Teachers' Digital Literacy in Using Generative AI for Islamic Education: Ethics and Pedagogical Competence

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Abstract

Generative artificial intelligence (GenAI) offers opportunities to support instructional planning, learning materials, and information access in Islamic education, while raising concerns about information accuracy, source verification, academic integrity, and teacher responsibility. This article examines teachers' digital literacy in utilizing GenAI for Islamic education and considers its relationships with ethical challenges, pedagogical competence, and pedagogical agency. A qualitative literature review with conceptual analysis was developed from a relevance-oriented corpus of 32 scholarly articles collected through Google Scholar, Scopus, ResearchRabbit, and Open Knowledge. The reviewed scholarship addresses both Islamic educational contexts and broader research on AI literacy, educational ethics, and teacher competence. The synthesis distinguishes evidence from context-specific empirical studies from conceptual and literature-based arguments. Across the literature, responsible GenAI use is associated with critical evaluation of generated information, ethical awareness, contextual adaptation of teaching materials, and teachers' continued responsibility for educational decisions. The analysis also indicates that AI-specific literacy is relevant to, but not identical with, broader digital literacy. In Islamic Religious Education, verification of religious explanations and alignment with educational values are particularly important considerations. The article proposes a conceptual connection among digital literacy, ethical evaluation, pedagogical competence, and pedagogical agency, without claiming a tested causal relationship. GenAI should therefore be approached as an assistive resource rather than a replacement for teachers' professional judgment and moral guidance. Further classroom-based research is needed to examine these relationships empirically.

Keywords: digital literacy, generative artificial intelligence, Islamic education, AI ethics, pedagogical competence

Introduction

Generative artificial intelligence (GenAI) has become relevant to teachers' work because it can produce draft explanations, exercises, and lesson materials in response to natural-language instructions. Yu and Guo (2023) discuss this development in relation to educational reform. Their account provides a starting point for considering opportunity, but the possibility of

producing material more quickly does not establish that the resulting material is pedagogically appropriate. A teacher still needs to determine what a particular lesson is intended to achieve and whether an AI-generated response advances that aim. This distinction is central to the argument developed in the following paragraphs because technical possibility alone does not establish educational suitability.

Hwang and Chen (2023) similarly frame generative AI through both its applications and challenges. Read alongside Yu and Guo (2023), this suggests that the central issue is not simply whether teachers use GenAI but under what conditions its outputs become educationally useful. In Islamic Religious Education (PAI), those conditions include source accuracy, students' developmental needs, and the teacher's responsibility for how religious knowledge is presented. Accordingly, the discussion moves from what GenAI can produce to the criteria teachers use when deciding whether to use it. The relevance of this point becomes clearer when the same decision is considered within the subject-specific responsibilities of PAI teachers.

The notion of AI literacy helps specify the capacities involved in such judgments. Ng et al. (2021) conceptualize AI literacy as a field of knowledge and competence rather than merely the ability to operate a digital interface. This distinction matters when a teacher can produce a polished answer but cannot explain its limitations or identify what needs verification. This concern also explains why a review of competence must address both the quality of AI-generated content and the accountability of its human user.

Chiu et al. (2024) develop a framework of AI literacy and competency that further emphasizes the educational significance of understanding AI. Chee et al. (2025) consider how competency expectations differ across learner groups. These contributions should not be treated as interchangeable prescriptions for PAI teachers; instead, they indicate why competence needs to be interpreted in relation to a particular professional role. For teachers, evaluating and adapting generated material is at least as important as generating it.

The context of Islamic education adds questions that are not resolved by general accounts of technological proficiency. Mustaghfirin et al. (2026) discuss Islamic educational transformation in the context of digital disruption and moral concerns. Their focus indicates why educational change must be considered in relation to the purposes and values of Islamic education rather than solely in terms of efficiency. The next step is to consider how these general concerns are interpreted in scholarship on teacher preparation and Islamic education.

Zulfa et al. (2026) examine opportunities, challenges, and ethics in AI-supported PAI learning. Taken together with Mustaghfirin et al. (2026), this literature supports examining how a teacher mediates between new instructional possibilities and responsibility for religious content. The present article develops that connection conceptually; it does not assume that all teachers experience the same opportunities or challenges.

Reliability is one concrete reason why professional judgment remains necessary. Walters and Wilder (2023) document fabricated and erroneous bibliographic citations produced by ChatGPT. Their evidence concerns citation generation, not the frequency of errors in PAI classrooms, but it demonstrates why a plausible-looking reference should not be accepted without checking it against an identifiable source. This distinction is central to the argument developed in the following paragraphs because technical possibility alone does not establish educational suitability. Accordingly, the discussion moves from what GenAI can produce to the criteria teachers use when deciding whether to use it.

The concern extends beyond factual correctness. Cotton et al. (2024) examine academic integrity in the context of ChatGPT, raising questions about responsible authorship and the presentation of AI-assisted work. Yan et al. (2024) synthesize practical and ethical challenges of large language models in education. These sources illuminate different aspects of responsibility: verification of claims, transparency about assistance, and attention to the conditions in which generated material is used. A PAI teacher may need to address all three when preparing teaching materials.

