



ISLAMIC EDUCATION IN THE DIGITAL AGE: Students' Perspectives on the Vark Model in the Context of Education 4.0

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Abstract: In order to better understand how students' learning styles affect their engagement with course contents, this study looks at how the VARK (Visual, Auditory, Read/Write, Kinesthetic) learning paradigm is applied in Islamic education. The study's two primary aims are first to examine how well students believe their preferred learning methods align with traditional versus digital learning environments and then to investigate how these preferences affect their interaction with Islamic educational materials. The study employs a semi-structured interview guide to record individual experiences during in-depth interviews conducted with 15 University of Utara Malaysia (UUM) students, utilizing a qualitative research approach. Within UUM's Islamic curriculum, a thematic analysis is conducted to identify trends, obstacles, and benefits associated with each VARK learning style. Specific obstacles include the dense structure of classical books for read/write learners, the monotony of audio materials, information overload for visual learners, and a lack of kinesthetic learning possibilities. The findings underscore the importance of an integrated, adaptable curriculum that accommodates diverse learning styles, thereby increasing student engagement and academic achievement. This study contributes to the literature on Islamic education by offering curriculum design recommendations that align with students' learning preferences, thereby facilitating the transition to Education 4.0.

Keywords: Curriculum Design, Digital Learning Environments, Education 4.0, Islamic Education, Learning Styles, Student Engagement, VARK Model

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Introduction

EDUCATION 4.0 is a paradigm shift that brings technology to the forefront and changes the way that people learn.¹ Web-enabled, web-convenient, and versatile systems are designed to meet the needs of each student and the essential elements of learning types. Education 4.0 now encompasses various technology tools, including Artificial Intelligence (AI), big data, the Internet of Things (IoT), and immersive learning tools such as Virtual Reality (VR). By providing autonomous learning, students can engage with content that best aligns with their interests, strengths, and preferences.

Such transformation presents an excellent opportunity for Islamic education to integrate modern pedagogies while maintaining a commitment to traditional values.² Traditional Islamic Education emphasizes teaching knowledge and morals based on Islamic values. As the educational scenario continues to evolve, there is an increasing need to adapt the teaching methods in a way that meets the diverse needs of all students while respecting Islamic values at the same time. Education 4.0 can serve as a framework for providing Islamic education in a better way by motivating interactivity, critical thinking, and the use of digital resources to engage students at a deeper level in their education in a more meaningful way.³

¹ Shahrul Mizan Bin Ismail and Wan Amir Azlan Wan Haniff, "Education 4.0: The Effectiveness of VARK Learning Style towards Actualising Industrial Revolution 4.0," *Journal of Educational and Social Research* 10, no. 3 (May 10, 2020): 52, <https://doi.org/10.36941/jesr-2020-0045>.

² Gamar Al Haddar et al., "The Revolution of Islamic Education Thought in the Era of Society 5.0: Corrections and Analysis of Studies in Islamic Higher Education Institutions in South Kalimantan," *International Journal of Teaching and Learning* 1, no. 4 (November 17, 2023): 468–83, <https://injotel.org/index.php/12/article/view/40>.

³ Kapil Joshi et al., "Exploring the Connectivity Between Education 4.0 and Classroom 4.0: Technologies, Student Perspectives, and Engagement in the Digital Era," *IEEE Access* 12 (2024): 24179–204, <https://doi.org/10.1109/ACCESS.2024.3357786>.

In this case, the VARK (Visual, Auditory, Reading/Writing, and Kinesthetic) model of learning is particularly relevant.⁴ The VARK model identifies four primary learning styles: kinesthetic learners (who benefit from hands-on activities and physical engagement), auditory learners (who prefer listening to lectures and discussions), visual learners (who benefit from images, diagrams, and visual aids), and reading/writing learners (who benefit from reading texts and taking notes). This model was introduced by Neil D. Fleming in 1987 based on the existing model, namely VAk (Visual, Aural, Kinesthetic), which was then developed into the VARK learning style.⁵ The second example comes from a well-known researcher and evaluator, Fleming, who began his career as a school inspector in New Zealand and later became a researcher at the University of Lincoln, where he observed teachers and students, focusing on their learning modality preferences about actual learning problems in schools.

This learning style was widely used in the 1980s and has played an essential role in education.⁶ In addition, Fleming made a distinction between Visual for visual and Read/Writing (R) for R because both have different types of tendencies. It is clear from what he read and saw that students have different preferences for written words (graphics) but also that some people prefer symbolic information (pictures), such as those used in maps, diagrams, and graphs. These two preferences are not always present in one person. Introduction. Fleming's learning style model has four modality preferences, abbreviated as VARK,

⁴ Natasha Dzulkalnine et al., "The Preferences of Student's Learning Method Based on Course, Gender and Age: Visual, Audio, Reading & Kinesthetic (VARK)," *Information Management and Business Review* 16, no. 2(IIS (May 29, 2024): 1–11, [https://doi.org/10.22610/imbr.v16i2\(IIS.3764](https://doi.org/10.22610/imbr.v16i2(IIS.3764).

