

Cognitive Scaffolding and Faith-Based Digital Literacy: Integrating Advanced Organizer and YouTube in Islamic Moral Education

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Abstract: This study investigates the effectiveness of integrating the Advanced Organizer learning model with YouTube media to strengthen Islamic digital literacy and learning outcomes in Islamic Moral Education (*Akidah Akhlak*) at MIN 7 Tapin. Employing a quantitative quasi-experimental design with pretest–posttest control groups, the study involved 104 sixth-grade students. The experimental group received learning through the Advanced Organizer model supported by Islamic YouTube content, while the control group received conventional instruction. Data were collected using validated achievement tests, Islamic digital literacy questionnaires, and learning observation sheets. Data analysis included normality, homogeneity, independent t-test, and Cohen’s d effect size using SPSS 26.0. The results revealed a significant difference between the experimental and control groups ($p < 0.05$) with a high effect size ($d = 0.84$), indicating that the integration significantly improved students’ conceptual understanding and ability to utilize digital media based on Islamic ethics. This study contributes theoretically by operationalizing Islamic digital literacy as a cognitively scaffolded instructional framework rather than a mere ethical or technical construct. The findings extend meaningful learning theory into faith-based digital education contexts by demonstrating how moral cognition can be systematically shaped through pre-organized multimedia learning.

Keywords: Advanced Organizer; YouTube; *Akidah Akhlak*; Islamic Moral Education; Islamic Digital Literacy

Abstrak: Penelitian ini mengkaji efektivitas integrasi model pembelajaran Advanced Organizer dengan media YouTube untuk memperkuat literasi digital Islam dan hasil belajar dalam Pendidikan Moral Islam (*Akidah Akhlak*) di MIN 7 Tapin. Penelitian ini menggunakan desain kuasi-eksperimental kuantitatif dengan kelompok kontrol pra-tes dan pasca-tes, melibatkan 104 siswa kelas enam. Kelompok eksperimen menerima pembelajaran melalui model Advanced Organizer yang didukung oleh konten YouTube Islam, sementara kelompok kontrol menerima instruksi konvensional. Data dikumpulkan menggunakan tes prestasi yang valid, kuesioner literasi digital Islam, dan lembar observasi pembelajaran. Analisis data meliputi uji normalitas, homogenitas, uji t independen, dan ukuran efek Cohen’s d menggunakan SPSS 26.0.

Hasil menunjukkan perbedaan signifikan antara kelompok eksperimen dan kontrol ($p < 0.05$) dengan ukuran efek tinggi ($d = 0.84$), menunjukkan bahwa integrasi tersebut secara signifikan meningkatkan pemahaman konseptual siswa dan kemampuan mereka dalam memanfaatkan media digital berdasarkan etika Islam. Studi ini berkontribusi secara teoritis dengan mengoperasionalkan literasi digital Islam sebagai kerangka kerja instruksional yang didukung secara kognitif, bukan sekadar konstruksi etis atau teknis. Temuan ini memperluas teori pembelajaran bermakna ke dalam konteks pendidikan digital berbasis agama dengan menunjukkan bagaimana kognisi moral dapat dibentuk secara sistematis melalui pembelajaran multimedia yang terorganisir sebelumnya.

Kata kunci: *Organizer Lanjutan; YouTube; Akidah Akhlak; Pendidikan Moral Islam; Literasi Digital Islam*

