

BUSINESS EDUCATION LECTURERS' COMPETENCES AND THE USE OF E-LEARNING TECHNOLOGIES: EVIDENCE FROM COLLEGES OF EDUCATION IN SOUTH-WEST, NIGERIA

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Abstract

This study assessed the interplay between lecturers' competences and the use of e-learning technologies in Business Education in Colleges of Education in South-West, Nigeria. Two research questions were raised and one null hypothesis was tested at a 0.05 level of significance. The study adopted a quantitative survey research design. The population comprised of 571 participants. A 13-item questionnaire designed on four-point rating scale was used as the instrument for data collection. The instrument was validated by three experts. The reliability of the instrument was established using a Cronbach's alpha, which yielded a coefficient value of 0.93. The research questions were analyzed using mean and standard deviation and the hypothesis was tested at a 0.05 level of significance using F-test. The hypothesis revealed that there is a significant relationship between lecturers' competences and use of e-learning technologies in Business Education in Colleges of Education, South-West, Nigeria. The authors, therefore, recommends among others that there should be a continuous training and capacity building be provided for lecturers in the use of digital tools for instruction.

Keywords: *Business Education, Colleges of Education, E-Learning Technologies, Lecturers Competences.*

Introduction

Students' academic achievement in business education constitutes one of the critical indicators of the success of any technological innovation or initiative within colleges of education and, by extension, in any institution of learning. In the context of formal education, academic achievement is often operationalized through indicators such as test scores, grade point averages, completion rates, and mastery of specific competencies. However, business education students' academic achievement and attitudes towards the use of e-learning tools are suggested to have had an influence on their learning styles (Adebayo & Balogun, 2019). As Information and Communication Technology (ICT) tools are being increasingly used in education, the need to monitor the impact and its use on business education students' academic achievement is ever more needed. This is because it is quite important to show the relationships between the use of technology in teaching and learning situation and students'

academic achievement.

To support the foregoing discussions, business education is viewed as a programme of study that prepares students for the world of work by exposing them to theoretical and practical knowledge in business practice and pedagogy. The programme has a slogan, education ‘for’ business and education ‘about’ business, which indicates that it covers the practical aspects of business knowledge and exposure of ways of teaching business (Bupo & Ibeneme, 2020). Due to the robust nature of the programme, some colleges of education divide this programme of study into specialized options like accountancy, commerce and cooperatives/marketing, management and office management and technology (formerly known as secretarial studies) and entrepreneurship education. These options usually run general courses in the first level of study after which students focus on specialized subject areas from their second level (Bupo & Ibeneme, 2020).

However, the training of business education students in colleges of education is guided by the objectives stipulated in the National Commission for Colleges of Education (NCCE) minimum standards of 2012. These objectives include: (1) producing well-qualified and competent Nigeria Certificate in Education (NCE) graduates capable of teaching business subjects in secondary schools and related institutions; (2) producing NCE business teachers capable of transmitting the vocational aspects of business education to society; (3) preparing NCE business teachers to contribute to the national drive for vocational development from primary through secondary levels; (4) equipping students with the competencies necessary to pursue post-NCE degree programmes in business education; and (5) enabling graduates to acquire skills for both paid employment and self-reliance. The overarching objectives or aims were to produce graduates who are academically sound, pedagogically competent, and vocationally skilled to meet the needs of a modern economy.

Despite these lofty objectives, there is evidence that the intended outcomes are not being fully realized due to a variety of challenges that impede students’ learning experiences (Ganiyu, 2019). The college of education system forms one of the three pillars of tertiary education in Nigeria, alongside universities and polytechnics, with the primary mandate of producing qualified teachers who will be awarded the NCE the minimum teaching qualification in the country. This certification qualifies holders to teach in junior secondary schools and technical colleges, and the programme typically spans a three-year duration. The NCCE, as the regulatory body, is tasked with overseeing teacher education and ensuring the effective production of qualified educators (Ganiyu, 2019).

