



 Yakup KAYA<sup>a\*</sup>

<sup>a</sup> Doç. Dr./Assoc. Prof., Aydın Adnan Menderes Üniversitesi, yakup.kaya@adu.edu.tr

\* Sorumlu Yazar/Corresponding Author



#### Künye:

Cilt/Volume: 6  
Sayı/Issue: 1  
Sayfa/Page: 31-48

Geliş Tarihi/Received: 22 Ocak 2026  
Kabul Tarihi/Accepted: 20 Nisan 2026  
Yayın Tarihi/Publication Date: 15 Haziran 2026

Atıf/Cite as: Kaya, Yakup. "Personalization and Epistemic Integrity in AI-Driven Religious Education: A Human-Centered Pedagogical Framework". *İdrak Dini Araştırmalar Dergisi* 6/1 (Haziran 2026), 31-48.



Yazarlar dergide yayınlanan çalışmalarının telif hakkına sahiptirler ve çalışmaların CC BY-NC 4.0 Lisansı altında yayınlanmaktadır. İkonlar Font Awesome'a aittir.

The authors own the copyright of their work published in the journal and their work is published under the CC BY-NC 4.0 License. Icons by Font Awesome.

## Personalization and Epistemic Integrity in AI-Driven Religious Education: A Human-Centered Pedagogical Framework

### Yapay Zekâ Destekli Din Eğitiminde Kişiselleştirme ve Epistemik Bütünlük: İnsan Merkezli Pedagojik Bir Çerçeve

#### Abstract

This study explores the opportunities and risks arising from artificial intelligence (AI) applications in religious education, focusing on the balance between personalization and epistemic integrity within a human-centered framework. As the integration of AI into educational technologies accelerates, fundamental questions regarding value transmission and informational accuracy emerge. The research relies on a thematic analysis of five key studies published between 2023 and 2025. While the limitation to a five-study dataset restricts the broader generalizability of the results, the analysis successfully identifies five core themes: personalization, epistemic integrity, conceptual depth, teacher guidance, and ethics/privacy. The findings indicate that large language models (LLMs) enhance learner motivation through tailored feedback and ease teacher workloads by enabling individualized guidance. However, content reliability remains constrained by limited source attribution, terminological inconsistencies, contextual gaps, and a frequent lack of theological and historical depth and methodological accuracy. Furthermore, the risk of presenting a single sectarian or cultural stance as neutral knowledge poses a significant threat to epistemic integrity, necessitating pluralistic framing and a two-stage validation process involving expert review. Ultimately, the study concludes that AI should be positioned strictly as a complementary tool rather than a substitute for uniquely human pedagogical capacities such as empathy, moral reasoning, and value transmission. The findings demonstrate that under strict curricular coherence, active teacher oversight, transparent data policies, and ethical governance, AI has the potential to significantly enhance learning without compromising epistemic integrity.

**Keywords:** Religious Education, Artificial Intelligence in Education, Personalized Learning, Epistemic Integrity, Human-Centered AI.

#### Öz

Bu çalışma, din eğitimi ve yapay zekâ (YZ) kesişimindeki fırsat ve riskleri, kişiselleştirme ile epistemik bütünlük kavramları odağında ve insan merkezli bir çerçevede incelemektedir. Eğitim teknolojilerindeki hızlı dönüşümle birlikte YZ'nin din eğitimine entegrasyonu, değer aktarımı ve bilgi doğruluğuna dair temel soruları gündeme getirmektedir. Araştırma, 2023-2025 yılları arasında yayımlanan beş temel çalışmanın tematik analizine dayanmaktadır. Veri setinin beş makaleyle sınırlı olması bulguların geniş çaplı genellenebilirliğini kısıtlasa da, analizler sonucunda beş ana tema başarıyla tespit edilmiştir: kişiselleştirme, epistemik bütünlük, kavramsal derinlik, öğretmen rehberliği ve etik/mahremiyet. Bulgular, büyük dil modellerinin (LLM) öğrencilere özelleştirilmiş geri bildirimler sunarak öğrenme motivasyonunu artırdığını ve bireyselleştirilmiş rehberlik sağlayarak öğretmen iş yükünü hafiflettiğini göstermektedir. Ancak üretilen içeriklerin güvenilirliği, eksik kaynak gösterimi, terminolojik tutarsızlıklar, bağlamsal boşluklar ile teolojik ve tarihsel derinlik yoksunluğu nedeniyle kısıtlanmaktadır. Ayrıca tek bir mezhepsel veya kültürel yaklaşımın tarafsız bilgi gibi sunulması epistemik bütünlük açısından ciddi riskler taşımaktadır. Bu durum, çoğulcu bir çerçeveyi ve uzman incelemesini içeren iki aşamalı bir doğrulama sürecini gerektirmektedir. Sonuç olarak çalışma, yapay zekânın empati, ahlaki akıl yürütme ve değer aktarımı gibi insana özgü pedagojik kapasitelerin yerini alamayacağını ve salt tamamlayıcı bir araç olarak işlev görebileceğini tespit etmiştir. Öğretmenin aktif denetimi, öğretim programıyla sıkı uyum, şeffaflık politikaları ve etik yönetim sağlandığında, YZ'nin epistemik bütünlüğü bozmadan öğrenmeyi destekleme potansiyeline sahip olduğu görülmüştür.

**Anahtar Kelimeler:** Din Eğitimi, Eğitimde Yapay Zekâ, Kişiselleştirilmiş Öğrenme, Epistemik Bütünlük, İnsan Merkezli Yapay Zekâ.



## 1. Introduction

Artificial intelligence (AI) has profoundly transformed educational technologies, evolving from early computer-assisted instruction to advanced large language models (LLMs) that offer adaptive content delivery and highly personalized learning experiences.<sup>1</sup> Recent empirical findings underscore that such systems can significantly increase learner motivation by adapting to individual needs.<sup>2</sup> However, within the specific domain of religious education (RE)-a discipline fundamentally tasked with moral guidance, spiritual development, and the transmission of complex societal values-this technological shift introduces a critical problem.<sup>3</sup> While LLMs present novel opportunities for dynamic content creation and tailored feedback, they simultaneously raise severe challenges regarding theological neutrality, data privacy, and epistemic integrity, particularly when AI-generated outputs lack proper source citations, exhibit terminological inconsistencies, or distort doctrinal contexts.<sup>4</sup>

Despite the growing academic discourse on educational technology, a distinct gap remains in the current literature. Existing studies tend to broadly reiterate the general benefits and risks of AI, yet there is a notable absence of targeted, practical frameworks addressing how to safely integrate generative AI into the highly sensitive, doctrinally precise context of religious education.

In response to this gap, the core issue explored in this study centers on achieving a functional equilibrium between capitalizing on the pedagogical benefits of AI-driven personalization and strictly maintaining epistemic integrity. Accordingly, the guiding research question is articulated as follows: As AI enhances personalization in religious

<sup>1</sup> Stuart J. Russell - Peter Norvig, *Artificial Intelligence: A Modern Approach* (United Kingdom: Pearson, 2016), 2; John Haugeland, *Artificial Intelligence: The Very Idea* (Cambridge: MIT Press, 1989), 2; İsmail Yalçıntaş, "Yapay Zekâ, Bilinç ve Özgür İrade Arasındaki İlişkinin Epistemolojik ve Ontolojik Analizi", *Beytulhikme* 16/1 (2026), 159-191; Alan Turing, "Computing Machinery and Intelligence", *Mind* 59 (1950), 433-436; Raymond Kurzweil, "The Age of Intelligent Machines" (Cambridge: MIT Press, 1990), 15-16, 90, 199-202, 474; Jaime R. Carbonell, "AI in CAI: An Artificial-Intelligence Approach To Computer-Assisted Instruction", *IEEE Transactions On Man-Machine Systems* 11/4 (1970), 190-191; Hans-Joachim Vogler, "Vom Lernprodukt zum Lernprozess mit ChatGPT – eine didaktische Analyse", *SEMINAR*, (2024), 115-130; Arthur C. Graesser, "Conversations with AutoTutor Help Students Learn", *International Journal of Artificial Intelligence in Education* 26, (2016), 124-132; Gabi Netz - Claudia Zanker, "Tutorielle Begleitung im vhs-Lernportal: Online lernen–aber nicht allein' weiter bilden", *DIE Zeitschrift für Erwachsenenbildung* 30.1 (2023), 37-39; Niels Pinkwart - Susan Beudt, "Künstliche Intelligenz als unterstützende Lerntechnologie", *Stuttgart: Fraunhofer-Institut für Arbeitswirtschaft und Organisation IAO*, 1.26 (2020), 2-8.