Introduction

The rapid expansion of digital technologies has fundamentally changed the way knowledge is accessed, interpreted, and disseminated in educational settings, including Islamic Elementary School (*Madrasah Ibtidaiyah*). Unlike previous generations, contemporary elementary school students actively engage in digital environments where learning occurs not only through printed textbooks and classroom instruction but also through interactive multimedia platforms, collaborative online spaces, and algorithm-driven content streams (Greenhow & Lewin, 2016). This transformation necessitates that educational institutions, particularly Islamic elementary schools, redesign their learning approaches to not only enhance cognitive outcomes but also cultivate digital literacy grounded in religious values (Hamid & Sa'adah, 2022). Despite this, many Islamic learning practices in *madrasah* remain dominated by linear teacher-centered instruction, with limited orchestration of structured digital learning experiences that foster critical digital engagement, reflective online interaction, and value-based technological use (Rohman & Fauzi, 2023). At MIN 7 Tapin, particularly in Islamic Moral Education (*Akidah Akhlak*) instruction, teachers predominantly construct students' knowledge frameworks through teacher-centered approaches, such as lecturing and task assignment, with limited opportunities for learners to actively explore information through diverse digital, audio-visual, and interactive learning modalities while remaining grounded in value-based education. This pedagogical practice sharply contrasts with the realities of the contemporary ICT era, where students increasingly engage in digital learning environments. Consequently, there is a clear need for research that focuses on integrating the cognitive scaffolding of the Advanced Organizer model with the use of curated Islamic YouTube content to enhance *Akidah Akhlak* learning outcomes while simultaneously enriching students' Islamic digital literacy at MIN 7 Tapin.

Within Islamic education discourse, scholars and educators conceptualize digital literacy not merely as technical proficiency or internet navigation skills, but as a broader competence encompassing the evaluation of ethical content, responsible digital behavior, resilience against misinformation, and engagement with digital content through Islamic moral principles (Sari & Setiawan, 2023). In the absence of guided literacy scaffolding, young learners become vulnerable to unfiltered digital exposure, where the lines between beneficial knowledge and harmful or misleading content often blur, potentially shaping moral reasoning, religious perspectives, and social behavior in directions that may contradict Islamic ethical standards (Nisa & Huda, 2021). This reality presents a pedagogical challenge because *madrasah* classrooms must now operate not only as learning-transfer spaces but also as

environments where digital disposition, moral filtering capacity, and ethical reasoning toward online information are intentionally cultivated (Hamid & Sa'adah, 2022).

Akidah Akhlak occupies a strategic position in the *madrasah* curriculum, as it systematically constructs theological understanding (*akidah*), shapes moral consciousness (*akhlak*), and internalizes value-based behavior in daily life. However, classroom implementation often remains disproportionately focused on factual retention, verbal memorization, and teacher-led moral messaging. In contrast, opportunities for contextual application, reflective dialogue, and digital moral decision-making remain minimal (Nisa & Huda, 2021). Consequently, students may cognitively comprehend moral concepts but have limited readiness when applying them to digital environments that involve content selection, online communication ethics, or judgment toward digital narratives (Sari & Setiawan, 2023). This pedagogical gap reveals that conventional approaches are insufficient to equip learners with the competencies demanded by digital-era Islamic character formation.

One learning framework that provides a strong cognitive foundation for structured conceptual integration is the Advanced Organizer model, introduced by Ausubel, (1968) to support meaningful learning through the activation and restructuring of prior knowledge before exposure to new information. Unlike direct instruction, which often requires learners to process unfamiliar concepts without cognitive preparation, this model intentionally positions initial conceptual frameworks as mental anchors, enabling learners to connect, contrast, and interpret new knowledge more systematically (Novak, 2002). When applied in religious learning contexts, Advanced Organizer functions not only as a cognitive scaffold but also as a conceptual bridge that can strengthen theological coherence, facilitate moral reasoning structures, and enhance comprehension of abstract Islamic values.

Parallel to cognitive structuring strategies, multimedia learning theories emphasize the importance of utilizing both visual and auditory learning channels in enhancing conceptual retention, engagement, and personalization (Mayer, 2014). Among digital platforms, YouTube has emerged as one of the most accessible, learner-preferred, and pedagogically versatile mediums due to its ability to deliver contextualized visual narratives, human-modeled demonstrations, and real-life moral exemplars through audio-visual learning experiences (Kurniawan & Prasetyo, 2022). For Islamic learning, YouTube provides a unique opportunity to combine observational learning, value reinforcement, and contextual visualization of moral behaviors that are often difficult to represent through textbooks alone, especially for young learners operating in a digital-native cognitive environment.

