IMPLEMENTING ONLINE LEARNING STRATEGIES TO STRENGTHEN MOTIVATION AND INDEPENDENCE AMONG STUDENTS IN THE DIGITAL ERA

Surya Eka Priyatna
UIN Antasari Banjarmasin, Indonesia
Email: suryaekapriyatna@uin-antasari.a.id

Ilham
UIN Antasari Banjarmasin, Indonesia
Email: ilham@uin-antasari.a.id

Risqiatul Hasanah
UIN Antasari Banjarmasin, Indonesia
Email: risqiatulhasanah@uin-antasari.ac.id

Abstract

Online learning has become an essential paradigm in the digital era, particularly in responding to the shifting educational landscape. However, challenges related to student motivation and independence persist, often impacting learning outcomes and engagement. This research aims to explore the implementation of strategic online learning methods to enhance motivation and independence among students, particularly in higher education settings. Using a mixed-method approach, this study combines qualitative interviews with quantitative surveys to analyze the factors influencing student engagement. Data were collected from undergraduate students at UIN Antasari, focusing on their experiences and perceptions of online learning strategies during the pandemic. The findings reveal that well-structured online learning strategies, including the integration of flexible scheduling, interactive tools, and self-directed learning modules, significantly enhance students' motivation and independence. This study contributes to the existing body of knowledge by highlighting the potential of online learning strategies to bridge gaps in traditional education, fostering not only academic success but also personal growth. The insights gained are expected to inform educators, policymakers, and institutions in designing more effective and inclusive online learning environments, particularly within the framework of Islamic education.

Keywords: *Online Learning Strategies, Motivation, Student Independence, Digital Education.*

1. Introduction

The digital era has brought transformative changes to various aspects of life, including education. Online learning, once considered an alternative mode of instruction, has become a primary educational paradigm in many institutions worldwide[12]. This shift was accelerated by the COVID-19 pandemic, which necessitated the adaptation of digital technologies to ensure continuity in learning[3]. While online learning offers unparalleled flexibility and accessibility, it also poses unique challenges, particularly in fostering motivation and independence among students[4].

Motivation and independence are critical components of successful learning, particularly in self-directed online environments. Motivation drives students to engage actively with course materials, complete assignments, and participate in discussions, while independence reflects their ability to manage time, resources, and responsibilities effectively[5]. However, the transition to online learning has highlighted gaps in these areas, with many students struggling to maintain focus and self-discipline[6]. This issue is particularly relevant in higher education, where students are expected to take greater ownership of their learning. For Islamic educational institutions, the challenges of online learning are compounded by the need to balance academic rigor with the spiritual and moral development of students[7]. Islamic education emphasizes holistic growth, integrating cognitive, affective, and psychomotor domains[8]. This dual focus necessitates strategies that not only address academic challenges but also reinforce students' spiritual values and character.

Numerous studies have explored the dynamics of online learning, particularly in terms of technology integration and pedagogical approaches. Research has shown that interactive tools, such as discussion forums and video conferencing, can enhance engagement and understanding[9]. However, the effectiveness of these tools often depends on their alignment with students' needs and the learning objectives of the course[10]. Previous research on motivation in online learning environments has identified several

---

[1] Azwar Rahmat, Abdul Wahab Syakhrani, and Erwinsyah Satria, "Promising Online Learning and Teaching in Digital Age: Systematic Review Analysis," *International Research Journal of Engineering, IT & Scientific Research* 7, no. 4 (April 29, 2021): 126–35, https://doi.org/10.21744/irjeis.v7n4.1578.

[2] D. A. Viliavin, N. V. Komleva, and L. A. Danchenok, "Digital Technologies In Online Education," 2020, 893–900, https://doi.org/10.15405/epsbs.2020.10.03.105.

[3] Prashant Kumar, "A Pathway Of Digital Learning In Changing Paradigm: The Context Of Covid-19," *Journal of Global Resources* 06, no. si1 (June 5, 2020): 73–78, https://doi.org/10.46587/JGR.2020.v06si01.010.

[4] Greta Braun et al., "Motivational Challenges of Engineers Participating in an Online Upskilling Program," *European Conference on E-Learning* 21, no. 1 (October 21, 2022): 25–31, https://doi.org/10.34190/ecel.21.1.594.

[5] Thomas M. Green and Chandrika M. Kelso, "Factors That Affect Motivation Among Adult Learners," *Journal of College Teaching & Learning (TLC)* 3, no. 4 (April 1, 2006), https://doi.org/10.19030/tlc.v3i4.1729.

[6] Emily Guetzoian, "Academic Motivation and Self-Discipline Strategies for Online Learners:," in *Advances in Higher Education and Professional Development*, ed. Sunil Ramlall, Ted Cross, and Michelle Love (IGI Global, 2021), 111–28, https://doi.org/10.4018/978-1-7998-8275-6.ch007.

[7] Idi Warsah, "Islamic Religious Teachers' Efforts To Motivate Students And Implement Effective Online Learning," *Edukasi Islami: Jurnal Pendidikan Islam* 10, no. 01 (February 18, 2021): 383, https://doi.org/10.30868/ei.v10i01.1210.

[8] Ayatullah Ayatullah, "Dasar-Dasar Pelaksanaan Pendidikan Agama Islam Di Sekolah," *ARZUSIN* 2, no. 2 (April 30, 2022): 205–21, https://doi.org/10.58578/arzusin.v2i2.472.

[9] Navdeep Verma et al., "Characteristics of Engaging Teaching Videos in Higher Education: A Systematic Literature Review of Teachers' Behaviours and Movements in Video Conferencing," *Research and Practice in Technology Enhanced Learning* 18 (March 21, 2023): 040, https://doi.org/10.58459/rptel.2023.18040.

[10] Abhinava Barthakur et al., "Aligning Objectives with Assessment in Online Courses: Integrating Learning Analytics and Measurement Theory," *Computers & Education* 190 (December 2022): 104603, https://doi.org/10.1016/j.compedu.2022.104603.

key factors, including the clarity of course expectations, the relevance of course materials, and the quality of instructor feedback[11]. Studies also highlight the role of peer interactions and collaborative activities in sustaining motivation. Despite these findings, the application of these insights in Islamic education remains underexplored, particularly in the context of fostering independence alongside motivation[12].

The concept of independence in learning is closely tied to self-regulation, a skill that enables students to set goals, monitor progress, and adapt strategies to achieve desired outcomes[13]. Self-regulation is particularly critical in online learning, where students must navigate the challenges of remote instruction without direct supervision[14]. While existing research underscores the importance of self-regulation, it often overlooks the cultural and spiritual dimensions that influence students' learning behaviors in Islamic contexts[15].

This study seeks to bridge these gaps by examining the implementation of online learning strategies that enhance motivation and independence among students in Islamic educational settings. By integrating insights from existing research with empirical data collected from students at UIN Antasari, the study aims to provide actionable recommendations for educators and institutions. Problem Formulation the primary questions addressed in this study are: 1. What online learning strategies are most effective in enhancing student motivation and independence?, 2. How can these strategies be adapted to align with the values and objectives of Islamic education? And 3. What are the key challenges and opportunities in implementing these strategies within higher education institutions?

The integration of online learning strategies into Islamic education requires a nuanced understanding of students' needs and the unique context of Islamic teaching[16]. Unlike conventional education, Islamic education prioritizes the development of adab (character and ethics) alongside academic achievement[17]. This dual focus presents both challenges and opportunities in the design and implementation of online learning strategies. One of the core principles of Islamic education is tarbiyyah, which emphasizes the cultivation of moral and spiritual growth[18]. Online learning environments, when

[11] Tetiana Shrol and Nataliia Poliukhovych, "Features of Formation of Motivation for Online Learning of Students of Pedagogical Specialties," *ScienceRise: Pedagogical Education*, no. 4(43) (July 30, 2021): 4–11, https://doi.org/10.15587/2519-4984.2021.237825.

[12] Agus Saepul Milah, "The Analysis of Online Discussion in Improving Students' Learning Motivation in Islamic Religious Education," *Devotion : Journal of Research and Community Service* 3, no. 6 (April 14, 2022): 547–54, https://doi.org/10.36418/dev.v3i6.150.

[13] Oxana Rydze, "Development of Learning Independence: Cooperation Between a Teacher and a Schoolchild," *Primary Education* 11, no. 1 (March 23, 2023): 8–12, https://doi.org/10.12737/1998-0728-2023-11-1-8-12.

[14] Saleh Alhazbi and Mahmood A. Hasan, "The Role of Self-Regulation in Remote Emergency Learning: Comparing Synchronous and Asynchronous Online Learning," *Sustainability* 13, no. 19 (October 7, 2021): 11070, https://doi.org/10.3390/su131911070.

[15] Hanif Fitrianto, "The Roles of Islamic Education in Building Self-Regulated Learner in the Era of Distance Education," *At-Ta'dib* 15, no. 2 (December 6, 2020): 84, https://doi.org/10.21111/at-tadib.v15i2.4722.

[16] M. Nurul Ikhsan Saleh, Ratna Sari, and Pujiarti Pujiarti, "Management of Online Learning in Islamic Higher Education: Challenges and Prospects," *POTENSIA: Jurnal Kependidikan Islam* 9, no. 1 (June 30, 2023): 58, https://doi.org/10.24014/potensia.v9i1.22761.

