



Theoretical Reconstruction of Kalam Science Learning Design in the Digital Era: Integration of Constructive Alignment and Technological Pedagogical Content Knowledge (TPACK)

Lalita Ni'mal Fajria¹, Irma Soraya²

^{1,2}Universitas Islam Negeri Sunan Ampel, Indonesia

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ABSTRACT

The transformation of digital space has changed the landscape of religious discourse, including the emergence of narratives of atheism and religious skepticism on social media, influencing how the digital generation understands faith. However, the learning of theology (Ilm al-Kalam) still tends to be textual and lacks context, thus failing to optimally respond to digital challenges. This study aims to reconstruct the learning design of theology in the digital era through the integration of Constructive Alignment and Technological Pedagogical Content Knowledge (TPACK). This study uses a qualitative approach with a library research method. Data were obtained through a documentation study of books, journal articles, and relevant academic documents from the past ten years. Data were analyzed using content analysis and conceptual synthesis techniques. The results show that Constructive Alignment provides a systematic framework for aligning learning objectives, activities, and assessments, while TPACK enables the meaningful integration of technology into the learning process. The integration of these two approaches produces a conceptual model of theology learning that encourages critical thinking skills, theological argumentation, and contextual digital learning. This research contributes to the development of Islamic education by strengthening the learning design of theology to be more adaptive and relevant to the digital era.

Corresponding Author.

Lalita Ni'mal Fajria

Email: lalitanimal0@gmail.com

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INTRODUCTION

Digital transformation has brought significant changes in how individuals access, produce, and distribute religious knowledge. The presence of social media such as YouTube, Instagram, and TikTok has created a space for religious discourse that is open, participatory, and no longer centered on formal authority. In this context, religious practices have shifted from traditional patterns to more fluid and fragmented forms, where individuals can freely consume and interpret religious information from various digital sources.¹

Consequently, the digital space has also become an arena for the development of diverse religious narratives, including the emergence of atheism and religious skepticism, which are increasingly accessible to the digital generation. Exposure to this content can influence individuals' thinking and beliefs, especially when not balanced with adequate digital literacy skills and theological understanding. Recent studies show that interaction with religious content on social media can trigger a process of critical reflection as well as doubt about one's beliefs.²

This phenomenon poses a challenge for Kalam learning, a discipline that focuses on strengthening faith through a rational and argumentative approach. However, Kalam learning in various educational institutions still tends to be normative, textual, and lacking contextualization with the realities of students' lives. The learning process emphasizes conceptual mastery rather than developing critical and reflective thinking skills, thus under-equipping students to navigate the dynamics of religious discourse in the digital space.³

Therefore, a Kalam learning design that is more contextual, adaptive, and relevant to the developments in the digital era is needed. From an educational theory perspective, Constructive Alignment emphasizes the importance of alignment between learning objectives, activities, and assessments in producing meaningful learning.⁴ On the other hand, the Technological Pedagogical Content Knowledge (TPACK) framework emphasizes the importance of integrating content, pedagogy, and technology in 21st-century learning.⁵ These two approaches have great potential to be integrated in the development of a more systematic and contextual Kalam learning design.

¹ Faustinus Chukwuma Onyema, "The Future of Faith-Tech: The Business of Digital Religious Experiences" (Vilnius University Business School, 2026).

² Sayeed Al-zaman, "Social Media Users' Engagement with Religious Misinformation: An Exploratory Sequential Mixed-Methods Analysis," *Sage Publishing* 2, no. 2 (2024): 181–209, <https://doi.org/10.1177/27523543241257715>.

³ Umi Waqidah and Diah Novita Fardani, "Ilmu Kalam Di Era Digital: Tantangan Dan Peluang Dalam Menjawab Problematika Keislaman Kontemporer," *Central Publisher* 2, no. 7 (2024): 2275–82, <https://doi.org/https://doi.org/10.60145/jcp.v2i7.477>.

⁴ John Biggs, "Constructive Alignment in University Teaching," *HERDSA Review of Higher Education* 1 (2014): 5–22.

