaching tool on student learning outcomes. The study shows that PowerPoint as an educational tool is effective in improving student learning outcomes." Meanwhile, Sri Wartini (2017) entitled *Utilization of whiteboard learning media, LCD, Projectors, and Language laboratories* said "Education is in a very rapid development process, this development must also be watched by every part of education. The focus of education is on learning. There are several factors that determine the key to successful learning. One of the supporting factors is the use of educational media. Media literacy owned by a teacher supports the success of learning which has an impact on improving education ". The difference between this research and the research above is that this research is about the use of interactive whiteboards in the use of fiqh learning, while the research conducted by previous researchers is the use of learning media other than interactive whiteboards.

The purpose of the research conducted by the researcher is for students to observe how interactive whiteboards can encourage students to participate in the fiqh learning process. This includes, for example, student participation in discussions, use of interactive tools, and interest in the subject matter. Then students will actively participate in learning. Students' active participation includes physical and mental presence in class. Physically active students engage in activities such as answering questions, discussing, or participating in group activities. Meanwhile, intellectual participation involves students' concentration and attention to the learning material. Learners will know the extent to which the use of interactive whiteboards can help students better understand fiqh concepts.

This might include students' ability to summarize, apply and explain legal principles in more detail.

RESEARCH METHOD

Research Design

To conduct this study, the researcher used a quantitative design by using Google form to distribute the survey online. Used by researchers to collect, analyze and interpret data (Yundong, 2021). The purpose of using this research design is to get results that match what has been done so far to get the latest innovations regarding the impact of using interactive whiteboards in elementary schools. This Google form is distributed by spreading the survey link. Before distributing the survey to teachers and students, researchers chose the nearest institution and easy internet access there (Semina & Semin, 2023). The results obtained from this survey are confirmed facts, after the data is input, a table will be displayed (De Jesus et al., 2023). The results of this data can help researchers to complete research on the use of interactive whiteboards in fiqh learning in elementary schools.

Research procedure

The first step in this study is to select educational institutions where researchers want to use interactive whiteboards in improving fiqh learning in elementary schools (Kerawalla et al., 2023). To conduct this research, researchers chose schools located in Nagari pulau punjung Kec.pulau punjung Kab.Dharmasraya. To fill in this Google form, researchers conducted a survey of educators, parents, the general public and even students who would later become educators. The results of these respondents will have a positive impact because they will reveal developments, what needs to be done, what can be taken forward. Respondents can complete this research in a short time, making it easier for researchers to identify problems in each question. The application of interactive whiteboards in elementary schools will greatly benefit students' learning in the future (Luo et al., 2023). This is one of the reasons why researchers pay close attention to the latest innovations in this field. Hence the distribution phase of this survey validates the latest project to understand the use of interactive whiteboards.

