

Strategies for Enhancing Digital and Media Literacies of Faculty of Education Lecturers: A Case of Two Universities in Abia State

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Abstract

The general objective of the study was to evolve strategies for enhancing digital and media literacy skills of lecturers in Faculties of education in two universities, Abia State University (ABSU) and Michael Okpara University of Agriculture Umudike (MOUUAU). Specifically, the study determined; digital and media literacy skills needed by lecturers in Faculties of education, and strategies through which education lecturers could imbibe needed digital and media skills. Survey design was used. Population was 177 lecturers from two Faculties of education in the two universities. Questionnaire was used for data collection. Data were analyzed using mean, standard deviations, and t-test at .05 level of significance. Findings reveal 13 digital skills required by the lecturers. These include creating and managing learning management systems ($\bar{X} = 4.41$), online classroom facilitation and digital communication tools ($\bar{X} = 4.28$), and others. Also, seven media literacy skills were identified, including, integrating media into curricula ($\bar{X} = 4.51$), evaluating online sources ($\bar{X} = 4.02$), and adhering to ethical media use ($\bar{X} = 4.02$) and others. Other findings are seven strategies for enhancing digital and media literacy skills of lecturers, including Faculty digital and media literacy development programs ($\bar{X} = 4.51$), digital tool integration into curriculum ($\bar{X} = 4.32$), among others. The study recommends structured training initiatives and workshops as well as mentor-mentee collaborations to enhance lecturers digital and media competencies and adaptability.

Keywords: Digital, Literacy, Media, Lecturers, Education, Faculty, Strategies, Skills

Introduction

Digital literacy involves the ability to use, evaluate, and communicate information through digital technologies, requiring technical skills, critical thinking, and ethical awareness (Ng, 2021). For lecturers, digital literacy encompasses proficiency in

educational technologies such as Learning Management Systems (LMS), Artificial Intelligence (AI) tools, multimedia, online assessments, and data analytics (OECD, 2021). It also entails pedagogical integration of digital tools such as blended learning and gamification; and awareness

of digital ethics, security, and privacy to ensure safe online learning environments (Redecker, 2017). Mardiana (2024) observed that digital tool proficiency enhances teaching, learning, and research.

Media literacy is the ability to access, analyze, evaluate, and create media content responsibly (Hobbs, 2022). This extends to digital storytelling, blogs, and social media, Hobbs noted. Lecturers require critical media analysis to identify bias and misinformation (Wuyckens et al., 2022). They need to integrate media into teaching, including responsible media consumption and content creation (Patel & Singh, 2020); and multimedia engagement by utilizing videos, podcasts, and digital storytelling (Pinto et al., 2022).

In Nigeria, the rapid digital transformation in the education sector has exposed a significant gap in the digital and media literacy skills of university lecturers, particularly those in Faculties of Education who are responsible for training future teachers (Tella & Adeyinka, 2021). With the growing reliance on digital platforms for teaching, research, and communication, lecturers in Nigerian higher institutions like Michael Okpara University of Agriculture, Umudike (MOUAAU), and Abia State University, Uturu (ABSU), are increasingly expected to possess digital and media competencies that go beyond basic Information Communication Technology (ICT) skills (Okonkwo & Ikegwu, 2020). However, many of these lecturers still struggle with integrating digital tools into their pedagogy and navigating the complexities of media literacy, especially in evaluating online information and responsibly creating digital content (Okafor & Adeyemi, 2021; Mardiana, 2024). Yilmaz

and Demir (2022) indicated that many educators lack appropriate awareness of digital research collaboration tools. This deficiency affects not only teaching effectiveness but also the ability of lecturers to guide students in developing critical media skills needed in a technology-driven society (Akhtar & Nadeem, 2021; Oliveira & Souza, 2024).

Researchers have highlighted various digital and media literacy skills needed by lecturers. One of the skills is the ability to create and manage online courses, assignments, and assessments. Learning Management System (LMS) platforms like Moodle, Blackboard, and Google Classroom are essential for online and blended learning (Mardiana, 2024). Similarly, effective management of virtual classrooms, including facilitating discussions and engaging students remotely are pivotal in contemporary education (Thompson & Davies, 2020; Oliveira & Souza, 2024). Lecturers also need digital competence in using educational software (Brown & Chen, 2022) as well as videos, podcasts, infographics, and digital scholarly communication like ResearchGate, Google Scholar, ORCID (Patel & Singh, 2020; Mohammed, 2022).