⁵ Muhammad Idris Effendi and Hakkun Elmunsyah, "Peran Technological Pedagogical Content Knowledge (TPACK) Terhadap Ketercapaian 4C Skills (Critical Thinking, Creative Thinking, Collaboration, and Communication) Siswa SMK," *Didaktika: Jurnal Kependidikan* 13, no. 001 (2024): 435–44.

Nevertheless, studies integrating Constructive Alignment and TPACK in the context of Kalam learning are still very limited. Most studies focus more on the use of technology as a learning tool or on the application of learning design in general, without linking it to the epistemological characteristics of Kalam or the dynamics of digital religious discourse. This indicates a theoretical gap that opens up opportunities to develop an integrative conceptual learning model that is relevant to the needs of the digital generation.

Several previous studies have examined the implementation of TPACK in Islamic education and digital learning contexts. Hanik et al. (2022) explained that the TPACK approach helps teachers integrate technology, pedagogy, and content more effectively in digital learning environments.⁶ Likewise, Octaviana and Yudha (2022) emphasized that TPACK supports 21st-century learning by encouraging critical thinking, collaboration, and digital literacy.⁷ In the context of religious education, Waqhidah and Fardani (2024) highlighted the urgency of reformulating Kalam learning in response to contemporary Islamic issues in the digital era.⁸

However, these studies still have several limitations. First, most previous studies focus primarily on the technical integration of technology in learning without systematically aligning learning objectives, activities, and assessments. Second, studies on Islamic theology learning tend to remain conceptual and normative, with limited discussion on how digital religious discourse, such as atheism and religious skepticism on social media, can be pedagogically addressed. Third, there is still limited research integrating Constructive Alignment and TPACK simultaneously in Kalam learning design. Therefore, this study seeks to fill the gap by proposing a conceptual reconstruction of Kalam learning that integrates pedagogical alignment and technology-based learning to strengthen students' theological literacy and critical thinking in the digital era.

Based on this description, this study offers a novelty in the form of a theoretical reconstruction of Kalam learning design through the integration of Constructive Alignment and TPACK. This research aims to formulate a conceptual model for Kalam learning that is pedagogically aligned, technologically integrated, and able to respond to the dynamics of narratives of atheism and religious skepticism in the digital space. This will, in turn, develop students' critical thinking skills and theological literacy more comprehensively.

RESEARCH METHOD

This research uses a qualitative approach with a library research approach. This research was chosen because it focuses on the study, analysis, and synthesis of various theoretical concepts related to learning design, specifically Constructive Alignment and Technological Pedagogical Content Knowledge (TPACK), to produce a conceptual model

⁶ Elya Umi Hanik et al., "Integrasi Pendekatan TPACK (Technological , Pedagogical , Content Knowledge) Guru Sekolah Dasar SIKL Dalam Melaksanakan Pembelajaran Era Digital," *JEID: Journal of Educational Integration and Development* 2, no. 1 (2022): 15–27, <https://doi.org/https://doi.org/10.55868/jeid.v2i1.97>.

⁷ Eva Octaviana and Chrisnaji Banindra Yudha, "Tecnological Pedagogical Content Knowledge (TPACK) Dalam Pembelajaran Abad Ke-21," *Social Humanities and Educational Studies (SHEs) Conference Series* 5, no. 2 (2022): 57–64, <https://doi.org/https://doi.org/10.20961/shes.v5i2.58305>.

⁸ Waqhidah and Fardani, "Ilmu Kalam Di Era Digital: Tantangan Dan Peluang Dalam Menjawab Problematika Keislaman Kontemporer."

for Kalam learning in the digital era. The library study allows researchers to in-depth review relevant scientific literature and systematically identify relationships between concepts.

The data sources in this study are secondary data obtained from scientific journal articles (national and international), reference books related to learning design and educational technology, scientific seminar proceedings, and relevant academic documents. Data collection techniques were conducted through documentation studies by identifying relevant literature, downloading and archiving scientific articles, critically reading the literature, and conducting literature searches using scientific databases such as Google Scholar, ResearchGate, and Open Access Journals. The collected data was then analyzed using content analysis and theory synthesis.