The ability to respond to these concerns depends partly on pedagogical knowledge. Celik (2023) develops an Intelligent-TPACK perspective on teachers' knowledge for ethical AI integration. This is useful because the appropriateness of a generated explanation cannot be judged through technical knowledge alone: the teacher must also consider subject content and teaching strategy. The relevance of this point becomes clearer when the same decision is considered within the subject-specific responsibilities of PAI teachers. This concern also explains why a review of competence must address both the quality of AI-generated content and the accountability of its human user.

Evidence concerning professional preparation provides a complementary perspective. Tan et al. (2025) examine a professional-development intervention among higher education teachers, while Yau et al. (2025) investigate in-service teachers' competency to teach AI. Their settings and research questions differ from those of PAI teachers. Nevertheless, they help establish why teacher preparation deserves separate attention from general claims about the usefulness of AI applications.

The review accordingly asks: (1) Which dimensions of teachers' digital literacy are relevant to responsible GenAI use in Islamic education? (2) Which ethical challenges concern accuracy, verification, integrity, and responsibility? (3) How might digital literacy support pedagogical competence and teachers' decision-making agency? The contribution is a focused conceptual synthesis connecting these dimensions, rather than a claim of discovering an entirely unexplored topic. The next step is to consider how these general concerns are interpreted in scholarship on teacher preparation and Islamic education.

A useful distinction is needed at the outset between adopting a technology and developing the professional capacity to use it well. A teacher may be able to enter prompts and obtain a lesson outline within seconds yet remain unable to judge whether the outline is accurate, suitable for the students' level, or consistent with the objectives of a particular subject. Conversely, a teacher with limited familiarity with an individual application may still possess strong pedagogical judgment and sound practices of source verification. This distinction matters because an assessment of teachers' digital literacy cannot be reduced to the frequency of GenAI use. For the present review, the more relevant question is what teachers are able to understand, evaluate, decide, and justify when they incorporate AI-generated materials into their work.

Islamic Religious Education (PAI) provides a particularly useful context in which to examine that question. Its subject matter includes knowledge claims, interpretive traditions, and value-laden educational purposes. An AI-generated explanation may be linguistically clear and age-appropriate while nevertheless omitting a relevant qualification, confusing the source of a quotation, or presenting one interpretation without acknowledging that interpretation is required. Such possibilities do not demonstrate that a particular system has made those errors; rather, they explain why a teacher's evaluation of religious learning materials must consider more than

readability or speed of production. In this setting, the teacher's professional task is to connect accurate content with appropriate pedagogy and responsible moral guidance.

The term 'digital literacy' is retained as the overarching concept because it appears in the accepted research abstract and captures a wider set of information practices than the operation of AI systems alone. AI literacy is used as a complementary concept when a source addresses the characteristics of AI, such as the need to interpret generated outputs, recognize limitations, and assess ethical implications. Keeping the concepts distinct avoids an analytical shortcut: a framework developed to teach students about AI does not automatically provide a complete account of a PAI teacher's digital literacy. The relationship between these concepts is therefore a question for interpretation across the reviewed literature, not an assumption built into the review. This distinction is central to the argument developed in the following paragraphs because technical possibility alone does not establish educational suitability.

The problem also has an institutional dimension. Decisions about whether teachers may use AI to prepare assessments, how students should acknowledge AI assistance, and which types of student information may be entered into external systems are not exclusively individual matters. They can depend on school policy, access to technology, professional support, and the availability of reliable teaching resources. A focus on teachers' competence must therefore avoid implying that every challenge can be solved through personal skill development alone. The literature is examined with attention to both individual judgment and the educational conditions within which that judgment is exercised.

The central argument of this article is consequently narrower than the broad claim that GenAI will transform Islamic education. The review asks how teachers can retain meaningful control over educational decisions while making selective use of AI assistance. This framing allows opportunities and risks to be discussed together: an application can reduce the time needed to draft a worksheet, but the saved time does not remove the need to check religious content; it can suggest differentiated examples, but the teacher must still decide whether they serve the intended learning objective. The analytical value of digital literacy lies in explaining how teachers negotiate these decisions rather than in celebrating or rejecting the technology in general. Accordingly, the discussion moves from what GenAI can produce to the criteria teachers use when deciding whether to use it.

Methods

Research Design

This study adopts a qualitative literature review with conceptual analysis. It interprets and compares published scholarship rather than collecting primary data or estimating causal effects. The review does not claim to be a systematic literature review or an exhaustive mapping of the field. The purpose of this approach is to make conceptual relationships explicit rather than to estimate the frequency of particular outcomes. This distinction also determines how the results are presented: as an interpretive synthesis rather than as pooled empirical findings.