<sup>2</sup> Christoph Meier - Sabine Seufert - Josef Guggemos, "Arbeitswelt 4.0 und Smart Machines: Augmentation als Herausforderung für die Personalentwicklung", *HMD Prax. Wirtsch.* 56.4 (2019), 823-833; Wenke Apt Wenke - Kai Priesack, "KI und Arbeit – Chance und Risiko zugleich", *üt-Themenband Künstliche Intelligenz Technologie | Anwendung | Gesellschaft* ((Herausgeber Prof. Dr. Volker Wittpahl) Springer Vieweg, 2019), 222-223; Moritz Kirste, "Augmented Intelligence – Wie Menschen mit KI zusammen arbeiten", *üt-Themenband Künstliche Intelligenz Technologie | Anwendung | Gesellschaft* (Hrsg. Volker Wittpahl, Berlin: Springer Vieweg, 2019), 58-68; Erich Herber, Bernhard Schmidt-Hertha - Sabine Zauchner, "Erwachsenen- und Weiterbildung - Technologieeinsatz beim Lernen und Lehren mit Erwachsenen" (Hrsg. Ebner, Martin, Schön, Sandra), *Lehrbuch für Lernen und Lehren mit Technologien*, 2013), 385-393; Denise Klinge, "Lehrende Algorithmen – spielend-behavioristische Lernanregungen von Apps als digitale Technologien", Hrsg. Franz, Julia, vd., *Digitalisierung in der Erwachsenenbildung* (Hessische Blätter für Volksbildung 3: 96, 2020), 65-73.

<sup>3</sup> Christos Papakostas, "Artificial Intelligence in Religious Education: Ethical, Pedagogical, and Theological Perspectives", *Religions* 16/5 (2025), 563.

<sup>4</sup> Pelin Güler – Simge Gülşenoğlu – Murat Sayılır, "Akademik Yazmada Kullanılabilecek Yapay Zekâ Araçlarının Sınıflandırılması", *Eğitim Bilimleri Tematik Araştırmalar Dergisi* 1/2 (2025), 76–97.

education, how can the integrity, transparency, and ethical soundness of educational content be ensured, and through which mechanisms of design and oversight can this balance be maintained? To systematically address this question and define the scope of the study, the research draws on peer-reviewed literature published between 2023 and 2025. Employing document analysis and NVivo-assisted thematic content analysis, the inquiry focuses on five principal dimensions: (i) personalization, (ii) epistemic integrity, (iii) conceptual depth, (iv) teacher oversight, and (v) ethics and privacy.

Addressing this specific need, this study provides an original theoretical and practical contribution by proposing a comprehensive, human-centered framework tailored explicitly for RE. Moving beyond abstract ethical warnings, the study offers actionable strategies—such as curriculum-aligned AI modules, explicit source attribution practices, and two-stage expert validation mechanisms. By structurally centralizing the teacher as the ultimate epistemic gatekeeper, this framework ensures that AI effectively accelerates pedagogical processes as a supplementary tool without displacing the inherently human capacities of empathy, educational discernment, and moral reasoning.<sup>5</sup>

## 2. Theoretical Framework

### 2.1. Defining Epistemic Integrity and Its Subdimensions

In the context of religious education, "epistemic integrity" extends beyond mere factual accuracy; it is defined as the preservation of theological authenticity, historical reliability, and methodological transparency in the knowledge transmitted to learners. When AI systems generate content, epistemic integrity is at risk due to algorithmic biases or "hallucinations." To operationalize this concept, the study identifies three critical subdimensions of epistemic integrity:

*Source Transparency:* The ability to trace AI-generated information back to authenticated sacred texts, historical documents, or recognized scholarly consensus.

*Theological and Contextual Coherence:* The prevention of syncretic errors, ensuring that the AI does not mistakenly blend distinct sectarian, cultural, or doctrinal paradigms into a misleading "neutral" narrative.

*Terminological Precision:* The accurate use of specialized religious vocabulary, recognizing that subtle shifts in terminology can fundamentally alter theological meanings.

### 2.2. The Theoretical Basis of the Human-Centered Framework

The "human-centered framework" proposed in this study is theoretically rooted in the "Human-in-the-Loop" (HITL) paradigm of artificial intelligence and socio-constructivist pedagogy. Theoretically, while AI excels at pattern recognition and data synthesis, it fundamentally lacks ontological awareness, moral agency, and empathetic discernment—qualities essential for religious education. The human-centered framework posits that the teacher is not merely a facilitator but the ultimate "epistemic gatekeeper." By integrating human pedagogical agency with AI's computational power, this framework ensures that technology serves as a cognitive scaffold rather than a substitute for the educator.

---

<sup>5</sup> Jiomarie B. Jesus – Rizza R. Caumeran, "Human-Centered AI in Education: Educators' Perspectives on Teacher Roles, Ethics, and Pedagogical Value", *International Journal on Studies in Education* 8/1 (2026), 142–154.

### 2.3. Systematic Relationships Among Core Concepts

The conceptual model of this study operates on a dynamic tension between Personalization and Epistemic Integrity, mediated by Teacher Oversight within the human-centered framework.

- *AI-Driven Personalization* seeks to tailor learning experiences, adapt pacing, and provide individualized feedback. However, unchecked hyper-personalization risks generating convenient but theologically inaccurate content, thus threatening the discipline's foundation.

- *Epistemic Integrity* demands rigid adherence to truth, sources, and context, acting as a boundary against the fluidity of AI outputs.

- *The Human-Centered Framework* serves as the systemic bridge. Through mechanisms such as two-stage validation (where AI generates a response, but the teacher reviews it for curricular and doctrinal alignment), the teacher harmonizes these competing forces.

Consequently, the theoretical model argues that personalization in RE can only be pedagogically valid and ethically sound when it is strictly anchored by epistemic integrity, a balance that can solely be sustained through active human oversight.

## 3. Methodology

### 3.1. Research Design and Data Collection

This study employs a document analysis design, a well-established tradition within qualitative research, to systematically evaluate the current trends, opportunities, and ethical boundaries surrounding the integration of artificial intelligence (AI) in religious education (RE).<sup>6</sup> This section clarifies the distinction between the broader background literature and the primary dataset: while the background literature (cited in the introduction and theoretical framework) informs the historical and conceptual context of AI in education, the primary dataset for this document analysis is strictly limited to a carefully selected core group of studies that specifically examine the intersection of generative AI and religious education.

The data collection process involved a systematic search across the Google Scholar, Web of Science, and DergiPark databases. The search strategy utilized Boolean operators and keyword combinations, including ("religious education" OR "theological education") AND ("artificial intelligence" OR "AI" OR "ChatGPT" OR "large language models") AND ("personalized learning" OR "epistemic integrity" OR "ethics").