RESULT AND DISCUSSION

Context and Problems of Kalam Learning

Digital transformation has fundamentally changed the landscape of religious discourse, moving from a hierarchical and authority-based structure to a more open, participatory, and decentralized one. Social media has become not only a means of communication but also an arena for the production of religious meaning, enabling every individual to become both a producer and a consumer of religious information. The fast-paced, fragmented, and algorithmic nature of the digital space allows the spread of religious discourse to occur without strict epistemological filters, thus shaping the thinking of the digital generation, which is more dynamic but also vulnerable to information bias.⁹

In this context, the digital space has also become a medium for the development of narratives of atheism and religious skepticism, becoming increasingly accessible to the younger generation. Various studies have shown that exposure to atheistic content, religious criticism, and alternative religious discourse on social media can trigger critical reflection and doubt about one's beliefs, especially when not balanced with a strong theological understanding. This phenomenon demonstrates that digital media functions not only as a learning tool but also as a space for ideological contestation that influences students' epistemological constructions in understanding religion.¹⁰

However, Kalam learning, as a discipline that epistemologically functions to strengthen faith through a rational and argumentative approach, has not fully responded to these dynamics. Kalam learning practices in various educational institutions still tend to be normative and textual, with an emphasis on mastering classical concepts without connecting them to the realities of contemporary religious discourse. This condition results in learning that is less relevant to students' learning experiences in the digital space and fails to develop critical thinking and argumentative skills in dealing with complex religious narratives.¹¹

⁹ Heidi A Campbell, *Religion in Quarantine: The Future of Religion in a Post-Pandemic World* (Digital Religion Publications, 2020), <https://oaktrust.library.tamu.edu/server/api/core/bitstreams/06d37f61-4526-4a28-be5b-005c099606db/content>.

¹⁰ Aliyu A. Rabiu et al., "Social Media and The Rise of Atheism Among Muslim Youth in Northern Nigeria," *Data Plus* 03, no. 01 (2025): 17–29, <https://doi.org/10.62887/dataplus.003.01.0030>.

¹¹ Ahmad Faizuddin Ramli et al., "A Preliminary Study on Atheism and Agnosticism Tendencies among Malaysian University Students Based Ethnicity and School Orientation," *International Journal of Academic Research in Business and Social Sciences* 15, no. 11 (2025): 1073–1106, <https://doi.org/http://dx.doi.org/10.6007/IJARBS/v15-i11/26979>.

Furthermore, the disconnect between Kalam learning and the digital context is also evident in the minimal integration of media and technology in the learning process. Technology is often used only as an administrative tool, not as an integral part of the epistemological learning process. As a result, students are not trained to critically analyze, evaluate, and respond to digital religious discourse. Yet, the nature of religious discourse in the digital era demands theological argumentation skills that are not solely text-based, but also contextual and dialogical in response to evolving social realities.¹²

Thus, there is a gap between the character of religious discourse in the digital era and conventional Kalam learning practices. This gap underscores the urgency of developing a more contextual, integrative, and adaptive learning design to digital dynamics, thus bridging the theological scholarly tradition with the epistemological realities of the digital generation.

This condition indicates that the challenges faced by Kalam learning in the digital era are not merely technological, but epistemological and pedagogical. The digital generation no longer receives religious knowledge passively from formal institutions; instead, they actively negotiate religious meanings through algorithm-driven digital interactions. Consequently, students are exposed to fragmented religious interpretations that often lack methodological and theological validation. If Kalam learning continues to rely solely on textual transmission and memorization-oriented approaches, students may experience a disconnect between theological knowledge acquired in classrooms and the complex religious realities encountered in digital spaces.