Although YouTube possesses considerable pedagogical potential, its use in Islamic education has largely remained unsystematic, sporadic, and predominantly entertainment-oriented rather than instructionally structured. As noted by Kurniawan and Prasetyo (2022), educators can instead deliberately design this platform as an organized literacy pathway aimed at strengthening religious cognition and digital ethical reasoning. Moreover, while numerous studies have examined digital literacy, multimedia learning, or Islamic character education independently, integrative research on these topics remains limited. For example, a study by Zartiyana et al., (2023) investigated the utilization of YouTube as a learning medium for Islamic Religious Education, focusing primarily on its instructional utility, content management, and learner responses, without embedding a structured cognitive framework such as the Advanced Organizer model within the instructional design. Similarly, research conducted by Anandita et al., (2025) examined the effectiveness of the Advanced Organizer model as a metacognitive approach to improving scientific

literacy, conceptual understanding, and mathematical communication skills in physics learning; however, it did not integrate digital media, such as YouTube, into the learning process.

Studies that explicitly integrate cognitive scaffolding through the Advanced Organizer model with curated Islamic YouTube content to enhance digital Islamic literacy and achieve *Akidah Akhlak* learning objectives at the *Madrasah Ibtidaiyah* level remain scarce, particularly in the context of MIN 7 Tapin. More importantly, existing studies position Islamic digital literacy merely as a general concept rather than operationalizing it as a coherent theoretical framework within instructional design. Therefore, this study advances Islamic Digital Literacy not only as a definitional construct but as an analytical and pedagogical framework that guides learning objectives, instructional strategies, and outcome evaluation.

At MIN 7 Tapin, preliminary classroom observations revealed patterns that reinforce this gap. While learners are highly familiar with YouTube as a learning source, their interaction remains largely consumption-oriented rather than analytical or values-based. Students often select religious content based on visual appeal or speaker popularity rather than credibility, message accuracy, or alignment with Islamic moral principles. Teachers also reported that learning activities rarely include structured frameworks for evaluating digital Islamic messages or linking them with *Akidah Akhlak* conceptual foundations. These findings underscore the pedagogical need for a learning design that integrates cognitive guidance, reinforcement of religious values, and digital literacy scaffolding into a coherent instructional model.

In response to these needs, this study emphasizes the integration of the Advanced Organizer learning scaffold with curated Islamic YouTube content as a pedagogical innovation aligned with three structured learning domains: (1) the systematic strengthening of conceptual understanding in *Akidah Akhlak*, (2) the enhancement of Islamic value-based digital literacy competencies related to online content evaluation and digital behavior, and (3) the facilitation of meaningful learning through contextualized moral representation. Beyond focusing on the measurement of learning outcomes, this study provides explicit scientific contributions. Theoretically, it extends the discourse on Islamic digital pedagogy by operationalizing Islamic Digital Literacy as an instructional framework grounded in cognitive scaffolding theory. Methodologically, it proposes a structured learning design that integrates the Advanced Organizer model with Islamic multimedia content to support the formation of coherent concepts. Practically, it offers empirically based insights for teachers and curriculum developers in designing *Akidah Akhlak* instruction that is digitally responsive, ethically grounded, and developmentally appropriate for contemporary learners, especially at MIN 7 Tapin. Collectively, these contributions enrich the body of knowledge in Islamic education and support the development of systematic, value-oriented, and contextually relevant digital learning designs.

Method.

This study employed a quantitative approach with a quasi-experimental pretest-posttest control group design to examine the effect of integrating the Advanced Organizer learning model and YouTube media on students' Islamic digital literacy and *Akidah Akhlak* learning outcomes at MIN 7 Tapin during the even semester of the 2024/2025 academic year. The study employed a quasi-experimental design to address institutional constraints on random assignment while still permitting causal examination of instructional mechanisms related to cognitive scaffolding and digital moral learning. This approach allowed for valid outcome comparisons between two intact classes operating under equivalent instructional conditions. The population

consisted of all sixth-grade students ($N = 104$) across four classes. The study employed purposive sampling to select two academically comparable classes with equivalent pretest scores, thereby ensuring baseline equivalence and reducing selection bias. Both the experimental and control groups consisted of 52 students. This sample size met the statistical adequacy requirements for quasi-experimental analysis, providing sufficient power to detect meaningful differences between groups at a significance level of $\alpha = 0.05$.