[17] Novi Puspitasari, Linda Relistian. R, and Reonaldi Yusuf, "PERAN PENDIDIKAN AGAMA ISLAM TERHADAP PEMBENTUKAN KARAKTER RELIGIUS PESERTA DIDIK," *Atta'dib Jurnal Pendidikan Agama Islam* 3, no. 1 (July 13, 2022): 57–68, https://doi.org/10.30863/attadib.v3i1.2565.

[18] Rosemaliza Binti Mohd Kamalludeen, "Technology Infusion in the Design of an Impactful Islamic Education Learning Experience," in *Supporting Modern Teaching in Islamic Schools*, by Ismail Hussein Amzat, 1st ed. (London: Routledge, 2022), 81–94, https://doi.org/10.4324/9781003193432-8.

effectively designed, can support tarbiyyah by providing opportunities for reflection, self-assessment, and the application of Islamic values in real-world contexts[19]. For example, assignments that require students to analyze contemporary issues from an Islamic perspective can foster critical thinking and ethical reasoning[20].

While the body of literature on online learning is extensive, there is a lack of research that explicitly addresses the intersection of motivation, independence, and Islamic education[21]. Most existing studies focus on either the technological or pedagogical aspects of online learning, with limited attention to the spiritual and cultural dimensions[22]. This study seeks to fill this gap by providing a comprehensive analysis of online learning strategies that are not only effective but also culturally and spiritually relevant[23]. The novelty of this study lies in its integrative approach, which combines quantitative and qualitative methods to capture the complexities of online learning in Islamic education. By focusing on motivation and independence, the study addresses two critical areas that are often overlooked in discussions of online learning. Moreover, the study's emphasis on practical implementation ensures its relevance to educators and policymakers.

The findings of this study have significant implications for the practice of Islamic education in the digital age. By identifying effective strategies for enhancing motivation and independence, the study provides a roadmap for educators seeking to optimize online learning environments. Additionally, the study highlights the potential of online learning to support the broader goals of Islamic education, including the development of ethical and responsible individuals[24]. This research also contributes to the broader discourse on online learning by introducing a culturally informed perspective. By situating the discussion within the context of Islamic education, the study challenges the dominant paradigms of online learning and underscores the importance of diversity in educational research.

In the context of online learning, motivation and independence are not merely desirable traits but essential components for success[25]. The absence of physical classroom settings places a greater emphasis on intrinsic motivation, where students must find their

---

[19] Anif Rachmawati and Evi Fatimatur Rusydiyah, "Implementasi Pembelajaran Berbasis E-Learning Pada Mata Pelajaran Pendidikan Agama Islam," *Jurnal Pendidikan Islam Indonesia* 5, no. 1 (October 15, 2020): 1–14, https://doi.org/10.35316/jpii.v5i1.223.

[20] Norhalimaton Saadiah Binti Ayub, Mohd Isa Bin Hamzah, and Khadijah Binti Abdul Razak, "Ethics of Islamic Teachers Education and the Challenges of the Current Era," *International Journal of Academic Research in Business and Social Sciences* 8, no. 12 (December 29, 2018): Pages 2302-2314, https://doi.org/10.6007/IJARBSS/v8-i12/5441.

[21] Supriyadi Supriyadi et al., "The Influence of Parent Support and Learning Motivation Towards The Achievement of Islamic Education Learning in The Pandemic Time Covid-19," in *Proceedings of the 2nd International Conference on Religion and Education, INCRE 2020, 11-12 November 2020, Jakarta, Indonesia* (2nd International Conference on Religion and Education, INCRE 2020, 11-12 November 2020, Jakarta, Indonesia, Jakarta, Indonesia: EAI, 2021), https://doi.org/10.4108/eai.11-11-2020.2308198.

[22] Chung-ling Shih, "Developing a Religious E-Program for Student Self-Learning of Culture and Translation," *Theory and Practice in Language Studies* 7, no. 12 (December 3, 2017): 1191, https://doi.org/10.17507/tpls.0712.05.

[23] Aldiyah Mellawati, "Strategies in Applying the Religious Character of Students to Distance Learning," *Proceedings of The ICECRS* 10 (August 25, 2021), https://doi.org/10.21070/icecrs20211141.

[24] Nur Eliza Mohd Noor, Tengku Sarina Aini Tengku Kasim, and Yusmini Md. Yusoff, "Instilling The Elements Of Good Values And Ethics Through Islamic Education E-Learning Platforms In Primary Schools," *International Journal of Education, Psychology and Counseling* 8, no. 50 (June 27, 2023): 477–97, https://doi.org/10.35631/IJEPC.850034.

[25] G. O. Tazhina, "Success Factors For Online Adult Education," *The Journal of Psychology & Sociology* 83, no. 4 (December 2022), https://doi.org/10.26577/jpcp.2022.v82.i4.04.

own reasons to stay engaged[26]. Similarly, independence becomes critical as students navigate digital platforms, manage their schedules, and ensure the completion of assignments without the direct oversight of instructors[27]. Motivation in Islamic education extends beyond academic achievement to encompass the internal drive to seek knowledge as a form of worship (ibadah). The Prophet Muhammad (peace be upon him) emphasized the pursuit of knowledge as a lifelong endeavor, stating, "Seeking knowledge is an obligation upon every Muslim" (Hadith, Sahih Muslim). This principle underscores the spiritual dimension of motivation in Islamic education, where learning is seen as a means of drawing closer to Allah[28]. Therefore, strategies to enhance motivation in Islamic online education must integrate spiritual values with academic goals[29].

Similarly, independence in learning aligns with the concept of mujahadah (self-discipline), which is central to personal and spiritual growth in Islam[30]. The ability to manage one's learning journey, make decisions, and overcome challenges is not only a marker of academic success but also a reflection of a Muslim's commitment to self-improvement[31]. Online learning environments provide a unique opportunity to cultivate these traits, as they require students to take ownership of their education and develop the resilience needed to thrive in a self-directed setting[32].

While the potential benefits of online learning are significant, the challenges cannot be overlooked. One of the primary obstacles is the digital divide, which affects access to reliable internet and digital devices[33]. This issue is particularly pronounced in regions with limited infrastructure, where students often struggle to participate in online learning due to connectivity issues[34]. Additionally, the lack of standardized guidelines for online learning in many Islamic educational institutions leads to inconsistencies in the quality of instruction[35]. Another challenge lies in ensuring that online learning environments uphold the values and principles of Islamic education. The absence of

---

[26] Jorge Rojo-Ramos et al., "Analysis of the Motivation of Students of the Last Cycle of Primary School in the Subject of Physical Education," *International Journal of Environmental Research and Public Health* 19, no. 3 (January 25, 2022): 1332, https://doi.org/10.3390/ijerph19031332.

[27] Hera Heru Sri Suryanti, Sri Hartini, and Ferisa Prasetyaning Utami, "Student Independence in Overcoming the Impact of COVID-19: Classical Online Guidance Based on Character Values," *Jurnal Cakrawala Pendidikan* 41, no. 1 (February 16, 2022), https://doi.org/10.21831/cp.v41i1.43943.

[28] Mirnawati, Suarni, and Saprin, "The Scientific Principles of Islamic Education," *Didaktika: Jurnal Kependidikan* 11, no. 3 (August 1, 2022): 117–24, https://doi.org/10.58230/27454312.148.

[29] Milah, "The Analysis of Online Discussion in Improving Students' Learning Motivation in Islamic Religious Education."

[30] Yuyun Yunita, Muhammad Ali, and Novita Herawati, "ISLAMIC CULTURAL HISTORY AS A LIFE PARADIGM," *Nizham Journal of Islamic Studies* 10, no. 1 (June 20, 2022): 101, https://doi.org/10.32332/nizham.v10i1.4228.

[31] Haseeb Mabrur, "Muslim Personality: Study of the Concept of Personality Structure and Psychological Struggles," *Interdisciplinary Journal Papier Human Review* 1, no. 1 (August 30, 2020): 14–23, https://doi.org/10.47667/ijphr.v1i1.4.

[32] Adi Dewantoro and Indriyana Rachmawati, "Analysis of Evaluation and Exploratory Studies on Student's Resilience of Online Learning during Pandemic of Covid-19," *KONSELI : Jurnal Bimbingan Dan Konseling (E-Journal)* 7, no. 2 (November 30, 2020): 155–62, https://doi.org/10.24042/kons.v7i2.7422.

[33] Lisa Ulzheimer et al., "Barriers in Times of Digital Teaching and Learning – a German Case Study: Challenges and Recommendations for Action," *Journal of Interactive Media in Education* 2021, no. 1 (September 8, 2021): 13, https://doi.org/10.5334/jime.638.

[34] Dr. Shashi Kant Gupta and Hayath M, "Lack of It Infrastructure for ICT Based Education as an Emerging Issue in Online Education," *Technoarete Transactions on Application of Information and Communication Technology(ICT) in Education* 1, no. 3 (July 15, 2022), https://doi.org/10.36647/TTAICTE/01.03.A004.

[35] Unang Wahidin et al., "The Effect of Applying an Online Learning System on Islamic Religious Education and the Characteristics of Learning Media Use," *AL-ISHLAH: Jurnal Pendidikan* 15, no. 2 (May 4, 2023): 1913–23, https://doi.org/10.35445/alishlah.v15i2.2819.

physical interaction in online settings can create a sense of isolation, which may hinder the development of ukhuwah Islamiyah (Islamic brotherhood). Furthermore, the integration of Islamic teachings into digital curricula requires careful consideration to ensure that spiritual and moral development is not overshadowed by technological and academic priorities.