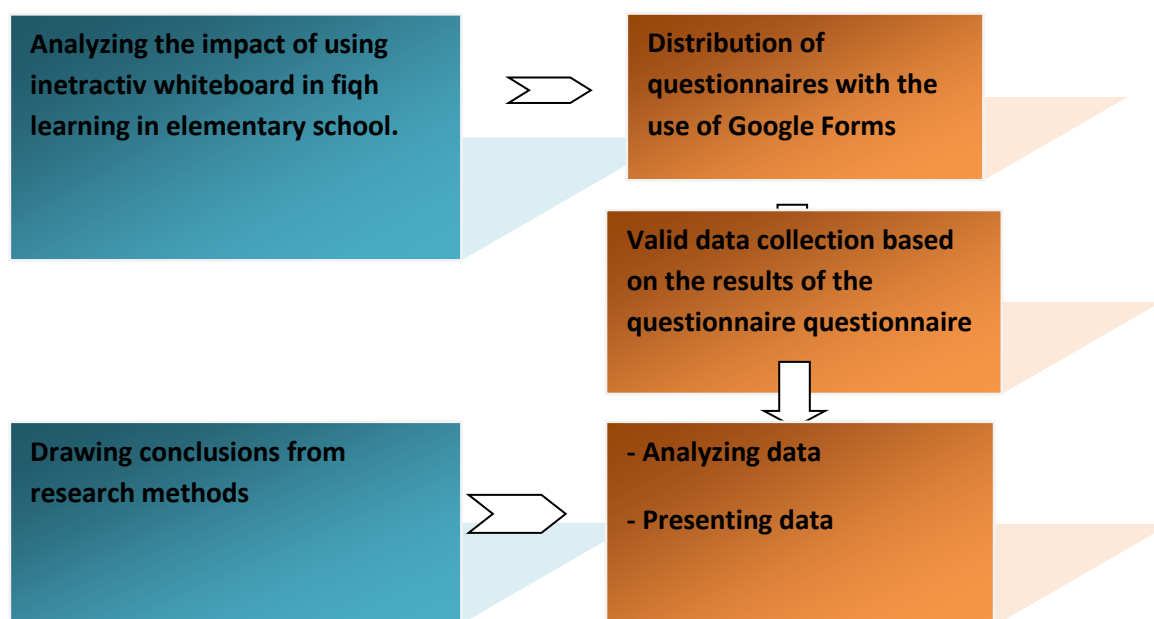
Research subjects and research ethics

The researcher selected schools located in Nagari pulau punjung, Kec. Pulau punjung Kab. Dharmasraya as the research target for this topic. In the research sample that the researcher chose from 100 students, 50 male and female students were selected. To complete this study, the researcher received answers from 50 students and teachers who participated in this study. The survey was conducted over a period of 3 months. By distributing this Google form via WhatsApp distributed to teachers and students and conducting question and answer interviews about the impact of using interactive whiteboards.

Data Collection Technique

The researcher used a data collection method that uses the Google form platform to collect information that can be analyzed and calculated procedurally (Trullemans & Valadez, 2022). The researcher asked 20 questions to check whether the statement was in accordance with the application of the impact of using the interactive whiteboard in fiqh learning at elementary school.

Figure 1
Flow of data collection and data analysis.



The figure above explains data collection and analysis. First, the researcher asked permission from the school concerned. The researcher then conducted interviews and received input from teachers to discuss the study. The survey was then distributed through a Google Form containing 20 very important questions: agree, strongly agree, disagree, strongly disagree. The researcher processed the data generated from the responses by downloading the data and then transferring it to excel.

RESULTS AND DISCUSSION

The impact of using interactive whiteboard in fiqh teaching in primary schools

The effect of using interactive whiteboards on fiqh teaching in primary schools shows positive results in several aspects, including improved academic performance, concept understanding, learning motivation and classroom management (Gao & Mu, 2021). The adoption of this technology can be one of the solutions to improve the quality of education in primary schools if supported by proper teacher training and resources. Students who used interactive whiteboards had significantly improved fiqh exam scores compared to students who used conventional methods (Kuo et al., 2019). Interactive and visual learning is more attractive to students and increases their learning motivation, Interactive whiteboards can be adapted to the needs of different types of students, including students with special needs (Jeffries et al., 2020). Thanks to quick access to a

variety of interactive resources and tools in the use of interactive whiteboards, making such learning more effective and efficient, educators and students can write and draw directly on the whiteboard with interactive pens or finger touches. Tools such as polls, quizzes and learning games can be used to actively engage students in the learning process. The use of interactive whiteboards in learning has been shown to deliver many positive outcomes, such as improved learning outcomes, student engagement and learning motivation. In addition, interactive whiteboards also help with classroom management, technical skill development and providing effective feedback to students (Chi et al., 2020). These results suggest that interactive whiteboards can be a very useful tool to improve the quality of teaching both in primary schools and elsewhere.

Fiqh morals lessons are an important part of Islamic education that teaches ethics and behavior according to Sharia Law. Fiqh itself is a science that studies the laws of the Quran, Hadith, Ijma (agreement of scholars) and Qiyas (analogy) (Erdoğan, 2020). Moral Lessons section of Fiqh: Akhlak Terhadap Allah: Teaching about monotheism, worshipping Allah and how to relate well with Allah. Morals towards fellow human beings: teaching ethics in muamalah (social and economic interaction), including honesty, justice and avoiding evil. Morals towards oneself : Encouraging students to care about cleanliness, health and balance of life here and there.

Percentage of the impact of using interactive whiteboards in learning fiqh in elementary school

The researcher distributed the survey to several high school teachers and received support from the general public. The results were then converted into a table where the total results were divided by the number of questionnaires distributed by the researcher to show the percentage of results more clearly. For each statement, the examiner gave a score for each category of the statement. When the score agrees, the score strongly agrees, points disagree, and points strongly disagree.

Based on the questions and the percentages obtained based on the answers from the respondents

No	QUESTION	S	SS	TS	STS
1	Interactive whiteboards can make learning more interesting for students	50%	50%	0%	0%
2	The use of interactive whiteboards can disrupt concentration for students in learning fiqh at school	40,5%	45,5%	14,3%	0%
3	Interactive whiteboards can strengthen fiqh understanding by displaying pictures and videos	78,6%	23,8%	0%	0%
4	Interactive whiteboards can be a distraction for students and reduce the time that should be spent learning.	35,7%	45,2%	19%	0%
5	The interactivity of using an interactive whiteboard can increase student engagement in	76,2%	19%	4,8%	2,4%