⁵ Aisyatu Bilkisti and W Retnaningsih, "A Descriptive Study of Fleming's Theory Based on Vark (Visual, Aural, Read/Write, Kinesthetic) Learning Styles in Learning English Used by the Eleven Grade Students of Sman 1 Tangen in the Academic Year of 2018/2019" (Islamic State Institute, 2019).

⁶ Van Olem Embrado Benitez, "Students' Learning Style and Their Preference to Teaching Method," *National Library of Medicine*, 2, no. 2 (2023): 19–31,

https://www.researchgate.net/publication/367969086_Students'_Learning_Style_and_their_Preference_to_Teaching_Method.

namely Visual, Aural or Auditory, Reading/Writing, and Kinesthetic.⁷ Each has the characteristics in Table 1 below.

Table 1. The VARK Learning Styles

Learning style:	Characteristics
Visual	Preference for using visual resources such as diagrams, pictures, and videos. I enjoy seeing people in action.
Auditory	Need to talk about situations and ideas with a range of people; enjoy hearing stories from others.
Reader/writer	Prolific note-taker; textbooks are important; extensive use of journals to write down the facts and stories
Kinaesthetic	Preference for hands-on experience within a 'real' setting and for global learning

Most researchers agree that the VARK model is an excellent tool for enhancing their educational experience. When a teacher tailors his/her teaching style to the learning styles of his/her students, it has been shown to lead to improvements in academic performance and student engagement. For this reason, the VARK model helps tailor instructional materials so that all students do better based on their learning styles.

In the age of Education 4.0, technology is being embedded in the education process regularly.⁸ Digital platforms like learning management systems (LMS), on the other hand, offer on-demand access to instructional resources, making learning more flexible and personalized for students.⁹ Moreover, by implementing

⁷ Naseer Ahmad Chaudhry, Abid Ashar, and Syeda Amina Ahmad, "Association of Visual, Aural, Read/Write, and Kinesthetic (Vark) Learning Styles and Academic Performances of Dental Students," *Pakistan Armed Forces Medical Journal* 70, no. Suppl-1 (January 27, 2020): S58-63, <https://pafmj.org/PAFMJ/article/view/3794>.

⁸ Kasmudin Mustapa et al., "Technology-Enhanced Education: Nurturing the Digital Generation-Experiences in Islamic Schools in Indonesia," *International Journal of Teaching and Learning* 1, no. 1 (September 18, 2023): 16-40, <https://injotel.org/index.php/12/article/view/2>.

⁹ Siti Nur Aishah Mohd Noor and Mohd Khairul Amri Ramly, "Bridging Learning Styles and Student Preferences in Construction Technology Education: VARK Model Analysis," *International Journal of Academic Research in Progressive Education and Development* 12, no. 3 (September 27, 2023): Pages 2091-2101, <https://doi.org/10.6007/IJARPED/v12-i3/19313>.

interactive technologies such as collaborative platforms and virtual simulations, active learning is facilitated while increasing the interest of the students.¹⁰

Focusing on their experiences with the VARK learning styles model in the context of Education 4.0, this study aims to explore the perspectives of Islamic education students at Universiti Utara Malaysia. Through their insights, this study aims to understand how students interact with content provided in Islamic education courses using digital technologies and personalized learning strategies. These perspectives help you to understand how the VARK model and Education 4.0 ideas can be helpful for the educational process.

This study aims to examine the impact of learning styles (Visual, Auditory, Read/Write, and Kinesthetic) on academic performance in Islamic education. It demonstrates how teachers can incorporate new technologies into lessons that align with students' preferred learning styles — such as bright photographs, videos, collaborative projects, and digital simulations. Visual learners connect through multimedia resources, auditory learners perform well during discussions, and kinesthetic learners get the hang of things through hands-on projects.¹¹

This study has two aims. First, it aims to identify how students perceive the implementation of the VARK model in Islamic education, specifically in terms of personalizing the use of technology and teaching methods. The second aspect examined in this paper is how these learning preferences impact students academically and the extent to which they contribute to the

¹⁰ Lizzani Kurnia Pratiwi and Anita Triastuti, "Identifying Students' Learning Styles and Its Implications for Educators in The EFL Classroom," in *Proceedings of the 1st International Conference on Language, Literature, and Arts Education (ICLLAE 2019)*, Advances in Social Science, Education, and Humanities Research (1st International Conference on Language, Literature, and Arts Education (ICLLAE 2019), Atlantis Press, 2020), 94–98, <https://doi.org/10.2991/assehr.k.200804.017>.

