



INTEGRATION OF DIGITAL TOOLS FOR TEACHING AND LEARNING OF ISLAMIC STUDIES AMONG SENIOR SECONDARY SCHOOLS IN ILORIN METROPOLIS, NIGERIA

Jibril Olaniyi Ayuba¹, Sakinah Abdulkadir², A. A. Mohammed³
^{1,2,3} Al-Hikmah University, Nigeria

Email: idmajul.kh5@gmail.com

ABSTRACT

This study examined the integration of digital tools for teaching and learning of Islamic studies among senior secondary schools in Ilorin, Nigeria. The advent of digital technology has profoundly impacted the landscape of Islamic religious education. The Covid- 19 pandemic outbreak, accelerated the adoption of digital tools for teaching and learning management. For that reason, educational institutions transitioned to virtual learning environments, utilizing diverse digital platforms. A descriptive survey research design was employed for the study. Simple random sampling technique was used to select 503 respondents as sample size for this study. An adapted questionnaire was used to elicit information from the respondents for the study. The reliability of the instrument was carried out with reliability index of 0.77. These findings indicate that Islamic educational institutions values the incorporation of digital technology and websites for teaching and learning. This approach is seen as crucial for equipping students with a balance skill between the interest of the world and preparation for the hereafter. Also, the study identified several key skills necessary for effective knowledge acquisition such as, mobile app proficiency, internet literacy, smart phone familiarity, technical competence, communication, creativity, time management, flexibility skills, and pedagogical knowledge. The study concluded that the study's findings highlight the importance of digital skills for both teachers and students, the positive impact of smart phone use on teaching and learning effectiveness, particularly on Islamic studies. Based on the findings, the study recommended that educational curricula should be updated to incorporate digital tools and resources, to ensure that students develop the necessary digital skills to thrive in the 21st century.

Keywords: Islamic Studies, Digital Era, Virtual Learning, 21st Century, Digital Skills

***Corresponding Author:** idmajul.kh5@gmail.com

Received: February 7th 2025; Revised: April 29th 2025; Accepted: June 29th 2025

DOI: <https://doi.org/10.34125/injes.v2i1.16>

Reference to this paper should be made as follows: Ayuba, J.O., Abdulkadir, S. & Mohammed, A. A. Integration of Digital Tools for Teaching and Learning of Islamic Studies Among Senior Secondary Schools in Ilorin Metropolis, Nigeria. *INJIES: International Journal of Islamic Education Studies*, 2 (1), 1-9.

E-ISSN: [3063-5489](#)

Published by: INJIES: International Journal of Islamic Education Studies

INTRODUCTION

The rapid development and the advancement of digital technology for the past three decades has significantly impacted every aspect of individual lives, communities and nations. The internet has redefined the concept of interaction, and the empowerment of information has shaped people's perspectives. Technology experts believe that society is experiencing a transformation in how digital resources are used and information is virtualized. ([Putrawangsa & Hassanah, 2018](#); [Rosmia & Suziani, 2019](#)).

The intersection of Islam and technology has become an increasingly significant area of study most especially in the field of education. Since the founding of Islam, Islamic education has been dedicated to fostering intellectual development and scientific enquiry as a means to advance human societies. ([Sahin, 2018](#)). Therefore, the integration of technology can modernize and improve the way Islamic studies are taught and learned. Equally, it enhances teachers and student performance. ([Ayuba, 2019](#)).

The development of Islamic education in Nigeria especially in the digital era has presented both the benefits and challenges for Islamic teaching and learning. Some of the benefits of technology for dissemination of Islamic knowledge include the use of various online platforms such as; WhatsApp, Telegram, Facebook and so on. Mobile apps such as; Google Meet, Zoom, Skype, and digital libraries for efficient and effective teaching and learning of Islamic education. Subsequently, the Covid-19 pandemic also affected the educational system world-wide which in turn introduces many educational institutions in Nigeria to the use of (Online classrooms). Therefore, The problems faced by Islamic religious education teachers in utilizing technology in the digital era for teaching and learning are, lack of skilled personnel in the use of digital technology and there is limited access to internet in all corners of the country, which is why good and effective teaching and learning with digital tools has not been achieved. Another factor is the ineffectiveness of special training for educators regarding the use of digital technology. However, It is important for teachers to master how to use digital tools and most importantly, such proficiency and competences should be included in their training and professional qualification, which must adjust to their level of education. ([Ilomaki et al, 2023](#)).