	the learning material.				
6	Not all students are interested in the interactive whiteboard so its effectiveness may be limited	47,6%	40,5%	16,7%	0%
7	Features of the interactive whiteboard such as touch screen and high resolution may encourage students to try harder.	81%	14,3%	9,5%	2,4%
8	Too much use of interactive whiteboards can lead to dependency and lack of engagement in real-world learning activities	50%	42,9%	7,1%	2,4%
9	Dengan papan tulis interaktif, siswa dapat belajar dengan ritme siswa sendiri, memungkinkan adaptasi terhadap gaya belajar individu	78,6%	19%	4,8%	2,4%
10	Interactive whiteboards may not be able to cover all aspects of complex fiqh learning	59,5%	33,3%	9,5%	0%
11	Interactive whiteboards provide instant feedback, allowing students to correct mistakes quickly	66,7%	31%	2,4%	0%
12	Errors in using the interactive whiteboard can frustrate students and reduce their motivation to learn	50%	38,1%	9,5%	2,4%
13	Through the interactive whiteboard, students can experience real-life situations that allow students to develop social and moral skills	76,2%	16,7%	4,8%	2,4%
14	Not all uses of interactive whiteboards are well designed and can provide quality learning experiences	64,3%	31%	4,8%	0%
15	Interactive whiteboards can stimulate students' creativity in completing assigned tasks	71,4%	26,2%	2,4%	0%
16	There is a potential that students only learn to get the highest result in the use of interactive whiteboards rather than deeply understanding fiqh concepts	54,8%	28,6%	14,3%	2,4%
17	With the interactive whiteboard, students can practice the values of aqidah akhlak directly from the material they understand	69%	31%	2,4%	0%
18	Reliance on the interactive whiteboard can reduce students' ability to think critically and analyze	52,4%	35,7%	11,9%	2,4%
19	Through the interactive whiteboard, students can learn more casually and without having to take more notes.	71,4%	21,4%	7,1%	0%
20	In this use of the interactive whiteboard, it may not be able to teach the real values of justice,	57,1%	33,3%	9,5%	2,4%

	empathy, and morality in the context of daily life.				
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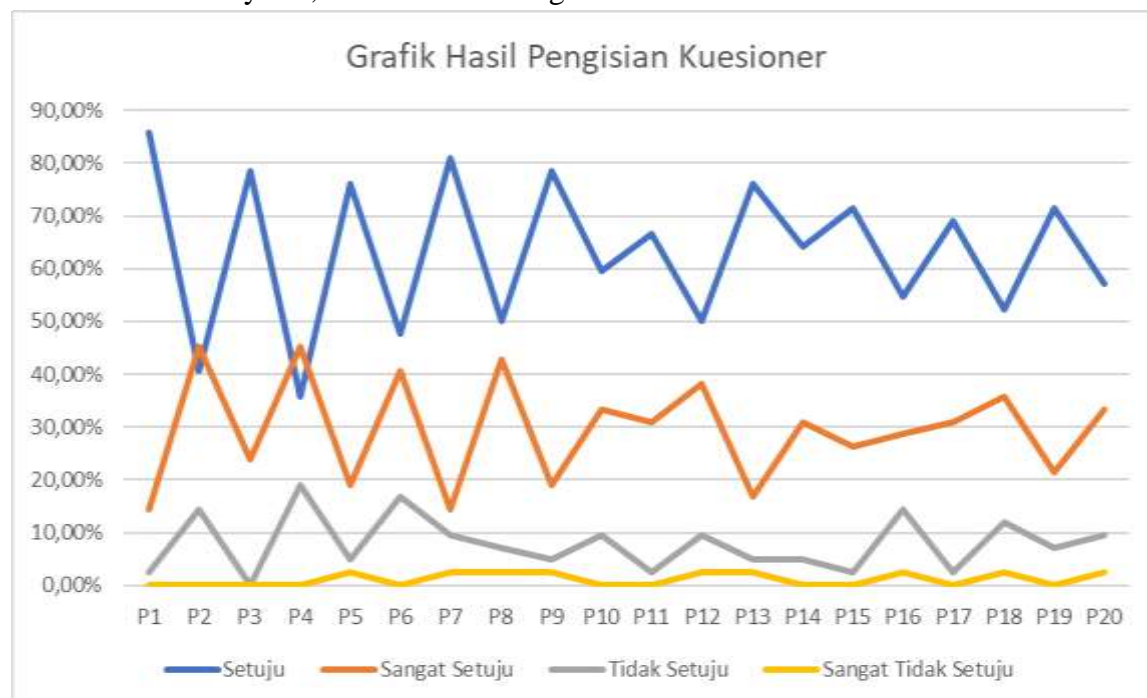
The table above contains descriptive questions from several research questionnaires, from several schools located in Nagari Pulau punjung, Kec.Pulau punjung, Kab. Dharmasraya. The opinions obtained from the survey will help researchers identify research on the effect of interactive whiteboards on increasing motivation to learn fiqh subjects in elementary schools. the questions tested totaled 20 questions regarding the impact of using interactive whiteboards in elementary schools, and teaching models using interactive whiteboards. on the question Interactive whiteboards can make learning more interesting for students obtained 50% agree. the question about Interactive whiteboards can strengthen fiqh understanding by displaying images and videos, obtained 78.6% agree. The question of interactivity in the use of interactive whiteboards can increase student involvement in learning materials, obtained 76.2% agree.