Proposed approaches to enhance digital and media literacies include: continuous training programs and hands-on workshops (Oliveira & Souza, 2024; Mohammed, 2022; Anisimova, 2020). Patel and Singh (2020) noted that university lecturers in India who participated in hands-on workshops demonstrated a higher adoption rate of digital and media literacy skills than those who only attended theoretical sessions. Another approach is integrating digital literacy into

curricula (Culver & Redmond, 2019; Patel & Singh, 2020; Hobbs 2022), and encouraging peer learning (Federal Ministry of Education, 2019).

Research has examined the relationship between digital literacy and teaching effectiveness. Patel and Singh (2020), in India reported that urban lecturers demonstrate greater proficiency in media literacy, enhancing their ability to integrate diverse media forms such as videos, podcasts, and simulations into teaching. In South Korea, Kim and Lee (2023) noted that digital literacy training improves lecturers' teaching performance, confidence, and technological integration. In Nigeria, Okafor and Adeyemi (2021) assessed lecturers' digital skills and reported competency gaps, underscoring the need for targeted professional development. In Canada Brown and Chen (2022) found that digital literacy strongly correlates with improved teaching and research productivity.

The reviewed literature underscores the necessity of digital and media literacy for university lecturers. Given their role in shaping future educators, it is imperative to assess and develop these competencies systematically. This study was therefore designed to bridge this gap by assessing the digital and media literacy needs of education lecturers in the two selected universities, as well as the strategies for imbibing these skills.

Objectives of the Study

The general objective of the study was to evolve strategies for enhancing digital and media literacy skills of lecturers in Faculties of education in two universities in Abia state of Nigeria. Specifically, the study determined;

1. digital literacy skills needed by lecturers in Faculties of Education of the two universities
2. media literacy skills needed by lecturers in Faculties of Education of the two universities.
3. strategies through which Education lecturers could imbibe needed digital and media skills

Research questions

- (1) What are the digital literacy skills needed by lecturers in Faculties of Education of the two universities?
- (2) What are the media literacy skills needed by lecturers in Faculties of Education of the two universities?
- (3) What are the strategies through which Faculties of Education lecturers could imbibe digital and media literacy skills?

Hypotheses

1. There is no significant difference between the mean rating of ABSU and MOUAU lecturers on the digital literacy skills needed by lecturers in the Faculties of Education
2. There is no significant difference between the mean rating of ABSU and MOUAU lecturers on the media literacy skills needed by lecturers in Faculties of Education
3. There is no significant difference between the mean rating of ABSU and MOUAU lecturers on the strategies through which Faculties of Education lecturers could imbibe digital and media literacy skills

Methodology

Design of study: The study adopted descriptive survey design.

Area of Study: The study was carried out in Abia State of Nigeria. Abia State University, Uturu (ABSU) and Michael Okpara University of Agriculture, Umudike (MOUUAU), were used for the study. The two universities were chosen because of rapid digital transformation in the education sector in Abia state as evidenced by the establishment of Information and Communication Technology (ICT) and Artificial Intelligence (AI) centers in the universities. Abia state university is owned by Abia state government whereas MOUUAU is owned by Federal government of Nigeria. Both Universities have Faculties of Education and categories of lecturers (male and female) with post-graduate qualifications in Education.

Population for study: The population of the study includes 177 lecturers, 54 and 123 in the nominal rolls of Faculties of Education of ABSU and MOUUAU respectively as at the year 2023. No sampling was done due to the manageable size of the population. Hence all the lecturers in the Faculties of Education of the two institutions were given opportunity to participate in the study.