In this regard, the inability of conventional Kalam learning to facilitate critical engagement with digital discourse may weaken students' capacity to evaluate misinformation, religious extremism, or skeptical narratives circulating online. Therefore, reconstructing Kalam learning is essential not only to maintain the relevance of Islamic theological education, but also to develop students' intellectual resilience, critical theological reasoning, and digital religious literacy in responding to contemporary ideological challenges.¹³

Constructive Alignment in Kalam Learning

Constructive Alignment (CA) is a learning design approach that emphasizes the systematic alignment between learning objectives (learning outcomes), learning activities, and assessments. Within this framework, learning is designed so that all components are constructively interconnected, thus encouraging students to optimally achieve predetermined learning outcomes. The main principle of CA lies in the assumption of constructivism, namely that knowledge is actively constructed by students through meaningful learning experiences. Therefore, lecturers or teachers not only deliver material but also design a learning environment that allows for active and reflective knowledge construction.¹⁴

In its implementation context, Constructive Alignment requires the formulation of clear, measurable learning outcomes oriented toward Higher Order Thinking Skills

¹² Anielath Missier, "Extreme Beliefs in a Digital Age: Influence of Digital Media on Social Imaginaries, Epistemic Authorities and Fundamentalist Beliefs of Gen Y and Gen Z in Amsterdam and Mumbai" (Vrije Universiteit Amsterdam, 2025), <https://doi.org/https://doi.org/10.5463/thesis.1186>.

¹³ Campbell, *Religion in Quarantine: The Future of Religion in a Post-Pandemic World*.

¹⁴ John Biggs and Catherine Tang, *Teaching For Quality Learning at University* (Maidenhead: Open University Press, 2011).

(HOTS).¹⁵ Furthermore, learning activities are designed to directly support the achievement of these objectives, for example through critical discussions, case studies, or problem-based learning. Meanwhile, assessments serve to measure the extent to which students have achieved learning outcomes, not simply test memorization.¹⁶ Recent research shows that consistent implementation of CA can improve the quality of learning, particularly in encouraging active engagement and critical thinking skills in students.¹⁷

In the digital era, the application of Constructive Alignment also enables the integration of learning contexts with the realities of students' lives in the digital space. Learning activities can utilize social media, digital content, or online religious phenomena as analytical materials, so that students are trained to critically examine and respond to religious discourse. Furthermore, assessments can be developed in the form of authentic assignments such as creating argumentative videos, critical essays, or digital projects that demonstrate reflective and applicable thinking skills. This approach aligns with the demands of 21st-century learning, which emphasizes the integration of knowledge, critical thinking skills, and digital literacy.¹⁸

Thus, Constructive Alignment holds great potential as a basic framework for reconstructing the design of Kalam (Theology) learning in the digital era. Through the alignment of objectives, activities, and assessments, this approach not only improves the quality of learning structurally but also fosters critical thinking skills and theological argumentation relevant to the dynamics of contemporary religious discourse. Therefore, CA can be positioned as a strong pedagogical foundation before being further integrated with technological frameworks such as TPACK in the development of more comprehensive learning models.

In the context of Kalam learning, the implementation of Constructive Alignment can significantly transform conventional teacher-centered practices into student-centered and inquiry-based learning. Learning outcomes should not only focus on students' ability to memorize theological doctrines, but also on their capability to critically analyze contemporary religious issues and formulate rational theological arguments. Therefore, learning activities need to be designed to encourage higher-order thinking processes, such as comparative analysis of digital religious narratives, reflective discussions on atheistic arguments found on social media, and collaborative projects related to contemporary Islamic discourse.

In addition, assessment methods should be aligned with these objectives by emphasizing authentic assessment strategies. For example, students may be assigned to create argumentative digital content, reflective essays, podcast discussions, or analytical responses to online religious debates. Such assessments allow educators to evaluate not only cognitive

¹⁵ Preeti Jaiswal, "Using Constructive Alignment to Foster Teaching Learning Processes," *English Language Teaching* 12, no. 6 (2019): 10–23, <https://doi.org/10.5539/elt.v12n6p10>.

¹⁶ Anggiet Noviana Puteri, Nono Hery Yoenanto, and Nur Ainy Fardana Nawangsari, "Efektivitas Asesmen Autentik Dalam Pembelajaran The Effectiveness of Authentic Assessment in Learning," *Jurnal Pendidikan Dan Kebudayaan* 8, no. 1 (2023): 77–87, <https://doi.org/10.24832/jpnk.v8i1.3535>.