The question about Features in using the interactive whiteboard such as: touch screen and high resolution can encourage students to try harder, received 81% agreement. The question about With the interactive whiteboard, students can learn at their own pace, allowing adaptation to individual learning styles, received 78.6% agreement. The question about Interactive whiteboard provides instant feedback, allowing students to correct mistakes quickly gained 66.7% agreement. The question about Through this interactive whiteboard, students can experience real-life situations that allow students to develop social and moral skills gained 76.2% agreement. The question about the interactive whiteboard can stimulate students' creativity in completing the assigned tasks obtained 71.4% agreed. The question about with the interactive whiteboard, students can practice the values of aqidah akhlak directly from the material they understand obtained 69% agreed.

The question about Through the interactive whiteboard, students can learn more relaxed and without having to take more notes, obtained 71.4% agree. The question about he use of interactive whiteboards can disrupt concentration for students in learning fiqh at school obtained 40.5% agree. The question about the interactive whiteboard can be a distraction for students and reduce the time that should be spent on learning 35.7% agreed. The question about Not all students are interested in the interactive whiteboard so its effectiveness may be limited gained 47.6% agree. The question about Too much use of the interactive whiteboard may lead to dependency and lack of engagement in real-world learning activities obtained 50% agreement. Question about Interactive whiteboards may not be able to cover all aspects of complex fiqh learning, received 59.5% agree.

The question about Mistakes in using the interactive whiteboard can frustrate students and reduce their motivation to learn, received 50% agreement. The question about Not all uses of interactive whiteboards are well designed and can provide a quality learning experience, received 64.3% agreement. The question about There is a potential that students only learn to get the highest result in the use of interactive whiteboard rather than understanding the fiqh concept deeply, obtained 54.8% agree. The question about

Reliance on the interactive whiteboard can reduce students' ability to think critically and analyse, obtained 52.4% agree. The question about in the use of this interactive whiteboard, it may not be able to teach the real values of justice, empathy, and morality in the context of daily life, obtained 57.1% agree.



The graph above shows the results of research claims regarding the effect of educational games on the subject of high school moral aqidah as follows. The statement was responded to by 50 teachers and students. In this study, the researcher asked 20 questions to teachers and students and asked for answers and tested the answers to the statements. The highest research result showed 85.7% for the same category (S). And the highest score was 45.2% in the strongly agree (SS) category.

And the third highest result is 19% disagree (TS) in the fiqh category. This can be explained as follows: the contract category obtained the highest representation of 85.7%, making this survey the highest category. While the lowest percentage that agreed was 35.7%. Other research results disagree with the highest percentage of 45.2 per cent.

And the percentage of the lowest disagreeing class is 14.3 per cent. The results for the third category that strongly shows the third percentile, namely. strongly agree, the highest is 16.7% and the lowest is 2.4%. And in the last score category, the highest percentage of strongly disagree category was 2.4% while the lowest score was 0%.

Interactive whiteboards in learning are educational technology tools that allow educators and students to interact dynamically and interactively with learning materials. These whiteboards are usually large touch screens connected to computers and projectors, allowing writing, drawing and digital manipulation directly on the screen. Educators and students can interact directly with the subject matter, for example by drawing, writing or manipulating objects on the screen. This makes learning more engaging and dynamic, interactive whiteboards are often connected to the Internet, allowing quick access to

additional resources such as videos, Interactive whiteboards also support distance learning, where displayed materials can be shared in real time to students who are not in the classroom. Thus, interactive whiteboards not only replace traditional whiteboards, but also improve the overall teaching and learning process.

The use of interactive whiteboards in fiqh education can increase efficiency and student participation in the teaching and learning process. The following are the benefits of interactive whiteboards in fiqh learning: 1. Interactive whiteboards allow the use of images, videos and animations that make fiqh material more interesting and easier for students, 2. Abstract fiqh concepts such as fiqh laws can be visualised more clearly so as to help students better understand the material.

An example of the use of interactive whiteboards in fiqh learning. In a lesson on prayer, the educator can show a video of the correct prayer procedure and then use an interactive whiteboard to illustrate the correct position and movement of the prayer, then the students can immediately try to correct it. Then learning fiqh laws in daily life, such as simulating real situations where students have to apply fiqh laws, such as Islamic buying and selling transactions. The steps and related laws can be recorded on the interactive whiteboard.