¹¹ Muhamad Rizza, Lilis Sumarni, and Siti Maryam, "Fostering Mutual Respect at Universiti Utara Malaysia: A Synergistic Approach Integrating Yusuf Al-Qardhawi's Moderation and Hamzah Fansuri's Sufi Thought," *Al-Ahnaf: Journal of Islamic Education, Learning and Religious Studies* 1, no. 2 (December 10, 2024): 80–99, <https://doi.org/10.61166/ahnaf.v1i2.13>.

content. Through achieving these aims, this study will generate critical insights into the potential of the VARK model in helping Islamic educators develop practical and student-centered pedagogy.

Besides yielding these tangible results, the study will contribute to an expanding body of literature on digital education and learning modalities in the context of Islamic studies. Examining how contemporary pedagogical approaches can be adapted for Islamic education, this research will provide a framework for integrating technology and customized learning into existing educational practices without compromising the religious or cultural context.

A qualitative methodology is thought to be the best fit for this aim since it allows for a more in-depth analysis of individual student experiences.¹² Fifteen students from the Islamic Studies program at the University of Utara Malaysia (UUM) will be interviewed, with three selected for in-depth discussions due to their active involvement in Islamic studies courses. Participants will be selected to represent a diverse range of characteristics, including gender, year of study, and familiarity with digital learning tools, to ensure a broad range of viewpoints on the integration of technology in Islamic education. The suggested minimum number of qualitative participants for data saturation is between 15 and 30 person.¹³

Using the system developed from this study, researchers can discover the interaction between Islamic course material and student math learning styles to enhance the learning environment in an Education 4.0 model. The study aims to provide further insights that can be used to adapt the curriculum more effectively, thereby enhancing students' academic success by aligning educational practices with their preferred learning styles.

¹² Jean S. Peterson, "Presenting a Qualitative Study: A Reviewer's Perspective," *Gifted Child Quarterly* 63, no. 3 (July 1, 2019): 147–58, <https://doi.org/10.1177/0016986219844789>.

¹³ Virginia Braun and Victoria Clarke, *Successful Qualitative Research: A Practical Guide for Beginners* (SAGE Publications, 2013).

Table 2. Open Ended Questions and Purpose

No	Open-Ended Question
1	How do you perceive the relationship between your preferred learning style and the use of digital technologies in education?
2	In what ways do you think visual learning methods influence your understanding of Islamic education content?
3	How does the integration of multimedia resources impact your learning experience, particularly in the context of Islamic education?
4	Can you describe how auditory learning strategies affect your engagement with Islamic education materials?
5	What role does kinesthetic learning play in your approach to understanding Islamic educational concepts?
6	How do you feel about adapting your learning preferences when exposed to a variety of teaching methods, such as visual or kinesthetic?

The analysis of data will be conducted through a thematic analysis, which is suitable for identifying and analyzing patterns and characteristics. Data familiarization will take place as the initial step, and the researcher will listen to all interview recordings and transcribe them.¹⁴ This edition of field notes enables the researcher to obtain an initial reading of the data.

The focus of the first step, which is a coding step,¹⁵ involves the researcher pinpointing segments that relate to the research questions, thematically considering aspects such as engagement, retention, and the learning styles described in the study's purpose. The next step in qualitative analysis is the construction of themes,¹⁶ where you cluster the codes into broader categories such as motivation, engagement, and challenges relating to learning

¹⁴ Tom Fryer, "A Critical Realist Approach to Thematic Analysis: Producing Causal Explanations," *Journal of Critical Realism* 21, no. 4 (August 8, 2022): 365–84, <https://doi.org/10.1080/14767430.2022.2076776>.

¹⁵ Mai Skjott Linneberg and Steffen Korsgaard, "Coding Qualitative Data: A Synthesis Guiding the Novice," *Qualitative Research Journal* 19, no. 3 (May 8, 2019): 259–70, <https://doi.org/10.1108/QRJ-12-2018-0012>.

¹⁶ Catherine Cassell and Vicky Bishop, "Qualitative Data Analysis: Exploring Themes, Metaphors and Stories," *European Management Review* 16, no. 1 (2019): 195–207, <https://doi.org/10.1111/emre.12176>.

styles.¹⁷ The researcher will then interpret the emergent themes in detail, relaying them back to the study aims, research questions, and existing literature.¹⁸

The tabulated material below summarizes key findings from a thematic analysis based on interview data with Islamic Education students at Universiti Utara Malaysia, including 15 students of Islamic primary education. They discuss many themes and sub-themes related to students' perceptions of the VARK model as applied in their Islamic education.