Instrument for Data Collection: Instrument for data collection was questionnaire. It was developed based on extensive review and based on objectives

of the study. It had a 5- point scale of Very High Extent-VHE (5), High Extent -HE (4), Moderate Extent- ME (3), Low Extent -LE (2), Very Low Extent -VLE (1). The instrument was made up of three subsections dealing with digital skills, media skills and strategies for imbibing digital and media skills. It was validated by five University Computer Science Education experts. The instrument was trial -tested on 20 lecturers and a reliability index of $r = .79$, was established using Cronbach Alpha method

Data Collection Method: A total of 177 copies (52 and 123 to ABSU and MOUUAU, respectively) of the questionnaire were distributed to respondents by hand with the help of four trained research assistants. Only 120 copies were properly filled and retrieved, 40 from ABSU and 76 from MOUUAU. This yielded a return rate of 68 percent.

Data Analysis Techniques: Data collected were analyzed using frequency counts, mean and standard deviation, and real limit of numbers. Real limit of numbers was used to interpret responses as follows: 4.5 – 5.00 VHE, 3.50 – 4.49 HE, 2.5 – 3.49 ME 1.50 – 2.49 LE, 1.00 – 1.49 VLE. Hypotheses were tested using t-test at .05 level of significance

Results

Table 1: Mean Responses and Standard Deviation of Digital literacy skills needed by lecturers in Faculties of Education

S/N	Digital Literacy Skills	$\bar{X}_1$	SD ₁	$\bar{X}_2$	SD ₂	$\bar{X}_g$	t	Sig	R
	Ability to:								
1	create Learning Management Systems (LMS): online courses, assignments, and assessments	4.39	.675	4.43	.625	4.41	.298	.766	HE

Table 1 continues

2	manage Learning Management Systems (LMS): online courses, assignments, and assessments	4.39	.675	4.43	.625	4.41	.298	.766	HE
3	create multimedia content (videos, podcasts, and info graphics)	2.62	.832	2.55	.848	2.58	.460	.647	ME
4	facilitate online discussions, manage virtual classrooms, and engage students remotely	4.26	.776	4.30	.823	4.28	.215	.830	HE
5	use online collaboration tools (Google Docs, Microsoft Teams).	3.61	.818	3.55	.951	3.52	.363	.717	HE
6	use cloud storage and sharing tools (Google Drive, Dropbox).	3.29	.861	3.20	.930	3.27	.506	.614	ME
7	use operating systems, software applications, and digital tools	3.89	1.078	4.07	1.021	3.96	.866	.388	HE
8	use email and instant messaging, tools.	4.54	.576	4.52	.590	4.53	.152	.879	VHE
9	organize video conference	3.95	1.057	3.86	1.025	4.53	.423	.673	VHE
10	collect, analyze, and interpret data using digital tools, (e.g. spreadsheets and statistical software).	3.95	1.057	3.86	1.025	3.91	.423	.673	HE
11	use digital tools for scholarly communication (e.g Research Gate, Google Scholar)	2.80	.994	2.75	1.037	2.78	.275	.784	ME
12	understand Open Educational Resources (OER) and maintain a professional online identity.	3.07	1.075	3.09	1.158	3.08	.120	.905	ME
13	manage online presence	3.07	1.075	3.09	1.158	3.08	.120	.905	ME

Note. $\bar{X}_1$ = Mean of ABSU Lecturers; SD_1 = Standard deviation of ABSU Lecturers; $\bar{X}_2$ = Mean of MOUAU Lecturers; SD_2 = Standard deviation of MOUAU Lecturers; $\bar{X}_g$ = **Grand mean**, R = Remark; HE = High Extent, ME = Moderate Extent; LE = Low Extent; VLE = Very Low Extent.

Table 1 shows varying levels of extent of necessity for different digital skills. Digital literacy skills include: Familiarity with use of email, instant messaging, and organizing video conference ($\bar{X}$ =4.53/VHE); creating and managing online courses, assignments and assessments through Learning management systems (LMS) usage ($\bar{X}$ =4.41/HE); Online classroom and discussion facilitation ($\bar{X}$ =4.28,

HE)Proficiency in operating systems, software, and digital tools ($\bar{X}$ = 3.96/HE), and Data collection, analysis, and interpretation ($\bar{X}$ =3.91/HE). Table 1 shows also that the significance of the t-value for all the 13 items. There is no significant difference in the mean response of ABSU and MOUAU lecturers on the digital skills needed by lecturers in faculties of education. Hence the null hypothesis 1 was not rejected.