DISCUSSION

The Impact of Using Interactive Whiteboards in Learning Fiqh in Primary Schools

The Impact of Using Interactive Whiteboards

The use of interactive whiteboards in educational and business environments has various positive and negative impacts, the following positive impacts are: (1) Increases participation and interaction. With the help of interactive whiteboards, students and trainees can better participate in learning or presentations. They can directly interact with the material using touch or digital pen, so learning becomes more dynamic and interesting (Chen et al., 2020). (2) Facilitate collaborative learning. The tool allows multiple users to write or draw on the whiteboard simultaneously, thus encouraging more effective collaboration and group discussion. (3) Visual enhancement of materials. Capable of displaying images, videos and diagrams, interactive whiteboards help visualise complex concepts, which can improve understanding and retention of information (Cianciolo et al., 2017). (4) Integration with other technologies. Interactive whiteboards can be connected to other devices such as computers, tablets, and the Internet, allowing direct access to online resources and educational software that enrich the material presented. (5) Ease of use. Features such as record keeping, printing, and sharing make teaching more effective. Prepared materials can be saved and reused, saving the teacher or presenter preparation time (Martín et al., 2019). Overall, the use of interactive whiteboards in teaching can be very beneficial if used wisely and well within the curriculum and teaching strategies (Tel et al., 2020). However, emerging challenges and potential problems must also be managed well to achieve the maximum positive impact. In addition, it also has an impact on learning methods such as: (1) Formative assessment. Educators can use interactive whiteboards to conduct real-time formative assessment such as interactive quizzes that instantly display results and feedback to students. (2) Differentiated teaching. This

technology allows educators to customise subject matter to meet the individual needs of students, giving more attention to those who need extra help or challenging advanced students (Stockless et al., 2018).

Apart from the positive impacts listed, there are also negative impacts that occur in the use of interactive whiteboards. Interactive whiteboards have many advantages such as increasing student interaction and participation in the teaching and learning process (Yong, E. Yong, 2020). However, there are some negative impacts that must be considered such as: (1) Technology dependence. The use of interactive whiteboards can increase dependence on technology. In the event of a malfunction or technical problem, the teaching and learning process may come to a halt. (2) High cost. The initial investment to acquire an interactive whiteboard, as well as the cost of maintenance and software updates, can be very expensive. This can be a burden for schools or educational institutions that have limited budgets (Vouros et al., 2023). (3) Health issues. Excessive use of interactive whiteboards can lead to health problems, such as eye strain and posture problems, as the screen is often viewed for long periods of time. (4) Educator skill limitations. Not all teachers are comfortable enough and know how to use these techniques effectively. This may result in a decline in the quality of teaching if teachers are not adequately trained (Shaurya et al., 2020). (5) Disruption in the classroom. Interactive whiteboards can be distracting if overused or inappropriate. Students may be more interested in the technical features than the material being taught. (6) Inequality of access. Not all students have equal access to this technology, especially in marginalised areas or schools with limited resources. This may widen the gap between students in different regions (Sun et al., 2022). (7) Resilience to technological change. Technology continues to evolve rapidly, so interactive whiteboard hardware and software may become obsolete in a short period of time, requiring additional investment for upgrades.

While there are many advantages to using interactive whiteboards, it is important to address and mitigate these negative impacts in order to optimally utilise this technology in the learning process. Given these different perspectives, it is important for schools and educational institutions to develop thoughtful strategies for integrating interactive whiteboards. Teacher training, clear instructions for use and regular evaluation of the impact of technology use are important steps to maximise benefits and minimise negative impacts (Zhou & Lewis, 2021).

Interactive Whiteboard in Fiqh Learning

Interactive whiteboards can be an effective tool in learning fiqh, a branch of knowledge related to Islamic law and worship (Khanal, 2021). The following are the benefits of interactive whiteboards in learning fiqh: (1) Interactive whiteboards help visualise complex fiqh concepts through diagrams, charts and concept maps. For example, interactive charts and graphs can be used to explain inheritance rules more easily. (2) Students can actively participate in learning by writing, drawing or manipulating objects on the whiteboard. This increases their engagement and understanding of the material (Stix & Hrbek, 2023). (3) Multimedia resources. Interactive whiteboards allow the

integration of video, audio and images that can enrich fiqh learning. For example, a video on how to pray or perform ablutions can be played back for better understanding. (4) Collaborative learning. Interactive features allow students to work together in groups to complete tasks or projects. They can discuss and share ideas directly on the whiteboard, which supports collaborative learning (Jeffries et al., 2020). (5) Access online resources. With an internet connection, interactive whiteboards can access online resources such as e-books, journals, and fiqh articles. In this way, teachers can offer more flexible and up-to-date teaching materials.