To ensure the rigor and relevance of the dataset, concrete inclusion and exclusion criteria were applied. Inclusion criteria required that the studies be: (a) peer-reviewed journal articles or formal academic reports; (b) published recently between 2023 and 2025 to capture the era of advanced generative AI; and (c) directly focused on the pedagogical or ethical implications of AI within the specific domain of religious education. Conversely, exclusion criteria eliminated: (a) studies discussing AI in general education without a specific focus on RE; (b) non-peer-reviewed materials such as blog posts, opinion pieces, or

---

<sup>6</sup> Ali Yıldırım - Hasan Şimşek, *Sosyal Bilimlerde Nitel Araştırma Yöntemleri* (Ankara: Seçkin Yayıncılık, 2011), 187.

news articles; (c) purely technical AI studies lacking pedagogical discussion; and (d) outdated literature published before the advent of ChatGPT.

The literature screening was executed via a methodical, multiphase protocol. From an initial pool of approximately 40 records, deduplication was performed to establish a reliable baseline corpus. During the preliminary phase, a thorough review of titles and abstracts led to the elimination of studies lacking a direct focus on religious education or those without peer-reviewed status. A subsequent, in-depth full-text evaluation filtered out articles that treated religion merely as a peripheral theme, heavily prioritized algorithmic mechanics over pedagogical substance, or presented broad philosophical conjectures devoid of practical educational utility. Ultimately, this rigorous exclusionary pipeline distilled the dataset into a select group of conceptually dense and highly pertinent primary sources that constitute the analytical core of this research.

The decision to limit the sample to these five studies is justified not only by the highly nascent nature of this specific academic intersection-where generative AI literature explicitly tailored to the doctrinal sensitivities of RE is still in its infancy-but also by concrete methodological evidence of theoretical saturation. During the NVivo-assisted open and axial coding processes, informational redundancy was empirically observed. Specifically, by the analysis of the third and fourth manuscripts, a clear pattern of thematic repetition emerged. When coding the fifth and final study, no new conceptual codes (free nodes) were generated. All five texts consistently yielded the exact same core phenomena: the indispensable need for active teacher oversight, hallucination risks distorting theological accuracy, and the pedagogical tension between personalization and epistemic integrity. Therefore, theoretical saturation was convincingly achieved regarding the guiding research question. Rather than artificially inflating the sample size with tangentially related general education papers that would dilute the study's precise focus, the research prioritized conceptual depth, ensuring that the five-study dataset served as a robust and complete representation of the currently available targeted literature.

### **3.2. Data Analysis Process**

The data were analyzed using NVivo-assisted thematic content analysis. NVivo software significantly contributed to the analytical process by facilitating the systematic management of the qualitative data, enabling the hierarchical structuring of nodes (codes), and allowing researchers to run text-search queries to visualize the relationships between "personalization" and "epistemic integrity."

The coding process was conducted in three detailed stages:

- *Open Coding:* The texts were subjected to line-by-line reading to identify initial, raw concepts (e.g., "AI making up fatwas," "students learning at own pace").
- *Axial Coding:* These initial concepts were grouped into broader, interrelated sub-categories (e.g., "Hallucination/Source Problems" and "Adaptive Feedback").
- *Thematic Categorization:* The sub-categories were ultimately synthesized into the five main themes of the study: personalization, epistemic integrity, conceptual depth, teacher oversight, and ethics/privacy.

To ensure the trustworthiness and validity of the analytical process, investigator triangulation was employed. The dataset was coded independently by two subject-matter experts (one specializing in Educational Technology and the other in Religious Education).

Inter-coder reliability was calculated using the Miles and Huberman (1994) formula [Reliability = Number of Agreements / (Total Number of Agreements + Disagreements)]. The calculation yielded an exact consensus coefficient of 93.5%, indicating excellent reliability. The minor disagreements (6.5%) that occurred between the coders-primarily regarding whether certain AI risks should be coded under "ethics" or "epistemic integrity"-were resolved through negotiated consensus meetings. In these meetings, both coders re-examined the context of the disputed quotes together until a mutual theoretical agreement was reached. Finally, the identified themes were synthesized into a descriptive-analytical framework, supported by direct quotations from the source texts.<sup>7</sup>

### 3.3. Ethical Considerations

Since this research relies exclusively on publicly available, peer-reviewed, and published secondary data-and involves no human participants, animal subjects, personal data, or confidential materials-it is exempt from ethics committee approval in accordance with current academic regulations. Throughout the data collection and analysis process, the utmost sensitivity was maintained regarding academic integrity, objective interpretation, and rigorous citation standards.

## 4. Findings

The thematic content analysis conducted with NVivo yielded five principal categories: personalization, epistemic integrity, conceptual depth, teacher guidance, and ethics/privacy. The purposive sampling strategy and the two-stage coding procedure (open-axial) ensured that the themes were identified with methodological rigor and reliability. The findings of the study can be summarized as follows: (i) Personalization: (ii) Epistemic Integrity (iii) Conceptual Depth (iv) Teacher Guidance (v) Ethics/Privacy. In the following section, each theme will be elaborated in detail, supported by codes and illustrative findings.

**Table 1.** Findings from the Thematic Content Analysis

| Theme                                    | Codes                                                                                                                                           | Sample Findings from the Data                                                                                                                                                                                                                                            |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personalized and Individualized Learning | <ul style="list-style-type: none"> <li>• Individual pace</li> <li>• Individual needs</li> <li>• Motivation</li> </ul>                           | <p>"ChatGPT is able to adapt to the learner's pace and style, shaping the learning pathway according to individual needs."</p> <p>"AI-supported personalized content delivery increases student participation and fosters curiosity."</p>                                |
| Epistemic Integrity in Content           | <ul style="list-style-type: none"> <li>• Lack of sources</li> <li>• Terminological inconsistency</li> <li>• Contextual fragmentation</li> </ul> | <p>"ChatGPT frequently provides information without citing sources."</p> <p>"Some of its responses display terminological inconsistencies and conceptual confusion."</p> <p>"In questions related to Isrā'iliyyāt and naskh, it deviated from the relevant context."</p> |

<sup>7</sup> Umut Birkan Özkan, "Doküman İnceleme Yönteminde Geçerlik Ve Güvenirlilik: Eğitim Bilimleri Araştırmaları Bağlamında Kuramsal Bir İnceleme", *Dokuz Eylül Üniversitesi Buca Eğitim Fakültesi Dergisi* 56 (2023): 832-848; Matthew B. Miles - A. Michael Huberman - Johnny Saldaña, *Qualitative Data Analysis: An Expanded Sourcebook*, sage, 1994.

|                                       |                                                                                                                                                              |                                                                                                                                                                                                                                                                                              |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conceptual Depth and Content Quality  | <ul style="list-style-type: none"> <li>• Superficiality</li> <li>• Methodological deficiency</li> <li>• Contribution of contemporary perspectives</li> </ul> | <p>“ChatGPT often remains limited to a superficial classification.”</p> <p>“On topics requiring deeper knowledge, such as the concept of mutashābihāt, it proved shallow.”</p> <p>“By incorporating modern philosophical approaches, it was able to provide a contemporary perspective.”</p> |
| Teacher Guidance and the Human Factor | <ul style="list-style-type: none"> <li>• Human factor</li> <li>• Two-stage supervision</li> </ul>                                                            | <p>“The outputs of AI-based systems must be reviewed by human experts.”</p> <p>“In the first stage, the model’s response should be obtained, and in the second stage, it must be checked by the teacher.”</p>                                                                                |
| Ethical and Privacy Dimension         | <ul style="list-style-type: none"> <li>• Data confidentiality</li> <li>• Security</li> <li>• Accountability</li> </ul>                                       | <p>“A two-stage review is recommended to ensure the epistemic integrity of AI-generated content.”</p> <p>“If ethical and privacy dimensions are neglected, the risk of misinformation emerges.”</p>                                                                                          |