Despite these challenges, the digital era offers unprecedented opportunities for Islamic education. Online platforms enable the dissemination of knowledge to a global audience, breaking down geographical barriers and fostering cross-cultural understanding. For instance, virtual classrooms can connect students from diverse backgrounds, allowing them to engage in discussions that enrich their perspectives and deepen their appreciation for Islamic values[36]. Moreover, the flexibility of online learning allows educators to tailor content to the needs and interests of individual students. This personalized approach can enhance engagement and foster a deeper connection to the material[37]. For example, incorporating multimedia resources, such as videos and interactive simulations, can make abstract concepts more accessible and relatable[38].

The use of data analytics in online learning also presents an opportunity to identify areas for improvement and track student progress. By analyzing patterns in student performance and engagement, educators can refine their teaching strategies and provide targeted support to students who may be struggling.

2. Literature Review

In the digital era, education has undergone a significant transformation, especially with the widespread adoption of online learning[39]. The shift from conventional to digital pedagogies has presented unique challenges and opportunities, particularly in fostering student motivation and independence[40]. This literature review explores the existing research on online learning strategies, identifying the gaps and limitations while highlighting the potential solutions that align with the goals of Islamic education. Online learning is characterized by its flexibility, accessibility, and ability to transcend geographical barriers. Digital learning offers new paradigms in educational delivery, encompassing synchronous and asynchronous models[41]. These models enable students to access learning materials at their convenience, promoting self-paced study. However, the effectiveness of these models largely depends on the implementation strategies[42].

---

[36] Wahyu Sugiarto et al., "The Influence of The Physical And Virtual Environment In The Development Of Students According To Islamic Education Perspectives," *Journal of Islam and Science* 9, no. 1 (June 30, 2022): 1–8, https://doi.org/10.24252/jis.v9i1.26560.

[37] Betsy Dasenko, "Engaging Students Through Connection to Individual Experience: Using Personal Connection to Increase Student Competencies," in *Advances in Early Childhood and K-12 Education*, ed. Theresa D. Neimann and Uta M. Stelson (IGI Global, 2020), 223–34, https://doi.org/10.4018/978-1-5225-9775-9.ch012.

[38] Felix G. Hamza-Lup and Ioana R. Goldbach, "Multimodal, Visuo-Haptic Games for Abstract Theory Instruction: Grabbing Charged Particles," *Journal on Multimodal User Interfaces* 15, no. 1 (March 2021): 1–10, https://doi.org/10.1007/s12193-020-00327-x.

[39] D A Petrusevich, "Modern Trends in the Digitalization of Education," *Journal of Physics: Conference Series* 1691, no. 1 (November 1, 2020): 012223, https://doi.org/10.1088/1742-6596/1691/1/012223.

[40] Nadezhda Efremova and Anastasia Huseynova, "The Impact of Digital Technology on Learning Motivation and Learning Modes," ed. D. Rudoy, A. Olshevskaya, and N. Ugrekhelidze, *E3S Web of Conferences* 273 (2021): 12083, https://doi.org/10.1051/e3sconf/202127312083.

[41] Menrisal, "Digital Learning Media: Review," *JOURNAL OF DIGITAL LEARNING AND DISTANCE EDUCATION* 1, no. 4 (October 1, 2022): 131–39, https://doi.org/10.56778/jdlde.v1i4.32.

[42] Emilia Candrawati et al., "Implementation of Integrated Science Model With Audiovisual Teaching Materials To Improve Students' Learning Outcomes and Science Process Skills," *IJORER : International Journal of Recent Educational Research* 1, no. 2 (July 31, 2020): 134–55, https://doi.org/10.46245/ijorer.v1i2.34.

Interactive learning tools such as video conferencing, discussion forums, and digital assessments have been identified as key components of effective online education[43]. These tools facilitate active engagement, peer interaction, and real-time feedback, contributing to a richer learning experience. Nonetheless, the absence of face-to-face interaction often results in feelings of isolation and reduced motivation[44].

In Islamic education, the integration of spiritual and moral values poses additional complexity in online learning environments[45]. Traditional pedagogies in Islamic education emphasize interpersonal relationships and the role of mentors, which are challenging to replicate in digital formats[46]. Consequently, the success of online learning strategies in this context requires innovative approaches that incorporate both academic and spiritual dimensions.

Despite the advancements in digital tools, several limitations hinder the effectiveness of online learning in fostering motivation and independence. One major issue is the lack of personalization in many online courses[47]. The one-size-fits-all approach often fails to address the diverse needs and learning styles of students[48]. This limitation is particularly evident in Islamic education, where contextual and cultural nuances play a critical role. Furthermore, the reliance on technology exposes students to challenges such as digital fatigue, technical difficulties, and unequal access to resources. Studies by Russo, have highlighted the digital divide, where students from underprivileged backgrounds struggle to access stable internet connections and adequate devices[49]. These barriers not only limit participation but also exacerbate feelings of frustration and disengagement.

Another significant limitation is the insufficient emphasis on self-regulated learning. While online learning inherently promotes autonomy, not all students possess the skills required to manage their time effectively and stay motivated[50]. Students often

[43] D. Vijaya Lakshmi and M. Sri Lakshmi, "Integrated Technological Tools for Effective Blended Learning," in *2020 IEEE Bombay Section Signature Conference (IBSSC)* (2020 IEEE Bombay Section Signature Conference (IBSSC), Mumbai, India: IEEE, 2020), 163–68, https://doi.org/10.1109/IBSSC51096.2020.9332223.

[44] Tzipi Horowitz-Kraus, Einat Heyd-Metzuyanim, and Michal Zivan, "Face-to-face Classroom Learning Produced Greater Brain Synchronisation in Children than a Zoom-based Online Session," *Acta Paediatrica* 112, no. 6 (June 2023): 1266–68, https://doi.org/10.1111/apa.16728.

[45] Leny Heliawati, Anna Permanasari, and Uun Sundari, "Students Learning Outcomes and Internalization Islamic Values in Buffer Solution Concept through Online Learning," *JTK (Jurnal Tadris Kimiya)* 6, no. 1 (June 30, 2021): 104–14, https://doi.org/10.15575/jtk.v6i1.12642.

[46] Nailya K. Nurikhanova, Aliya T. Araslanova, and Tamara B. Nabieva, "Concepts Of The Teacher And Mentor: From The Islamic Pedagogical Renaissance To The Modernity," *Russian Journal of Education and Psychology* 14, no. 2 (April 30, 2023): 64–81, https://doi.org/10.12731/2658-4034-2023-14-2-64-81.

[47] Hamdan Abdulaziz Alamri, "Effects Of Personalized Learning As An Instructional Approach On Students' Self-Determination And Learning Engagement In Online Higher Education," 2019, 1730303 Bytes, https://doi.org/10.25394/PGS.8984270.V1.

[48] Shudong Yang et al., "From One-Size-Fits-All Teaching to Adaptive Learning: The Crisis and Solution of Education in The Era of AI," *Journal of Physics: Conference Series* 1237, no. 4 (June 1, 2019): 042039, https://doi.org/10.1088/1742-6596/1237/4/042039.

[49] Kerry Russo, "Conquering the Digital Divide: With a Digital Native Who Never Was" (James Cook University, 2019), https://doi.org/10.25903/5ECDE7FFE069F.

[50] Hong Ngoc Truong, "Fostering Self-Regulated Learning in an Online Writing Course: Challenges and Solutions," *International Journal of TESOL & Education* 3, no. 2 (April 11, 2023): 1–13, https://doi.org/10.54855/ijte.23321.

require guidance in developing self-regulation skills, which are crucial for achieving independence in online environments[51].

To address these limitations, researchers have proposed several strategies to enhance the effectiveness of online learning. One promising approach is the use of adaptive learning technologies. These systems utilize data analytics to tailor content delivery based on individual student needs and progress. Adaptive learning can significantly improve engagement and outcomes by providing personalized pathways[52]. Incorporating gamification elements is another innovative solution. By integrating game-based mechanics such as rewards, leaderboards, and challenges, educators can make learning more engaging and motivating. Gamification aligns well with the principles of Islamic education by fostering a sense of achievement and moral responsibility[53].

The role of educators is also pivotal in overcoming the challenges of online learning. Effective teacher-student communication, can mitigate feelings of isolation and create a supportive learning environment[54]. In Islamic education, this can be achieved through regular virtual meetings, mentorship programs, and collaborative projects that emphasize community values[55].

The integration of Islamic principles into online learning presents a unique opportunity to innovate traditional pedagogies[56]. One approach is to design curricula that blend academic and spiritual learning[57]. For instance, online platforms can incorporate Quranic studies, hadith interpretation, and ethical discussions alongside conventional subjects. This not only enriches the learning experience but also ensures that students develop a balanced perspective. Another critical aspect is the incorporation of values-based education. By embedding Islamic values such as discipline, honesty, and compassion into online activities, educators can foster holistic development, the importance of integrating moral education into digital learning environments[58].

The proposed strategies address several gaps in existing research and practice. First, they prioritize the personalization of online learning, which is often overlooked in current models. By tailoring content to individual needs, these strategies ensure that students remain motivated and engaged. Second, the emphasis on self-regulated learning

---

[51] Imelda Mallipa and Riana Murianty, "Self-Regulated Learning Development: Students' Perception to Explicit Instructional Support in Online Learning," *International Journal of Education* 14, no. 2 (February 4, 2022), https://doi.org/10.17509/ije.v14i2.43879.