Table 3. Thematic Analysis Results

No	Theme	Sub-theme	Code	Challenges
1	Visual Learning	Preference for Images and Videos	"Prefer using educational videos," "Visual representations enhance understanding," "Visuals help in memorization"	"Difficulty focusing on lengthy videos," "Overuse of video content leading to distraction"
		Preference for Written Visuals	"Infographics enhance learning," "Learning with annotated slides," "Visual notes support memory"	"Difficulty interpreting complex visuals," "Lack of clarity in visual representations"
2	Auditory Learning	Enjoyment of Listening	"Prefer lectures and podcasts," "Learn well through verbal explanations," "Enjoy verbal discussions."	"Difficulty with passive listening," "Over-reliance on verbal explanations"
		Group Discussions	"Engaged through group debates,"	"Limited opportunities for

¹⁷ Karen L. Peel, "A Beginner's Guide to Applied Educational Research using Thematic Analysis," *Practical Assessment, Research, and Evaluation* 25, no. 1 (January 2, 2020), <https://doi.org/10.7275/ryr5-k983>.

¹⁸ Kristina M. Scharp and Matthew L. and Sanders, "What Is a Theme? Teaching Thematic Analysis in Qualitative Communication Research Methods," *Communication Teacher* 33, no. 2 (April 3, 2019): 117–21, <https://doi.org/10.1080/17404622.2018.1536794>.

			"Learn from discussion-based activities," and "Collaborative audio learning."	"group discussions," "Difficulties in virtual group conversations."
		Verbal Interaction	"Benefit from verbal explanations," "Feedback through spoken words," "Active listening in class"	"Challenges in large lecture halls," "Difficulty engaging with non-interactive lectures"
3	Read/Write Learning	Preference for Written Reflection	"Enjoy writing reflections and essays," "Writing helps internalize concepts," "Writing consolidates learning"	"Struggles with writing under time constraints," "Difficulty in organizing written thoughts"
		Reading and Writing for Clarity	"Written materials simplify complex ideas," "Reading enhances the understanding," "Writing organizes thoughts"	"Difficulty understanding densely written content," "Challenges with extensive reading assignments"
		Textual Analysis	"Prefer analysis of written Islamic texts," "Learn better through written interpretations," "Research-based learning"	"Challenges with understanding classical texts," "Difficulty interpreting Islamic texts in modern contexts"
4	Kinesthetic Learning	Active Learning	"Learning through role-play," "Engage with hands-on projects," "Physical interaction with content"	"Limited hands-on learning opportunities," "Challenges with online or virtual role-plays,"
		Learning Through Movement	"Active participation in activities," "Physical engagement with material," "Role-playing for	"Lack of space for physical learning," "Limited movement-based learning activities"

			historical events"	
		Practical Application	"Hands-on application of Islamic principles," "Experiential learning with Islamic artifacts," and "Engage with real-life scenarios."	"Lack of real-world scenarios," "Difficulty simulating real-life Islamic experiences."
5	Learning Preferences	Customization of Learning Styles	"Different strategies for different students," "Flexible learning environment," "Adapting to varied learning styles"	"Challenges with one-size-fits-all teaching methods," "Difficulty catering to diverse learning preferences,"
		Self-Directed Learning	"Students take the initiative in learning," "Independence in exploring material," "Learning through self-paced resources."	"Lack of guidance in self-directed learning," "Struggles with time management and self-discipline"
		Use of Technology for Personalization	"Custom digital learning resources," "Online learning that fits personal preferences," "Tailored learning activities"	"Technology limitations in personalizing learning," "Difficulty accessing personalized content"

Understanding VARK Model Learning Styles in the Context of Islamic Education

The VARK model of learning categorizes learning preferences into Visual, Auditory, Read/Write, and Kinesthetic styles,¹⁹ provides valuable insights into how students engage with educational content. In the context of Islamic education, understanding and incorporating these learning styles can enhance the learning experience by catering to the diverse needs

¹⁹ Chaudhry, Ashar, and Ahmad, "Association of Visual."

of students. This discussion examines how each of the VARK models can be effectively applied in Islamic education, drawing on examples from the curriculum and Islamic teachings.

Visual Learning Style

The way the learner tends toward learning is a learning style.²⁰ Visual learning can be effective in this area, such as when examining traditional Islamic patterns (found in Qurans) or critical historical events. For example, visual aids illustrating events in the life of the Prophet Muhammad (peace be upon him) or significant events in Islam's history help pupils comprehend them, understand their placement in time, and appreciate their importance. A study found that infographics incorporating Islamic fundamentals (usul) or various schools of thought (madhab) of Islam could help students understand abstract concepts and correlate one idea with other ideas. A handful of students reported struggling with overly complex visuals, which, when carelessly designed, can confuse or overwhelm a learner.