Similarly, education and globalization is highly interwoven and intertwined in this 21st century. And for graduates to be able to explore and contribute to the global democratic society, Nigeria has to reform its education process to create smooth, comprehensive and flexible system of education. Alkahtani (2017) stated that technology has the ability to transform the nature of education, where and how learning takes place including the roles of students and teachers in the learning process. [Halik et al., \(2018\)](#) noted that the use of digital tools improves students studying habits and makes learning fun. It is generally believed that digital tools can empower teachers and learners, promote change and foster the development of '21st century skills.

PURPOSE OF THE STUDY

The main purpose of the study was to examine the integration of digital tools for teaching Islamic Studies in Ilorin metropolis, Kwara State. Specifically, this study determined;

1. The use of digital tools for teaching and learning Islamic education among upper basic schools in Ilorin, Kwara State, Nigeria.
2. The benefits of digital tools for teaching and learning Islamic education among upper basic schools in Ilorin, Kwara State.
3. Identify the challenges militating against teachers' use of digital tools for teaching and learning of Islamic education among senior secondary schools in Ilorin metropolis, Kwara State.

RESEARCH QUESTIONS

The following questions were raised to guide the conduct of the study:

1. Does teachers used digital tools for teaching and learning of Islamic education among senior secondary schools in Ilorin metropolis, Kwara State?
2. To what extent are digital tools benefitting both teachers and students for teaching and learning Islamic education among senior secondary schools in Ilorin metropolis, Kwara State?
3. What are the challenges militating against teachers' use of digital tools for teaching Islamic studies among senior secondary schools in Ilorin metropolis, Kwara State?

METHODS

This research employed survey research design. The researchers-designed questionnaire tagged "Questionnaire on the Integration of Digital Tools for Teaching and Learning Islamic Studies in the Digital Era (QIDTTLISDE)" was used as an instrument for this study. Simple Random sampling technique was used to select 503 senior secondary school teachers of Islamic studies as sample size for this study. The instrument used for data collection was validated by three experts in Test & Measurement and found it appropriate for this study. The reliability of the instrument was determined using the test re-test reliability technique within a two week interval. The scores of the two tests were correlated using the Pearson's Product Moment Correlation (PPMC). The value of the correlation coefficient obtained was 0.87. Four research questions were analyzed and answered using the simple percentage, mean and standard deviation.

Similarly, the instrument was administered by the researchers and research assistance to all the 503 senior secondary school teachers of Islamic studies as sample size for this study. Also, the researchers sought the permission from all the heads of the sampled schools. Twenty items were designed for the respondents to react to by ticking, , Used (U) and Not Used (NU); Available (A) and Not Available (NA); and Very Great Extent (VGE), Great Extent (GE), Low Extent (LE) and Very Low Extent (VLE).

RESULT AND DISCUSSION

Table 1. *Usability of Digital Tools for Teaching Senior Secondary Schools Islamic Studies in Ilorin Metropolis, Kwara State*