A literature review is appropriate for this inquiry because its principal object is the relationship among concepts already discussed across several bodies of scholarship. The study does not ask whether a specified GenAI application raises students' test scores or whether a particular training program has a measurable causal effect. Instead, it asks what the literature enables us to say about responsible use and where the limits of that evidence lie. Conceptual analysis is used to clarify the meaning and relationships of digital literacy, AI literacy, ethical

evaluation, pedagogical competence, and agency. The resulting interpretation should be read as a reasoned synthesis, not as a new empirical measurement.

The unit of analysis is the published work, including its research setting, claims, and type of evidence. Where a publication reports observations or a training outcome, the review treats those findings as specific to the reported study. Where an article proposes an ethical framework or discusses educational possibilities, it is used to develop conceptual understanding rather than to establish an observed effect. This distinction is particularly important because the corpus combines research on general education with publications concerning Islamic education and religious education more broadly. The study therefore evaluates the explanatory contribution of each publication in relation to its context and design.

Literature Collection and Selection

The author assembled an initial corpus of 32 scholarly articles through Google Scholar, Scopus, ResearchRabbit, and Open Knowledge. Sources were selected for relevance either to the overall topic of GenAI in Islamic education or to individual analytical dimensions, including digital literacy, AI literacy, ethics, and pedagogical competence. Therefore, not every publication addresses all dimensions simultaneously. Sources focused on Islamic education provide contextual evidence; studies from general education, AI ethics, and teacher education contribute concepts or comparative findings. The use of Scopus as a discovery platform does not establish that every article is Scopus-indexed. A systematic search log, date-bounded query history, and formal screening flow were not documented and are not claimed here.

Selection was based on topical relevance rather than the requirement that every article address all variables simultaneously. This choice reflects the interdisciplinary nature of the question. Literature on academic integrity can inform the analysis of responsible AI use even when it does not concern PAI; a paper on teacher knowledge can inform the pedagogical dimension even when it does not examine Islamic values. In contrast, publications on PAI and Islamic education are especially important for contextualizing the implications of those broader concepts. The selection logic thus aims at complementary explanatory roles rather than treating all articles as equivalent sources of evidence.

The number 32 refers to the assembled working corpus, not to the number of records retrieved by an exhaustive search or the result of a documented screening process. No PRISMA flow diagram, reproducible database query, or numerical exclusion rate is presented. The limitations of this procedure are acknowledged because relevant publications may have been missed and because the corpus may reflect the pathways by which the author discovered the literature. These limits do not prevent a conceptual review, but they constrain claims about comprehensiveness or the prevalence of a view across the entire field. The breadth of the corpus supports comparison across topics, but it does not establish that every relevant publication was located.

Analytical Approach

The corpus was organized for interpretive comparison around four dimensions derived from the study objectives: (1) teachers' digital and AI literacy, (2) information reliability and ethical responsibility, (3) pedagogical competence and professional development, and (4) pedagogical agency in Islamic education. The synthesis distinguishes empirical observations, reviews, and normative or conceptual arguments. It does not calculate pooled effects, count studies as evidence of consensus, or extrapolate findings from general education directly to PAI. This procedure keeps the connection between the source material and the author's interpretation

visible to the reader. It also reduces the risk of presenting a conceptual implication for PAI as if it were an observed finding in PAI classrooms.

The four analytical dimensions function as organizing questions rather than independent numerical variables. For each dimension, the review considers what the source actually addresses, which educational population or setting it concerns, and what kind of conclusion its design can support. Connections are then explored across dimensions: for example, an article about erroneous citations informs the need for verification, while a teacher-competence framework helps explain why that verification is part of professional practice. The synthesis deliberately preserves the difference between these contributions rather than converting them into a single measure. The thematic sections that follow use these distinctions to examine competence, ethics, and teacher agency in relation to one another.

A further interpretive distinction is made between a reported finding and an implication drawn for PAI. The fact that fabricated references have been documented in an evaluation of ChatGPT does not establish how frequently a teacher encounters inaccurate religious explanations. It does, however, justify asking how teachers verify generated references and quotations. Similarly, an intervention with university lecturers may demonstrate the potential value of professional learning in its own setting, but it cannot establish that the same approach will have the same effect among school-level PAI teachers. The Discussion makes such transitions explicit so that recommendations do not appear to be direct observations when they are actually reasoned applications of existing scholarship.

Results

Digital Literacy and AI-Specific Competencies

Ng et al. (2021) provide a broad conceptual entry point into AI literacy. Their review helps distinguish awareness of AI-related concepts from the narrower ability to produce an output. In the context of lesson preparation, this distinction means that a successful prompt is not itself evidence that a teacher can judge the accuracy or suitability of the response. The distinction matters because producing a plausible response and evaluating its educational reliability are different professional actions.

Chiu et al. (2024) approach AI literacy through a competency framework, while Chee et al. (2025) explore differences among learner groups. The latter distinction matters because competencies developed for pupils or general users cannot be transferred to teachers without considering professional responsibility. A teacher's evaluation has consequences for what students are asked to learn and which sources they are encouraged to trust.