Quranic Verse: "Indeed, in the creation of the heavens and the earth, and the alternation of the night and the day, there are signs for those of understanding."²¹

This Verse urges reflection on visible evidence in nature, which aligns with visual learning approaches. Images that are helpful to Islamic teachings or offer a glimpse into history or the creation of the world will help provide a more profound understanding. Think about embedding animated videos in your courses that narrate stories of the Prophets and graphical displays of Salah (prayer- an Islamic ritual) for visual/graphical learners to make things fun and engaging for your students. However, students have a few difficulties with long or tedious videos, which

²⁰ Mohd Noor and Amri Ramly, "Bridging Learning Styles and Student Preferences in Construction Technology Education."

²¹ Quran 3:190, Sahih International Translation. Retrieved from <https://quran.com> This translation is widely recognized for its accuracy and adherence to authoritative Quranic interpretation standards.

can affect their attention.²² Thus, visual content has to be short, intentional, and aligned tightly with the lesson's aims.²³

Auditory Learning Style

Auditory learners excel when the content is spoken, like lectures, discussions, and podcasts.²⁴ The auditory method became a significant part of the transmission of religious sciences through Islamic education in these institutes.²⁵ Most students were technically sound in Islamic wisdom, delivered either through the preacher to the school (as outlined in the syllabus) or lectures or words (such as the Quran, haya, and Ibrahim, among others) from hundreds of people in Islamic dialogues, after establishing and clarifying everything the student needed. For example, one student may aspire to study Islamic jurisprudence (Fiqh) or interpretation (Tafsir) of the Quran. Those discussions become part of the internal dialogue, especially if the lecturer's stories and variations in volume or cadence make the lessons more vivid. However, it becomes an ordeal for students when the accuracy of learning and retention is compromised due to the session being a drudgery with one-note delivery.

The Prophet Muhammad (PBUH) said: *"He who introduced some good practice in Islam which was followed after him (by people) he*

²² Nurul Amilin Razawi et al., "Improving the Use of Lecture Videos to Increase Student Engagement in ESL Blended Learning Classrooms," *International Journal on E-Learning and Higher Education* 18, no. 2 (2023): 72–93, <https://doi.org/10.24191/ijelhe.v18n2.18205>.

²³ Najrul Jimatul Rizki et al., "Implementasi Model Vark dalam Penggunaan Kelas untuk Meningkatkan Prestasi Siswa," *RISOMA: Jurnal Riset Sosial Humaniora dan Pendidikan* 2, no. 1 (February 12, 2024): 71–84, <https://doi.org/10.62383/risoma.v2i1.48>.

²⁴ Hendra Setyawan Setyawan et al., "The Importance of Archery Education Management in Physical Education Classes and Curriculum Programs for Students to Gain Skills in Many Areas," *Retos* 53 (April 1, 2024): 242–49, <https://doi.org/10.47197/retos.v53.101973>.

²⁵ Mojtaba Tadayonifar, Mahnaz Entezari, and Mostafa Bahraman, "Investigating the Relationship between Linguistic Focus of Recasts, Learning Styles and Noticing," *Language Learning in Higher Education* 10, no. 1 (July 31, 2020): 53–72, <https://doi.org/10.1515/cercles-2020-2008>.

would be assured of reward like one who followed it, without their rewards being diminished in any respect.”²⁶

Listening is the main element of audio learning, and this Verse emphasizes the technique of listening carefully.²⁷ Hearing recitations from the Quran and lectures on Islamic principles can be fundamental to Islamic education.²⁸ A different aspect of auditory learning is group discussion. Islamic studies concern ethical issues or the application of religious teachings in contemporary society. Auditory learners engage through listening and sharing thoughts in auditory environments.²⁹ However, this is a challenge we face in large class sizes or virtual classes where not all students can shine individually,³⁰ mainly when they are meant to work as a group, which is vital in auditory learning.

Read/Write Learning Style

There are written texts, including the Quran and Hadith collections, for students who enjoy reading and writing.³¹

²⁶ Muslim ibn al-Hajjaj al-Qushayri, “Sahih Muslim 1017e - The Book of Knowledge - كتاب العلم -,” trans. Nasiruddin al-Khattab, Sunnah.com, accessed July 1, 2024, <https://sunnah.com/muslim:1017e> This translation is widely recognized for its accuracy and adherence to authoritative standards of hadith.

²⁷ Bonifasius Widharyanto and Heribertus Binawan, “Learning Style and Language Learning Strategies of Students from Various Ethnics in Indonesia,” *Jurnal Cakrawala Pendidikan* 39, no. 2 (June 22, 2020): 480–92, <https://doi.org/10.21831/cp.v39i2.28173>.

