



Integrating Immersive Learning and Interactive Media in Teaching Islamic Cultural History: A Qualitative Case Study

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ABSTRACT

Purpose – This exploratory qualitative case study describes the initial implementation of technology-based learning media (Wordwall, video, and PowerPoint) within Islamic Cultural History (ICH) learning at MTsN 2 Deli Serdang.

Methods – The study involved five informants: one (ICH) teacher, a principal as a contextual informant, and three eighth-grade students. Data were collected naturally through eight classroom observation sessions, documentation studies, and five in-depth interviews. To comply with ethical standards for protecting minors, all student identities were anonymized, and visual documentation was digitally blurred.

Findings – Based on observations and interviews, integrating interactive media reduced student passivity common in conventional lecture methods. Visual quizzes and videos helped direct student focus and facilitated historical recollection. However, given the small qualitative sample size, improvements in students' motivation, critical thinking, and social skills remained situational and did not reach full theoretical saturation. Practical implementation was also constrained by limited lesson time, infocus shortages, and the challenges of large crowd management due to noise during gamified quizzes.

Research implications – This study offers context-specific qualitative insights into how interactive tools stimulate classroom engagement in madrasah settings.

Originality – The findings reject macro-level generalizations or broad TPACK and self-determination claims, illustrating instead the practical challenges of pedagogical adaptation within a limited digital infrastructure ecosystem.

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INTRODUCTION

21st-century education demands an active learning process oriented toward critical, creative, collaborative, and reflective thinking skills. The world of education is now required not only to adapt to technological advances but also to innovate in the pedagogical approaches used. One relevant innovative approach is Deep Learning, a method that emphasizes in-depth conceptual understanding, higher-order thinking, and contextualizing knowledge in real-life situations [1]. This approach is crucial for Islamic Cultural History courses, ensuring that students not only learn from historical facts but also learn from them and embody these exemplary values in their lives. In the national context, this approach aligns with the official policy of the Indonesian Ministry of Primary and Secondary Education (Kemendikdasmen) which conceptualizes Deep Learning through three main principles: mindful, meaningful, and joyful, which are realized through a cycle of learning experiences consisting of understanding, application, and reflection. Alya & Santiani (2025) stated that the Deep Learning approach, as pioneered by Abdul Mu'ti, prioritizes mindful, meaningful, and joyful learning experiences [2].

However, in reality, initial observations at MTsN 2 Deli Serdang show that the learning of Islamic Cultural History (ICH) is still dominated by conventional lecture methods. As a result, learning fails to foster a learning awareness (mindful), limited student involvement, a monotonous learning atmosphere, and low student participation and motivation. Islamic education, based on the teachings of the Qur'an and Hadith, has in principle provided sufficient motivation for its people to progress and be able to become caliphs on earth [3]. This learning concept that emphasizes in-depth understanding is basically in line with the values of Islamic education that encourage humans to understand, appreciate, and apply knowledge, as reflected in the word of Allah SWT in Surah Al-Nahl verse 125. This learning concept that emphasizes in-depth understanding is basically in line with the values of Islamic education that encourage humans to understand, appreciate, and apply knowledge, as reflected in the word of Allah SWT in Surah Al-Nahl verse 125

أَدْخِلْ إِلَى سَبِيلِ رَبِّكَ بِالْحُكْمَةِ وَالْمَوْعِظَةِ الْحَسَنَةِ وَجَادِلْهُمْ بِالَّتِي هِيَ أَحْسَنُ إِنَّ رَبَّكَ هُوَ أَعْلَمُ بِمَنْ ضَلَّ عَنْ سَبِيلِهِ وَهُوَ أَعْلَمُ بِالْمُهْتَدِينَ ﴿١٢٥﴾

Meaning: "Call (humans) to the path of your Lord with wisdom and good teachings, and argue with them in a better way. Indeed, your Lord is All-Knowing, He who strays from His path and All-Knowing too, He who is guided" [4].