Table 2: Mean Response and Standard Deviation of Media Literacy skills needed by Lecturers in Faculties of Education

S/ N	Media Literacy Skills	$\bar{X}_1$	SD ₁	$\bar{X}_2$	SD ₂	$\bar{X}_g$	t	Sig	R
	Ability to:								
1	evaluate credibility and reliability of media messages, (texts, images, and videos).	3.53	.840	3.45	.901	3.50	.439	.661	HE
2	identify Bias, misinformation, and disinformation in media messages.	3.38	.938	3.32	.883	3.36	.364	.716	ME
3	evaluate online sources for credibility, reliability, and validity.	4.03	.993	4.02	1.000	4.02	.019	.985	HE
4	identify media manipulation, (e.g. photo shopping and fake news).	3.08	1.093	3.07	1.129	3.08	.051	.959	ME
5	create and share digital media content (videos, podcasts and info graphics)	2.95	1.082	3.09	1.096	3.00	.697	.487	ME
6	protect online identity, (strong passwords, data privacy)	4.04	.944	4.16	.888	3.00	.683	.496	ME
7	avoid online harassment, including recognizing and reporting cyberbullying.	3.07	1.037	2.98	1.089	3.03	.442	.659	ME
8	adhere to ethical use of media content (e.g. copyright, fair use)	4.16	.939	4.23	.859	4.18	.402	.688	HE
9	integrate media literacy into the curriculum, (e.g. lesson planning).	4.49	.683	4.55	.589	4.51	.476	.635	VHE
10	stay current with media trends (e.g. AI-generated content, digital storytelling)	2.89	1.040	2.91	1.074	2.90	.072	.943	ME

Note, $\bar{X}$ =Mean Score; SD= Standard Deviation, R = Remark; VHE = Very High Extent; HE = High Extent; ME = Moderate Extent; LE = Low Extent; VLE = Very Low Extent.

Table 2 shows variations in the perceived importance of different media literacy skills. For instance, highly essential media literacy skills include ability to: integrate media literacy into curriculum ($\bar{X}$ = 4.51, VHE); adhere to ethical use of media

content ($\bar{X}$ = 4.18, HE). The Table shows moderately essential media literacy skills include, among others, identifying bias, misinformation, and disinformation ($\bar{X}$ = 3.36, ME); identify media manipulation ($\bar{X}$ = 3.08, ME).

Table 3: Mean Responses and Standard Deviation of Strategies for Enhancing Digital and Media Literacy among Lecturers

S/N	Strategies for Enhancing Digital and Media skills of Education Lecturers	$\bar{X}_1$	SD ₁	$\bar{X}_2$	SD ₂	$\bar{X}_g$	t	Sig	R
	Lecturers should:								
1	participate in workshops with hands-on practice on using digital tools for teaching.	4.17	.915	4.18	.971	4.17	.061	.952	HE
2	attend conferences and seminars on digital and media literacies.	3.54	1.148	3.50	1.191	3.53	.179	.858	HE
3	enroll in online courses and certification programs, such as those offered by Coursera, edX, and LinkedIn Learning	3.55	1.100	3.64	1.143	3.58	.396	.693	HE
4	participate in Faculty development programs offered by the university or college on digital and media literacies.	4.46	.738	4.57	.587	4.51	.827	.410	VHE
5	utilize online resources, such as YouTube tutorials, blogs, and podcasts, to learn about digital and media literacies.	3.09	1.112	2.95	1.056	3.04	.661	.510	ME
6	join social media groups and online communities, such as Twitter chats and Facebook groups, to connect with other educators and learn about best practices	2.68	1.257	2.75	1.260	2.71	.276	.783	ME
7	collaborate with colleagues who have expertise in digital and media literacies.	3.57	1.100	3.61	1.146	3.58	.226	.821	HE
8	integrate digital tools, such as learning management systems, online discussion forums, and multimedia resources, into courses.	4.32	.716	4.32	.708	4.32	.018	.986	HE

Note, $\bar{X}$ = Mean Score; SD = Standard Deviation, R = Remark; VHE = Very High Extent; HE = High Extent; ME = Moderate Extent; LE = Low Extent; VLE = Very Low Extent.