²⁸ Mahdokht Taheri et al., “Analyzing the Relationship between Learning Styles (Kolb and VARK) and Creativity with the Academic Achievement of Dental Students,” *Journal of Education and Health Promotion* 10, no. 1 (January 2021): 252, https://doi.org/10.4103/jehp.jehp_1492_20.

²⁹ Li Jiang, Lawrence Jun Zhang, and Stephen May, “Implementing English-Medium Instruction (Emi) in China: Teachers’ Practices and Perceptions, and Students’ Learning Motivation and Needs,” *International Journal of Bilingual Education and Bilingualism* 22, no. 2 (February 17, 2019): 107–19, <https://doi.org/10.1080/13670050.2016.1231166>.

³⁰ Hamid Reza Mozaffari et al., “The Relationship Between the VARK Learning Styles and Academic Achievement in Dental Students,” *Advances in Medical Education and Practice* Volume 11 (January 2020): 15–19, <https://doi.org/10.2147/AMEP.S235002>.

³¹ Naufal Ishartono et al., “Visual, Auditory, and Kinesthetic Students: How They Solve PISA-Oriented Mathematics Problems?,” *Journal of Physics: Conference*

Auditory-style learners are often best at studying religious text if they have time and margin for notes and reflective writing.³² Students might absorb enormous amounts of the classical Islamic canon,³³ reading works like Al-Ghazali's *Ihya' Ulum al-Din* or the writings of Ibn Taymiyyah, with many classes focusing on Islamic theology, ethics, or spiritual formation. For these learners, reflections or summaries of the main ideas from these readings provide the opportunity to process and consolidate.³⁴ When texts are too dense or complex to read, especially classical Arabic or philosophical texts, such as Islamic scholarship, they present challenges for these students.

Quranic Verse: "Read in the name of your Lord who created. Created man from a clot (of blood). Read, and your Lord is the Most Generous. Who taught by the pen. Taught man that which he knew not".³⁵

Reading and writing are key here because we learn via these mediums.³⁶ Islamic scholars have historically depended on written texts as a significant method of transmitting knowledge.³⁷

Series 1720, no. 1 (January 2021): 012012, <https://doi.org/10.1088/1742-6596/1720/1/012012>.

³² Choi Chi Hyun et al., "Implementation of Contextual Teaching and Learning (CTL) to Improve the Concept and Practice of Love for Faith-Learning Integration," *International Journal of Control and Automation* 13, no. 1 (2020): 365–83,

https://www.researchgate.net/publication/339874468_Implementation_of_Contextual_Teaching_and_Learning_CTL_to_Improve_the_Concept_and_Practice_of_Love_for_Faith-Learning_Integration.

³³ Nathasha Mohd Ishak, Harikrishnan Ranganathan, and Kamalambal Harikrishnan, "Learning Preferences of Generation Z Undergraduates at the University of Cyberjaya," *Journal of Learning for Development* 9, no. 2 (July 19, 2022): 331–39, <https://doi.org/10.56059/jld.v9i2.584>.

³⁴ Ismail and Haniff, "Education 4.0."

³⁵ Quran 96:1-5, Sahih International Translation. Retrieved from <https://quran.com>. This translation is widely recognized for its accuracy and adherence to authoritative standards of Quranic interpretation.

³⁶ Danya Hashem, "Preferred Learning Styles of Dental Students in Madinah, Saudi Arabia: Bridging the Gender Gap," *Advances in Medical Education and Practice* Volume 13 (March 2022): 275–82, <https://doi.org/10.2147/AMEP.S358671>.

³⁷ Rosniati Hakim et al., "Learning Strategies for Reading and Writing the Quran: Improving Student Competence as Preservice Teachers at the Faculty of

Islamic education writing assignments could also be a problem, yet a solution.³⁸ They also perform well in essay-level coursework requiring an argumentative or critical analysis to extract all the necessary information.³⁹ Students, for example, might write essays that analyze Islamic teachings on social justice or the environment and connect those teachings to current events. By the way, students need to do a lot of writing and reading when the volume is overwhelming, so they can become burned out or struggle to connect with the information.

Kinesthetic Learning Style

Islamic education is thus a system that rewards kinesthetic learners who can relate theory with practice because of the hands-on experiences they receive while learning.⁴⁰ Kinesthetic learners are more likely to be engaged in Islamic education if they go on field trips or enjoy practical demonstrations.⁴¹ Through experienced sites of Islamic history or community activities such as mosque service or volunteering for an Islamic charity, these learners practically apply their religious education in a real-world context.⁴² For example, students can go on field trips to different mosques, where they can both observe and participate in ritual prayers or attend traditional Islamic cultural activities, allowing

Tarbiyah and Teacher Training," *Education Research International* 2022, no. 1 (2022): 3464265, <https://doi.org/10.1155/2022/3464265>.