S/N	Digital Tools	N	Used (%)	Un Used (%)	Inferences
1.	Zoom	503	321 (63.8%)	182 (36.2%)	Used
2.	Google meet	503	330 (65.6%)	173(34.4%)	Used
3.	Microsoft Teams	503	120(23.8%)	383(76.1%)	Un used
4.	Facebook	503	403(80.1%)	100(19.9%)	Used
5.	Twitter	503	203(40.4%)	300(56.6%)	Unused
6.	Instagram	503	185(36.8%)	318(63.2%)	Unused
7.	linkedIn	503	256(50.9%)	247(49.1%)	Used
8.	Coursera	503	260(51.6%)	243(48.3%)	Used
9.	Skooli	503	196(38.4%)	307(61.0%)	Unused
10.	TutorMe	503	310(61.6%)	193(38.4%)	Used
11.	Chegg Tutors	503	280(55.7%)	223(44.3%)	Used
12.	Udemy	503	196(38.4%)	307(61.0%)	Used
13.	You Tubes	503	398(79.1%)	105(20.9%)	Used

The table 1 shows the percentage scores of the response on the use of digital tools for teaching and learning Islamic studies among secondary schools in Ilorin metropolis, Kwara State. The table reveals that items 1, 2, 4, 7, 8, 10, 11, 12 and 13, are used to teach and learn Islamic studies by the senior secondary school, while items 3, 5, 6 and 9 are the tools that were not used to teach and learn Islamic studies in senior secondary school in Ilorin metropolis. This implies that Zoom, Google Meet, Facebook, LinkedIn, Coursera, TutorMe, Chegg Tutors, Udemy, You Tubes are digital tools used to teach Islamic studies among senior secondary schools in Ilorin metropolis, Kwara State.

Table 2. *The Extent of Teachers' Integration of Digital Tools for Teaching and Learning Islamic Studies in Ilorin Metropolis, Kwara State*

S/N	ICT Tools	VGE %	GE %	LE %	VLE %	Inferences
1	Zoom	270 53.7	99 19.7	109 21.7	25 5	VGE
2	Google Meet	293 58.3	81 16.1	98 19.5	31 6.2	VGE

3	Microsoft Teams	100	100	41	262	VLE
		19.9	19.9	8.6	52.1	
4	Facebook	300	158	30	15	VGE
		59.6	31.4	6	3	
5	Twitter	100	128	113	162	VLE
		19.9	25.4	22.5	32.2	
6	Instagram	197	100	126	180	VLE
		39.2	19.9	25.0	35.8	
7	LinkedIn	311	121	40	31	VGE
		61.8	24.1	8	6.2	
8	Coursera	153	200	61	89	GE
		30.4	39.8	12.1	17.7	
9	Skooli	50	43	217	193	LE
		9.9	8.5	43.1	38.4	
10	TutorMe	287	122	59	35	VGE
		57.1	24.3	11.7	7	
11	Chegg Tutors	120	207	89	87	GE
		23.9	41.2	17.7	17.3	
12	Udemy	82	210	113	98	GE
		16.3	41.7	22.5	19.5	
13	You Tubes	98	223	120	62	GE
		19.5	44.3	23.9	12.4	

Table 3 shows the extent of teachers integration of digital tools for teaching senior secondary schools Islamic studies in Ilorin metropolis, Kwara State. Items 1, 2, 4, 7, 10, are the digital tools to a very large extent integrate to learning and teaching senior secondary schools Islamic studies in Ilorin metropolis, Kwara State. Similarly, items 3, 5, and 6 are the digital tools to a very low extent integrate to learning and teaching senior secondary schools Islamic studies while items 8, 11, 12, and 13 are the digital tools to a great extent integrate to learning and teaching of senior secondary school Islamic studies in Ilorin metropolis. Consequently, item 9 is the only digital tool to a low extent integrates to learning and teaching senior secondary schools Islamic studies in Ilorin metropolis, Kwara State. This implies that the digital tools are to a very large extent integrate into the learning and teaching of Islamic studies among senior secondary schools in Ilorin metropolis, Kwara State, Nigeria.