According to the Tafsir Tahlili of the Ministry of Religious Affairs of the Republic of Indonesia, the verse contains a message that the educational process must be carried out wisely, using appropriate methods, and paying attention to the conditions of students so that learning takes place effectively and meaningfully. This principle shows that learning must be able to build deep understanding and provide space for students to participate actively. In addition, the hadith narrated by Imam Muslim about the procedures for prayer (HR. Muslim No. 579) shows that knowledge is easier to understand if presented concretely, gradually, and with clear explanations. According to Imam an-Nawawi (2011) in the book Syarah Sahih Muslim, this principle of clear and systematic delivery, in a modern context, can be realized through the use of interactive learning media that present information in visual, audiovisual, and digital formats, so that learning materials are easier for students to understand [5]. Based on this background, Deep Learning is considered an approach that emphasizes conceptual understanding and critical application of knowledge [6]. Research by Nur et al. (2025) revealed that deep learning has been applied effectively in various subjects and levels of education, improving conceptual understanding, learning motivation, and student character [7].

This research is based on the concept of deep learning from Marton & Säljö (1976) [8] and the global competency framework (6C) from McEachen & Kane (2018) [9]. To sharpen the contextual analysis in Indonesia, this study is guided by the Ministry of Primary and Secondary Education's Deep Learning Academic Framework as the main analytical framework that systematically divides students' cognitive and affective processes into the dimensions of mindful (focus and full awareness), meaningful (connectedness to life's realities), and joyful (positive emotional engagement), which are translated into learning experience indicators: understanding, application, and reflection. Students' knowledge construction processes in this framework are actively reviewed through Piaget's and

Vygotsky's Constructivism Theory, while David Ausubel's Meaningful Learning Theory is used to analyze how new information is linked to students' cognitive structures. Teachers' mastery of digital technology is guided by the Technological Pedagogical Content Knowledge (TPACK) framework from Mishra & Koehler (2006) [10], while the dimensions of student motivation are examined through the Self-Determination Theory (SDT) of Deci & Ryan (2000) [11].

Previous empirical studies have shown that Islamic education learning in madrasas is often dominated by lectures and memorization [12], [13]. To address this challenge, the use of technology-based media has proven effective in increasing student motivation [14]. Educators, particularly classroom teachers, should focus on teaching students how to use these tools effectively and ethically, as part of a broader teaching approach [15]. On the other hand, the implementation of Deep Learning has been proven to increase the internalization of Islamic values [16]. The use of certain media such as YouTube has been shown to increase participation in Islamic studies subjects [17], while interactive presentations using Prezi can trigger students' interest in learning [18]. Across these studies, teacher preparedness has been identified as a key factor in successful implementation in the field.

Although much literature demonstrates the positive impact of the Deep Learning approach and the use of interactive media, most previous studies have examined these two aspects separately. Research on Deep Learning generally focuses only on the macro level of Islamic Religious Education (PAI) in general. On the other hand, research on interactive media in Islamic subjects tends to only test the effectiveness of one type of media without integrating it with a comprehensive Deep Learning pedagogical framework. The most glaring theoretical and practical gap is the lack of systematic analysis that maps the use of digital multimedia to the principles of mindful, meaningful, and enjoyable learning and the cognitive experiences of understanding, applying, and reflecting as mandated by the current national curriculum policy. Most local studies are still trapped in using visual media only to test factual recall (such as short memory quizzes), rather than as a supporting tool for critical analysis and reflection on historical values. Furthermore, specific studies that fully integrate all dimensions of the Ministry of Primary and Secondary Education's Deep Learning model at the Madrasah Tsanawiyah (SMP) level in North Sumatra are still very limited.

The integration of the Deep Learning approach with interactive learning media such as Wordwall, learning videos, and interactive PowerPoint presentations is crucial to examine using the policy lens of the Ministry of Primary and Secondary Education. Learning Islamic Cultural History (ICH) requires more than just attractive visualizations or mere entertainment in the classroom; this subject requires media design that can build attentive focus, help students connect the material contextually with real life (meaningful), and create a pleasant emotional learning atmosphere (joyful). Through this interactive media, students are guided gradually through a complete learning experience: not stopping at the level of understanding historical concepts, but being able to apply the essence of exemplary values, to reflect on the relevance of that history in their current lives. Therefore, this study offers novelty by testing the implementation of interactive multimedia analyzed directly using the official Indonesian Deep Learning dimensions in the madrasah environment, while also mapping the supporting and inhibiting factors in the field.