¹⁷ Waleed Mahmoud Abdelhamid Hamdoun, "Constructive Alignment Approach: Enhancing Learning and Teaching," *British Journal of Multidisciplinary and Advanced Studies: Education, Learning, Training & Development* 4, no. 2 (2023): 162–70, <https://doi.org/https://doi.org/10.37745/bjmas.2022.0173>.

¹⁸ Christine Redecker, *European Framework for the Digital Competence of Educators* (Luxembourg: Publication Office of the European Union, 2017).

mastery but also students' critical reasoning, communication skills, and digital literacy. Through this alignment, Constructive Alignment becomes highly relevant in developing meaningful Kalam learning that is adaptive to the intellectual and social challenges of the digital era.¹⁹

The Role of TPACK in Kalam Learning

The Technological Pedagogical Content Knowledge (TPACK) framework is an approach that emphasizes the importance of integrating three main domains in learning: Content Knowledge (CK), Pedagogical Knowledge (PK), and Technological Knowledge (TK). TPACK positions technology not merely as a tool, but as an integral part that interacts dynamically with content and pedagogical strategies. In this context, effective learning occurs when teachers are able to integrate these three aspects in a balanced manner, so that technology is used appropriately to deliver material and achieve learning objectives.²⁰

In Kalam learning, Content Knowledge (CK) relates to the understanding of Islamic creedal concepts, theological argumentation, and Islamic traditions of thought. Pedagogical Knowledge (PK) encompasses learning strategies that foster critical discussion and reflection, such as debates, case studies, and inquiry learning. Meanwhile, Technological Knowledge (TK) refers to the ability to utilize digital technology, including social media and online learning platforms, as a means of exploration and interaction. The integration of these three aspects allows the learning of Kalam (Islamic theology) to focus not only on conceptual understanding but also on students' ability to critically and reflectively examine and respond to religious phenomena in the digital space.

Furthermore, the role of technology within the TPACK framework is highly relevant in the context of the digital era, particularly through the use of social media and digital platforms as learning resources. Media such as YouTube, Instagram, or TikTok can be used as analytical materials for various religious narratives, including discourses on atheism and religious skepticism. In this case, technology serves as a bridge between theory and reality, where students are invited to directly explore, evaluate, and critique digital content. Research shows that the pedagogical use of digital media can increase students' learning engagement and critical thinking skills in understanding complex issues.²¹

In practice, the implementation of TPACK in Kalam learning can be realized through various interactive and contextual activities.²² For example, students can be asked to analyze religious debate videos on YouTube, discuss theological arguments emerging on social media, or create digital content that critically reflects on contemporary religious issues. These

¹⁹ Redecker.

²⁰ Elya Umi Hanik et al., "Integrasi Pendekatan TPACK (Technological , Pedagogical , Content Knowledge) Guru Sekolah Dasar SIKL Dalam Melaksanakan Pembelajaran Era Digital," *JEID: Journal of Educational Integration and Development* 2, no. 1 (2022): 15–27, <https://doi.org/https://doi.org/10.55868/jeid.v2i1.97>.

²¹ Wahyu Fajar Lestari and Ani Rakhmawati, "Peran Technological Pedagogical Content Knowledge (TPACK) Terhadap Ketercapaian Tiga Prinsip Pembelajaran Mendalam (Mindful , Meaningful , Joyful) Pada Siswa SMP," *Didaktika: Jurnal Kependidikan* 15, no. 1 (2026): 965–76, <https://doi.org/https://doi.org/10.58230/27454312.3667> Abstrak.

²² Nadhifa Fajrin, "Kompetensi Guru Fikih Dalam Mengimplementasikan Technological Pedagogical and Content Knowledge (TPACK) Serta Dampaknya Terhadap Pemahaman Konseptual Dan Keterampilan Kolaboratif Siswa Di MAN 5 Sleman" (UIN Sunan Kalijaga Yogyakarta, 2025).

activities not only enhance conceptual understanding but also train theological argumentation and digital literacy skills. Furthermore, the use of learning platforms such as a Learning Management System (LMS) or online forums can expand the space for discussion and collaboration, making learning more dialogic and participatory.²³

Thus, TPACK provides a comprehensive framework for meaningfully integrating technology into the learning of Kalam. Technology is no longer positioned as an adjunct, but as part of the epistemological process that enables students to interact directly with the reality of religious discourse in the digital age. Through the integration of CK, PK, and TK, Kalam learning can be developed to be more contextual, critical, and relevant to the needs of the digital generation. Therefore, TPACK serves as an important foundation that can then be synthesized with Constructive Alignment to produce a more systematic and transformative learning model.