Table 3 presents strategies that could help university lecturers develop essential digital and media literacy skills. Perceived possible highly effective strategies include: participation in faculty development programs ($\bar{X}$ = 4.51, VHE), integration of

digital tools into courses ($\bar{X}$ = 4.32, HE), workshops with hands-on training ($\bar{X}$ = 4.17, HE). Other strategies are perceived as moderate effective ($\bar{X}$ = 3.58).

The Table also indicates no significant difference in the mean response of

lecturers from ABSU and MOUAU on the strategies for enhancing digital and media literacies of lecturers in faculties of education.

Discussion

The study emphasizes the paramount importance of digital communication skills among university lecturers, highlighting proficiency in emails, instant messaging, and video conferencing as essential for fostering collaboration and engagement in higher education. This finding aligns with previous research by Kim and Lee (2023) and Wilson and Martin (2023), which underscores the critical role of digital communication tools in academic settings. Additionally, the ability to create and manage online courses through Learning Management Systems (LMS) such as Moodle, Blackboard, and Google Classroom is identified as crucial for facilitating online and blended learning environments. Lecturers' adept at managing virtual classrooms can enhance student interaction, a point supported by studies from Thompson and Davies (2020) and Oliveira and Souza (2024). Digital competence in utilizing educational software is also deemed vital for effective content delivery. This reinforces findings by Brown and Chen (2022), who demonstrated a strong correlation between digital literacy and teaching effectiveness. Despite the growing importance of multimedia in education, lecturers rated this skill as only moderately essential, indicating a need for further training to promote multimedia integration in teaching, as suggested by Patel and Singh (2020). Similarly, lecturers reported moderate proficiency in digital scholarly communication tools like

Research Gate and Google Scholar. This reflects the findings of Yilmaz and Demir (2022), who noted a lack of awareness regarding digital research collaboration platforms.

Regarding media literacy, lecturers rated integrating media into curricula as the most essential skill. This will encourage both lecturers and students to strive for proficiency in the required skills. This supports the arguments of Patel and Singh (2020) and Hobbs (2022), who emphasize its role in enhancing students' critical thinking and media evaluation abilities. Ethical media use, including copyright laws and intellectual property rights, was also highly prioritized. This is consistent with Wilson and Martin (2023), who found that lecturers knowledgeable about copyright laws effectively guide students in responsible digital practices. Evaluating online sources to combat misinformation was another crucial skill, aligning with Wuyckens et al. (2022), who highlighted educators' role in ensuring students access credible information. Additionally, cyber security skills, including strong password management and data privacy, were noted as essential. Kim and Lee (2023) similarly reported that university lecturers in South Korea benefited significantly from cyber security training.

Furthermore, as regards to strategies for imbibing needed digital and media literacy skills, participation in faculty development programs was rated as the most effective strategy for improving digital and media literacies. Structured faculty training significantly enhances digital competency and confidence (Mohammed, 2022; Oliveira & Souza, 2024). Encouraging lecturers to integrate

LMS, online discussion forums, and multimedia resources into teaching was also highly rated. Studies (Wilson & Martin, 2023; Brown & Chen, 2022) suggest that embedding digital tools into daily teaching fosters proficiency. Hands-on workshops were found to be more effective than theoretical sessions, as Patel & Singh (2020) demonstrated a higher adoption rate of digital skills among lecturers who attended practical workshops.

Conclusion

Lecturers from faculties of education in the two universities equally agree that education lecturers urgently need enhanced digital and media literacy skills, particularly in managing LMS, digital communication, and media integration. While core digital skills are moderately developed, gaps remain in areas like multimedia content creation and media trend awareness. Hands-on training, faculty development programs, and mentor-mentee collaborations are the most effective strategies for improvement. Institutional support and structured professional development are essential to bridge existing skill gaps and equip lecturers for technology-driven teaching and learning

Recommendations: The following recommendations are made based on the findings:

1. Faculties of education should provide tailored training sessions that address specific digital and media literacies needs and challenges faced by lecturers.
2. Education faculties should promote collaborative initiatives where lecturers can share best practices and resources to

improve digital and media literacies and innovative teaching methods.

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