Table 4. *Response on the Challenges Militating against Teachers' Use of digital Tools for Teaching and Learning Islamic Studies in Ilorin Metropolis*

S/N	Challenges	N	Mean	Std. Deviation
1.	Low accessibility and network connection	503	2.32	1.25
2.	Insufficient instructional software	503	3.13	0.92
3.	Lack of technical expertise	503	3.10	0.90
4.	Unreliable power supply	503	3.01	0.89
5.	Lack of teachers' competency	503	2.99	1.0
6.	Poor maintenance of digital tools	503	3.05	0.88

The table 4 shows the mean and standard deviation of the challenges militating against teachers' use of ICT tools for teaching Islamic studies. The results as shown in the table revealed that the average response mean score are within 2.32-3.13 which falls within the range of "Agreed". This implies that the senior secondary school teachers of Islamic studies have high level of challenges militating against the use of digital tools for teaching Islamic studies among Senior secondary schools in Ilorin metropolis, Kwara State ranging from limited accessibility and network connection, schools with insufficient instructional software, lack of technical expertise, unreliable power supply, lack of teachers' competency and poor maintenance of digital tools in educational institutions as pertaining to material and non-material conditions. Senior secondary school teachers of Islamic studies integrate mobile smart phones, Tabs, laptops and others for effective teaching and learning of Islamic studies in Ilorin, Kwara State, Nigeria. The finding of this study supported the submissions of previous studies whose findings revealed that teachers used digital tools (mobile smart phones and others) to teach ([Ayuba & Kayode, 2023](#)).

Adegbenro et al., (2017) concluded that both students and teachers require digital tools for effective teaching and learning. ([Piotrowska et al., 2022](#); [Economides & Grousopoulou \(2010\)](#)) Identified a range of skills necessary for integrating mobile smart phones into education, including technical proficiency, communication skills, and pedagogical knowledge. The findings align with previous studies that highlighted the importance of critical thinking, problem-solving, and collaboration skills.

However, senior secondary schools teachers in Ilorin, Kwara state, face significant challenges in integrating digital tools into their Islamic studies lessons. These challenges include limited access to technology, inadequate technical support, insufficient training, time constraint, and lack of teacher competency. Ayuba, (2019) supported these findings, identifying additional barriers to ICT integration in education. These include the absence of computer labs, insufficient instructional software, out dated technology, inadequate technical expertise, unreliable power supply, poor maintenance of digital tools.

This research suggests that digital tools can be beneficial in teaching religious subjects, particularly in secondary schools, by providing students with increased access to religious materials. It reinforces the importance of religious education in secondary school curricula and may lead to curriculum reforms and changes in teaching methods.

CONCLUSION

In conclusion, the integration of digital tools in Islamic studies teaching and learning among senior secondary schools in Ilorin metropolis, Kwara state, is hindered by a myriad of challenges previously mentioned, to address these issues, it is important to implement targeted interventions and plausible solutions. By so doing, this will not only improve student outcomes but also contribute to overall development of education in the region.

Recommendations

Based on the findings of this research, the following recommendations are proposed to enhance the integration of digital tools in Islamic studies teaching and learning among senior secondary schools in Ilorin metropolis, Kwara state.

1. Invest in digital infrastructure: The Kwara State government and various school administrators should provide digital tools for teaching and learning of Islamic studies in schools.
2. Provide comprehensive training programs: Kwara State government should organize a seminar, workshops, symposium, conferences and host of other programmes for training teacher's particularly Islamic studies teachers on how to effectively and efficiently integrate digital tools for teaching.
3. Develop relevant educational resources: teachers should create high-quality digital content such as, interactive lessons, multimedia presentations, and simulations that align with the Islamic studies curriculum.
4. Collaborate with stakeholders: government and schools should work together to develop and implement strategies for promoting digital integration in education.
5. Promote digital literacy among students: by equipping students with necessary digital skills to effectively use digital tools for learning.