Based on the national problems and framework, this study aims to achieve three main objectives: Analyze the initial conditions of Islamic Cultural History (ICH) learning before the implementation of the Deep Learning approach through interactive learning media at MTsN 2 Deli Serdang in terms of students' awareness (mindful), meaningfulness, and joy (joyful) of learning. Describe the process of implementing the Deep Learning approach through the use of Wordwall, learning videos, and interactive PowerPoint in the Islamic Cultural History (ICH) subject at the school, by systematically analyzing the dimensions of awareness, meaningfulness, joy, and students' experiences in understanding, applying, and reflecting on knowledge. Identify various supporting and inhibiting factors that influence the implementation of Deep Learning based on interactive media at MTsN 2 Deli Serdang.

METHOD

Research Design, Context, and Participants

This study uses a qualitative approach with an exploratory case study design to deeply and holistically understand the perception of the implementation of the Deep Learning approach and student engagement in class on the subject of Islamic Cultural History (ICH) [19]. This single case study design was chosen because the research boundaries focused intensively on real phenomena in the naturalistic madrasah ecosystem at MTsN 2 Deli Serdang. Informant Characteristics: The characteristics of the main informants consisted of 5 people, including one (ICH) Subject Teacher (Mrs. Halimah Tusa'diah, S.Pd.) as a TPACK-based instructional designer. Meanwhile, three active students of grade VIII were anonymized using initial codes to protect the privacy of minors, namely Student A (female, 13 years old), Student B (male, 14 years old), and Student C (female, 13 years old). The three were strategically selected based on teacher recommendations to represent variations in pre-intervention engagement: Student A represents the active group, Student B represents the medium ability, and Student C represents the passive/shy group. The principal of the madrasah acts as a contextual informant to provide secondary data on curriculum policies [20].

Implementation Procedures and Data Collection

This research is a naturalistic case study of self-teaching practices by (ICH) teachers without artificial intervention. The researcher acted as the primary instrument (human instrument). Field data collection was conducted chronologically over a 2-month fieldwork period (February 13–April 15, 2026) using three techniques:

1. Structured Classroom Observation: Eight face-to-face observation sessions were conducted periodically during the eighth-grade (ICH) lesson, with a duration of 80 minutes per session (2 x 40 minutes according to the official lesson time allocation). Sessions 1-2 recorded the initial conditions (lecture method), while sessions 3-8 recorded the integration of Wordwall, video, and PowerPoint.
2. Semi-Structured In-Depth Interviews: Five independent face-to-face interviews, each lasting approximately 45 minutes, were conducted. Madrasah principals underwent equivalent semi-structured interview procedures, using a formal Indonesian-language interview guide adapted to explore macro policy aspects and supporting facilities. All interviews were digitally recorded and transcribed verbatim.
3. Documentation Study: Collecting administrative documents in the form of Learning Implementation Plans (RPP), Teaching Modules, Wordwall quiz score sheets, and photo visualizations of class activities. [21].

Research Ethics Procedures and Publication Approval

This research was conducted based on an official research permit from the MTsN 2 Deli Serdang authorities. However, because explicit written consent for the release of visual publication from the students' parents was not obtained, the researcher implemented a total anonymity procedure for the minor participants. The full names of the three students in the transcripts and final report were replaced using pseudonyms (Students A, B, and C). In addition, for the photographic documentation of classroom activities in Figures 2 and 3, all recognizable parts of the students' faces were digitally blurred before publication to ensure the privacy and protection of the children's identities.