Yim (2024) addresses AI literacy in primary education, whereas Sperling et al. (2024) review AI literacy in teacher education. Their different educational emphases reinforce the importance of specifying the population under discussion. Anggraini et al. (2026) consider GenAI and gamification in digital literacy; this contributes an additional pedagogical angle but does not, by itself, establish how PAI teachers verify religious material. The synthesis therefore identifies evaluative judgment as a connecting concern while retaining the limits of each source.

Across these perspectives, a distinction emerges between being able to operate an application and being able to judge its output. Operational ability may involve entering a request, modifying a prompt, or exporting an answer. Evaluative ability involves asking whether the answer addresses the learning objective, whether its factual claims can be traced to reliable sources, and whether the proposed activity is appropriate for the intended learners. A teacher might

demonstrate the first without consistently demonstrating the second. The reviewed frameworks help explain why digital literacy for GenAI-supported instruction should not be measured only by access, confidence, or usage frequency.

The educational setting changes what successful evaluation looks like. A general classroom activity might prioritize a clear explanation and a suitable difficulty level. In PAI, teachers may also need to consider the accuracy of cited religious material, the distinction between quotation and interpretation, and the appropriateness of presenting contested interpretations as settled facts. These are not separate from digital literacy; they are examples of how critical digital practices operate within subject-specific teaching. The literature therefore supports a context-sensitive understanding of competence, even though it does not provide one universally validated measure for PAI teachers.

Ethical Risks and Verification

Walters and Wilder (2023) demonstrate that AI-generated bibliographic references can contain fabricated or erroneous details. For teaching, the implication is specific: references generated by an AI system require independent checking before they are incorporated into learning materials. This finding should not be generalized into an unsupported estimate of how often religious explanations are inaccurate. The problem is not resolved simply by adding more generated detail, because fluent wording does not itself provide evidence of accuracy. In PAI, the teacher must additionally consider whether an explanation faithfully represents the religious material it invokes.

Cotton et al. (2024) discuss academic integrity, which introduces a different issue from reference accuracy: even accurate generated content can be used in ways that obscure authorship or responsibility. Yan et al. (2024) address broader practical and ethical challenges, making it possible to consider verification and transparency together without treating them as the same problem. These concerns lead to a distinction between checking the content of an answer and being transparent about how the answer was produced.

The educational context matters as well. Achruh et al. (2024) discuss challenges and opportunities surrounding AI adoption in Indonesian Islamic higher education. Elmahjub (2023) offers an Islamic-ethical perspective on AI. The former provides an institutional context, while the latter contributes ethical reasoning; neither should be presented as a direct classroom experiment demonstrating the effectiveness of a particular verification practice.

Three related but distinguishable problems can be identified. First, an output may be inaccurate: a citation may not exist or a statement may be unsupported. Second, an output may be insufficiently transparent: the user may be unable to identify the source of a claim or the basis for a recommendation. Third, the way an output is used may be ethically problematic even when the content is accurate, for example if a teacher presents AI-generated material as independently researched or enters identifiable student information into a tool without appropriate safeguards. Treating these issues separately makes the ethical discussion more precise than describing them all simply as 'AI risks'.

The implications for PAI teaching are practical but should be framed as safeguards rather than experimentally verified solutions. A teacher can distinguish generated explanations from cited primary sources, inspect quotations before sharing them, and avoid using an AI response as the sole authority for religious claims. The need for such safeguards follows from the combination of documented general reliability concerns and the importance of source-sensitive knowledge in Islamic education. The reviewed studies do not show that these particular

safeguards eliminate errors, and the review makes no claim that they have been tested as a complete intervention. The practical implication is a continuing duty of judgment rather than an assumption that every generated output is either useful or unreliable.

Academic integrity also applies to the teacher's own preparation of learning materials. Transparency about AI assistance may be relevant when a generated activity, assessment, or explanatory text is distributed to students or colleagues. The appropriate form of disclosure will depend on institutional expectations and the nature of the work. Rather than prescribing one universal disclosure rule, the literature supports the broader principle that responsibility for checking, adapting, and presenting instructional material remains with the educator who uses it. The problem is not resolved simply by adding more generated detail, because fluent wording does not itself provide evidence of accuracy.

Pedagogical Competence and Preparation

Celik (2023) offers Intelligent-TPACK as a way to understand the professional knowledge involved in ethical AI integration. This framework helps explain why technological proficiency alone is insufficient: a teacher must relate a tool's affordances to instructional purposes, subject content, and professional responsibilities. The importance of this perspective lies in connecting the use of an AI tool with decisions about content, learners, and instructional goals. This connection is especially important when an activity appears polished but has not yet been evaluated for classroom suitability. The evidence from different educational settings is informative, although it cannot be transferred automatically to Indonesian PAI classrooms.

Tan et al. (2025) study professional development among higher education teachers using an Intelligent-TPACK-related approach. The relevance for this review lies in the attention given to teacher preparation, rather than in any assumption that outcomes in universities necessarily apply to school-level PAI teaching. The next question is how teachers can develop and exercise these judgments in realistic instructional situations. The importance of this perspective lies in connecting the use of an AI tool with decisions about content, learners, and instructional goals.