Synthesis of Constructive Alignment and TPACK

Constructive Alignment (CA) and Technological Pedagogical Content Knowledge (TPACK) are two theoretical frameworks that developed from different traditions, but have complementary goals in improving the quality of learning. CA focuses on the systematic aspects of instructional design, particularly in ensuring alignment between learning objectives, activities, and assessments.²⁴ Meanwhile, TPACK emphasizes the integration of technology in learning through the dynamic relationship between content, pedagogy, and technology.²⁵ Thus, CA provides a structural framework for learning design, while TPACK provides a contextual dimension in utilizing technology as an integral part of the learning process.

Although originating from different focuses, these two theories have significant common ground in the effort to create meaningful and learner-oriented learning. CA emphasizes the importance of linking what is to be achieved, how it is achieved, and how the results are measured, while TPACK ensures that the process is supported by the use of appropriate and relevant technology. In other words, CA provides the "pedagogical structure," while TPACK provides the "instruments and technological context" that enable that structure to be effectively implemented in digital learning environments. This integration is crucial in facing the challenges of 21st-century learning, which demands alignment between pedagogical design and technological literacy.²⁶

In the context of learning Ilmu Kalam (Theology of the Kalam), the synthesis of CA and TPACK enables the creation of learning designs that are not only systematic but also contextualized to the dynamics of religious discourse in the digital age. Through CA, learning objectives can be formulated to develop critical thinking and theological argumentation skills,

²³ Fatmawati Mahabu et al., "Pemanfaatan Learning Management System (LMS) Untuk Meningkatkan Efektifitas Pembelajaran," *Jurnal Teknologi Pendidikan Dan Pembelajaran (JTTP)* 03, no. 01 (2025): 27–34, <https://jurnal.kopusindo.com/index.php/jtpp/article/view/1003>.

²⁴ Telle Hailikari et al., "Student Perspectives on How Different Elements of Constructive Alignment Support Active Learning," *Sage Journals* 9, no. 3 (2022): 217–231, <https://doi.org/10.1177/1469787421989160>.

²⁵ Amelia et al., "Implementasi Teknologi Pedagogical Content Knowledge (TPACK) Dalam Pembelajaran Di SD Negeri 1 Bireuen," *Jurnal Pendidikan Guru Sekolah Dasar* 2, no. 4 (2025): 1–10, <https://doi.org/https://doi.org/10.47134/pgsd.v2i4.1891>.

²⁶ Octaviana and Yudha, "Tecnological Pedagogical Content Knowledge (TPACK) Dalam Pembelajaran Abad Ke-21."

while activities and assessments are designed in harmony to support these achievements. Furthermore, through TPACK, technologies such as social media, digital platforms, and online resources can be integrated into learning activities, allowing students to directly interact with contemporary religious phenomena. Thus, learning Ilmu Kalam is oriented not only toward conceptual understanding but also toward analytical and reflective skills in digital realities.

Furthermore, an integrative analysis of CA and TPACK shows that the two frameworks complement each other in addressing their respective weaknesses. CA, while strong in design, tends not to explicitly address technology integration in learning.²⁷ Conversely, TPACK provides a technology integration framework but does not specifically address the alignment between objectives, activities, and assessments.²⁸ Therefore, the synthesis of the two frameworks yields a more comprehensive approach, where learning is systematically designed while supported by the meaningful use of technology. This approach enables adaptive, reflective, and relevant learning to meet the needs of the digital generation.

Thus, the synthesis of Constructive Alignment and TPACK produces a strong conceptual framework for reconstructing the design of Kalam (Theology) learning in the digital era. This integration not only unites structural and technological aspects but also encourages contextual, critical, and transformative learning. This sub-chapter forms the scientific core of the research, which will then be formulated in the form of a conceptual learning model as the research's main contribution.