Data Analysis and Data Validity (Trustworthiness)

Data analysis combined deductive approaches (categorizing evidence based on the 3 dimensions of the Ministry of Education and Culture's Deep Learning) and inductive approaches (collecting fresh codes from negative field cases, such as technical constraints and children's psychological barriers). The analysis process was guided by the Interactive Model of Miles, Huberman, and Saldaña (2014). To ensure the quality of the qualitative methodology, traditional validity and reliability testing was replaced with data validity standards (trustworthiness) based on the Lincoln and Guba criteria, which include four main dimensions: Credibility, Transferability, Dependability, Confirmability &

Reflectivity: In order to show a transparent qualitative analytical chain (audit trail) from raw data to conclusion drawing, the following is a concise analytical matrix for typing research codes. To ensure transparency and analytical credibility, the interview data were systematically traced from representative statements through initial coding and category development to the relevant dimensions of deep learning. This process provides an audit trail showing how the interpretations were derived from participants' experiences while also incorporating negative cases that challenge predominantly positive findings. The analytical chain is presented in Table 1.

Table 1. Qualitative Analysis Chain Matrix of (ICH) Research Report

Raw Data / Representative Evidence	Initial Coding	Findings Category	Deep Learning Dimensions
Mrs. Halimah (Teacher): <i>"If the material is about Islamic figures, I play videos... they become more focused on watching"</i>	Cognitive visual attention; Focus on the display	Limiting classroom distractions through multimedia stimulation	Mindful
Student B: <i>"At the end of the lesson, we are often asked to summarize the material... to relate it to everyday life... to know the good qualities of characters who can be emulated"</i>	Drawing moral meaning; Everyday contextual relevance	Aligning historical values with personal reality	Meaningful
Student C: <i>"If there's a quiz, I'm more enthusiastic because it feels like playing a game while learning... I don't get bored easily."</i>	Gamification enthusiasm; Reducing learning tension	Positive emotional engagement based on interactive quizzes	Joyful
Student A: <i>"The class isn't conducive, sis, when we're fighting over the quizzes, we're afraid of disturbing the class next door."</i>	Over-enthusiasm of students; Noisy class; External disturbances	Obstacles to large-scale governance (<i>Crowd management</i>)	Inhibiting Factors (Negative Case)
Student B: <i>"Sometimes I have trouble explaining my opinion... I'm still embarrassed when asked to speak in front of friends."</i>	Psychological barriers to speech; Performance anxiety	Children's internal sociopsychological anxiety barriers	Inhibiting Factors (Negative Case)

Table 1 shows that multimedia supported mindful learning by directing students' attention and reducing classroom distractions. Meaningful learning emerged when students connected historical values with everyday life, while interactive quizzes promoted joyful learning by increasing enthusiasm and reducing boredom. However, the negative cases revealed classroom-management challenges caused by excessive excitement and psychological barriers such as embarrassment and speaking anxiety. These findings indicate that effective deep learning requires engaging instructional strategies, appropriate classroom management, and a psychologically supportive learning environment.

RESULTS AND DISCUSSION

Results

This section presents empirical data collected during a two-month fieldwork period (February 13–April 15, 2026) at MTsN 2 Deli Serdang through eight face-to-face observation sessions (80 minutes per session) and five in-depth semi-structured interviews. The data are presented objectively based on observed patterns in the field and perceptions expressed directly by the participants.

Initial Conditions for (ICH) Learning in Class VIII

Based on observation data from Sessions 1 and 2, the teaching process for the History of Islamic Culture (ICH) subject was dominated by conventional, teacher-centered lecture methods. During these sessions, the teacher verbally presented the chronology of historical dynasties and the years. These conditions can be seen in Figure 1 below.



Figure 1. The teacher stands in front of the class explaining material about Islamic dynasties using an interactive PowerPoint presentation

The observed student behavior pattern was cognitive passivity; some students chatted with their deskmates, dozed off, and looked away from the teacher. Mrs. Halimah Tusa'diah, S.Pd., confirmed this in an interview:

"Yes, before we used interactive media, learning was mostly lecture-based. So sometimes children get bored quickly, especially if the material is long, like about history or the years of events. Many of them get sleepy, chat with their friends, and lose focus."