³⁸ Karin K. Flensner, "Dealing with and Teaching Controversial Issues: Teachers' Pedagogical Approaches to Controversial Issues in Religious Education and Social Studies," *Acta Didactica Norden* 14, no. 4 (December 8, 2020): 21 sider-21 sider, <https://doi.org/10.5617/adno.8347>.

³⁹ Hassan A. El-Sabagh, "Adaptive E-Learning Environment Based on Learning Styles and Its Impact on Development Students' Engagement," *International Journal of Educational Technology in Higher Education* 18, no. 1 (December 2021): 53, <https://doi.org/10.1186/s41239-021-00289-4>.

⁴⁰ Alexandros Bousdekis, Dimitris Apostolou, and Gregoris Mentzas, "Predictive Maintenance in the 4th Industrial Revolution: Benefits, Business Opportunities, and Managerial Implications," *IEEE Engineering Management Review* 48, no. 1 (2020): 57–62, <https://doi.org/10.1109/EMR.2019.2958037>.

⁴¹ Kateřina Berková et al., "Learning Styles of Czech College and University Students in Accounting Education," *Universal Journal of Educational Research* 8, no. 8 (August 2020): 3459–68, <https://doi.org/10.13189/ujer.2020.080820>.

⁴² Benitez, "Students' Learning Style."

them to see and hear the material they study firsthand. However, this can be challenging to sustain when there are limited opportunities to be physically active, for example, in online learning or in classrooms where physical activity is restricted. Quranic Verse: “*Say, [O Muhammad], “Travel through the land and observe how the end of those before. Most of them were associators [of others with Allah].”*⁴³

These verses encourage people to take action — God commands them to travel and move. Kinesthetic learners learn best by engaging their bodies, using experience, and acting out what they are learning.

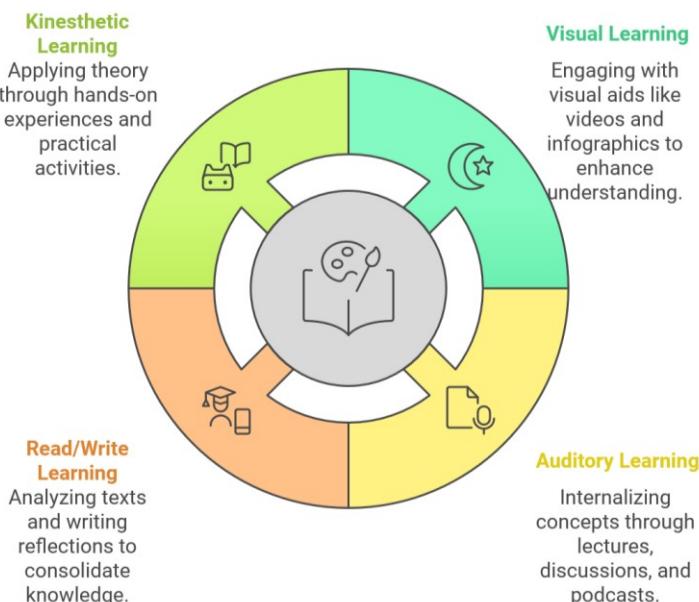


Figure 1. VARK Learning Styles in Islamic Education

Challenges and Considerations in Applying the VARK Model

The following sections highlight the challenges associated with applying each of the four VARK learning styles—Visual,

⁴³ Quran 30:42, Sahih International Translation. Retrieved from <https://quran.com> This translation is widely recognized for its accuracy and adherence to authoritative Quranic interpretation standards.

Auditory, Read/Write, and Kinesthetic—in the context of Islamic education.

Visual Learning Challenges

For visual learners in Islamic education, one challenge is the overwhelming nature of complex or excessive visual content⁴⁴. While tools can enhance understanding, overly detailed or poorly organized visuals can confuse students rather than clarify concepts. For instance, an infographic outlining key events in Islamic history may be too dense for some learners, making it difficult for them to follow the information. Additionally, not all visual learners respond equally to the same type of visual material—some may prefer static diagrams, while others might find interactive multimedia tools more effective. To address these challenges, it is crucial to create visuals that are clear, concise, and directly aligned with learning aims.

Auditory Learning Challenges

Auditory learners in Islamic education often face the challenge of monotonous or disengaging lectures,⁴⁵ which can lead to difficulty in retaining information. For example, a dry lecture on Islamic jurisprudence may fail to captivate auditory learners who require more dynamic vocal delivery or interactive discussions. Another challenge is the accessibility and relevance of auditory resources such as podcasts or online lectures, which may not always align with specific Islamic educational content. To enhance the learning experience for auditory learners, educators should incorporate storytelling, group discussions, and engaging audio resources that provide a deeper connection to Islamic teachings, while ensuring that the content is accessible and engaging.