[52] Sonali Banerjee et al., "A Survey on the Use of Adaptive Learning Techniques Towards Learning Personalization:," in *Handbook of Research on Modern Educational Technologies, Applications, and Management*, ed. Mehdi Khosrow-Pour D.B.A. (IGI Global, 2021), 790–808, https://doi.org/10.4018/978-1-7998-3476-2.ch049.

[53] Zainora Daud et al., "Persepsi Pelajar Terhadap Penggunaan Gamifikasi Tahfiz Global Dalam Pengajaran Dan Pembelajaran Subjek Muraja'ah al-Quran: Students' Perceptions Towards The Use of Global Tahfiz Gamification In Teaching And Learning The Subject of Muraja'ah al-Qur'an," *Journal of Quran Sunnah Education & Special Needs* 6, no. 2 (December 1, 2022): 62–78, https://doi.org/10.33102/jqss.vol6no2.163.

[54] Brian Horstman, David Johnston, and Michael Rock, "Teacher-Student Relationships Within the Context of Online Teaching and Learning: Challenges and Opportunities of Three Populations," in *Advances in Educational Technologies and Instructional Design*, ed. Aaron Samuel Zimmerman (IGI Global, 2022), 59–76, https://doi.org/10.4018/978-1-6684-8407-4.ch004.

[55] Suhendri Suhendri, "Islamic Education Institution Programs That Address the Psychosocial Crises of Stude," *KnE Social Sciences*, April 8, 2022, 560–69, https://doi.org/10.18502/kss.v7i8.10774.

[56] Wahidin et al., "The Effect of Applying an Online Learning System on Islamic Religious Education and the Characteristics of Learning Media Use."

[57] Masbur Masbur, "A Spiritual Pedagogic Approach to Learning (Analytical Study of Approach Model)," *Jurnal Ilmiah Peuradeun* 10, no. 2 (May 30, 2022): 353, https://doi.org/10.26811/peuradeun.v10i2.751.

[58] Mohd Noor, Tengku Kasim, and Md. Yusoff, "Instilling The Elements Of Good Values And Ethics Through Islamic Education E-Learning Platforms In Primary Schools."

skills adds a novel dimension to online education. By equipping students with the tools to manage their learning independently, these approaches contribute to long-term academic success[59]. This is particularly relevant in the context of Islamic education, where independence is closely linked to personal responsibility and spiritual growth[60].

Lastly, the integration of Islamic principles into online learning strategies represents a significant contribution to the field. By bridging the gap between traditional and digital pedagogies, these approaches ensure that students receive a comprehensive education that aligns with their cultural and religious values[61].

To further enhance the effectiveness of online learning in Islamic education, several areas warrant additional exploration. One promising avenue is the use of artificial intelligence (AI) in adaptive learning platforms. AI-driven systems can analyze student data in real-time, offering customized recommendations and instant feedback. This technology holds great potential to address individual learning gaps and optimize the educational experience. Another area of interest is the development of collaborative online environments that replicate the communal aspects of traditional Islamic education[62]. Virtual study groups, peer mentoring, and interactive workshops can foster a sense of belonging and enhance learning outcomes[63]. These strategies are particularly important in promoting social and emotional well-being, which are integral to holistic education. Finally, longitudinal studies are needed to assess the long-term impact of online learning strategies on student motivation and independence. By tracking student progress over time, researchers can identify trends and refine approaches to maximize their effectiveness[64]. Such studies would also provide valuable insights into the scalability and sustainability of these strategies in diverse educational contexts.

3. Research Method

This study employs a mixed-method approach to provide a comprehensive analysis of the strategies that enhance student motivation and independence in online learning. The research integrates qualitative and quantitative methodologies to ensure a balanced understanding of the phenomena under investigation[65]. The type of research includes descriptive qualitative analysis to capture students' and faculty members' experiences and perceptions, alongside inferential quantitative analysis to identify significant patterns and relationships within the data.

---

[59] Jenny L. Richmond and Jacquelyn Cranney, "Curricular Approaches to Supporting University Student Academic Success and Wellbeing," *Psychology Learning & Teaching* 21, no. 3 (September 2022): 254–63, https://doi.org/10.1177/14757257221098763.

[60] Nurwahidah and Eva Syarifatul Jamilah, "Internalisasi Nilai-Nilai Merdeka Belajar Dalam Pembelajaran Pendidikan Agama Islam," *HEUTAGOGIA: Journal of Islamic Education* 2, no. 1 (June 15, 2022): 83–96, https://doi.org/10.14421/hjie.2022.21-06.

[61] Abdul Halik Nasaruddin, St. Wardah Hanafie Das, and Suyatno Ladiqi, "Digital-Based Islamic Religious Education (IRE) Learning Model at Senior High School," *Indonesian Journal of Islamic Education Studies (IJIES)* 6, no. 1 (June 30, 2023): 79–92, https://doi.org/10.33367/ijies.v6i1.3525.

[62] Muhammad Amran et al., "Islamic Religious Education Learning Innovation (PAI) Based on a Mini-Webinar," *EduLine: Journal of Education and Learning Innovation* 2, no. 4 (December 13, 2022): 509–16, https://doi.org/10.35877/454RI.eduline1375.

[63] Ting Liu et al., "Peer Mentoring to Enhance Graduate Students' Sense of Belonging and Academic Success," *Kinesiology Review* 11, no. 4 (November 1, 2022): 285–96, https://doi.org/10.1123/kr.2022-0019.

[64] Shuanghong Shen et al., "Monitoring Student Progress for Learning Process-Consistent Knowledge Tracing," *IEEE Transactions on Knowledge and Data Engineering*, 2022, 1–15, https://doi.org/10.1109/TKDE.2022.3221985.

[65] Bachtiar Bachtiar, "The Interplay between Online Learning and Students' Learning Motivation: A Mixed Method Study," *Jurnal Basicedu* 6, no. 3 (April 23, 2022): 4701–11, https://doi.org/10.31004/basicedu.v6i3.2902.

The data collection process involved two primary methods: 1. Interviews: Conducted with students and faculty members to gather in-depth insights into their experiences and challenges related to online learning and 2. Questionnaires: Distributed digitally to a broader sample of undergraduate students to quantify responses and validate qualitative findings.

The data sources for this study were students enrolled at UIN Antasari during the academic year 2021/2022, focusing on those who actively participated in online learning during the pandemic. Faculty members involved in delivering online courses were also included to provide a comprehensive perspective.

The data types include: 1. Qualitative Data: Derived from interviews and open-ended responses in questionnaires, highlighting subjective experiences and perceptions[66], and 2. Quantitative Data: Generated from structured questionnaire responses, analyzed to identify correlations and trends[67].

The data analysis process involved a combination of qualitative thematic analysis and quantitative statistical evaluation using SPSS software[68]. A SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis was conducted to systematically categorize the findings, providing actionable insights into the effectiveness of the online learning strategies implemented[69].

This methodological approach ensures that the study captures both the nuanced experiences of individual participants and broader trends, contributing to a well-rounded understanding of how online learning strategies impact motivation and independence.

4. Finding and Discussion

The research explores the implementation of strategic online learning methods and their impact on student motivation and independence in the digital era, particularly in the context of higher education at UIN Antasari. Through a mixed-method approach, the findings provide a comprehensive understanding of how various strategies influence the learning dynamics[70].

One of the significant outcomes of this study is the identification of key factors that affect motivation among students in an online learning environment. These factors include the use of multimedia tools, such as video lectures, interactive quizzes, and discussion forums, was reported to enhance engagement. Students noted that visually

---

[66] Lars-Göran Johansson, "Qualitative Data and Methods," in *Philosophy of Science for Scientists*, by Lars-Göran Johansson (Cham: Springer International Publishing, 2016), 81–102, https://doi.org/10.1007/978-3-319-26551-3_5.

[67] Linnea L. Rademaker and Elena Y. Polush, "Quantitative Data Analysis," in *Evaluation and Action Research*, by Linnea L. Rademaker and Elena Y. Polush, 1st ed. (Oxford University PressNew York, 2022), 119–39, https://doi.org/10.1093/oso/9780197620823.003.0008.

[68] Mohsen Mortazavi and Afshin Davarpanah, "Implementation of a Thematic Analysis Method to Develop a Qualitative Model on the Authentic Foreign Language Learning Perspective: A Case Study in the University of Northern Cyprus," *Education Sciences* 11, no. 9 (September 15, 2021): 544, https://doi.org/10.3390/educsci11090544.

[69] Putri Dina Mardika et al., "SWOT Analysis on the Implementation of Online Learning During the Covid-19 Pandemic," in *Proceedings of the 1st Konferensi Internasional Berbahasa Indonesia Universitas Indraprasta PGRI, KIBAR 2020, 28 October 2020, Jakarta, Indonesia* (Proceedings of the 1st Konferensi Internasional Berbahasa Indonesia Universitas Indraprasta PGRI, KIBAR 2020, 28 October 2020, Jakarta, Indonesia, Jakarta, Indonesia: EAI, 2022), https://doi.org/10.4108/eai.28-10-2020.2315345.