In learning and understanding fiqh learning using the interactive whiteboard there are effects that occur to students. That is, increasing student engagement can make learning more interesting and interactive for students (Strbo, 2021). Features such as animations, videos and simulations can help students better understand complex fiqh concepts. (1) Improving visualisation, it can help teachers visualise abstract fiqh concepts. This can help students better understand these concepts and their application in the real world. (2) Increases motivation, helps increase students' motivation in learning fiqh. Students can be more motivated to learn if they feel engaged and interested in the class. (3) Improve accessibility. can facilitate fiqh learning for students with different learning needs. For example, an interactive whiteboard can be used to provide translation, subtitles or voice over text. (4) Improve comprehension. It can help improve students' understanding of fiqh concepts (Fox & O'Maley, 2023). This is because the interactive whiteboard can be used to present information in a more interesting and understandable way. (5) Support independent learning. used to support students' independent learning. Students can use the interactive whiteboard for additional learning materials such as exercises and quizzes.

It is important to note that the interactive whiteboard is just a tool and not a substitute for a good teacher. In addition to the positive impacts mentioned above, infocus also has some potential negative aspects (Psychological Institute of the Russian Academy of Education et al., 2021). It is important for teachers to be aware of these potential negative aspects and use the intelligence carefully to avoid its negative impact. Overall, infocus has a lot of potential to enhance fiqh learning. If used correctly, infocus can help teachers create a more engaging, interactive and effective learning environment.

CONCLUSION

The use of interactive whiteboards in fiqh learning can improve the quality of learning through interaction, better visualisation of concepts, collaboration, ease of access, increased knowledge and more effective evaluation, and the use of interactive whiteboards in fiqh learning not only improves learning effectiveness, but also expands learning opportunities and student skill development. Then using this technology in learning helps students develop essential technological skills in today's increasingly networked world. This is expected to strengthen the understanding of morals and good character in learners. Teachers are encouraged to use media more creatively and innovatively, both in teaching materials and in assessment, to increase students' interest and engagement in learning so as to encourage students to engage in learning.

REFERENCES

- A. Rahman, M. (2022). The Discursive Construction of Strategies for Implementing Anti-Corruption Education at State Islamic Higher Educational Institutions. *Jurnal Ilmiah Peuradeun*, 10(3), 555. <https://doi.org/10.26811/peuradeun.v10i3.737>
- Aizawa, I., Rose, H., Thompson, G., & Curle, S. (2023). Beyond the threshold: Exploring English language proficiency, linguistic challenges, and academic language skills of Japanese students in an English medium instruction programme. *Language Teaching Research*, 27(4), 837–861. <https://doi.org/10.1177/1362168820965510>
- Akther, T., & Nur, T. (2022). A model of factors influencing COVID-19 vaccine acceptance: A synthesis of the theory of reasoned action, conspiracy theory belief, awareness, perceived usefulness, and perceived ease of use. *PLOS ONE*, 17(1), e0261869. <https://doi.org/10.1371/journal.pone.0261869>
- Chen, I.-H., Gamble, J. H., Lee, Z.-H., & Fu, Q.-L. (2020). Formative assessment with interactive whiteboards: A one-year longitudinal study of primary students' mathematical performance. *Computers & Education*, 150, 103833. <https://doi.org/10.1016/j.compedu.2020.103833>
- Chi, H.-N., Lee, P.-J., & Lo, C.-L. (2020). Visual Tracking Cleaner—A Robot Implements on the Whiteboard. *2020 International Conference on System Science and Engineering (ICSSE)*, 1–4. <https://doi.org/10.1109/ICSSE50014.2020.9219288>
- Cianciolo, A. T., Klamen, D. L., Beason, A. M., & Neumeister, E. L. (2017). ASPIRE-ing to Excellence at SIUSOM. *MedEdPublish*, 6, 82. <https://doi.org/10.15694/mep.2017.000082>
- De Jesus, N. M., Castro, E. T., & Buyan, C. A. (2023). Acceptance Analysis of IWB Systems in Education using UTAUT2 Model: The Moderating Role of Perceived Technological Innovations. *2023 IEEE International Conference on Automatic Control and Intelligent Systems (I2CACIS)*, 269–274. <https://doi.org/10.1109/I2CACIS57635.2023.10193662>
- Elahi, E., Khalid, Z., & Zhang, Z. (2022). Understanding farmers' intention and willingness to install renewable energy technology: A solution to reduce the environmental emissions of agriculture. *Applied Energy*, 309, 118459. <https://doi.org/10.1016/j.apenergy.2021.118459>
- Elareshi, M., Habes, M., Youssef, E., Salloum, S. A., Alfaisal, R., & Ziani, A. (2022). SEM-ANN-based approach to understanding students' academic-performance adoption of YouTube for learning during Covid. *Heliyon*, 8(4), e09236. <https://doi.org/10.1016/j.heliyon.2022.e09236>
- Erdoğan, İ. (2020). İngiltere'de İslam Eğitimi: Fırsatlar ve Tehditler. *Cumhuriyet İlahiyat Dergisi*, 24(2), 687–714. <https://doi.org/10.18505/cuid.703185>
- Fox, J. G., & O'Maley, P. (2023). 'If you don't have a relationship with your tutor...you don't care about the subject': Revisiting the role of the teacher - getting off the
-