A more local example is provided by Wahid et al. (n.d.), who report a training activity involving 15 PAI teachers and an increase in reported understanding from 56.3 to 82.7. This result is informative within its reported training setting, but it does not establish sustained changes in classroom practice. Iflaha and Zarkasi (2025) discuss teacher-competence transformation in the era of generative AI, reinforcing the need to examine professional development beyond short-term familiarity with tools. This connection is especially important when an activity appears polished but has not yet been evaluated for classroom suitability.

The competency frameworks help clarify why a technologically fluent teacher is not necessarily pedagogically prepared. Generating multiple examples of a concept is easy to demonstrate, but choosing among those examples requires knowledge of the subject, awareness of students' prior understanding, and a rationale for the teaching sequence. A suitable AI-assisted lesson therefore depends on the interaction of technological capability and pedagogical judgment. In PAI, content-related judgment also includes attention to the language, source, and educational purpose of religious explanations. The evidence from different educational settings is informative, although it cannot be transferred automatically to Indonesian PAI classrooms.

The professional-development evidence should be interpreted at its proper scale. A reported increase in understanding after a localized workshop is informative about that group and that training experience. It does not by itself show retention, changes in classroom routines, or improved student learning. Likewise, a university-based professional-development intervention

cannot be transferred without adjustment to a madrasah or school setting. What these different studies contribute is a rationale for investigating professional learning further, including how teachers practice verification, adapt AI-generated content, and explain their instructional decisions.

A more developed account of preparation would therefore include opportunities for teachers to compare generated outputs with trustworthy materials, revise examples for different learners, and discuss ethical dilemmas encountered in actual teaching tasks. These activities are proposed here as pedagogical implications of the synthesis. They should not be mistaken for a training program that this review implemented or evaluated. The next question is how teachers can develop and exercise these judgments in realistic instructional situations. The importance of this perspective lies in connecting the use of an AI tool with decisions about content, learners, and instructional goals.

Islamic Education and Teacher Agency

The PAI-focused literature approaches GenAI from several related perspectives. Yusuf and Arifin (2026) examine its effectiveness, ethics, and teacher competence through a literature-based discussion, while Ramadhani et al. (2026) consider opportunities, barriers, and strategies for AI-supported PAI learning. These publications make the PAI context explicit, but their discussions should not be mistaken for a common empirical dataset. The shared issue is not whether AI can generate material, but who is responsible for interpreting and approving that material for teaching.

Alamsyah (2026) examines ChatGPT as a supporting medium for PAI learning from pedagogical and ethical perspectives. Zulfa et al. (2026) similarly foreground opportunities and ethical challenges. Together, these contributions suggest that instructional usefulness depends on more than whether an application can generate material; the teacher must judge whether that material is consistent with learning objectives and responsible religious instruction. This issue links technological assistance to the professional and value-based purposes of Islamic education.

Other sources deepen the interpretation of this responsibility. Aimmah et al. (2026) approach AI in Islamic education through philosophy of science, while Ahmad et al. (2025) address pedagogical methods in modern Islamic education. Papakostas (2025) discusses ethical, pedagogical, and theological issues in religious education more broadly. The latter offers a comparative conceptual perspective, not direct evidence about Indonesian PAI classrooms. Across these contexts, the review interprets teacher agency as the continuing responsibility to accept, revise, or reject AI suggestions.

A key difference between an assistive tool and an educational authority concerns who has the final responsibility to judge a teaching decision. A generated response can offer options, but it cannot take responsibility for a student's understanding, a misleading quotation, or an inappropriate assessment task. The concept of agency captures the teacher's capacity to consider those options critically and to reject them when necessary. In this sense, responsible use is not measured by how often a teacher accepts AI suggestions but by whether the teacher remains able to justify the decisions made. The reviewed publications illuminate the issue from different settings, so their implications must be adapted rather than assumed to be identical.

This perspective also guards against a false opposition between innovation and religious educational values. The literature does not require teachers to avoid GenAI altogether. Instead, it suggests that technological assistance must be evaluated in light of the purposes of Islamic education, including knowledge, character formation, and responsible relationships between

teachers and learners. A teacher may use AI to generate preliminary questions or alternative explanations while still retaining responsibility for religious accuracy, instructional appropriateness, and the human interaction through which students receive guidance. The resulting synthesis treats teacher judgment as a necessary condition of responsible integration, not as an optional final check.

The cross-context evidence remains limited. Studies of religious education outside Indonesia can illuminate comparable concerns about educational values and teacher roles, but they do not establish how Indonesian PAI teachers behave. Likewise, conceptual articles can articulate why human agency matters without demonstrating how agency is maintained in classrooms. This distinction points to an important research need: observational or interview-based studies of how teachers actually accept, edit, or reject AI-generated materials in their day-to-day PAI teaching. The shared issue is not whether AI can generate material, but who is responsible for interpreting and approving that material for teaching.