Similar perceptions were expressed by Student A (active group) and Student C (shy group). Student A stated,

"In the past, I got bored more quickly, because I was just explaining things, then I was asked to write down a lot of material."

Meanwhile Student C added,

"In the past, I sometimes felt that (ICH) material consisted of a lot of stories and had to be memorized, so it was a bit boring."

Implementation of Interactive Media and Student Engagement Patterns

Starting from the 3rd to the 8th observation sessions, the teacher integrated the use of PowerPoint presentations, video screenings of historical stories (such as the development of the Abbasid Dynasty), and interactive Wordwall-based quizzes displayed via an infocus projector at the front of the class.

Classroom Attention, Enjoyment, and Participation Patterns

Observational data consistently show strong empirical evidence on aspects of students' attention focus, emotional enjoyment, and level of verbal participation when interactive media is used. This condition can be seen in Figure 2 below.



Figure 2. A student stands in front of the class to select answers on a Wordwall quiz projected via infocus, witnessed by the teacher and other students

As the video played, students' eyes were fully focused on the screen, and the level of off-topic chatter decreased significantly. Student A perceived this as increased focus:

"Yes, sis, so I can focus more because I'm shown pictures and videos of stories like that. If I just talk about it, sometimes it's boring, especially since (ICH) has a lot of material, sis."

Massive emotional enjoyment and active participation were evident during the Wordwall quiz (Sessions 6 and 7). When the quiz questions appeared on the screen, most students raised their hands voluntarily and showed eagerness to come forward. Student B (medium ability group) testified:

"If I have one, sis, about the Abbasid Dynasty. I used to be confused, sis, I often forgot the material on those dynasties, but when there was a video with the explanations in the video, I understood better... I was happy, sis, I was immediately enthusiastic, especially when I entered the quizzes on the Wordwall, I was enthusiastic to answer."

Student C also expressed his enjoyment of this gamification format:

"What I like most are the quizzes and videos, Sis. If there are quizzes, I'm more enthusiastic because it feels like playing a game while studying... So during the lesson I don't get bored easily and I can focus more on following it."

Evidence of Conceptual Understanding and Reasoning of Historical Values

In contrast to the highly visible evidence of classroom engagement, empirical evidence regarding students' abilities to apply values, engage in in-depth reflection, and engage in critical historical reasoning remains at an early stage. Observational data in the sub-chapter on meaningful teaching indicates that reflective activity is predominantly driven by teacher initiative, actively asking analytical questions and encouraging students to draw moral conclusions (ibrah).

When asked to relate history to real life, students' written and verbal responses, recorded on observation sheets, tended to be normative and follow the teacher's directions. Evidence of the application of real values based on students' personal perceptions is illustrated in Student B's statement:

"Yes, sis, because usually at the end of the lesson, we're often asked to summarize the material learned and relate it to everyday life. So we know what good qualities of Islamic figures we can emulate."

From the interview transcripts, students' independent analytical responses were purely limited to the ease of recalling chronological facts aided by media visualization, rather than constructing independent critical thinking. Student A stated,

"It's easier to understand and remember the material. If I use media like that, it's not too difficult for me to memorize the names of the characters and the events."

This statement is supported by Student C:

"Usually, if there are pictures or videos, it's easier for me to remember the material being explained. What I see sticks in my mind more than just reading text."

This condition can be seen in Figure 3 below.



Figure 3. As well as students actively answering questions and discussing.

Dynamics of Barriers and Negative Cases in the Field

This naturalistic qualitative study also documented patterns of situational barriers that emerged during the implementation process. The first barrier was crowd management. Students' over-enthusiasm in competing to answer the Wordwall quizzes triggered a loud commotion in the classroom. Student A complained about this barrier:

"There's no difficulty, sis. Sometimes the class isn't conducive, sis, when we're fighting over quizzes, and we're afraid of disturbing the class next door."