Conceptual Model of Kalam Learning

Based on the synthesis of Constructive Alignment and TPACK, this research produces a conceptual model of Kalam learning in the digital era that emphasizes the integration of harmonious learning design and the meaningful use of technology. This model is based on the assumption that Kalam learning is not solely oriented toward mastering religious concepts but must also develop critical, reflective, and argumentative thinking skills in addressing the dynamics of religious discourse in the digital space.²⁹ Thus, this model integrates the pedagogical structure of Constructive Alignment with the technological dimension of TPACK to produce contextual, systematic, and adaptive learning.

Conceptually, this model consists of four main components: learning objectives (learning outcomes), learning activities, assessment, and technology integration. First, learning objectives are formulated specifically and oriented toward developing higher-order thinking skills, such as analysis, evaluation, and theological argumentation. Second, learning activities are designed in interactive and contextual formats, such as critical discussions, case studies of digital religious phenomena, and argumentative debates. Third, assessments are

²⁷ Vindya V Senadheera, Thilini P Rupasinghe, and Dileepa S Ediriweera, "Connective Alignment' as the Educational Approach for Higher Education in the Digital Age," *Journal of Learning for Development* 11, no. 1 (2024): 172–80, <https://doi.org/https://doi.org/10.56059/jl4d.v11i1.970>.

²⁸ Feisal Aziez, Elly Hasan Sadel, and Miftahul Furqon, "Implementing TPACK-Based Technology Integration Training for Pre-Service Teachers in the Philippines," *PengabdianMu: Jurnal Ilmiah Pengabdian Kepada Masyarakat* 10, no. 8 (2025): 2018–27, <https://doi.org/https://doi.org/10.33084/pengabdianmu.v10i8.10045> Implementing.

²⁹ Fathur Rohman Ar, "Urgensi Ilmu Kalam Terhadap Pembentukan Karakter Moderasi Beragama Mahasiswa Di Tengah Tantangan Era Digital," *Pena Islam Jurnal Pendidikan Agama Islam* 8, no. 1 (2025): 1–13, <https://doi.org/https://doi.org/10.47759/6jysjk57>.

developed authentically to measure students' application skills, for example through digital projects, reflective essays, or the production of argumentative content. Fourth, technology is integrated as both a medium and a learning resource, enabling students to interact directly with the reality of religious discourse in the digital age.

The integration of these four components creates a harmonious and mutually supportive learning system. Learning objectives form the basis for designing activities, activities become a means to achieve objectives, while assessments serve to authentically measure the achievement of objectives. Within this framework, technology is not positioned as an add-on, but as an integral part that strengthens the interconnections between learning components. This approach aligns with the principles of 21st-century learning, which emphasize the integration of knowledge, critical thinking skills, and digital literacy.

To clarify the model's construction, the following conceptual diagram illustrates the relationships between the components:

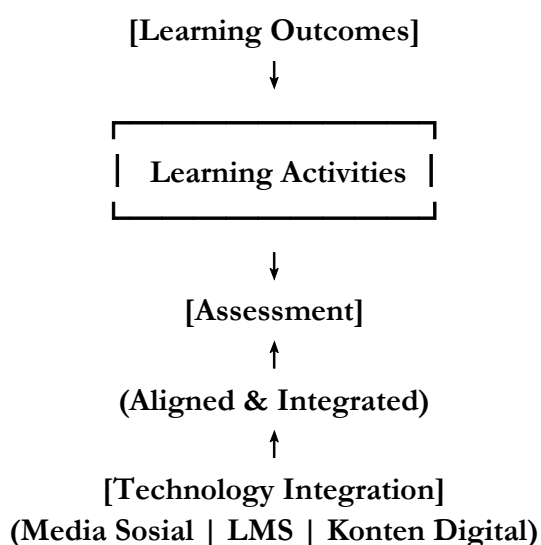


Diagram 1 conceptual model of learning Islamic theology in the DIGITAL ERA: integration of Constructive Alignment and TPACK

The diagram shows that Constructive Alignment serves as the primary framework (objectives–activities–assessments), while TPACK strengthens the integration of technology within each component. Thus, this model not only ensures structural alignment of learning but also its contextual relevance to the digital reality. This conceptual model is a key research contribution in efforts to reconstruct the learning of Kalam (Theology) to be more responsive to the epistemological and pedagogical challenges of the digital era.