The study employed three research instruments for data collection. The *Akidah Akhlak* achievement test consisted of 25 multiple-choice items measuring indicators of conceptual understanding, including comprehension of theological principles, moral reasoning, and application of *Akidah Akhlak* values in contextual situations; expert validation yielded a Content Validity Index (CVI) of 0.89, and pilot testing demonstrated high internal consistency (Cronbach's $\alpha = 0.87$). Islamic digital literacy was measured using a 20-item Likert-scale questionnaire covering ethical content evaluation, source credibility assessment, responsible online communication, information filtering, and value-based digital behavior. The instrument showed excellent reliability (Cronbach's $\alpha = 0.90$). A structured observation sheet further documented treatment fidelity and indicators of student engagement, including participation, attentiveness, and reflective interaction. This instrument yielded a CVI of 0.86, with acceptable inter-rater reliability (Cronbach's $\alpha = 0.82$). All instruments were reviewed and approved by subject-matter and educational measurement experts before implementation.

Data collection followed a structured instructional sequence, beginning with a pretest administered to both groups to establish baseline equivalence. The experimental group then received an intervention that integrated the Advanced Organizer model with curated Islamic YouTube content over six instructional meetings, conducted across four weeks. Each meeting consisted of two lesson time units ($2 \text{ JTM} \times 35 \text{ minutes} = 70 \text{ minutes}$). Each session followed a consistent learning sequence: (1) presentation of the Advanced Organizer to activate prior knowledge and introduce key *Akidah Akhlak* concepts (10 minutes), (2) guided concept mapping and clarification of learning objectives (10 minutes), (3) YouTube-based learning activities, including video viewing and guided analysis aligned with Islamic values (25 minutes), and (4) reflective discussion and value reinforcement to connect conceptual understanding with moral reasoning and digital ethics (25 minutes). The control group received conventional teacher-centered instruction covering identical content and duration without digital media or cognitive scaffolding. Treatment fidelity was maintained through the use of standardized lesson plans, pre-intervention teacher briefings, and structured observation sheets, ensuring consistency in instructional implementation and student engagement across all sessions.

The collected data were analyzed using SPSS version 26.0. Statistical procedures included the Shapiro-Wilk normality test and Levene's homogeneity test as prerequisites for parametric testing. The study analyzed group differences using an independent-samples *t*-test with a significance level of $p < 0.05$. Cohen's *d* was calculated to estimate effect size and interpreted using conventional benchmarks (0.2 = small, 0.5 = medium, 0.8 = large). The analysis assessed whether the instructional integration significantly improved students' Islamic digital literacy and *Akidah Akhlak* learning outcomes.

Result and Discussion

Result

1. Akidah Akhlak Learning Outcome (Pretest–Posttest)

Table 1 illustrates the differential learning gains between groups, demonstrating that the instructional integration produced not only statistical significance but also a substantial educational impact. The experimental group achieved a substantially higher learning gain ($M = 24.18$) compared to the control group ($M = 12.42$). The independent sample t-test indicated a significant difference between groups ($p = 0.000$), with a large effect size (Cohen's $d = 0.84$), confirming a substantial impact of the treatment on student learning outcomes (Cohen's d on SPSS 26 output, 2025).

Table 1. Pretest–Posttest Score Comparison

Group	N	Pretest Mean	Posttest Mean	Gain Score	Sig. (2-tailed)	Cohen's d
Experimental	52	63.27	87.45	24.18	0.000	0.84
Control	52	62.91	75.33	12.42		

2. Islamic Digital Literacy Score

Post-intervention results revealed that the experimental group achieved a high level of digital literacy ($M = 85.12$), whereas the control group maintained a moderate level ($M = 71.48$). The difference was statistically significant ($p = 0.000$), showing that the intervention positively enhanced students' Islamic digital literacy (Based on questionnaire analysis, 2025).