Subject teacher, Mrs. Halimah, also verified the existence of classroom management constraints and limited teaching time allocation:

"Sometimes there's not enough time if the discussion or quizzes are too long. Besides, the kids are sometimes too enthusiastic during quizzes, making the class a bit noisy and less conducive."

The second barrier is internal sociopsychological. Observations indicate that the use of digital media does not automatically reduce communication anxiety for students who are naturally shy. During the two-month fieldwork period, the increase in students' speaking confidence occurred within a limited and situational context. Student B described his psychological barrier:

"I sometimes have difficulty explaining my own opinion, sis. I'm still shy when asked to speak in front of my friends. But now I'm a bit braver than before, because I've done it often, sis."

Finally, from a managerial aspect, the Head of Madrasah as a contextual informant confirmed the conditions for providing supporting infrastructure:

"In terms of curriculum policy, we continue to encourage teachers to shift from lectures to the use of ICT. We have deliberately optimized the school's Wi-Fi network for smooth access to digital platforms like Wordwall in the classroom. However, we acknowledge that the availability of hardware, such as infocus, in each classroom is still limited and requires gradual procurement."

Discussion

Theoretical Interpretation of Deep Learning Dimensions

The monotonous initial conditions of eighth grade indicate a failure to foster mindfulness in learning due to the dominance of conventional lecture methods. However, when viewed from the Islamic theological foundations of Surah Al-Nahl verse 125, the ideal educational process prioritizes a hikmah approach (a method that is wise and appropriate to the needs of students). According to the Tafsir Tahlili (interpretation of the teachings) by the Ministry of Religious Affairs of the Republic of Indonesia, this verse indicates the importance of varying teaching methods to build students' mental readiness and full attention.

The observed attention patterns when teachers use PowerPoint presentations and video displays indicate that the interactive multimedia function acts as a cognitive support (cognitive scaffolding) to focus students' situational visual attention. This is in line with the view of Imam an-Nawawi (2011)

in Syarah Sahih Muslim when discussing the hadith of instructions for prayer demonstration (HR. Muslim No. 579), which states that delivering material in a concrete and systematic manner can facilitate students' cognitive understanding process. However, the researcher provides a critical interpretation that the empirical evidence collected is stronger in showing classroom engagement, focused attention, and joyful learning based on Wordwall gamification, compared to evidence of deep conceptual learning. Based on student interview data, students' cognitive changes are still at the level of easy recall (retention) of local historical facts through visual aids, not at the level of mastery of in-depth independent critical historical reasoning (Marton & Säljö, 1976). The dimensions of meaningful learning, application, and reflection of historical values in this study were primarily driven by the teacher's instructional design, which actively posed analytical questions (Ausubel). Students were able to follow these moral directions to identify the exemplary values of historical figures. However, the ability to apply these values is still perceived as fulfilling class assignments from the teacher, not yet proven to be transformed into social competence or broad independent metacognitive skills outside the classroom. High emotional involvement during quizzes should not be exchanged or considered automatically to represent deep conceptual understanding (Nur et al., 2025).

Condition confirms the findings of Nasution et al. (2023) regarding the low level of active student participation due to verbalistic learning patterns [12]. This orientation towards short-term memorization is also in line with the findings of Vebrianto & Anwar (2025) who stated that the textual approach makes it difficult for students to absorb the essence of the values of the subject of Islamic Cultural History (ICH) [13]. Viewed from the lens of Constructivism Theory (Piaget & Vygotsky) [22], the dominance of lectures fails to facilitate students to construct their knowledge independently because information cannot simply be transferred passively from the teacher to the student's cognition. In contrast, field observations show that the shift to an interactive multimedia ecosystem is related to the formation of a social interaction space that stimulates students' cognitive activity. The teacher's steps in starting the class with apperception and connecting past events with the realities of modern life reflect the application of David Ausubel's Meaningful Learning Theory. Based on this theory, new historical information can persist in long-term memory if it is logically linked to the initial cognitive structure (prior knowledge) that students already have. Through this cognitive framework, (ICH) material is no longer treated as rote memorization, but is interpreted contextually to achieve the cognitive dimensions of understanding, application, and reflection, in accordance with the Deep Learning directives of the Indonesian Ministry of Education and Culture. This is in line with the findings of Dhani et al. (2025). The implementation of Deep Learning also increases learning participation and strengthens students' collaborative and creative attitudes [23].