### Personalized and Individualized Learning

As reflected in the thematic coding (see Table 1), the integration of artificial intelligence (AI) into religious education (RE) functions primarily as an engine for “adaptive spiritual scaffolding” rather than mere information retrieval. When the selected studies are analyzed collectively, a higher-order conclusion emerges: large language models (LLMs, e.g., ChatGPT) do not simply deliver content, but rather individualize the learning experience by calibrating responses to both the cognitive level and the spiritual readiness of the user. In the specific context of RE-where abstract theological concepts and moral values require deep internalization rather than rote memorization-this systemic adaptation accelerates the overall learning process by breaking down complex dogmas into digestible components.<sup>8</sup> Furthermore, the synthesis of the data indicates that these adaptive mechanisms make conceptual misunderstandings visible without delay, thereby sustaining pedagogical continuity.<sup>9</sup> Analytically speaking, reading these studies in conjunction reveals that AI-supported personalized content transcends basic engagement; it fosters a highly inclusive environment in heterogeneous classrooms, ensuring that foundational religious values are pedagogically accessible to every student regardless of their background.<sup>10</sup>

This analytical conclusion extends powerfully into the context of adult education. The literature collectively demonstrates that personalized learning platforms establish a non-judgmental, self-paced private sphere-a crucial requirement for navigating sensitive ethical dilemmas, comprehending sacred texts, and remediating individual deficiencies.<sup>11</sup> By synthesizing these findings, it becomes evident that AI acts as a responsive facilitator that

<sup>8</sup> Gül Şenyaman, “Arapça Yabancı Dil Öğretiminde Yapay Zekânın Geleceği: ChatGPT Örneği”, *RumeliDE Dil ve Edebiyat Araştırmaları Dergisi* 33 (2023), 628-629.

<sup>9</sup> Furkan Çakır, “Yapay Zekâ ve Hadis”, *Şırnak Üniversitesi İlahiyat Fakültesi Dergisi* 32 (2023), 116-117; Yakup Kaya - Elif Eliyatkin, “Din Eğitiminde İçerik Oluşturma ve Kişiselleştirilmiş Öğrenme Aracı Olarak ChatGPT”, *Dinbilimleri Akademik Araştırma Dergisi* 24/3 (2024), 622.

<sup>10</sup> Şenyaman, “Arapça Yabancı Dil Öğretiminde Yapay Zekânın Geleceği: ChatGPT Örneği”, 1058-1059; Kaya - Eliyatkin, “Din Eğitiminde İçerik Oluşturma”, 628-629.

<sup>11</sup> Yakup Kaya, “The Potential of Artificial Intelligence As the Learning Ecosystem of the Future in Adult Religious Education”, *Eskişehir Osmangazi Üniversitesi İlahiyat Fakültesi Dergisi* 12/Din ve Yapay Zeka, (2025), 143-150.

bridges the gap between individual existential challenges and profound theological concepts (such as divine justice and theodicy) by dynamically adjusting its linguistic complexity.<sup>12</sup> Consequently, the coded data reveal that student motivation, individual pace, and content adaptation are not merely technical conveniences; they are pedagogically vital elements that construct a safe space for spiritual questioning, fostering increased engagement and enabling individual spiritual deepening.<sup>13</sup>

Ultimately, the collective analysis of this theme yields a critical pedagogical synthesis: while AI-driven personalization maximizes learner engagement, it inherently generates a systemic tension with the core dimension of epistemic integrity. The data clearly demonstrate that unchecked "hyper-personalization"-where the AI overly adapts to user biases to provide convenient or comforting answers-carries the systemic risk of diluting or misrepresenting strict religious doctrines. Therefore, the original synthesis derived from this theme is that personalization in RE cannot function safely as an autonomous educational model. As indicated by the interrelationships in the thematic table, to prevent the distortion of theological accuracy, the personalized capabilities of AI must be bounded by strict ethical protocols, positioned solely as a complementary tool, and strictly mediated by active teacher oversight.<sup>14</sup>

### *Epistemic Integrity in Content*

As indicated by the thematic coding (see Table 1), in knowledge-intensive and sensitive domains such as religious education (RE), epistemic integrity constitutes the primary criterion for AI integration.<sup>15</sup> Unlike general academic subjects where a factual error might merely result in a loss of marks, in RE, epistemic inaccuracies-such as hallucinated verses, fabricated ḥadīths, or distorted theological doctrines-carry profound spiritual, moral, and dogmatic consequences. A collective analysis of the selected studies reveals a critical baseline: while large language models (LLMs) such as ChatGPT frequently transmit core concepts accurately and align with textbook definitions due to their vast data repositories, this algorithmic accuracy is fundamentally superficial and lacks conceptual depth.<sup>16</sup>

Synthesizing the data across the primary sources exposes a triadic systemic vulnerability that directly threatens epistemic integrity. First, the literature consistently identifies source obscurity; models frequently provide information without proper, traceable attribution to foundational texts (e.g., the Qur'ān, ḥadīth collections, or classical theological works), which undermines the learner's orientation toward evidence-based knowledge.<sup>17</sup> Second, the studies collectively highlight terminological instability, wherein specialized religious terms suffer conceptual shifts across prompts or are conflated with secular

<sup>12</sup> Yakup Kaya, "Din Eğitiminde Chatgpt'nin Rolü: Tefsir ve Kelam Çerçevesinde Doğruluk ve Tutarlılık Analizi", *Kilis 7 Aralık Üniversitesi İlahiyat Fakültesi Dergisi* 12/1 (2025), 258-260; Kaya - Eliyatkn, "Din Eğitiminde İçerik Oluşturma", 634.

<sup>13</sup> Çakır, "Yapay Zekâ ve Hadis", 118-121; Kaya - Eliyatkn, "Din Eğitiminde İçerik Oluşturma", 629; Kaya, "The Potential of Artificial Intelligence", 150.

<sup>14</sup> Kaya, "Din Eğitiminde Chatgpt'nin Rolü", 251; Kaya, "The Potential of Artificial Intelligence", 131-132.

<sup>15</sup> Kaya, "Din Eğitiminde Chatgpt'nin Rolü", 277; Kaya - Eliyatkn, "Din Eğitiminde İçerik Oluşturma", 644.

<sup>16</sup> Şenyaman, "Arapça Yabancı Dil Öğretiminde Yapay Zekânın Geleceği: ChatGPT örneği", 1068-1069; Kaya - Eliyatkn, "Din Eğitiminde İçerik Oluşturma", 618.