⁴⁴ Abdullah Bin Eid et al., "Examining Learning Styles with Gender Comparison Among Medical Students of a Saudi University," *Advances in Medical Education and Practice* Volume 12 (March 2021): 309–18, <https://doi.org/10.2147/AMEP.S295058>.

⁴⁵ Muhammad Faris Arman et al., "Tactile Exploration in Architecture: The Role of Kinesthetic Learning in Developing Design Skills," *International Journal of Business and Technology Management* 6, no. S2 (November 1, 2024): 302–17, <https://myjms.mohe.gov.my/index.php/ijbtm/article/view/27939>.

Read/Write Learning Challenges

Read/write learners often encounter difficulties with the dense, complex nature of classical Islamic texts.⁴⁶ For example, works by scholars like Al-Ghazali or Ibn Taymiyyah may be challenging due to their archaic language or abstract reasoning. Additionally, the volume of reading and writing required in Islamic education can lead to burnout, as students are often tasked with extensive analysis of religious texts and writing assignments. This challenge can be mitigated by breaking down readings into manageable sections, providing summaries, and encouraging active note-taking that connects theoretical concepts with contemporary issues, allowing students to better engage with the material.

Kinesthetic Learning Challenges

Kinesthetic learners, who thrive on hands-on activities and physical engagement, face challenges in traditional Islamic education environments that are primarily lecture-based.⁴⁷ The abstract nature of Islamic studies, such as theology and history, can be problematic for kinesthetic learners to grasp without tangible experiences to relate to. For instance, understanding the significance of the Hajj pilgrimage may be more engaging for kinesthetic learners through an experiential activity rather than a lecture. Additionally, online Islamic education platforms may lack the capacity to incorporate the interactive, hands-on experiences that kinesthetic learners need. Educators can address this challenge by integrating virtual simulations or interactive role-playing exercises that allow kinesthetic learners to connect more deeply with the material.

⁴⁶ Mazuin Mat Halif et al., "Moderating Effects of Student Motivation on the Relationship between Learning Styles and Student Engagement," *Asian Journal of University Education* 16, no. 2 (August 6, 2020): 93, <https://doi.org/10.24191/ajue.v16i2.10301>.

⁴⁷ Logan Fiorella et al., "Fostering Generative Learning from Video Lessons: Benefits of Instructor-Generated Drawings and Learner-Generated Explanations," *Journal of Educational Psychology* 112, no. 5 (2020): 895–906, <https://doi.org/10.1037/edu0000408>.

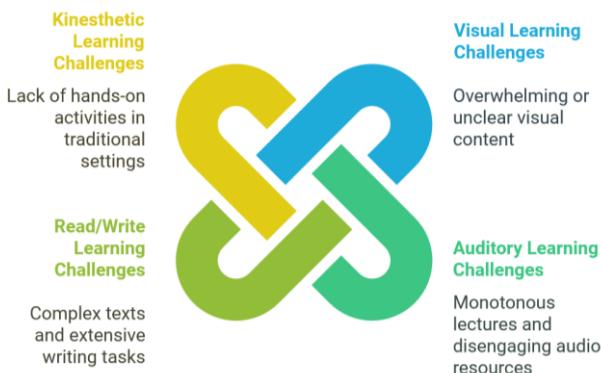


Figure 2. Addressing VARK Challenges in Islamic Education

Conclusion

This study has explored the intersection of Islamic education, learning styles (as outlined in the VARK model), and the transformative potential of Education 4.0 in the digital era. By examining students' preferences and experiences, it becomes evident that integrating technology into Islamic education can enhance engagement, inclusivity, and learning outcomes. The findings underscore the importance of recognizing diverse learning styles—visual, auditory, reading/writing, and kinesthetic—and utilizing digital tools to cater to these preferences effectively. In doing so, educators can create dynamic learning environments that align with both traditional Islamic values and modern educational paradigms, ensuring that students are equipped with the skills and knowledge needed to thrive in an increasingly digital world.

Looking ahead, this research highlights the need for ongoing innovation in Islamic education to address the challenges and opportunities of the Digital Age. As Education 4.0 continues to evolve, stakeholders must collaborate to design systems that honor the timeless principles of Islamic teachings while embracing technological advancements. Future studies could delve deeper into the long-term impacts of these methodologies, particularly in diverse cultural and institutional contexts. Ultimately, this work serves as a foundation for fostering educational practices that

empower learners intellectually, spiritually, and socially, contributing to a brighter future for Islamic education in the 21st century and beyond.

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