By implementing these recommendations,

ACKNOWLEDGEMENTS

This article discusses the integration of digital tools for teaching and learning Islamic studies among senior secondary schools in Ilorin metropolis, Nigeria. The study is implemented through self-evaluation and quality control in the public senior secondary schools that offers Islamic studies in Ilorin metropolis, Nigeria. The research results showed that it is possible to overcome the challenges hindering digital integration in Islamic studies teaching and learning in this digital era and create a more effective and engaging learning experience for students. The obstacles to integration of digital tools are low accessibility and network connection, insufficient instructional software, lack of technical expertise, lack of technical expertise, and poor maintenance of digital tools. The application focuses on integration of digital tools by both teachers and students. Research methodology includes observation and surveys. Further research proposals are based on research findings and recommendations from the research results.

REFERENCES

- Ayuba, O. J. (2019). *Availability and use of ICT tools for teaching senior secondary schools Islamic studies in Kwara State, Nigeria*. An unpublished dissertation submitted to the Department of Arts Education, Faculty of Education, University of Ilorin, Nigeria.
- Ayuba, O. J. & Kayode, A. M. (2023). Exploring the effectiveness of mobile smartphones in teaching Islamic studies among senior secondary school. *Indonesia Journal of Educational Research and Review*, 6, (3), 511-519. <https://doi.org/10.23887/ijerr.v6i3.67443>

- Abiyusuf, I., Hafizi, M., Pakhrurrozi, P., Saputra, W., & Hermanto, E. (2024). Critical Analysis of The Rejection of Richard Bell's Thoughts on The Translation of The Qur'an in The Context of Orientalism. *INJIES: Journal of Islamic Education Studies*, 1(2), 48–60. <https://doi.org/10.34125/injies.v1i2.6>
- Adegbenro, J. B., Gumbo, M. T., & Olakanmi, E. E. (2017). In-service secondary school teacher technology integration needs in an ICT-enhanced classroom. *Turkish Online Journal of Educational Technology-TOJET*, 16(3), 79-87.
- Amir, A., Afnita, A., Zuve, F. O., & Erlianti, G. (2024). Education and Application of Digital Media in Creation and Documentation Artery Based Service Letter. *JERIT: Journal of Educational Research and Innovation Technology*, 1(1), 36–42. Retrieved from <https://jerit.unimika.ac.id/index.php/jerit/article/view/5>
- Anwar, C., Septiani, D., & Riva'i, F. A. (2024). Implementation Of Curriculum Management Of Tahfidz Al-Qur'an at Al-Qur'an Islamiyah Bandung Elementary School. *INJIES: Journal of Islamic Education Studies*, 1(2), 91–96. <https://doi.org/10.34125/injies.v1i2.11>
- Amrulloh, N. M. A. G. (2024). Educator Recruitment Management in Improving Student Quality at Dwiwarna Parung High School. *JERIT: Journal of Educational Research and Innovation Technology*, 1(2), 80–90. <https://doi.org/10.34125/jerit.v1i2.9>
- Adeoye, M. A., & Otemuyiwa, B. I. (2024). Navigating the Future: Strategies of EdTech Companies in Driving Educational Transformation. *JERIT: Journal of Educational Research and Innovation Technology*, 1(1), 43–50. Retrieved from <https://jerit.unimika.ac.id/index.php/jerit/article/view/10>
- Alkahtani, A. (2017). The challenges facing the integration of ICT in teaching in Saudi secondary schools. *International Journal of Education and Development using ICT*, 13, (1), 32-51.
- Baroud, N., Alouzi, K., Elfzzani, Z., Ayad, N., & Albshkar, H. (2024). Educators' Perspectives on Using (AI) As A Content Creation Tool in Libyan Higher Education: A Case Study of The University of Zawia. *JERIT: Journal of Educational Research and Innovation Technology*, 1(2), 61–70.
- Economides, A. & Grousopoulou, A. (2010). Mobiles in education: students' usage, preferences and desires. *International Journal of Mobile Learning and Organisation*, 4, (3), 235-252.
- Halik, H., et al. (2018). Integration of ICT for teaching Islamic studies among secondary schools in Ilorin Metropolis, Kwara State.
- Hidayatullah, R. R., Kamali, M. F., & T, . N. A. (2024). Innovative Dakwah Strategies Through Social Media: Case Study of Islamic Communication Approaches in Indonesia. *INJIES: Journal of Islamic Education Studies*, 1(1), 16–27. Retrieved from <https://injies.unimika.ac.id/index.php/injies/article/view/3>
- Islam, I., & Ishaq, M. (2024). Development of Journalism Development Strategies in The Digital Era at Darul Mukhlisin High School. *JERIT: Journal of Educational Research and Innovation Technology*, 1(2), 71–79. <https://doi.org/10.34125/jerit.v1i2.11>
- Ilomaki, L., Lakkala, M., Kallunki, V., Mundy, D., Romero, M., Romeu, T. & Gouseti, A. (2023). Critical digital literacies at school level: A systematic review. *Journal of Education*, 11(3). DOI: <https://doi.org/10.1002/rev3.3425>