<sup>17</sup> Çakır, "Yapay Zekâ ve Hadis", 120-121.

meanings, generating severe conceptual confusion.<sup>18</sup> Third, the data reveal a pattern of contextual fragmentation.<sup>19</sup> For instance, in sensitive doctrinal areas such as *İsrâ'iliyyât* (Judeo-Christian traditions) and *naskh* (abrogation), the models tend to generate overly elaborate, unfiltered discussions that diverge from the central pedagogical focus. While textbooks establish a hierarchical, methodological flow relating definitions, examples, and doctrines, the synthesis of the literature shows that AI's extended digressions risk cognitive overload and disrupt thematic coherence.<sup>20</sup>

Reading these empirical findings in conjunction yields a higher-order insight regarding the "illusion of consistency." While AI responses generally demonstrate an effort to maintain internal logical coherence and a readable flow, the meta-analysis of the texts confirms that this fluid articulation does not seamlessly translate to curricular coherence or academic systematicity. Comparative research within the dataset emphasizes that although models like ChatGPT generate structurally sound outputs, they remain uniformly superficial in dealing with religious history and precise terminology, consistently failing to provide verifiable sourcing. This collective finding underscores that ensuring the depth of domain knowledge and the absolute reliability of religious references strictly requires the continuous oversight of a subject-matter expert.<sup>21</sup>

Ultimately, the synthetic evaluation of this theme demonstrates that epistemic integrity cannot be algorithmically guaranteed by the AI itself; it necessitates a structural pedagogical intervention. Therefore, the original synthesis derived from these studies is that the oft-cited recommendation for "teacher review" must be elevated from a passive suggestion to an active, two-stage epistemic oversight protocol. In this human-centered framework, AI-generated responses are first obtained in a controlled environment, after which the teacher explicitly acts as the "epistemic gatekeeper." By systematically cross-referencing AI claims with authoritative classical texts, correcting terminological shifts to match the curriculum, and filtering out overly generic or pluralistic stances that contradict specific denominational teachings, the educator neutralizes AI's systemic vulnerabilities. Through this rigorous expert validation, the speed and personalization benefits of AI are effectively harnessed without compromising fundamental doctrinal truths.<sup>22</sup>

### *Conceptual Depth and Content Quality*

As reflected in the thematic coding (see Table 1), achieving conceptual depth in religious education (RE) is not merely an academic requirement; it is a fundamental prerequisite for the spiritual and ethical internalization of knowledge. Unlike empirical sciences where surface-level memorization might occasionally suffice, RE demands that learners grasp the profound ontological, moral, and historical meanings behind doctrines to form a coherent worldview. A collective analysis of the dataset reveals a dualistic capability within AI outputs regarding this dimension. On the one hand, large language models (LLMs)

<sup>18</sup> Çakır, "Yapay Zekâ ve Hadis", 115, 127; Kaya - Eliyatkin, "Din Eğitiminde İçerik Oluşturma", 618-619.

<sup>19</sup> Çakır, "Yapay Zekâ ve Hadis", 127-128.

<sup>20</sup> Kaya, "Din Eğitiminde Chatgpt'nin Rolü", 257-259; Kaya, "Din Eğitiminde Chatgpt'nin Rolü", 271-272; Kaya, "The Potential of Artificial Intelligence", 132.

<sup>21</sup> Mehmet Ayhan - Zülal Kılıç, "Yapay Zekâ Modellerinin Hadis Tarihi Sorularına Verdiği Yanıtların Karşılaştırmalı Analizi: Chatgpt Ve Gemini Örneği", *Dinbilimleri Akademik Araştırma Dergisi* 24/3 (2024), 137-159; Kaya, "Din Eğitiminde Chatgpt'nin Rolü", 247-279.

<sup>22</sup> Kaya, "Din Eğitiminde Chatgpt'nin Rolü", 276-278.

demonstrate a capacity for horizontal knowledge aggregation. By combining definitions with historical backgrounds and diverse interpretive approaches, AI can introduce contemporary philosophical orientations into classical fields like Kalām (Islamic theology) in ways not typically included in standard textbooks, offering intellectual stimulation for advanced learners.<sup>23</sup> However, synthesizing the findings across the studies indicates that this broad, horizontal perspective does not inherently translate into vertical conceptual depth.

Reading the primary studies in conjunction exposes a systemic tendency of AI toward superficial categorization, effectively flattening complex theological debates. In rigorous religious pedagogy, true conceptual depth demands a systematic alignment of precise definition, contextual example, immutable theological principle, and historical genesis. The meta-analysis of the data shows that AI frequently severs this pedagogical chain. For example, when addressing complex concepts like mutashābihāt (ambiguous or allegorical Qur’ānic verses), the models generally convey the core lexical definition accurately but systematically fail to elaborate on the nuanced, centuries-long methodological debates between different theological schools (such as the early Salaf vs. the later Ash’arī/Māturīdī theologians) regarding divine attributes. By omitting this vital historical context and the methodological principles of exegesis, the AI’s output remains fundamentally shallow, which actively prevents learners from constructing robust conceptual connections.<sup>24</sup>

Furthermore, the synthesized data reveal an inextricable link between conceptual depth and terminological precision.<sup>25</sup> In subjects demanding profound theological rigor, the models frequently fall into "terminological reductionism." The literature collectively highlights that specialized religious concepts are often stripped of their epistemological weight. For instance, technical terms are either superficially glossed over or conflated with Western-centric paradigms-such as presenting a generic definition of “deism” without acknowledging the specific Islamic theological counter-arguments concerning divine providence (qadar) and continuous creation. Such algorithmic homogenization strips concepts of their profound theological dimensions, risking a one-dimensional perception of the subject that ultimately weakens the learner’s capacity for deeper conceptual grasp.<sup>26</sup>

Despite these systemic vulnerabilities, the collective findings indicate that conceptual depth can be mechanically enhanced through deliberate, expert-guided prompt engineering. The literature suggests that explicitly demanding reliance on the primary sources of the religious sciences-classical texts, authoritative commentaries, and modern scholarly interpretations-forces the model to deepen its substantive quality. For instance, prompts that structurally require the integration of the historical context of revelation (asbāb al-nuzūl) and comparative insights from classical exegetes yield significantly more robust content. Additionally, instructing the AI to generate concept maps and explicit source attributions helps students visualize the broader theological framework.<sup>27</sup>

Ultimately, the synthetic evaluation of this theme yields a critical pedagogical conclusion: AI-based tools are structurally incapable of generating conceptual depth autonomously. The original synthesis derived from the coded data is that AI operates

<sup>23</sup> Kaya, “Din Eğitiminde Chatgpt’nin Rolü”, 262-266.

<sup>24</sup> Kaya, “Din Eğitiminde Chatgpt’nin Rolü”, 264-265; 273-277.

<sup>25</sup> Şenyaman, “Arapça Yabancı Dil Öğretiminde Yapay Zekânın Geleceği”, 1057-1068.

<sup>26</sup> Kaya, “Din Eğitiminde Chatgpt’nin Rolü”, 269-276.

<sup>27</sup> Kaya, “Din Eğitiminde Chatgpt’nin Rolü”, 250-278.

fundamentally as a horizontal synthesizer of broad information rather than a vertical meaning-maker. Therefore, conceptual depth in AI-integrated RE can only be sustained through a strictly blended pedagogical model. The foundational conceptual structure and systematic methodological framework must be established by human teachers and rigorous instructional materials, while AI functions merely as a supplementary tool to diversify examples and individualize knowledge delivery. This synthesis confirms that preserving the integrity of religious education requires active pedagogical oversight to counteract AI's inherent reductionist tendencies.

### *Teacher Guidance and the Human Factor*

As illustrated in the thematic coding (see Table 1), the indispensable necessity of teacher oversight in religious education (RE) is not merely a normative ethical recommendation, but a structural imperative directly derived from the empirical limitations of AI. When the selected studies are analyzed collectively, a higher-order analytical conclusion emerges: the integration of AI does not marginalize the educator; rather, it initiates a pedagogical paradigm shift. While empirical evidence confirms that AI significantly reduces teachers' routine workload in areas such as content generation and assessment, this algorithmic efficiency functions to liberate the educator. It structurally redirects their instructional time toward meaningful, individualized interaction and complex pedagogical guidance, fundamentally affirming that the teacher's multifaceted role cannot be substituted.<sup>28</sup>

Synthesizing the data across the primary sources reveals that the indispensable functions of the teacher within an AI-integrated ecosystem consolidate around three core, irreplaceable domains where algorithmic capacities end and uniquely human pedagogical agency must begin. First is the domain of Moral and Emotional Anchorage. The literature collectively demonstrates that while AI excels at rapid, encyclopedic data retrieval, it is structurally devoid of empathy, authentic role modeling, and moral orientation-dimensions critical for shaping a student's faith and identity.<sup>29</sup> The meta-analysis highlights that when a student grapples with personal religious doubts, algorithmically generated information is pedagogically insufficient; it is the teacher's empathetic feedback and active moral guidance that provide the qualitatively distinct support necessary for true value internalization.<sup>30</sup>