Table 2. Islamic Digital Literacy Score

Group	N	Mean	Category	Sig. (p-value)
Experimental	52	85.12	High	0.000
Control	52	71.48	Moderate	

3. Indicator-Based Islamic Digital Literacy Performance

Indicator analysis showed the strongest performance in Islamic value alignment ($M = 89.4$) and digital communication ethics ($M = 88.2$). The lowest score, although still in the high category, was observed in misinformation prevention ($M = 80.9$), indicating a need for further reinforcement in critical verification skills (Based on questionnaire analysis, 2025).

Table 3. Islamic Digital Literacy Indicators (Experimental Group)

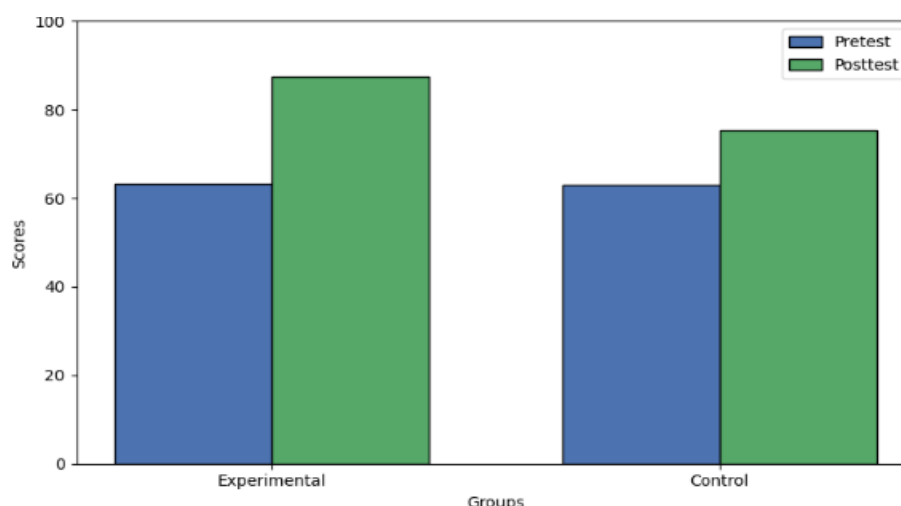
Indicator	Mean Score
Islamic value alignment	89.4
Digital communication ethics (<i>adab</i> online)	88.2
Content evaluation	86.5
Source credibility analysis	84.9
Digital decision-making ethics	84.3
Information filtering	83.7
Responsible content sharing	82.6
Misinformation prevention	80.9

4. Classroom Observation Results

Observation data from four learning sessions revealed that students in the experimental class exhibited higher engagement in digital-based critical tasks, such as validating the credibility of Islamic content, interpreting moral messages from video materials, and practicing ethical communication during discussions. Meanwhile, the control class displayed active participation, but with limited involvement in digital content analysis (Based on a structured observation sheet, 2025).

5. Learning Outcome Improvement Visualization

The visualization above represents a learning outcome improvement chart comparing pretest and posttest scores between the experimental and control groups. It shows that both groups began with relatively similar pretest scores, indicating equivalent initial abilities; however, after the intervention, the experimental group achieved a substantially higher posttest mean score (87.45) compared to the control group (75.33). This pattern illustrates the stronger learning gains produced by the integration of the Advanced Organizer model and Islamic YouTube content. To enhance clarity and accessibility, the visualization can be replaced with the same bar chart using a different color scheme, allowing for clear distinction between pretest and posttest results, as well as between the experimental and control groups, without altering the underlying data interpretation.



Figur 1. Learning Outcome Improvement

Discussion

1. Empirical Role of Cognitive Scaffolding in *Akidah Akhlak* Learning and Digital Engagement

Based on the quasi-experimental findings, this study demonstrates that cognitive scaffolding through the Advanced Organizer plays a decisive instructional role in enhancing students' learning outcomes in *Akidah Akhlak* while simultaneously shaping the quality of students' engagement. The significantly higher posttest scores and large effect size in the experimental group demonstrate that learning improvement stemmed not merely from digital media exposure, but from the structured activation of prior knowledge and moral concepts prior to multimedia interaction. This finding is consistent with Ausubel's meaningful learning theory, which emphasizes that learners assimilate new information effectively when they possess organized conceptual anchors that guide interpretation and integration (Ausubel, 1968; Novak, 2002).