[70] Elizabeth Reisinger Walker et al., "Role of Team Dynamics in the Learning Process: A Mixed-Methods Evaluation of a Modified Team-Based Learning Approach in a Behavioral Research Methods Course," *Advances in Health Sciences Education* 25, no. 2 (May 2020): 383–99, https://doi.org/10.1007/s10459-019-09931-3.

engaging and interactive content helped maintain their interest and focus[71]. The asynchronous nature of online learning allowed students to manage their time effectively[72]. Many participants highlighted that flexible scheduling enabled them to balance academic responsibilities with personal obligations. Receiving prompt feedback on assignments and participation was crucial in sustaining motivation. Feedback not only clarified learning objectives but also fostered a sense of progress[73]. Structured modules that encouraged students to explore topics independently were seen as highly beneficial[74]. Students reported improved critical thinking and problem-solving skills as a result. The availability of digital libraries, recorded lectures, and online tutorials provided students with the tools to learn autonomously[75]. Peer discussions and virtual study groups played a role in cultivating a collaborative yet independent approach to learning.

Poor internet connectivity and insufficient access to digital devices were highlighted as major obstacles for many students, especially those from rural or economically disadvantaged areas. This digital divide often results in unequal opportunities for learning and can lead to a sense of frustration and disengagement among affected students. Additionally, technical difficulties such as platform malfunctions and outdated software further exacerbate the problem, requiring robust institutional support and investment in reliable infrastructure to bridge these gaps.

While the flexibility of online learning is often celebrated, students frequently reported feeling overwhelmed by the volume of assignments and the constant need to remain engaged in asynchronous activities[76]. Unlike traditional settings where structured schedules help distribute the workload evenly, the open-ended nature of online learning can blur the boundaries between study and personal time, leading to heightened stress and burnout. Addressing this requires a reevaluation of course design to ensure that workloads are reasonable and include provisions for mental health support.

A significant drawback of online learning is the lack of real-time, face-to-face interaction between students and instructors[77]. This limitation reduces the sense of community and can make the learning experience feel isolated and impersonal. While discussion boards and video conferencing tools provide some relief, they often fail to replicate the depth of engagement achieved in physical classrooms. Enhanced strategies, such as virtual mentorship programs and interactive live sessions, could be employed to

[71] Herianto and Insih Wilujeng, "Increasing the Attention, Relevance, Confidence and Satisfaction (ARCS) of Students through Interactive Science Learning Multimedia," *Research in Learning Technology* 29 (August 13, 2021), https://doi.org/10.25304/rlt.v29.2383.

[72] Nora'ayu Ahmad Uzir et al., "Analytics of Time Management and Learning Strategies for Effective Online Learning in Blended Environments," in *Proceedings of the Tenth International Conference on Learning Analytics & Knowledge* (LAK '20: 10th International Conference on Learning Analytics and Knowledge, Frankfurt Germany: ACM, 2020), 392–401, https://doi.org/10.1145/3375462.3375493.

[73] Kim De Jong et al., "Using Progress Feedback to Improve Outcomes and Reduce Drop-out, Treatment Duration, and Deterioration: A Multilevel Meta-Analysis," *Clinical Psychology Review* 85 (April 2021): 102002, https://doi.org/10.1016/j.cpr.2021.102002.

[74] E Yuliani, W Wiji, and S Mulyani, "Review of Learning Modules in Chemistry Education," *Journal of Physics: Conference Series* 1806, no. 1 (March 1, 2021): 012207, https://doi.org/10.1088/1742-6596/1806/1/012207.

[75] R Ilahi et al., "Digital Library as Learning Resources," *Journal of Physics: Conference Series* 1402, no. 7 (December 1, 2019): 077044, https://doi.org/10.1088/1742-6596/1402/7/077044.

[76] Tabitha L. James et al., "The Moderating Effect of Technology Overload on the Ability of Online Learning to Meet Students' Basic Psychological Needs," *Information Technology & People* 35, no. 4 (June 6, 2022): 1364–82, https://doi.org/10.1108/ITP-03-2021-0225.

[77] Gregory Gimpel, "Bringing Face-to-Face Engagement to Online Classes: Developing a High-Presence Online Teaching Method," *Journal of the Scholarship of Teaching and Learning* 22, no. 4 (December 16, 2022), https://doi.org/10.14434/josotl.v22i4.32702.

foster stronger connections and collaborative learning experiences. Students highlighted feelings of isolation and disconnection as a common issue in online education[78]. Without the informal social interactions that occur naturally in physical settings, students often struggle to build rapport with their peers and instructors. This can adversely affect motivation and overall well-being, emphasizing the need for integrated support systems such as virtual counseling services and peer mentoring networks to address these concerns effectively.

The transition to online platforms has exposed gaps in educators' readiness to adapt teaching methodologies to digital environments. Many instructors reported difficulties in designing interactive and engaging content that leverages the strengths of online tools. Furthermore, traditional assessment methods often fail to account for the unique challenges of online learning, necessitating a shift towards more dynamic and formative evaluation techniques that align with the online context. By addressing these challenges with targeted strategies and comprehensive support systems, online learning can evolve to become more inclusive, engaging, and effective for diverse student populations.

The findings underscore the importance of well-thought-out strategies in online learning environments. The integration of multimedia tools, for example, aligns with the principles of cognitive load theory, which posits that visual and auditory aids can enhance learning by reducing cognitive strain. By incorporating tools like interactive quizzes and discussion forums, educators can create a dynamic learning environment that promotes active participation and sustained interest. Moreover, flexible scheduling is a crucial element in accommodating diverse student needs. In line with self-determination theory, providing autonomy in learning fosters intrinsic motivation, allowing students to take ownership of their educational journey. This flexibility, however, must be balanced with structured deadlines to prevent procrastination.

The study's insights reveal that motivation and independence are interconnected aspects of online learning. Motivated students are more likely to engage in self-directed learning, while independent learners often display higher levels of motivation due to their sense of achievement. Timely feedback emerges as a critical factor in maintaining motivation. Feedback serves as a form of reinforcement, guiding students on their learning paths and highlighting areas for improvement. Instructors must ensure that feedback is constructive, actionable, and delivered promptly to sustain student engagement.

Additionally, the provision of self-directed learning modules demonstrates the potential of online platforms to cultivate independence. These modules encourage students to explore topics at their own pace, fostering a sense of responsibility and accountability for their learning outcomes. The success of such modules hinges on their design, which should be intuitive and scaffolded to guide learners through progressively challenging content.

While online learning offers numerous advantages, it is not without its challenges. Technological barriers, for instance, highlight the need for institutional support in providing adequate infrastructure. Universities must prioritize investments in robust learning management systems and partnerships with internet service providers to ensure

---

[78] Tengku Elena Tengku Mahamad, Nurul Atiqah Mohd Azlan, and Lucia Rivadeneira, "Identifying Strategies Used by Students to Manage Their Emotions during Online Learning," *Malaysian Journal of Social Sciences and Humanities (MJSSH)* 7, no. 5 (May 17, 2022): e001485, https://doi.org/10.47405/mjssh.v7i5.1485.

seamless access for all students. The issue of overwhelming workloads calls for a reevaluation of course design. Educators should aim for a balance between synchronous and asynchronous activities, ensuring that assignments are meaningful and manageable. Incorporating student feedback into the course design process can also help identify pain points and refine the curriculum accordingly.

Limited interaction in online settings can be mitigated through the use of synchronous sessions and virtual office hours. Creating opportunities for real-time engagement fosters a sense of community and provides students with immediate support. Instructors should also encourage peer-to-peer collaboration through group projects and study circles to enhance the social dimension of learning. The findings have specific relevance for Islamic education, where the integration of spiritual and academic growth is paramount. Online learning strategies can be tailored to incorporate Islamic values, such as discipline, mutual respect, and the pursuit of knowledge. For instance, discussion forums can be used to explore ethical dilemmas in Islamic jurisprudence, encouraging critical thinking within a spiritual framework. Digital platforms provide an opportunity to make Islamic education more accessible. Recorded lectures, online Quranic studies, and virtual seminars can reach students in remote areas, democratizing access to quality education. However, it is essential to ensure that the content aligns with Islamic teachings and is presented in a culturally sensitive manner.

The balance between modern pedagogical methods and traditional Islamic values remains a challenge. Institutions must engage in continuous dialogue with educators, scholars, and students to develop a curriculum that reflects the principles of Islamic education while embracing technological advancements.

Another critical aspect is the development of robust support systems to ensure the success of online learning. This includes providing students with access to mental health resources, as the isolation associated with online education can take a toll on their well-being. Regular check-ins by instructors, coupled with the integration of counseling services, can mitigate feelings of isolation and stress. Support systems should also extend to technical assistance. Many students reported difficulties in navigating online platforms or troubleshooting technical issues. Dedicated help desks or virtual support teams can address these concerns promptly, ensuring a smoother learning experience. Furthermore, training sessions for students on the effective use of digital tools can bridge the technological gap, empowering them to make the most of available resources.

Inclusivity is a cornerstone of effective online education. The research emphasizes the need for institutions to address disparities in access to technology and resources. Providing low-cost devices or subsidized internet packages for economically disadvantaged students can level the playing field, ensuring equal opportunities for all learners. Cultural and linguistic considerations also play a significant role in fostering inclusivity. For Islamic education, this means offering content in multiple languages and accommodating diverse cultural perspectives. Inclusive practices help create an environment where students from various backgrounds feel valued and supported, ultimately enhancing their motivation and engagement.

Finally, leveraging data analytics can provide valuable insights into student performance and engagement. Learning management systems equipped with analytics tools can track student activity, identify patterns, and highlight areas for improvement. This data-driven approach enables educators to refine their teaching strategies, tailor interventions for struggling students, and celebrate the successes of high achievers. In

the context of Islamic education, data analytics can also inform the development of culturally relevant content and teaching methods. By understanding the unique needs and preferences of students, institutions can ensure that their educational offerings remain relevant and impactful.