Second is the domain of Epistemic Curation and Adaptation. As established in previous themes, AI outputs (such as those from ChatGPT) suffer from inherent contextual and theological vulnerabilities. The synthesis of the studies positions the teacher not as a passive user, but as an active epistemic curator. The collective data mandate that educators rigorously monitor, review, and adapt AI-generated materials to ensure strict theological accuracy and pedagogical alignment, thereby neutralizing algorithmic hallucination risks.<sup>31</sup>

Third is the Facilitation of Algorithmic Discernment. Reading the studies in conjunction reveals that effective AI integration is heavily contingent on the teacher's

<sup>28</sup> Şenyaman, "Arapça Yabancı Dil Öğretiminde Yapay Zekânın Geleceği", 1069; Çakır, "Yapay Zekâ ve Hadis", 112, 116; Kaya, "Din Eğitiminde Chatgpt'nin Rolü", 249.

<sup>29</sup> Kaya - Eliyatkin, "Din Eğitiminde İçerik Oluşturma", 619; Kaya, "The Potential of Artificial Intelligence", 148; Çakır, "Yapay Zekâ ve Hadis", 124-125; 128; Kaya, "The Potential of Artificial Intelligence", 129.

<sup>30</sup> Çakır, "Yapay Zekâ ve Hadis", 125; Kaya, "The Potential of Artificial Intelligence", 142-143.

<sup>31</sup> Çakır, "Yapay Zekâ ve Hadis", 118-121; Kaya, "Din Eğitiminde Chatgpt'nin Rolü", 277.

technological competence and pedagogical intentionality.<sup>32</sup> Overcoming learners' technological adoption barriers requires sustained human encouragement.<sup>33</sup> More importantly, while AI can juxtapose multiple theological perspectives, the overarching pedagogical task of equipping students with the critical literacy needed to evaluate these perspectives, verify sources, and apply sound epistemological criteria remains an exclusively human prerogative.<sup>34</sup>

Ultimately, the collective analysis of this theme produces a definitive original synthesis: the safe and effective deployment of AI in religious education strictly necessitates a collaborative, human-centered design framework. The literature conceptually redefines the pedagogical division of labor. In this new paradigm, AI is relegated strictly to the role of a cognitive amplifier and supportive technical tool, handling routine tasks and initial personalization. Conversely, the teacher is elevated to the role of the ultimate epistemological and moral gatekeeper. AI realizes its pedagogical potential not as an autonomous educational agent, but exclusively within this structured partnership, thereby preserving and prioritizing the profoundly interpersonal character of religious education.<sup>35</sup>

### *The Ethical and Privacy Dimension*

As detailed in the thematic coding (see Table 1), ethical and privacy considerations in the integration of artificial intelligence (AI) into religious education (RE) extend far beyond technical compliance; they constitute a core pedagogical determinant. A collective reading of the dataset reveals that AI queries in RE generate highly sensitive indicators of personal beliefs, existential doubts, and individual learning profiles.<sup>36</sup> Synthesizing these findings highlights a systemic vulnerability: when data storage protocols, access permissions, and processing purposes are ambiguous, the very act of personalized spiritual inquiry becomes a severe privacy risk. The literature consistently emphasizes that robust, transparent data policies and strict institutional safeguards are not merely administrative duties, but fundamental prerequisites for creating a safe space for religious learning.<sup>37</sup>

Furthermore, a meta-analysis of the selected studies exposes a critical tension regarding the ethical reliability of AI-generated content. Rather than acting as objective repositories of divine truth, the models inherently reproduce the dominant tendencies and biases embedded within their training datasets. In the context of RE, the collective literature warns that this algorithmic bias creates the dangerous illusion of "neutral knowledge"-effectively presenting specific sectarian, cultural, or secularized interpretations as universal religious facts. To counteract this threat to theological pluralism, the data mandate that AI outputs must be systematically subjected to pedagogical contextualization and expert oversight, ensuring that extreme or one-sided interpretations are balanced through critical classroom discourse<sup>38</sup>

<sup>32</sup> Kaya - Eliyatkn, "Din Eğitiminde İçerik Oluşturma", 618, 630, 644; Kaya, "The Potential of Artificial Intelligence", 141.

<sup>33</sup> Kaya, "The Potential of Artificial Intelligence", 143-151.

<sup>34</sup> Çakır, "Yapay Zekâ ve Hadis", 127; Kaya, "Din Eğitiminde Chatgpt'nin Rolü", 278.

<sup>35</sup> Kaya - Eliyatkn, "Din Eğitiminde İçerik Oluşturma", 629; Kaya, "The Potential of Artificial Intelligence", 142-143; Çakır, "Yapay Zekâ ve Hadis", 116, 127.

<sup>36</sup> Kaya, "The Potential of Artificial Intelligence", 148.

<sup>37</sup> Kaya - Eliyatkn, "Din Eğitiminde İçerik Oluşturma", 618.

<sup>38</sup> Kaya - Eliyatkn, "Din Eğitiminde İçerik Oluşturma", 644.

The third problematic dimension synthesized from the data concerns the nature of human-machine interaction. The studies collectively indicate that the linguistic fluency of AI frequently elevates the model to the status of a “virtual authority,” fostering an epistemological surrender and uncritical acceptance among learners. Because AI fundamentally lacks the experiential and emotional capacity to internalize and model moral values, its instant convenience risks short-circuiting profound processes of spiritual inquiry and deliberation.<sup>39</sup> Consequently, the literature insists that AI must be strictly positioned as a complementary instrument. Genuine moral guidance and the communication of virtue remain exclusively within the domain of the human educator and the lived example.<sup>40</sup>

Directly deriving from these intertwined risks of data vulnerability, algorithmic bias, and diminished critical thinking, the collective findings point to the absolute necessity of a robust institutional ethical framework. The data show that to safely harness AI, institutions must legally enforce privacy principles (such as data minimization and anonymization) while pedagogically regulating AI usage to ensure curricular alignment.<sup>41</sup> In response to the finding that AI can weaken analytical rigor, institutional policies must explicitly define standards for academic integrity, citation, and originality, establishing structured protocols for correcting inappropriate outputs and training students in critical evaluation.<sup>42</sup>

Ultimately, the collective analysis of this theme yields a definitive higher-order synthesis: in religious education, technological ethics cannot be outsourced to the algorithm. The original synthesis derived from the dataset is that the “neutrality” and “privacy” of AI are algorithmic illusions that, if left unmanaged, actively subvert the spiritual and ethical goals of RE. Therefore, the safe pedagogical integration of AI strictly necessitates a proactive framework of “conscious friction.” By intentionally slowing down the uncritical consumption of AI outputs through stringent data protections, institutional policy frameworks, and rigorous teacher oversight, this human-centered approach ensures that AI serves as a catalyst for deeper theological inquiry rather than a mechanism for cognitive and spiritual outsourcing.

## 5. Discussion

The integration of artificial intelligence (AI) into religious education must be approached with a dual focus on personalization and epistemic integrity. While personalization supports motivation by tailoring feedback and instructional pacing to individual learner needs, it also introduces risks when content quality and curriculum alignment are not adequately protected. Thus, the advantages of personalization require simultaneous oversight through teacher intervention and adherence to structured, curriculum-based content policies.