Table 1. Thematic synthesis of the reviewed literature

Analytical dimension	Literature-based synthesis	Relevance to PAI teaching
Digital and AI literacy	Understanding tool capabilities, limitations, and the need to critically evaluate generated information.	Evaluate generated religious explanations rather than relying on fluency or convenience.
Ethical responsibility	Source reliability, transparency, academic integrity, and accountable use of AI-generated content.	Check religious quotations and references; make responsible decisions about disclosure and student data.
Pedagogical competence	Combining technological understanding with content knowledge, learner needs, and instructional design.	Adapt examples, tasks, and assessments to curriculum goals and student understanding.
Pedagogical agency	Maintaining human judgment over the selection, revision, or rejection of AI suggestions.	Keep the teacher responsible for instructional choices and value-sensitive guidance.

Table 1 shows that the four dimensions address different parts of the same professional task. Digital and AI literacy concerns understanding and evaluating the tool; ethical responsibility concerns the acceptability and accountability of its use; pedagogical competence concerns the suitability of the learning activity; and agency concerns who ultimately decides. The dimensions overlap in practice, but none can substitute for the others. In PAI, their interaction is especially visible when a generated explanation appears persuasive yet requires source verification and adaptation to the students' learning context. This issue links technological assistance to the professional and value-based purposes of Islamic education.

Discussion

Digital Literacy as a Connecting Competence

Digital literacy becomes analytically important when it is connected to decisions rather than treated as a checklist of tools. Ng et al. (2021) supply a conceptual basis for AI literacy, and Chiu et al. (2024) frame it in competency terms. These perspectives support asking what a teacher understands about a generated output, not simply whether the teacher knows how to request it.

For a PAI teacher, this question leads directly to pedagogical responsibility. The context-sensitive discussions of Islamic education by Hilmi and Hilmi (2026) and Rifa'i (2026) foreground values and digital literacy in educational transformation. Their contributions help explain why critical evaluation must be interpreted within educational purposes. The argument

advanced here is that technical understanding enables, but cannot replace, ethical and pedagogical judgment. The relationship is therefore best understood through an instructional decision in which technological skill and professional judgment interact.

The value of treating digital literacy as a connecting competence becomes clear when considering a single instructional decision. Suppose a teacher asks a GenAI system to draft a short explanation of a religious concept for younger learners. Digital literacy is involved in framing the request and recognizing the nature of the output. Ethical evaluation is involved in checking whether its statements and references are reliable. Pedagogical competence is involved in deciding whether the explanation fits the learners' level and the lesson objective. Agency is expressed in the teacher's final decision to revise, use, or discard the material. This example is illustrative, not a case observed in the reviewed studies; its purpose is to show why the concepts are analytically connected.

The four dimensions should not be interpreted as a rigid sequence or as independent scores. Ethical evaluation may occur while the teacher is designing a prompt, and pedagogical judgment may influence which sources are checked. Agency is exercised throughout the process, not only at its end. A more accurate conceptual interpretation is therefore that the dimensions reinforce and constrain one another. Digital skills without judgment may lead to uncritical acceptance, while ethical intentions without sufficient understanding of the technology may make verification difficult. The review identifies these tensions as a basis for further inquiry rather than claiming to have measured their strength.

Ethical Verification and Islamic Educational Values

The need for verification has an empirical point of departure: Walters and Wilder (2023) show that AI-generated citations may be unreliable. A PAI teacher preparing a handout should therefore not treat a generated reference as proof that a religious statement is properly sourced. The teacher must check the source itself and distinguish the original wording from an AI-generated paraphrase. This point becomes more significant when the material concerns religious knowledge that students may regard as authoritative. The ethical dimension is thus inseparable from the pedagogical decision about what to present and how to explain it.

The ethical issue is broader than citation accuracy. Cotton et al. (2024) discuss academic integrity, while Elmahjub (2023) develops an Islamic-ethical discussion of AI. These works operate at different analytical levels: one concerns integrity in educational practice, the other the ethical principles through which AI may be evaluated. Their combination supports a reasoned expectation of accountability, but it does not amount to an experimentally validated PAI verification protocol.

Institutional considerations complicate the picture. Achruh et al. (2024) discuss AI adoption within Indonesian Islamic higher education, including contextual challenges. Accordingly, the present review does not place the entire burden of responsible AI use on individual teachers: school guidance, professional learning, and appropriate access can shape what teachers are able to do. The distinction also indicates why responsibility is shared between teachers' professional practice and institutional guidance.

For a teacher, source verification is not merely a technical quality-control step. It is also a decision about what students may reasonably be invited to trust. In subjects involving religious texts and interpretation, that decision can carry implications for the way students understand authority and evidence. Teachers should be able to explain why a source is appropriate, where a quotation comes from, and which parts of an explanation represent interpretation rather than a

direct textual statement. These expectations are proposed as responsible teaching practices informed by the literature, not as a standardized protocol proven effective across PAI settings.

An Islamic ethical perspective can help articulate the purposes of verification, but it does not remove the need for specific professional decisions. Invoking a principle such as public benefit is insufficient unless teachers also ask what benefits are anticipated, what risks remain, and who may be affected. For example, the convenience of automated feedback must be considered alongside student privacy, the reliability of feedback, and the educational value of teacher-student interaction. The literature supports asking these questions; it does not provide a universal formula that resolves them in every school or classroom. These considerations provide a basis for discussing how competence and agency operate together in classroom preparation.