In the context of *Akidah Akhlak* learning, where abstract theological and moral concepts require conceptual coherence, the Advanced Organizer functioned as a cognitive gateway, preparing students to interpret digital content meaningfully. When teachers introduced Islamic YouTube materials after the pre-structuring phase, students became better equipped to connect visual narratives with existing moral schemas, resulting in deeper conceptual understanding rather than surface-level recall. This finding supports multimedia learning theory by demonstrating that instructional effectiveness depends not only on the choice of media modality but also on learners' cognitive preparedness and the deliberate sequencing of instructional content. Previous studies have similarly reported that multimedia learning yields optimal outcomes when embedded within structured instructional designs, rather than used as standalone media tools ([Kurniawan & Prasetyo, 2022](#)).

In addition to improving conceptual understanding, the structured use of cognitive scaffolding through Advanced Organizers also contributed to more efficient cognitive load management during students' interaction with digital religious content. Recent research in multimedia learning emphasizes that learners frequently experience extraneous cognitive load when engaging with complex audiovisual materials without prior conceptual guidance, leading to fragmented understanding and superficial learning outcomes ([Alpionita & Baihaqi, 2025](#)). By providing an explicit conceptual framework before exposure to Islamic YouTube content, the instructional design in this study enabled students to allocate cognitive resources more selectively toward essential moral and theological information. This finding aligns with contemporary extensions of cognitive load theory, which highlight that pre-organized schemas facilitate deeper integration of multimedia information and reduce unnecessary processing demands in digitally mediated learning environments ([Twabu, 2025](#); [Herold & Seufert, 2025](#)).

The observed enhancement in the quality of digital engagement indicates that cognitive scaffolding contributes to the development of self-regulated learning processes within faith-based digital instruction. Empirical studies in smart and adaptive learning environments indicate that structured scaffolding enhances learners' ability to monitor understanding, regulate attention, and sustain meaningful engagement when interacting with digital platforms. In this study, students were not merely passive recipients of YouTube content but engaged as reflective learners who evaluated messages, discussed moral implications, and aligned digital narratives with Islamic values. This pattern is consistent with recent findings showing that self-regulated learning and engagement act as key mediators between instructional design and learning effectiveness, particularly in digital contexts that require ethical judgment and critical evaluation ([Adler, 2025](#); [Ouyang, 2025](#)). Consequently, integrating Advanced Organizers with digital media not only strengthens cognitive processing but also fosters learner agency and moral self-regulation within contemporary Islamic education.

Furthermore, student engagement in the experimental group was qualitatively distinct from that of the control group. Engagement manifested through reflective participation, guided discussion, and analytical interaction with digital content, rather than passive consumption. Aligns with previous research showing that technology-enhanced learning in madrasah settings becomes educationally meaningful only when teachers intentionally structure digital tools within clear pedagogical designs and explicit moral guidance. [Rohman & Fauzi, \(2023\)](#) In this study, the integration of cognitive scaffolding and curated Islamic YouTube content transformed YouTube from an entertainment-oriented platform into a pedagogically

legitimate learning space, reinforcing the view that technology acceptance in faith-based education depends on perceived instructional and moral legitimacy rather than novelty alone (Rahman & Nuryana, 2022).

2. Islamic Digital Literacy as Regulated Cognition in Faith-Based Digital Learning

Drawing on the empirical results, this study advances the conceptualization of Islamic digital literacy as a form of regulated cognition shaped through cognitively and ethically guided digital learning. The significantly higher scores achieved by the experimental group across Islamic digital literacy indicators, particularly in ethical digital communication, value-based content filtering, and responsible online behavior, demonstrate that digital literacy development is optimized when ethical reasoning precedes and governs digital interaction. This finding extends prior studies that conceptualize Islamic digital literacy primarily as technical competence or general moral awareness. Hamid & Sa'adah, (2022) and Nasution & Lubis, (2021) showing that intentionally designed instructional strategies cultivate ethical digital behavior.