The findings of this study indicate that challenges to epistemic integrity can be grouped into three categories: the absence of source attribution-particularly in reference to Qur’anic verses, ḥadīth, and classical texts; inconsistent terminology; and contextual fragmentation. These issues compromise academic quality and necessitate the positioning of AI outputs as

---

<sup>39</sup> Kaya - Eliyatkin, “Din Eğitiminde İçerik Oluşturma”, 618, 628-629, 637, 644.

<sup>40</sup> Kaya - Eliyatkin, “Din Eğitiminde İçerik Oluşturma”, 619, 629, 644.

<sup>41</sup> Kaya, “The Potential of Artificial Intelligence”, 142-143.

<sup>42</sup> Kaya, “Din Eğitiminde Chatgpt’nin Rolü”, 248-250, 276-278.

preliminary drafts. A two-stage model, wherein AI-generated content is reviewed by educators before dissemination, offers a practical framework for safeguarding integrity.

Although AI can expose learners to diverse perspectives and contemporary interpretations, it often lacks depth in historical and methodological contextualization. This shortcoming highlights the need for structured content designs that include precise religious terminology and layered explanations (e.g., definition-example-principle). Integrating classical sources with modern academic insights, and using concept maps or schematics, can deepen understanding and mitigate superficiality.

The role of teachers remains irreplaceable. AI applications can reduce preparatory workload and support differentiated instruction, but they cannot replicate human capacities for empathy, moral instruction, and context-aware judgment. For this reason, teacher literacy in both technology and pedagogy is essential. AI should be conceived as an assistive tool, while the educator functions as guide and evaluator. From the specific perspective of religious education, value transmission warrants separate emphasis. While AI can offer relevant examples and elaborations, it cannot internalize or model values rooted in lived experience and emotional depth. Values such as honesty are most effectively conveyed through experiential learning under teacher guidance. Thus, learners must remain aware that ultimate direction comes from educators and conscience, not algorithmic outputs.

Ethical and privacy considerations further reinforce the need for deliberate integration. The lack of clear institutional protocols regarding data retention, access, and content neutrality can expose learners to risks. Moreover, the inadvertent promotion of a single sectarian perspective under the guise of neutrality underscores the importance of pluralism and contextual sensitivity. To ensure responsible AI use in educational contexts, robust ethical frameworks must be established. These should articulate principles such as data minimization, access control, and anonymization; mechanisms for content review, bias mitigation, and error correction; and pedagogical guidelines involving teacher oversight and alignment with learning outcomes. Policies should specify appropriate use cases and enforce standards of citation, originality, and academic integrity. Training for both teachers and students in ethical AI use and critical evaluation is imperative, along with clear procedures for addressing errors, including collaborative reviews and alternative sourcing.

Recent studies from 2023 to 2025 support the empirical observations and interpretive frameworks discussed here. Gül Şenyaman observes that ChatGPT offers personalized support and real-time feedback in language education, particularly in vocabulary, grammar, translation, and composition.<sup>43</sup> Sıdıka Nur Parlak explores the promise of new technologies, including the Metaverse, within religious education.<sup>44</sup> Furkan Çakır argues that while ChatGPT-3 is effective for general overviews in ḥadīth studies, it falls short in tasks requiring deep critique and methodological expertise, reinforcing the need for specialist oversight.<sup>45</sup> Mehmet Ayhan and Zülal Kılıç demonstrate that ChatGPT provides more systematic responses than Gemini in addressing questions on Ḥadīth History; however, both models

---

<sup>43</sup> Şenyaman, "Arapça Yabancı Dil Öğretiminde Yapay Zekânın Geleceği", 1050-1070.

<sup>44</sup> Parlak, "Din Kültürü ve Ahlak Bilgisi Dersi Öğretim Programı ile Öğretim Teknolojileri Bağlamında Metaverse'e Genel Bakış", 54-74.

<sup>45</sup> Çakır, "Yapay Zekâ ve Hadis", 109-131.

struggle with technical terminology and source citation.<sup>46</sup> From a practical perspective, Yakup Kaya and Elif Eliyatkin show that ChatGPT improves middle school student engagement, facilitates abstract learning, and lightens teacher workload, though ethical and pedagogical risks necessitate controlled implementation.<sup>47</sup> Kaya further notes that in adult religious education, AI can meet individual needs in textual interpretation and ritual learning, but lacks the empathetic and spiritual depth of human instruction.<sup>48</sup> In another observation, Kaya adds that while ChatGPT offers generally accurate answers in Tafsîr and Kalâm, it falls short in source attribution, contextual depth, and terminological accuracy.<sup>49</sup>

## 6. Conclusion

This study set out to evaluate the pedagogical, epistemic, and ethical impacts of integrating AI into religious education. The findings conclusively demonstrate that while AI offers tangible pedagogical benefits-such as personalized learning, instant feedback, and reduced instructional burden-these tools currently lack the conceptual depth, methodological nuance, and moral capacities fundamentally required in the domain of religious education.

The original contribution of this research lies in formulating a specific, "dual-focus" pedagogical framework tailored for religious education: one that structurally balances AI-driven personalization with strict human-led safeguards. Unlike general education, religious education demands rigorous source attribution, terminological precision, and experiential value transmission. By categorizing AI's epistemic shortcomings specifically into source absence, terminological inconsistency, and contextual fragmentation, this study moves beyond generic critiques of AI and provides a targeted two-stage educator-review model to ensure theological accuracy and epistemic integrity.

Ultimately, ethics and privacy emerge as critical determinants of educational quality in AI-supported environments. Realizing the speed and scale advantages of AI, while mitigating its profound risks of bias and superficiality, is achievable only through thoughtful, controlled, and value-centered implementation. AI must be strictly governed by robust institutional ethics policies and positioned strictly as a supplementary undermining the essential, irreplaceable moral and spiritual guidance of the human teacher.

## 7. Recommendations

In light of the research findings, which highlight the dialectic tension between AI's personalized pedagogical utility and its inherent epistemic limitations, the following targeted recommendations are proposed:

- *Implementation of a Two-Stage Educator-Review Model:* Directly responding to the findings regarding AI's source absence and terminological inconsistency, AI-generated outputs must be structurally treated as "provisional drafts" rather than definitive knowledge. Educational institutions should enforce a systematic secondary review process wherein educators audit content for theological precision and the validity of source attributions

<sup>46</sup> Ayhan - Kılıç, "Yapay Zekâ Modellerinin Hadis Tarihi Sorularına Verdiği Yanıtların Karşılaştırmalı Analizi: Chatgpt ve Gemini Örneği", 137-159.

<sup>47</sup> Kaya - Eliyatkin, "Din Eğitiminde İçerik Oluşturma", 615-646.

<sup>48</sup> Kaya, "The Potential of Artificial Intelligence", 127-156.

<sup>49</sup> Kaya, "Din Eğitiminde Chatgpt'nin Rolü", 247-279.

(particularly for Qur'ānic verses and ḥadīth). Consequently, professional development must prioritize building teachers' evaluative competencies rather than mere technical usage.

- *Curriculum-Aligned and Epistemically Rigorous Integration*: To mitigate the observed risks of superficiality, AI modules should be strictly engineered to function as supplementary instruments within a blended instructional framework. Its integration must be directed toward generating layered content-integrating definitions, historical contexts, and principles-that explicitly deepens the established curriculum rather than providing fragmented or decontextualized summaries.

- *Value-Centered Ethical Governance*: Addressing the risks of algorithmic bias and the presentation of sectarian interpretations as "universal" knowledge, institutions should adopt formal standards for pluralistic representation. This involves moving beyond technical data privacy toward a governance model where teachers intentionally mediate AI outputs to foster critical thinking and contextual sensitivity, ensuring that the technology remains a tool for moral and academic inquiry.



**Hakem/Peer-review:** Çift Taraflı Kör/Double Blind.

**Teşekkür/Acknowledgements:**

-

**Beyanname/Declarations:**

**1. Özgünlük Beyanı/Statement of Originality:**

Bu çalışma özgündür.