The discussion also distinguishes the responsibility of individual teachers from the responsibilities of institutions. Teachers can check materials and exercise caution with sensitive information, but schools and educational authorities may need to provide policies, access to appropriate tools, and opportunities for professional learning. Without such support, calls for ethical AI use risk becoming an unrealistic burden placed entirely on teachers. This point becomes more significant when the material concerns religious knowledge that students may regard as authoritative. The ethical dimension is thus inseparable from the pedagogical decision about what to present and how to explain it.

Pedagogical Competence and Agency

Celik's (2023) Intelligent-TPACK perspective provides a basis for relating technological, pedagogical, and ethical knowledge. Its significance here is explanatory: when a teacher rejects a fluent but unsuitable AI-generated example, that decision may reflect content knowledge and pedagogical judgment rather than a lack of technical ability. The teacher's decision to accept, revise, or reject an output is the point at which technological assistance becomes pedagogically accountable. This decision requires more than familiarity with a prompt interface; it requires a defensible explanation of educational suitability. The proposed relationship is conceptual and should not be mistaken for a causal effect measured by this review.

Tan et al. (2025) examine professional development in a higher education setting, offering a reason to investigate how teachers learn to integrate AI responsibly. Wahid et al. (n.d.) report a smaller PAI-focused training activity. The contrast between these studies is important: they share an interest in professional learning, but their populations, designs, and reported outcomes differ. The present review therefore proposes context-sensitive training as an implication, not as an intervention whose effectiveness has been established across PAI settings.

Agency remains the connecting idea. Papakostas (2025) brings ethical and theological considerations into discussions of religious education and AI. In conjunction with pedagogical competence frameworks, this suggests that human judgment is integral to responsible integration. Teachers retain the responsibility to determine whether a generated explanation is reliable, appropriate for their students, and compatible with the aims of Islamic education. This interpretation leads to the question of what further evidence is needed to examine teacher agency in practice.

Pedagogical agency is most visible when a teacher makes a reasoned decision that differs from a tool's suggestion. An AI-generated activity may be coherent but too difficult, insufficiently connected to the curriculum, or unsuitable for the class's religious and social context. Revising or rejecting that activity is not evidence that the technology has failed; it may instead be evidence of responsible professional use. This shifts attention from the quantity of

AI-generated material to the quality of the teacher's decisions about that material. The teacher's decision to accept, revise, or reject an output is the point at which technological assistance becomes pedagogically accountable.

This interpretation has implications for professional development. Training that focuses only on writing prompts may increase familiarity with an interface without adequately preparing teachers to recognize unsupported religious claims, assessment problems, or inappropriate examples. A more comprehensive approach would connect practical use with source verification, content knowledge, learner needs, and reflective decision-making. Such an approach is proposed by this review as an area for development and testing, not reported as a completed intervention. This decision requires more than familiarity with a prompt interface; it requires a defensible explanation of educational suitability.

Agency also involves acknowledging when a teacher needs further expertise. A generated answer touching on a specialized religious question may require consultation with authoritative materials or knowledgeable colleagues. Responsible professional judgment can include delaying the use of an answer until it has been checked. This is consistent with positioning GenAI as a tool that extends available options while leaving accountability with the human educator. The proposed relationship is conceptual and should not be mistaken for a causal effect measured by this review.

Table 2. Ethical and pedagogical challenges and proposed implications

Challenge identified in the literature	Proposed pedagogical response	Scope of the implication
Unsupported or inaccurate generated claims	Compare claims and quotations with reliable disciplinary sources before classroom use.	A precautionary practice; not evaluated as an intervention in this review.
Uncritical dependence on generated outputs	Ask teachers to explain why they accept, revise, or reject a generated suggestion.	A professional-learning implication based on the agency argument.
Mismatch with learner needs or curriculum	Review language, difficulty, sequencing, and intended learning outcomes.	Requires contextual pedagogical judgment by the teacher.
Academic integrity and unclear attribution	Apply transparent, institutionally appropriate rules for AI assistance.	Implementation depends on local policy and assessment context.
Value-sensitive or privacy-related concerns	Review the educational purpose and avoid unnecessary disclosure of student information.	Requires both teacher judgment and institutional safeguards.

Table 2 translates the conceptual synthesis into questions that teachers and institutions can act upon. These recommendations should not be read as a checklist whose completion guarantees safe AI use. For example, verifying a quotation addresses one type of factual risk but does not establish that the associated learning activity is appropriate for a particular class. Similarly, disclosure of AI assistance may support transparency without resolving concerns about the quality of an assessment. Responsible integration therefore requires repeated professional judgment across content, pedagogy, and institutional practice.