Building on the insights of this study, future research should delve deeper into the long-term effects of online learning strategies on various dimensions of student development, including academic performance, personal growth, and professional readiness. Understanding the implications of these strategies on career readiness and lifelong learning habits is critical for evaluating their efficacy. Furthermore, exploring the broader societal impacts, such as fostering inclusivity and reducing educational disparities, can enrich the understanding of how online education reshapes learning ecosystems.

The integration of emerging technologies, such as artificial intelligence (AI) and virtual reality (VR), in online learning environments warrants comprehensive exploration. AI can offer personalized learning experiences, adapting to individual student needs and providing real-time feedback. Meanwhile, VR can create immersive educational environments, enabling students to engage with content in innovative ways that traditional methods cannot replicate. These technologies hold the potential to bridge the gap between traditional classroom settings and virtual education, making learning more interactive, engaging, and accessible.

Expanding access to online learning for underserved communities remains a crucial area for future efforts. Addressing the digital divide through initiatives like providing affordable internet access, offering low-cost devices, and creating localized content that aligns with cultural and linguistic nuances can significantly broaden education's reach. Localized content creation, in particular, plays a pivotal role in ensuring that the knowledge imparted is both contextually relevant and universally applicable. This approach can transform educational outcomes by making learning experiences more inclusive and equitable for diverse populations. By prioritizing inclusivity, equity, and innovation, online learning strategies can continue to evolve into a robust framework for global education. Investing in teacher training programs to familiarize educators with these technologies and their pedagogical applications can further enhance the effectiveness of online learning environments. Similarly, fostering collaborations between educational institutions, technology developers, and policymakers can accelerate the adoption of best practices, ensuring that the benefits of online education are maximized.

Future research should also examine the psychological and social dimensions of online learning, such as its impact on student well-being, communication skills, and community-building. Investigating how different pedagogical models influence these aspects can provide actionable insights for educators seeking to balance academic rigor with holistic development. In addition, studies could explore how hybrid models of education, which combine the best elements of online and in-person learning, can optimize student engagement and performance. Ultimately, by focusing on these multifaceted aspects, online learning strategies can evolve beyond being mere solutions to immediate challenges. They can serve as powerful tools for addressing long-standing inequities in education, preparing students for dynamic global landscapes, and fostering a culture of lifelong learning.

5. Conclusion

This study demonstrates that implementing strategic online learning methods significantly enhances student motivation and independence, particularly in the context of higher education during the digital era. By integrating flexible scheduling, interactive tools, and self-directed learning modules, educators can create a supportive environment that encourages both academic achievement and personal growth. The findings indicate that structured online learning strategies not only address the challenges of engagement but also equip students with essential skills for lifelong learning. In the framework of Islamic education, these strategies play a pivotal role in fostering a balance between spiritual and intellectual development. By promoting independence, students are encouraged to take ownership of their learning journey, while motivational strategies sustain their enthusiasm and commitment to academic excellence.

The implications of this research highlight the necessity for educational institutions to adopt a holistic approach in designing online learning systems. Educators and policymakers are encouraged to prioritize innovative methodologies that cater to diverse student needs, ensuring inclusivity and adaptability in rapidly evolving educational landscapes. Future research should explore the long-term impact of these strategies on student performance and their broader application in other educational contexts.

Bibliography

Alamri, Hamdan Abdulaziz. "Effects Of Personalized Learning As An Instructional Approach On Students' Self-Determination And Learning Engagement In Online Higher Education," 2019, 1730303 Bytes. https://doi.org/10.25394/PGS.8984270.V1.

Alhazbi, Saleh, and Mahmood A. Hasan. "The Role of Self-Regulation in Remote Emergency Learning: Comparing Synchronous and Asynchronous Online Learning." *Sustainability* 13, no. 19 (October 7, 2021): 11070. https://doi.org/10.3390/su131911070.

Amran, Muhammad, Rahmat Sukur, M. Nazri, and Neliwati Neliwati. "Islamic Religious Education Learning Innovation (PAI) Based on a Mini-Webinar." *EduLine: Journal of Education and Learning Innovation* 2, no. 4 (December 13, 2022): 509–16. https://doi.org/10.35877/454RI.eduline1375.

Ayatullah, Ayatullah. "Dasar-Dasar Pelaksanaan Pendidikan Agama Islam Di Sekolah." *ARZUSIN* 2, no. 2 (April 30, 2022): 205–21. https://doi.org/10.58578/arzusin.v2i2.472.

Ayub, Norhalimaton Saadiah Binti, Mohd Isa Bin Hamzah, and Khadijah Binti Abdul Razak. "Ethics of Islamic Teachers Education and the Challenges of the Current Era." *International Journal of Academic Research in Business and Social Sciences* 8, no. 12 (December 29, 2018): Pages 2302-2314. https://doi.org/10.6007/IJARBSS/v8-i12/5441.

Bachtiar, Bachtiar. "The Interplay between Online Learning and Students' Learning Motivation: A Mixed Method Study." *Jurnal Basicedu* 6, no. 3 (April 23, 2022): 4701–11. https://doi.org/10.31004/basicedu.v6i3.2902.

Banerjee, Sonali, Kaustuv Deb, Atanu Das, and Rajib Bag. "A Survey on the Use of Adaptive Learning Techniques Towards Learning Personalization:" In *Handbook of Research on Modern Educational Technologies, Applications, and Management*, edited by

Mehdi Khosrow-Pour D.B.A., 790–808. IGI Global, 2021. https://doi.org/10.4018/978-1-7998-3476-2.ch049.

Barthakur, Abhinava, Srecko Joksimovic, Vitomir Kovanovic, Michael Richey, and Abelardo Pardo. "Aligning Objectives with Assessment in Online Courses: Integrating Learning Analytics and Measurement Theory." *Computers & Education* 190 (December 2022): 104603. https://doi.org/10.1016/j.compedu.2022.104603.

Braun, Greta, Miitta Järvinen, Johan Stahre, and Raija Hämäläinen. "Motivational Challenges of Engineers Participating in an Online Upskilling Program." *European Conference on E-Learning* 21, no. 1 (October 21, 2022): 25–31. https://doi.org/10.34190/ecel.21.1.594.

Candrawati, Emilia, Sumpono, Agus Sundaryono, and Mellyta Uliyadari. "Implementation of Integrated Science Model With Audiovisual Teaching Materials To Improve Students' Learning Outcomes and Science Process Skills." *IJORER : International Journal of Recent Educational Research* 1, no. 2 (July 31, 2020): 134–55. https://doi.org/10.46245/ijorer.v1i2.34.

Dasenko, Betsy. "Engaging Students Through Connection to Individual Experience: Using Personal Connection to Increase Student Competencies." In *Advances in Early Childhood and K-12 Education*, edited by Theresa D. Neimann and Uta M. Stelson, 223–34. IGI Global, 2020. https://doi.org/10.4018/978-1-5225-9775-9.ch012.

Daud, Zainora, Abdul Muhaimin Ahmad, Norazman Alias, and Norhasnira Ibrahim. "Persepsi Pelajar Terhadap Penggunaan Gamifikasi Tahfiz Global Dalam Pengajaran Dan Pembelajaran Subjek Muraja'ah al-Quran: Students' Perceptions Towards The Use of Global Tahfiz Gamification In Teaching And Learning The Subject of Muraja'ah al-Qur'an." *Journal of Quran Sunnah Education & Special Needs* 6, no. 2 (December 1, 2022): 62–78. https://doi.org/10.33102/jqss.vol6no2.163.

De Jong, Kim, Judith M. Conijn, Roisin A.V. Gallagher, Alexandra S. Reshetnikova, Marya Heij, and Miranda C. Lutz. "Using Progress Feedback to Improve Outcomes and Reduce Drop-out, Treatment Duration, and Deterioration: A Multilevel Meta-Analysis." *Clinical Psychology Review* 85 (April 2021): 102002. https://doi.org/10.1016/j.cpr.2021.102002.

Dewantoro, Adi, and Indriyana Rachmawati. "Analysis of Evaluation and Exploratory Studies on Student's Resilience of Online Learning during Pandemic of Covid-19." *KONSELI : Jurnal Bimbingan Dan Konseling (E-Journal)* 7, no. 2 (November 30, 2020): 155–62. https://doi.org/10.24042/kons.v7i2.7422.

Efremova, Nadezhda, and Anastasia Huseynova. "The Impact of Digital Technology on Learning Motivation and Learning Modes." Edited by D. Rudoy, A. Olshevskaya, and N. Ugrekhelidze. *E3S Web of Conferences* 273 (2021): 12083. https://doi.org/10.1051/e3sconf/202127312083.

Fitrianto, Hanif. "The Roles of Islamic Education in Building Self-Regulated Learner in the Era of Distance Education." *At-Ta'dib* 15, no. 2 (December 6, 2020): 84. https://doi.org/10.21111/at-tadib.v15i2.4722.

Gimpel, Gregory. "Bringing Face-to-Face Engagement to Online Classes: Developing a High-Presence Online Teaching Method." *Journal of the Scholarship of Teaching and Learning* 22, no. 4 (December 16, 2022). https://doi.org/10.14434/josotl.v22i4.32702.