-
- ‘sideline’ and ‘meddling in the middle.’ *Social Work Education*, 42(6), 809–830. <https://doi.org/10.1080/02615479.2021.1988918>
- Gao, X., & Mu, Y. (2021). Interactive multimedia Network teaching evaluation based on object segmentation algorithm. *2021 IEEE 4th International Conference on Information Systems and Computer Aided Education (ICISCAE)*, 551–553. <https://doi.org/10.1109/ICISCAE52414.2021.9590755>
- Girometti, N., Byrne, R., Bracchi, M., Heskin, J., McOwan, A., Tittle, V., Gedela, K., Scott, C., Patel, S., Gohil, J., Nugent, D., Suchak, T., Dickinson, M., Feeney, M., Mora-Peris, B., Stegmann, K., Plaha, K., Davies, G., Moore, L. S. P., ... Whitlock, G. (2022). Demographic and clinical characteristics of confirmed human monkeypox virus cases in individuals attending a sexual health centre in London, UK: An observational analysis. *The Lancet Infectious Diseases*, 22(9), 1321–1328. [https://doi.org/10.1016/S1473-3099\(22\)00411-X](https://doi.org/10.1016/S1473-3099(22)00411-X)
- Gonzales, G. G., & Gonzales, R. R. (2021). Introducing IWB to preservice mathematics teachers: An evaluation using the TPACK framework. *Cypriot Journal of Educational Sciences*, 16(2), 436–450. <https://doi.org/10.18844/cjes.v16i2.5619>
- Hassan, S. S., Nausheen, F., Scali, F., Mohsin, H., & Thomann, C. (2022). A constructivist approach to teach neuroanatomy lab: Students’ perceptions of an active learning environment. *Scottish Medical Journal*, 67(3), 80–86. <https://doi.org/10.1177/00369330221107101>
- Houzangbe, S., Masson, D., Fleury, S., Gómez Jáuregui, D. A., Legardeur, J., Richir, S., & Couture, N. (2022). Is virtual reality the solution? A comparison between 3D and 2D creative sketching tools in the early design process. *Frontiers in Virtual Reality*, 3, 958223. <https://doi.org/10.3389/frvir.2022.958223>
- Jeffries, D., Mohan, R., & Norris, C. (2020). dsDraw: Programmable Animations and Animated Programs. *Proceedings of the 2020 ACM Southeast Conference*, 39–46. <https://doi.org/10.1145/3374135.3385292>
- Kerawalla, L., Chudasama, M., & Messer, D. J. (2023). “We can make our words powerful”: Students’ perspectives about using Talk Factory, a classroom technology to support exploratory talk. *English in Education*, 57(1), 28–44. <https://doi.org/10.1080/04250494.2022.2135431>
- Khanal, A. (2021). A Potential Package for Organic Chemistry Remote Teaching. *Advanced Journal of Chemistry-Section A*, 4(2). <https://doi.org/10.22034/ajca.2021.272208.1239>
- Kuo, C.-W., Hung, C.-L., Liao, Y.-Y., Tsai, L.-H., Tzeng, B.-S., Lu, S.-P., Liu, Y.-J., Lin, C.-H., Chiang, M.-F., Lin, Y.-C., & Yu, J.-S. (2019). 44-1: Photo Sensors Embedded within TFT-LCD with Three Primary Colors Optical Touch Function. *SID Symposium Digest of Technical Papers*, 50(1), 600–603. <https://doi.org/10.1002/sdtp.12992>
- Lee, S. J., Ward, K. P., Chang, O. D., & Downing, K. M. (2021). Parenting activities and the transition to home-based education during the COVID-19 pandemic. *Children*
-