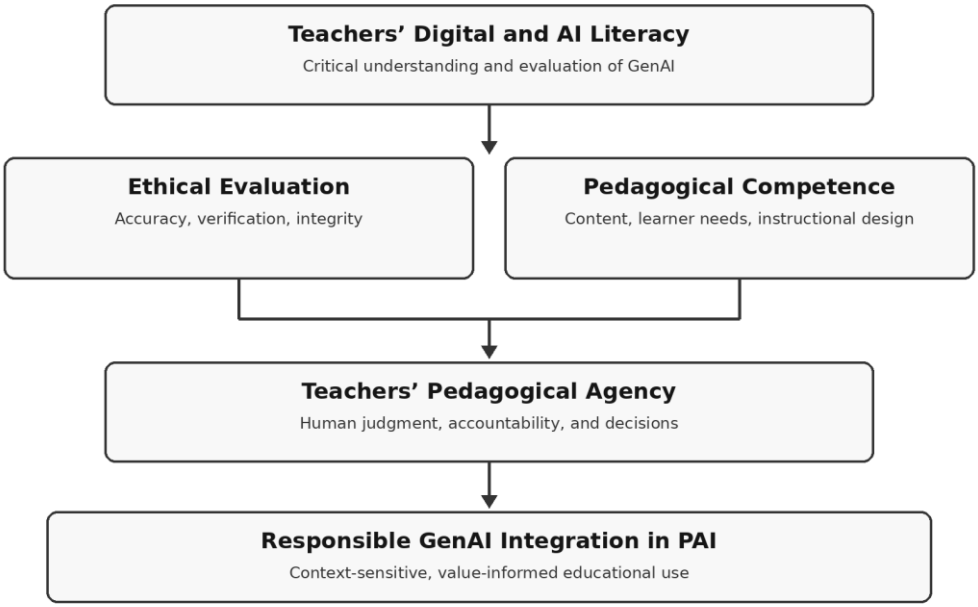


Figure 1. Proposed conceptual framework for responsible GenAI integration in Islamic education

Figure 1 brings the synthesis together by placing digital and AI literacy as a foundation for evaluating generated content, with ethical and pedagogical judgments informing teachers' exercise of agency. The framework is intended as a guide for discussing decisions, not as a predictive model. Teachers may move back and forth among its components while preparing or teaching a lesson. Future empirical research would be needed to test how these relationships operate in particular schools and how institutional conditions affect them. This interpretation leads to the question of what further evidence is needed to examine teacher agency in practice.

Limitations and Future Directions

The relevance-oriented corpus is not exhaustive; it includes empirical studies, conceptual discussions, and reviews across different settings. Selection procedures were not documented as a systematic protocol, and the proposed relationships were not tested empirically. Future studies could examine how PAI teachers verify AI-generated religious content, how professional development affects their classroom decisions, and how pedagogical agency is sustained during GenAI use. The interpretation is therefore limited to what the selected publications can support, rather than a claim of comprehensive coverage. These boundaries matter when translating findings from general or higher education to the specific responsibilities of PAI teachers.

An additional limitation concerns the range of concepts covered by the corpus. Some publications address AI literacy as a general educational goal, while others concern the use of GenAI in teaching; these are related but not identical objects of study. The review therefore does not claim that one unified theory has already been established across the 32 publications. Nor does it infer that the frequency with which a topic appears in this selected corpus represents its prevalence in the wider research literature. Future studies can test and refine the proposed relationships by examining actual teaching decisions and the reasons behind them.

Future empirical work could use classroom observation, interviews, analysis of teacher-created materials, or carefully designed professional-development evaluations to investigate the conceptual relationships proposed here. Particularly useful questions include which kinds of AI-generated claims PAI teachers verify, which sources they use for verification, how they decide that a generated explanation is suitable for a particular learner group, and what institutional

conditions support or constrain those decisions. Such research would help move from a defensible conceptual synthesis toward evidence about actual educational practices. The interpretation is therefore limited to what the selected publications can support, rather than a claim of comprehensive coverage. These boundaries matter when translating findings from general or higher education to the specific responsibilities of PAI teachers.

Conclusion

Teachers' digital literacy is a central consideration in the responsible use of GenAI for Islamic education. The reviewed literature connects critical evaluation of information, ethical responsibility, pedagogical competence, and teachers' continued decision-making agency. In PAI, these considerations also relate to the appropriateness of religious explanations and the moral responsibilities of educators. The article contributes a conceptual synthesis, not an experimentally validated framework or a claim that GenAI improves learning outcomes. GenAI should be treated as an assistive resource whose outputs remain subject to verification and teacher judgment. Classroom-based research is needed to test how these responsibilities are enacted in practice.

The practical implication is not that teachers should either adopt or reject GenAI as a whole. Rather, adoption decisions should remain conditional on the educational task, the reliability of the output, the teacher's competence, and the values guiding instruction. For PAI teachers, these conditions include attention to religious sources and the formative role of teacher-student relationships. A useful next step for institutions is to support teachers in making and documenting these judgments rather than assessing competence solely by how often AI tools are used. The central contribution is a framework for asking better questions about responsible integration rather than a claim that one tool or method is universally effective.

Conflict of Interests

The author declares that there are no conflicts of interest related to the research, authorship, or publication of this article.

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