Green, Thomas M., and Chandrika M. Kelso. "Factors That Affect Motivation Among Adult Learners." *Journal of College Teaching & Learning (TLC)* 3, no. 4 (April 1, 2006). https://doi.org/10.19030/tlc.v3i4.1729.

Guetzoian, Emily. "Academic Motivation and Self-Discipline Strategies for Online Learners:" In *Advances in Higher Education and Professional Development*, edited by Sunil Ramlall, Ted Cross, and Michelle Love, 111–28. IGI Global, 2021. https://doi.org/10.4018/978-1-7998-8275-6.ch007.

Gupta, Dr. Shashi Kant, and Hayath M. "Lack of It Infrastructure for ICT Based Education as an Emerging Issue in Online Education." *Technoarete Transactions on Application of Information and Communication Technology(ICT) in Education* 1, no. 3 (July 15, 2022). https://doi.org/10.36647/TTAICTE/01.03.A004.

Hamza-Lup, Felix G., and Ioana R. Goldbach. "Multimodal, Visuo-Haptic Games for Abstract Theory Instruction: Grabbing Charged Particles." *Journal on Multimodal User Interfaces* 15, no. 1 (March 2021): 1–10. https://doi.org/10.1007/s12193-020-00327-x.

Heliawati, Leny, Anna Permanasari, and Uun Sundari. "Students Learning Outcomes and Internalization Islamic Values in Buffer Solution Concept through Online Learning." *JTK (Jurnal Tadris Kimiya)* 6, no. 1 (June 30, 2021): 104–14. https://doi.org/10.15575/jtk.v6i1.12642.

Herianto, and Insih Wilujeng. "Increasing the Attention, Relevance, Confidence and Satisfaction (ARCS) of Students through Interactive Science Learning Multimedia." *Research in Learning Technology* 29 (August 13, 2021). https://doi.org/10.25304/rlt.v29.2383.

Horowitz-Kraus, Tzipi, Einat Heyd-Metzuyanim, and Michal Zivan. "Face-to-face Classroom Learning Produced Greater Brain Synchronisation in Children than a Zoom-based Online Session." *Acta Paediatrica* 112, no. 6 (June 2023): 1266–68. https://doi.org/10.1111/apa.16728.

Horstman, Brian, David Johnston, and Michael Rock. "Teacher-Student Relationships Within the Context of Online Teaching and Learning: Challenges and Opportunities of Three Populations." In *Advances in Educational Technologies and Instructional Design*, edited by Aaron Samuel Zimmerman, 59–76. IGI Global, 2022. https://doi.org/10.4018/978-1-6684-8407-4.ch004.

Ilahi, R, I Widiaty, D Wahyudin, and A G Abdullah. "Digital Library as Learning Resources." *Journal of Physics: Conference Series* 1402, no. 7 (December 1, 2019): 077044. https://doi.org/10.1088/1742-6596/1402/7/077044.

James, Tabitha L., Jie Zhang, Han Li, Jennifer L. Ziegelmayer, and Eduardo D. Villacis-Calderon. "The Moderating Effect of Technology Overload on the Ability of Online Learning to Meet Students' Basic Psychological Needs." *Information Technology & People* 35, no. 4 (June 6, 2022): 1364–82. https://doi.org/10.1108/ITP-03-2021-0225.

Johansson, Lars-Göran. "Qualitative Data and Methods." In *Philosophy of Science for Scientists*, by Lars-Göran Johansson, 81–102. Cham: Springer International Publishing, 2016. https://doi.org/10.1007/978-3-319-26551-3_5.

Kamalludeen, Rosemaliza Binti Mohd. "Technology Infusion in the Design of an Impactful Islamic Education Learning Experience." In *Supporting Modern Teaching in Islamic Schools*, by Ismail Hussein Amzat, 81–94, 1st ed. London: Routledge, 2022. https://doi.org/10.4324/9781003193432-8.

Kumar, Prashant. "A Pathway Of Digital Learning In Changing Paradigm: The Context Of Covid-19." *Journal of Global Resources* 06, no. si1 (June 5, 2020): 73–78. https://doi.org/10.46587/JGR.2020.v06si01.010.

Lakshmi, D. Vijaya, and M. Sri Lakshmi. "Integrated Technological Tools for Effective Blended Learning." In *2020 IEEE Bombay Section Signature Conference (IBSSC)*, 163–68. Mumbai, India: IEEE, 2020. https://doi.org/10.1109/IBSSC51096.2020.9332223.

Liu, Ting, YuChun Chen, Michelle Hamilton, and Katie Harris. "Peer Mentoring to Enhance Graduate Students' Sense of Belonging and Academic Success." *Kinesiology Review* 11, no. 4 (November 1, 2022): 285–96. https://doi.org/10.1123/kr.2022-0019.

Mabrur, Haseeb. "Muslim Personality: Study of the Concept of Personality Structure and Psychological Struggles." *Interdisciplinary Journal Papier Human Review* 1, no. 1 (August 30, 2020): 14–23. https://doi.org/10.47667/ijphr.v1i1.4.

Mallipa, Imelda, and Riana Murianty. "Self-Regulated Learning Development: Students' Perception to Explicit Instructional Support in Online Learning." *International Journal of Education* 14, no. 2 (February 4, 2022). https://doi.org/10.17509/ije.v14i2.43879.

Mardika, Putri Dina, Nilma Nilma, Shinta Dwi Handayani, and Ega Shela Marsiani. "SWOT Analysis on the Implementation of Online Learning During the Covid-19 Pandemic." In *Proceedings of the 1st Konferensi Internasional Berbahasa Indonesia Universitas Indraprasta PGRI, KIBAR 2020, 28 October 2020, Jakarta, Indonesia.* Jakarta, Indonesia: EAI, 2022. https://doi.org/10.4108/eai.28-10-2020.2315345.

Masbur, Masbur. "A Spiritual Pedagogic Approach to Learning (Analytical Study of Approach Model)." *Jurnal Ilmiah Peuradeun* 10, no. 2 (May 30, 2022): 353. https://doi.org/10.26811/peuradeun.v10i2.751.

Mellawati, Aldiyah. "Strategies in Applying the Religious Character of Students to Distance Learning." *Proceedings of The ICECRS* 10 (August 25, 2021). https://doi.org/10.21070/icecrs20211141.

Menrisal. "Digital Learning Media: Review." *Journal Of Digital Learning And Distance Education* 1, no. 4 (October 1, 2022): 131–39. https://doi.org/10.56778/jdlde.v1i4.32.

Milah, Agus Saepul. "The Analysis of Online Discussion in Improving Students' Learning Motivation in Islamic Religious Education." *Devotion : Journal of Research and Community Service* 3, no. 6 (April 14, 2022): 547–54. https://doi.org/10.36418/dev.v3i6.150.

Mirnawati, Suarni, and Saprin. "The Scientific Principles of Islamic Education." *Didaktika: Jurnal Kependidikan* 11, no. 3 (August 1, 2022): 117–24. https://doi.org/10.58230/27454312.148.

Mohd Noor, Nur Eliza, Tengku Sarina Aini Tengku Kasim, and Yusmini Md. Yusoff. "Instilling The Elements Of Good Values And Ethics Through Islamic Education E-Learning Platforms In Primary Schools." *International Journal of Education, Psychology and Counseling* 8, no. 50 (June 27, 2023): 477–97. https://doi.org/10.35631/IJEPC.850034.

Mortazavi, Mohsen, and Afshin Davarpanah. "Implementation of a Thematic Analysis Method to Develop a Qualitative Model on the Authentic Foreign Language Learning Perspective: A Case Study in the University of Northern Cyprus."

Education Sciences 11, no. 9 (September 15, 2021): 544. https://doi.org/10.3390/educsci11090544.

Muthoharoh, Muthoharoh. "PAI Alumni IAIN Syekh Nurjati Cirebon's Efforts to Maintain Tolerance." *SYAMIL: Jurnal Pendidikan Agama Islam (Journal of Islamic Education)* 10, no. 1 (June 1, 2022): 33–46. https://doi.org/10.21093/sy.v10i1.5613.

Nasaruddin, Abdul Halik, St. Wardah Hanafie Das, and Suyatno Ladiqi. "Digital-Based Islamic Religious Education (IRE) Learning Model at Senior High School." *Indonesian Journal of Islamic Education Studies (IJIES)* 6, no. 1 (June 30, 2023): 79–92. https://doi.org/10.33367/ijies.v6i1.3525.

Nurikhanova, Nailya K., Aliya T. Araslanova, and Tamara B. Nabieva. "Concepts Of The Teacher And Mentor: From The Islamic Pedagogical Renaissance To The Modernity." *Russian Journal of Education and Psychology* 14, no. 2 (April 30, 2023): 64–81. https://doi.org/10.12731/2658-4034-2023-14-2-64-81.

Nurwahidah and Eva Syarifatul Jamilah. "Internalisasi Nilai-Nilai Merdeka Belajar Dalam Pembelajaran Pendidikan Agama Islam." *HEUTAGOGIA: Journal of Islamic Education* 2, no. 1 (June 15, 2022): 83–96. https://doi.org/10.14421/hjie.2022.21-06.

Petrusevich, D A. "Modern Trends in the Digitalization of Education." *Journal of Physics: Conference Series* 1691, no. 1 (November 1, 2020): 012223. https://doi.org/10.1088/1742-6596/1691/1/012223.