Implications of The Conceptual Model of Kalam Learning

The conceptual model of Kalam learning based on the integration of Constructive Alignment and TPACK has significant theoretical implications for the development of Islamic education studies. Conceptually, this model expands the paradigm of Kalam learning, which has tended to be normative and textual, to become more constructivist, contextual, and technology-based. The integration of the alignment of learning design and the use of

technology demonstrates that strengthening faith (aqidah) can be achieved not only through the transmission of knowledge, but also through a process of constructing meaning that involves active interaction between students and the socio-digital reality. This aligns with developments in contemporary Islamic educational theory, which emphasizes the importance of integrating Islamic scientific traditions and modern pedagogical approaches in responding to the challenges of globalization and digitalization.³⁰

Furthermore, this model also contributes to strengthening the theoretical framework for technology-based learning design in the field of religious education. By integrating Constructive Alignment and TPACK, this research demonstrates that effective learning design depends not only on selecting the right technology but also on the alignment between the objectives, activities, and assessments underlying the use of that technology. Therefore, this model can serve as a reference in developing learning designs that are not partial, but integrative and systematic, particularly in the context of digital-based learning.

Practically, the implications of this model are highly relevant for Islamic Religious Education (PAI) teachers in designing learning that is more adaptive to the characteristics of the digital generation. Teachers no longer act merely as transmitters of material, but as facilitators capable of designing learning experiences that encourage students to think critically, engage in dialogue, and construct theological arguments independently. Through this approach, teachers can utilize various digital platforms, such as social media, Learning Management Systems (LMS), and online learning resources, as part of a contextual and interactive learning strategy. Research shows that integrating technology into religious education learning can increase student engagement and strengthen conceptual and reflective understanding.

Furthermore, in the context of digital learning, this model provides a new direction in developing learning practices that are oriented not only toward the use of technology but also toward the quality of interaction and the depth of students' thinking. Technology is utilized as a means to explore contemporary religious phenomena, develop digital literacy, and build evaluative skills regarding various religious narratives in the digital space. Thus, the learning of Kalam can be transformed to become more dialogic, reflective, and relevant to students' lives in the digital era. This aligns with the digital competency framework, which emphasizes the importance of integrating digital literacy, critical thinking, and contextual learning.³¹

CONCLUSION

This study aims to reconstruct the Kalam learning design in the digital era through the integration of Constructive Alignment and TPACK. The study's results indicate that Kalam learning needs to be directed at developing critical thinking skills and contextualized theological argumentation within the dynamics of digital religious discourse. The integration of these two approaches results in a conceptual learning model that emphasizes alignment

³⁰ Abdul Azis et al., "Tantangan Dan Problematika Pendidikan Masa Kini Dalam Perspektif Islam Di Era Globalisasi," *Moral: Jurnal Kajian Pendidikan Islam* 2, no. 2 (2025): 224–40.

³¹ Marjanah Saldin, "Pengembangan Kurikulum Berbasis Literasi Digital Untuk Meningkatkan Keterampilan Abad Ke 21 Pada Peserta Didik Sekolah Menengah Atas," *Journal of Innovative and Creativity* 21, no. 3 (2025): 29402–6.

between objectives, activities, and assessments, along with the meaningful use of technology, resulting in more systematic, contextual, and adaptive learning to the characteristics of learners in the digital era.

Based on these findings, this study recommends empirical testing of the proposed model in real-life learning contexts. Further research could focus on implementing the model through experimental approaches, case studies, or classroom action research to measure its effectiveness in improving students' critical thinking and theological argumentation skills. In addition, further research can also integrate this model with contemporary issues, such as digital literacy and religious moderation, to enrich the development of Kalam learning designs that are relevant to the demands of education in the digital era.

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