This study further supports social cognitive theory by illustrating how curated Islamic YouTube content functioned as a medium for moral modeling, allowing students to observe and internalize ethically aligned digital practices within a structured learning environment (Bandura, 1986). Previous studies have reported similar benefits of digital media for Islamic learning engagement; however, they often emphasize content delivery and learner motivation without explicating the cognitive mechanisms underlying moral internalization (Zartiyana et al., 2023; Aisyah & Hasan, 2023). By embedding digital media within an Advanced Organizer framework, the present study demonstrates that moral reasoning and digital judgment emerge not incidentally, but through regulated cognitive processes.

Recent empirical findings indicate that Islamic digital literacy contributes not only to ethical digital conduct but also to the development of evaluative and critical thinking skills, particularly in assessing information credibility and religious digital content (Rivai, 2025). This trend aligns with broader global research emphasizing the integration of value-based digital literacy within Islamic education curricula to strengthen epistemic judgment and reflective reasoning (Adima, 2025). Evidence from pesantren-based learning environments further suggests that contextualized digital literacy instruction enables students to bridge traditional religious learning with critical digital competencies, despite persistent structural and pedagogical constraints (Mahmudah & Ridwan, 2025).

Nevertheless, the comparatively lower performance in epistemic verification skills such as evaluating source credibility and identifying misinformation highlights an important instructional limitation. This finding corroborates earlier research suggesting that elementary learners tend to prioritize symbolic religious cues and affective appeal over critical validation strategies when engaging with digital religious content (Nisa & Huda, 2021). Accordingly, while the intervention strongly developed ethical alignment and digital *adab*, Islamic digital literacy frameworks must explicitly integrate verification routines to strengthen epistemic vigilance alongside moral regulation (Sari & Setiawan, 2023).

From both theoretical and practical perspectives, this study offers a transferable instructional model for faith-based digital education. By positioning digital media as a guided epistemic resource rather than a substitute for teacher authority, the proposed framework aligns digital innovation with moral education goals, supporting

prior calls for value-oriented digital transformation in *madrasah* curricula (Arifin & Hakim, 2023; Wahyudi & Islamiati, 2023). Despite these contributions, this study remains limited by its single-site context and relatively short intervention duration. Future research should therefore adopt longitudinal and multi-site designs to assess the sustainability of regulated digital cognition beyond classroom settings and to examine how home-school collaboration and advanced digital verification training can further strengthen Islamic digital literacy.

Conclusion

This study provides robust empirical evidence that integrating the Advanced Organizer learning model with curated Islamic YouTube content significantly enhances students' conceptual learning outcomes in *Akidah Akhlak* and their Islamic digital literacy competencies. The experimental group consistently outperformed the control group in posttest achievement and demonstrated stronger ethical digital communication, value-based content filtering, and responsible online behavior. These findings indicate that cognitive pre-structuring prior to multimedia exposure enables learners to organize new information within coherent mental and moral schemas, leading to deeper conceptual understanding and more regulated digital conduct. However, the relatively weaker performance in epistemic verification skills, particularly source credibility evaluation and misinformation detection, highlights a critical area for further instructional reinforcement within Islamic digital literacy development.

Theoretically, this study advances the literature by operationalizing Islamic Digital Literacy as a structured instructional framework that integrates cognitive scaffolding, moral reasoning, and digital practice, rather than treating it as a purely descriptive or technical construct. By extending Ausubel's meaningful learning theory into faith-based digital education contexts, the findings demonstrate that multimedia learning becomes cognitively transformative only when preceded by explicit conceptual organization. Practically, the study offers a pedagogical model in which digital media functions as a guided epistemic resource aligned with moral authority, emphasizing structured sequencing of conceptual pre-organization, guided multimedia engagement, ethical reflection, and evaluative discussion. Despite its contributions, this study is limited by its single-site context and short intervention duration. Future research should therefore employ longitudinal and multi-site designs to examine the sustainability of Islamic digital literacy behaviors beyond classroom settings and to strengthen learners' epistemic validation capacities in increasingly complex digital environments.

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