Theoretical Limitations of Teacher TPACK and Student Motivation (SDT)

In this manuscript, teachers' use of digital media and students' active behavior are interpreted using the lenses of Technological Pedagogical Content Knowledge (TPACK) (Mishra & Koehler, 2006) and Self-Determination Theory (SDT) (Deci & Ryan, 2000). The researchers emphasize that these theories are purely used as theoretical interpretation tools, not as variables directly measured through specific analytical indicators in interviews. The use of Wordwall, video, and PowerPoint by teachers indicates an effort to adapt technology in teaching Islamic Cultural History (ICH), but these activities do not in themselves indicate a well-established high level of TPACK mastery. Technology integration in the field still faces practical obstacles such as noisy classroom management and limited school infocus units, so that its pedagogical implementation is still situational (Mishra & Koehler, 2006). From a SDT perspective, the phenomenon of students raising their hands and volunteering to come to the front of the class represents the stimulation of intrinsic situational motivation triggered by the quiz game element (Huda et al., 2024). The integration of meaningful, attentive, and enjoyable learning makes the learning process more comprehensive, interactive, and student-centered [24]. The deep learning approach also emphasizes the importance of metacognitive awareness, namely the ability of students to monitor and control their own learning process [25].

However, active behavior during the gamified quiz cannot be claimed as evidence of the permanent fulfillment of basic psychological needs for autonomy, competence, and relatedness (Deci & Ryan,

2000). The large class chaos is actually a negative case that shows that the inability to tactically manage the excitement of digital competition can reduce the conduciveness of students' cognitive learning environment. Observations during the two months of fieldwork also showed that exposure to interactive media only stimulated shy students' courage to speak at certain moments, and cannot be claimed to have established a path of improvement or long-term causal effects on children's social skills.

Reflections on Field Barriers to Successful Deep Learning

The findings regarding teacher pedagogical readiness as a key supporting pillar reinforce the empirical study by Gustina et al. (2025) which places educator competence as a crucial key in implementing a modern Islamic education curriculum [26]. However, the emergence of obstacles such as time constraints and noisy classroom situations indicates that the implementation of naturalistic immersive learning requires more dynamic spatial and temporal flexibility than conventional classrooms. Although students' high enthusiasm in competing on quizzes sometimes triggers noise, this situation is seen as a form of positive emotional engagement (enjoyable engagement), which requires tactical adjustments in classroom management strategies by teachers. This is in line with the findings of Safitri et al. (2024). These findings confirm that the successful implementation of immersive learning in Indonesia requires policy synergy, teacher capacity building, and a continuous contextual assessment system [27]. Internal obstacles such as lack of confidence in some shy students were also observed to gradually decrease through the creation of a relaxed and supportive classroom climate. These observations prove that the introduction of interactive learning models contributes positively to the development of students' social and communication skills at the madrasah level.

Implications

Theoretically, the results of this case study imply that the use of digital multimedia in the madrasa ecosystem is more effective in stimulating students' situational attention (mindful) and affective excitement (joyful), rather than in developing independent critical historical reasoning (meaningful). Practically for teachers, the integration of interactive media such as Wordwalls implies the importance of mastering tactical skills in managing noisy classes (crowd management) to prevent student over-enthusiasm that can disrupt the conducive cognitive environment of the surrounding classroom. For students themselves, the use of audiovisual stimulation has implications for reducing academic anxiety, although increasing speaking courage for shy students is still situational during the adaptation period. Finally, the policy implications of this study emphasize that the successful implementation of the Deep Learning curriculum at the madrasah level requires a balanced alignment between improving teachers' digital pedagogical readiness and accelerating the provision of equitable ICT infrastructure from educational authorities.