- Iskandar, M. Y., Nugraha, R. A., Halimahturrafiah, N., Amarullah, T. A. H., & Putra, D. A. (2024). Development of Android-Based Digital Pocketbook Learning Media in Pancasila and Citizenship Education Subjects For Class VIII SMP. *JERIT: Journal of Educational Research and Innovation Technology*, 1(2), 51–60. <https://doi.org/10.34125/jerit.v1i2.13>
- Iswandi, I., Syarnubi, S., Rahmawati, U., Lutfiyani, L., & Hamrah, D. (2024). The Role of Professional Ethics Courses in Producing Prospective Islamic Religious Education Teachers with Character. *INJIES: Journal of Islamic Education Studies*, 1(2), 71–82. <https://doi.org/10.34125/injies.v1i2.9>
- Khofi, M. B., & Santoso, S. (2024). Optimize the Role of The State Islamic High School (MAN) Bondowoso Principal in Promoting Digital-Based Learning. *JERIT: Journal of Educational Research and Innovation Technology*, 1(2), 91–102. <https://doi.org/10.34125/jerit.v1i2.7>
- Khubab, A. I., & Jaya, A. I. A. (2024). Implementation of Quality Education at the Darul Falah Amsilati Islamic Boarding School. *INJIES: Journal of Islamic Education Studies*, 1(1), 1–4. Retrieved from <https://injies.unimika.ac.id/index.php/injies/article/view/1>
- Putrawangsa, A., & Hassanah, A. (2018). Integration of digital technology in learning in the Industrial age 4.0. *Journal of Tatsqif*, 16, (1), 42-54.
- R., & Suziani, S. (2019). Digital literacy in the use of technology-based information system. *Advances in Social Science, Education and Humanities Research*. Proceedings of the 2nd International Conference on Educational Sciences (ICES, 2018). <https://doi.org/10.2991/ices-18.2019.3>
- Sahin, A. (2018). Critical issues in Islamic education studies: Rethinking Islamic and Western liberal secular values of education. *Religions*, 9, (11), 335. <https://doi.org/10.3390/rel9110335>
- Tolchah, M. & Ammar, M. A. (2019). Islamic education in the globalization era: Challenges, opportunities, and contribution of Islamic education in Indonesia. *Journal of Humanities & Social Sciences Reviews*, 7, (4), 1021-1037. <https://doi.org/10.18510/hssr.2019.74141>
- Wiwita, R., Handayani, R., Efendi, E., Vratwi, S., & Efrianto, E. (2022). Penerapan Modul Pembelajaran Visual Basic Berbasis Model Problem Based Learning. *Jurnal Kepemimpinan dan Pengurusan Sekolah*, 7(1), 51-59.
- Yolanda, N. S., & Laia, N. (2024). Practicality of Mathematics Learning Media Using Applications PowToon. *JERIT: Journal of Educational Research and Innovation Technology*, 1(1), 27–35. Retrieved from <https://jerit.unimika.ac.id/index.php/jerit/article/view/4>