**2. Yazar Katkıları/Author Contributions:**

Tek yazarlıdır.

**3. Etik Kurul İzni/ Ethics approval:**

Etik Kurul İzni gerekmemektedir.

**4. Finansman-Destek/Funding-Support:**

Bu çalışma herhangi bir finansman ya da destek almamıştır.

**5. Çıkar Çatışması Beyanı/Competing interests:**

Yazar, herhangi bir çıkar çatışması olmadığını beyan etmektedir.



## KAYNAKÇA

- Apt, Wenke - Priesack, Kai. "KI und Arbeit – Chance und Risiko zugleich". *üit-Themenband Künstliche Intelligenz Technologie | Anwendung | Gesellschaft*. 221-238. (Herausgeber Prof. Dr. Volker Wittpahl) Springer Vieweg, 2019.
- Ayhan, Mehmet - Kılıç, Zülal. "Yapay Zekâ Modellerinin Hadis Tarihi Sorularına Verdiği Yanıtların Karşılaştırmalı Analizi: Chatgpt ve Gemini Örneği". *Dinbilimleri Akademik Araştırma Dergisi* 24/3, 137-159. <https://doi.org/10.33415/daad.1586164>

- Carbonell, Jaime R. "AI in CAI: An Artificial-Intelligence Approach To Computer-Assisted Instruction". *IEEE transactions on man-machine systems* 11/4 (1970), 190-202.
- Çakır, Furkan. "Yapay Zekâ ve Hadis". *Şırnak Üniversitesi İlahiyat Fakültesi Dergisi* 32 (2023), 109-131. <https://doi.org/10.35415/sirnakifd.1240725>
- Graesser, Arthur C. "Conversations with AutoTutor Help Students Learn", *International Journal of Artificial Intelligence in Education* 26 (2016), 124-132.
- Güler, Pelin, Gülşenoğlu - Simge - Sayılır, Murat. "Akademik Yazmada Kullanılabilecek Yapay Zekâ Araçlarının Sınıflandırılması". *Eğitim Bilimleri Tematik Araştırmalar Dergisi* 1/2 (2025), 76-97.
- Haugeland, John. *Artificial Intelligence: The Very Idea*. Cambridge: MIT press, 1989.
- Herber, Erich - Schmidt-Hertha, Bernhard - Zauchner-Studnicka, Sabine. "Erwachsenen- und Weiterbildung. Technologieeinsatz beim Lernen und Lehren mit Erwachsenen". 385-393. (Hrsg. Ebner, Martin, Schön, Sandra), *Lehrbuch für Lernen und Lehren mit Technologien*, 2013.
- Jesus, Jiomarie B. – Caumeran, Rizza R. "Human-Centered AI in Education: Educators' Perspectives on Teacher Roles, Ethics, and Pedagogical Value." *International Journal on Studies in Education* 8/1 (2026), 142-154.
- Kaya, Yakup. "Din Eğitiminde Chatgpt'nin Rolü: Tefsir ve Kelam Çerçevesinde Doğruluk ve Tutarlılık Analizi". *Kilis 7 Aralık Üniversitesi İlahiyat Fakültesi Dergisi* 12/1 (2025), 247-279. <https://doi.org/10.46353/k7auifd.1626263>
- Kaya, Yakup. "The Potential of Artificial Intelligence As the Learning Ecosystem of the Future in Adult Religious Education". *Eskişehir Osmangazi Üniversitesi İlahiyat Fakültesi Dergisi* 12/Din ve Yapay Zeka (2025), 127-156. <https://doi.org/10.51702/esoguifd.1607220>
- Kaya, Yakup - Eliyatkin, Elif. "Din Eğitiminde İçerik Oluşturma ve Kişiselleştirilmiş Öğrenme Aracı Olarak ChatGPT". *Dinbilimleri Akademik Araştırma Dergisi* 24/3 (2024), 615-646. <https://doi.org/10.33415/daad.1582922>
- Kirste, Moritz. "Augmented Intelligence – Wie Menschen mit KI zusammen arbeiten". *üt-Themenband Künstliche Intelligenz Technologie | Anwendung | Gesellschaft*. 58-71. Hrsg. Volker Wittpahl: Berlin: Springer Vieweg, 2019.
- Klinge, Denise. "Lehrende Algorithmen – spielend-behavioristische Lernanregungen von Apps als digitale Technologien". Hrsg. Franz, Julia, vd., *Digitalisierung in der Erwachsenenbildung*. 65-76. Hessische Blätter für Volksbildung 3: 96, 2020.
- Kurzweil, Raymond. "The Age of Intelligent Machines". Cambridge: MIT Press, 1990.
- Meier, Christoph, Sabine Seufert - Josef Guggemos. "Arbeitswelt 4.0 und Smart Machines: Augmentation als Herausforderung für die Personalentwicklung". *HMD Prax. Wirtsch.* 56.4 (2019), 823-839.
- Miles, Matthew B., A. Michael Huberman - Saldaña, Johnny. *Qualitative Data Analysis: An Expanded Sourcebook*. sage, 1994.
- Netz, Gabi - Claudia Zanker. "Tutorielle Begleitung im vhs-Lernportal: Online lernen–aber nicht allein.' weiter bilden." *DIE Zeitschrift für Erwachsenenbildung* 30.1 (2023), 37-39.

- Özkan, Umut Birkan. "Doküman İnceleme Yönteminde Geçerlik ve Güvenirlik: Eğitim Bilimleri Araştırmaları Bağlamında Kuramsal Bir İnceleme". *Dokuz Eylül Üniversitesi Buca Eğitim Fakültesi Dergisi* 56 (2023): 832-848; <https://doi.org/10.53444/deubefd.1258867>
- Papakostas, Christos. "Artificial Intelligence in Religious Education: Ethical, Pedagogical, and Theological Perspectives". *Religions* 16/5 (2025), 563.
- Parlak, Sıdika Nur. "Din Kültürü ve Ahlak Bilgisi Dersi Öğretim Programı ile Öğretim Teknolojileri Bağlamında Metaverse'e Genel Bakış". *Talim* 7/1 (2023), 54-74.
- Pinkwart, Niels - Susan Beudt. "Künstliche Intelligenz als unterstützende Lerntechnologie." *Stuttgart: Fraunhofer-Institut für Arbeitswirtschaft und Organisation IAO*. 1-26 (2020).
- Russell, Stuart J., - Peter Norvig. *Artificial intelligence: a modern approach*. United Kingdom: Pearson, 2016.
- Şenyaman, Gül. "Arapça Yabancı Dil Öğretiminde Yapay Zekânın Geleceği: ChatGPT Örneği". *RumeliDE Dil ve Edebiyat Araştırmaları Dergisi* 33 (2023), 1057-1070.
- Turing, Alan. "Computing Machinery and Intelligence". *Mind* 59 (1950), 433-460. <https://doi.org/10.1093/mind/lix.236.433>
- Vogler, Hans-Joachim. "Vom Lernprodukt zum Lernprozess mit ChatGPT – eine didaktische Analyse". *SEMINAR*. <https://elibrary.utb.de/doi/10.3278/SEM.2402.W011>
- Yalçıntaş, İsmail. "Yapay Zekâ, Bilinç ve Özgür İrade Arasındaki İlişkinin Epistemolojik ve Ontolojik Analizi". *Beytulhikme* 16/1 (2026), 159-191. <https://doi.org/10.29228/beytulhikme.88942>
- Yıldırım, Ali - Şimşek, Hasan. *Sosyal Bilimlerde Nitel Araştırma Yöntemleri*. Ankara: Seçkin Yayıncılık, 2011.