-
- and Youth Services Review, 122, 105585.
<https://doi.org/10.1016/j.chilyouth.2020.105585>
- Lu, L., Meng, X., Mao, Z., & Karniadakis, G. E. (2021). DeepXDE: A Deep Learning Library for Solving Differential Equations. *SIAM Review*, 63(1), 208–228.
<https://doi.org/10.1137/19M1274067>
- Luo, Z., Tan, X., He, M., & Wu, X. (2023). The seewo interactive whiteboard (IWB) for ESL teaching: How useful it is? *Heliyon*, 9(10), e20424.
<https://doi.org/10.1016/j.heliyon.2023.e20424>
- Martín, E., Roldán-Alvarez, D., Haya, P. A., Fernández-Gaullés, C., Guzmán, C., & Quintanar, H. (2019). Impact of using interactive devices in Spanish early childhood education public schools. *Journal of Computer Assisted Learning*, 35(1), 1–12. <https://doi.org/10.1111/jcal.12305>
- Psychological Institute of the Russian Academy of Education, Gut, Y. N., Kabardov, M. K., Psychological Institute of the Russian Academy of Education, Kosheleva, Y. P., Moscow State Linguistic University, Moskvitina, O. A., & Psychological Institute of the Russian Academy of Education. (2021). Cognitive functions and personality traits of students in different educational environments. *Perspectives of Science and Education*, 53(5), 323–333. <https://doi.org/10.32744/pse.2021.5.22>
- Semina, V., & Semin, G. (2023). Application of Modern Digital Technologies in Education. *2023 3rd International Conference on Technology Enhanced Learning in Higher Education (TELE)*, 163–165.
<https://doi.org/10.1109/TELE58910.2023.10184328>
- Shamsuddin, S. A., Woon, C. K., & Hadie, S. N. H. (2023). Feedback from medical student on an interactive online anatomy practical using the Google Jamboard platform. *Journal of Taibah University Medical Sciences*, 18(2), 234–243.
<https://doi.org/10.1016/j.jtumed.2022.08.007>
- Shaurya, Som, S., & Rana, A. (2020). IoT Based Educational Model for Better Teaching-Learning Environment. *2020 8th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO)*, 824–828. <https://doi.org/10.1109/ICRITO48877.2020.9197852>
- Stix, A., & Hrbek, F. (2023). *Walking Through History: Constitution & the New Government, Westward Expansion, and Civil War* (1st ed.). Routledge.
<https://doi.org/10.4324/9781003259022>
- Strbo, Ing. M. (2021). Modern Information and Communication Technologies as a Part of Teaching Process During Pandemy. *2021 Universitas Riau International Conference on Education Technology (URICET)*, 71–76.
<https://doi.org/10.1109/URICET53378.2021.9865883>
- Sugihara, T. (2021). Analysis of university students' awareness and opinions on the SDGs-From interactive lessons using the online whiteboard (Miro). *2021 10th International Congress on Advanced Applied Informatics (IIAI-AAI)*, 207–212.
<https://doi.org/10.1109/IIAI-AAI53430.2021.00037>
-

-
- Sun, H., Xie, Y., & Lavonen, J. (2022). Effects of the use of ICT in schools on students' science higher-order thinking skills: Comparative study of China and Finland. *Research in Science & Technological Education*, 1–18. <https://doi.org/10.1080/02635143.2022.2116421>
- Tel, A., Bortuzzo, F., Pascolo, P., Costa, F., Sembronio, S., Bresadola, V., Baldi, D., & Robiony, M. (2020). Maxillofacial Surgery 5.0: A new paradigm in telemedicine for distance surgery, remote assistance, and webinars. *Minerva Stomatologica*, 69(4). <https://doi.org/10.23736/S0026-4970.20.04274-0>
- Trullemans, S., & Valadez, J. I. (2022). Collaborative Sketching with Tangibles: Let's Stop Soulless Meetings. *CHI Conference on Human Factors in Computing Systems Extended Abstracts*, 1–3. <https://doi.org/10.1145/3491101.3503759>
- Vouros, S., Diamantidou, D.-E., & Kyprianidis, K. (2023). Teaching Optimization of Thermal and Fluid Machinery in the Post-Pandemic Era. *Volume 6: Education; Electric Power; Energy Storage; Fans and Blowers*, V006T07A003. <https://doi.org/10.1115/GT2023-103869>
- Wang, Y., Guo, C., Du, C., Chen, X., Jia, L., Guo, X., Chen, R., Zhang, M., Chen, Z., Wang, H., ,The Institute of Geology, Chinese Academy of Geological Sciences, Beijing 100037, China, ,China University of Geosciences (Beijing), Beijing 100083, China, ,Development and Research Center of China Geological Survey, Beijing 100037, China, ,Shanghai Jiaotong University, Shanghai 200030, China, ,Xi'an Jiaotong University, Xi'an 710049, China, & ,China Institute of Water Resources and Hydropower Research, Beijing 100038, China. (2021). Carbon peak and carbon neutrality in China: Goals, implementation path, and prospects. *China Geology*, 4(0), 1–27. <https://doi.org/10.31035/cg2021083>
- Yong, E. Yong, E. (2020). Understanding How eLearning Tools Influence Self-Efficacy and Instructor Connectedness: A Sunway College Preliminary Study. *2020 The 4th International Conference on Education and Multimedia Technology*, 90–94. <https://doi.org/10.1145/3416797.3416802>
- Yundong, D. (2021). Design and Implementation of Human Computer Interaction Platform for Online Ideological and Political Education under The Background of Mobile Learning. *2021 International Conference on Intelligent Transportation, Big Data & Smart City (ICITBS)*, 71–74. <https://doi.org/10.1109/ICITBS53129.2021.00026>

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