Research Contribution

This study does not intend to build a new formal model, but rather contributes to presenting a context-specific implementation account of how a madrasah teacher utilizes a variety of digital media within the official Indonesian Deep Learning structure. The scientific contribution of this local qualitative study lies in its ability to objectively map the various dynamics of practical, non-technical obstacles, such as the negative case of large class noise due to gamification and the internal sociopsychological obstacles of minors that actually occur in the field. Furthermore, this paper contributes a local empirical analysis at the Madrasah Tsanawiyah level that is systematically dissected using the lens of the three principles of Deep Learning of the Ministry of Primary and Secondary Education: attentive, meaningful, and enjoyable.

Limitations

The researcher acknowledges that this exploratory case study has a major limitation in its very small, purposefully selected sample size, preventing the findings from establishing causality or a linear trajectory of student behavioral improvement. A second limitation lies in the two-month duration of the fieldwork, which means the study is unable to provide long-term longitudinal observational data

to capture lasting changes in student character. Furthermore, the assessment of teachers' mastery of Technological Pedagogical Content Knowledge (TPACK) and the fulfillment of students' basic psychological needs (SDT) is positioned purely through a theoretical interpretative lens, rather than being directly measured through specific analytical indicators in the data collection instrument. A final limitation is the lack of objective product evidence, where evidence of the application of historical values (ibrah) relies purely on students' normative verbal perceptions during interviews, rather than through systematic analysis of portfolio documents or independent written reflections.

Suggestion

Based on field findings, Islamic Cultural History (ISC) teachers are advised to design stricter learning contracts or quiz competition regulations before the game begins to minimize noise in large classes, while providing more personalized, inclusive guidance for students who tend to be shy. The Madrasah Principal is advised to develop a program to gradually procure infocus projector units in each eighth-grade classroom to support the efficiency of teachers' teaching preparation time and optimize the use of school WiFi facilities. For future researchers, it is recommended to conduct Classroom Action Research (CAR) to find practical solutions to the noise barrier of large classes, or use mixed methods to test the conceptual effectiveness of this interactive media in a much wider range of madrasah student populations

CONCLUSION

Implementation of the Deep Learning approach through the integration of interactive learning media such as Wordwall, learning videos, and PowerPoint at MTsN 2 Deli Serdang has been proven to contribute positively in changing the dynamics of the Islamic Cultural History (ICH) class from a monotonous traditional pattern to a more participatory learning environment. Viewed from a national framework, the use of this multimedia is very effective in building students' full attention (mindful) through concrete visual stimulation and triggering joy (joyful) learning based on gamification. Although the internalization of historical values (meaningful) is only achieved at the level of practical moral understanding that is situational, this approach successfully reduces students' cognitive passivity within the limits of this local research context. However, the researcher concluded that the effectiveness of this Deep Learning approach in the field is still limited by several practical obstacles that condition the learning process. These obstacles include limited allocation of class hours, limited infocus projector units in the madrasah, the noise of large classes due to students' over-enthusiasm when competing, and sociopsychological obstacles in the form of communication anxiety from students who are originally shy. Given that this naturalistic qualitative case study has inherent limitations in the form of a focus on a single school context and a small-scale group of informants, the conclusions drawn are not intended to establish a long-term linear improvement trajectory or macro-level causal generalizations, but rather as a descriptive portrait of teachers' pedagogical adaptations in managing digital technology-based learning.

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AUTHOR CONTRIBUTION STATEMENT

NR and WNN conceptualized the research model and designed the study framework. NR conducted the literature review, field observations, and in-depth interviews. WNN supervised the data collection process and provided methodological guidance. Both NR and WNN conducted qualitative data condensation and interactive analysis. NR drafted the initial manuscript, while WNN critically reviewed, revised, and approved the final version for submission.

AI DISCLOSURE STATEMENT

The authors used an AI Assistant to draft the manuscript, summarize the text, and refine the language. After using the service, the authors thoroughly reviewed and edited the content as needed and take full responsibility for the content of this publication.

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