Puspitasari, Novi, Linda Relistian. R, and Reonaldi Yusuf. "Peran Pendidikan Agama Islam Terhadap Pembentukan Karakter Religius Peserta Didik." *Atta'dib Jurnal Pendidikan Agama Islam* 3, no. 1 (July 13, 2022): 57–68. https://doi.org/10.30863/attadib.v3i1.2565.

Rachmawati, Anif, and Evi Fatimatur Rusydiyah. "Implementasi Pembelajaran Berbasis E-Learning Pada Mata Pelajaran Pendidikan Agama Islam." *Jurnal Pendidikan Islam Indonesia* 5, no. 1 (October 15, 2020): 1–14. https://doi.org/10.35316/jpii.v5i1.223.

Rademaker, Linnea L., and Elena Y. Polush. "Quantitative Data Analysis." In *Evaluation and Action Research*, by Linnea L. Rademaker and Elena Y. Polush, 119–39, 1st ed. Oxford University PressNew York, 2022. https://doi.org/10.1093/oso/9780197620823.003.0008.

Rahmat, Azwar, Abdul Wahab Syakhrani, and Erwinsyah Satria. "Promising Online Learning and Teaching in Digital Age: Systematic Review Analysis." *International Research Journal of Engineering, IT & Scientific Research* 7, no. 4 (April 29, 2021): 126–35. https://doi.org/10.21744/irjeis.v7n4.1578.

Richmond, Jenny L., and Jacquelyn Cranney. "Curricular Approaches to Supporting University Student Academic Success and Wellbeing." *Psychology Learning & Teaching* 21, no. 3 (September 2022): 254–63. https://doi.org/10.1177/14757257221098763.

Rojo-Ramos, Jorge, María José González-Becerra, Santiago Gómez-Paniagua, Eugenio Merellano-Navarro, and José Carmelo Adsuar. "Analysis of the Motivation of Students of the Last Cycle of Primary School in the Subject of Physical Education." *International Journal of Environmental Research and Public Health* 19, no. 3 (January 25, 2022): 1332. https://doi.org/10.3390/ijerph19031332.

Russo, Kerry. "Conquering the Digital Divide: With a Digital Native Who Never Was." James Cook University, 2019. https://doi.org/10.25903/5ECDE7FFE069F.

Rydze, Oxana. "Development of Learning Independence: Cooperation Between a Teacher and a Schoolchild." *Primary Education* 11, no. 1 (March 23, 2023): 8–12. https://doi.org/10.12737/1998-0728-2023-11-1-8-12.

Saleh, M. Nurul Ikhsan, Ratna Sari, and Pujiarti Pujiarti. "Management of Online Learning in Islamic Higher Education: Challenges and Prospects." *POTENSIA: Jurnal Kependidikan Islam* 9, no. 1 (June 30, 2023): 58. https://doi.org/10.24014/potensia.v9i1.22761.

Shen, Shuanghong, Enhong Chen, Qi Liu, Zhenya Huang, Wei Huang, Yu Yin, Yu Su, and Shijin Wang. "Monitoring Student Progress for Learning Process-Consistent Knowledge Tracing." *IEEE Transactions on Knowledge and Data Engineering*, 2022, 1–15. https://doi.org/10.1109/TKDE.2022.3221985.

Shih, Chung-ling. "Developing a Religious E-Program for Student Self-Learning of Culture and Translation." *Theory and Practice in Language Studies* 7, no. 12 (December 3, 2017): 1191. https://doi.org/10.17507/tpls.0712.05.

Shrol, Tetiana, and Nataliia Poliukhovych. "Features of Formation of Motivation for Online Learning of Students of Pedagogical Specialties." *ScienceRise: Pedagogical Education*, no. 4(43) (July 30, 2021): 4–11. https://doi.org/10.15587/2519-4984.2021.237825.

Sugiarto, Wahyu, Sutipyo Ru'iya, Rashid Herbanu, and Ibn Mahmuda. "The Influence Of The Physical And Virtual Environment In The Development Of Students According To Islamic Education Perspectives." *Journal of Islam and Science* 9, no. 1 (June 30, 2022): 1–8. https://doi.org/10.24252/jis.v9i1.26560.

Suhendri, Suhendri. "Islamic Education Institution Programs That Address the Psychosocial Crises of Stude." *KnE Social Sciences*, April 8, 2022, 560–69. https://doi.org/10.18502/kss.v7i8.10774.

Supriyadi, Supriyadi, Qowaid Qowaid, Hayadin Hayadin, Murtadho Murtadho, Lisa'diyah Ma'rifataini, Ayu Amalia, Syafwandi Syafwandi, et al. "The Influence of Parent Support and Learning Motivation Towards The Achievement of Islamic Education Learning in The Pandemic Time Covid-19." In *Proceedings of the 2nd International Conference on Religion and Education, INCRE 2020, 11-12 November 2020, Jakarta, Indonesia.* Jakarta, Indonesia: EAI, 2021. https://doi.org/10.4108/eai.11-11-2020.2308198.

Suryanti, Hera Heru Sri, Sri Hartini, and Ferisa Prasetyaning Utami. "Student Independence in Overcoming the Impact of COVID-19: Classical Online Guidance Based on Character Values." *Jurnal Cakrawala Pendidikan* 41, no. 1 (February 16, 2022). https://doi.org/10.21831/cp.v41i1.43943.

Tazhina, G. O. "Success Factors For Online Adult Education." *The Journal of Psychology & Sociology* 83, no. 4 (December 2022). https://doi.org/10.26577/jpcp.2022.v82.i4.04.

Tengku Mahamad, Tengku Elena, Nurul Atiqah Mohd Azlan, and Lucia Rivadeneira. "Identifying Strategies Used by Students to Manage Their Emotions during Online Learning." *Malaysian Journal of Social Sciences and Humanities (MJSSH)* 7, no. 5 (May 17, 2022): e001485. https://doi.org/10.47405/mjssh.v7i5.1485.

Truong, Hong Ngoc. "Fostering Self-Regulated Learning in an Online Writing Course: Challenges and Solutions." *International Journal of TESOL & Education* 3, no. 2 (April 11, 2023): 1–13. https://doi.org/10.54855/ijte.23321.

Ulzheimer, Lisa, Annika Kanzinger, Alina Ziegler, Bernd Martin, Joerg Zender, Antje Römhild, and Christine Leyhe. "Barriers in Times of Digital Teaching and Learning – a German Case Study: Challenges and Recommendations for Action." *Journal of Interactive Media in Education* 2021, no. 1 (September 8, 2021): 13. https://doi.org/10.5334/jime.638.

Uzir, Nora'ayu Ahmad, Dragan Gašević, Jelena Jovanović, Wannisa Matcha, Lisa-Angelique Lim, and Anthea Fudge. "Analytics of Time Management and Learning Strategies for Effective Online Learning in Blended Environments." In *Proceedings of the Tenth International Conference on Learning Analytics & Knowledge*, 392–401. Frankfurt Germany: ACM, 2020. https://doi.org/10.1145/3375462.3375493.

Verma, Navdeep, Seyum Getenet, Christopher Dann, and Thanveer Shaik. "Characteristics of Engaging Teaching Videos in Higher Education: A Systematic Literature Review of Teachers' Behaviours and Movements in Video Conferencing." *Research and Practice in Technology Enhanced Learning* 18 (March 21, 2023): 040. https://doi.org/10.58459/rptel.2023.18040.

Viliavin, D. A., N. V. Komleva, and L. A. Danchenok. "Digital Technologies In Online Education," 893–900, 2020. https://doi.org/10.15405/epsbs.2020.10.03.105.

Wahidin, Unang, Agus Mailana, M Sarbini, Wulan Anggraeni, and Taufiq Nur Azis. "The Effect of Applying an Online Learning System on Islamic Religious Education and the Characteristics of Learning Media Use." *AL-ISHLAH: Jurnal Pendidikan* 15, no. 2 (May 4, 2023): 1913–23. https://doi.org/10.35445/alishlah.v15i2.2819.

Walker, Elizabeth Reisinger, Delia L. Lang, Bethany A. Caruso, and Leslie Salas-Hernández. "Role of Team Dynamics in the Learning Process: A Mixed-Methods Evaluation of a Modified Team-Based Learning Approach in a Behavioral Research Methods Course." *Advances in Health Sciences Education* 25, no. 2 (May 2020): 383–99. https://doi.org/10.1007/s10459-019-09931-3.

Warsah, Idi. "Islamic Religious Teachers' Efforts To Motivate Students And Implement Effective Online Learning." *Edukasi Islami: Jurnal Pendidikan Islam* 10, no. 01 (February 18, 2021): 383. https://doi.org/10.30868/ei.v10i01.1210.

Yang, Shudong, Huiyi Tian, Lin Sun, and Xueying Yu. "From One-Size-Fits-All Teaching to Adaptive Learning: The Crisis and Solution of Education in The Era of AI." *Journal of Physics: Conference Series* 1237, no. 4 (June 1, 2019): 042039. https://doi.org/10.1088/1742-6596/1237/4/042039.

Yuliani, E, W Wiji, and S Mulyani. "Review of Learning Modules in Chemistry Education." *Journal of Physics: Conference Series* 1806, no. 1 (March 1, 2021): 012207. https://doi.org/10.1088/1742-6596/1806/1/012207.

Yunita, Yuyun, Muhammad Ali, and Novita Herawati. "Islamic Cultural History As A Life Paradigm." *Nizham Journal of Islamic Studies* 10, no. 1 (June 20, 2022): 101. https://doi.org/10.32332/nizham.v10i1.4228.