In recognition of the centrality of digital competence in contemporary pedagogy, the NCCE incorporated basic ICT skills into the national minimum standards for teacher education at the NCE level (Ganiyu, 2019). Consequently, in 2010, the Commission launched a revised curriculum mandating ICT compliance for all students in colleges of education. Furthermore, the NCCE has acknowledged the pivotal role of lecturers in fostering ICT competence among students. Since the 2004/2005 academic session, ICT has been a compulsory component of lecturer professional practice in Nigerian colleges of education, with an explicit requirement for lecturers to integrate ICT tools and resources into classroom activities (Ganiyu, 2019). This policy underscores the belief that technological integration is not merely an optional enhancement but a fundamental necessity for improving pedagogical quality, student engagement, and ultimately, academic achievement in business education.

Succinctly, the fast pace of development in ICT has led to changes that affect all aspects of the world and increasingly becoming important in our daily lives. The changes brought by the ICT have led to the transformation that brought supports to the human day-to-day activities which has had an impact on the real human cognition that affects the way we think, act and in some cases altered the way we react. No wonder stakeholders in the educational sector continue to advocate that societies needs to place premium on skills possessed by individuals rather than certificates.

Impressively, the increasing use of smartphones, computers, and other internet-enabled devices has indeed transformed the world into a global village, breaking down geographical and cultural

barriers. This technological shift is characterized by the widespread adoption of digital technologies and their integration into daily life, impacting communication, information access, and even social interactions. This innovation led to the introduction of e-learning into the educational system (Crossdale & Nwosu, 2022).

E-learning technologies provide learners with significant autonomy over their educational experiences. Unlike traditional modes of instruction, e-learning allows students to control the sequence of learning, pace, content coverage, time allocation, and often the media through which instruction is delivered. This flexibility enables learners to tailor their educational experiences to meet personal goals and learning objectives. Beyond learner autonomy, e-learning technologies also facilitate the management of access to instructional resources, promote consensus on technical standardization, and create frameworks for the peer review of educational content (Oladeji & Nuhu, 2021).

The use of e-learning technologies necessitates the use of ICT facilities as instructional mode for teaching and learning processes. Regrettably, using this method for teaching of business education programmes in colleges of education in Nigeria seems to have been influenced by some factors. To this end, the use of e-learning in colleges of education is influenced by a number of factors, such as organizational, socio-cultural, intra-and-interpersonal factors, to mention a few. Furthermore, Thomas and Amaechi (2021) observed that some lecturers often fail to build on technology's instructional potentials due to barriers such as institutional and administrative support, training and experience, attitudinal or personality factors and resources. In same vein, other researchers who investigated determinants of e-learning have identified the factors hindering the effective use of e-learning technologies in higher institutions of learning to include among others: inadequate ICTs and e-learning infrastructure; individual characteristics such as the lack of interest and commitment amongst the teaching staff to use e-learning in teaching and learning session (Thomas & Amaechi, 2021; Hassan et al., 2021). These authors further explained that the individual characteristic are inherent and they are what motivate one to either use or not use a particular technology.

In addition to the technological and pedagogical innovations shaping contemporary education, lecturers remain central to students' academic achievement. Their influence is profound, as they are not merely facilitators of knowledge but also the critical agents who interpret and implement educational policies within the classroom context. The lecturer assumes the responsibility of translating abstract educational principles into concrete practices through instructional design, classroom interaction, and student engagement. This statement therefore, connotes that, for a lecturer to be up and doing in his/her profession, he/she must possess the quality of wealth of knowledge and skills in his/her field. To this end, lecturer competences can therefore be described as the combination of knowledge, skills and abilities required for performing successful teaching and learning processes (Pandey & Kumar, 2020). It is regarded as an intellectual potency that exists in lecturers' mind and which is realized in doing his/her job according to professional standards (Pandey & Kumar, 2020).

In essence, competence may be described as the individual expression of what one is capable of doing in practice (Tolorunleke, Haruna & Tolorunleke, 2023). For instance, when lecturers value their interpersonal skills and maintain confidence in their ability to pursue professional goals to completion, their competence in this regard is more likely to result in positive teaching and learning outcomes. The same principle applies to the use of e-learning technologies in Colleges of Education. Lecturers' competences particularly in ICT integration are key determinants of how effectively these technologies are deployed for instructional and research purposes. However, studies indicate that demographic and professional factors such as gender and years of teaching experience significantly affect the rate at which lecturers adopt ICT tools for teaching (Tolorunleke et al., 2023). Male and female lecturers, for example, may demonstrate different levels of confidence in adopting new technologies, while years of teaching experience may influence openness to technological innovation, with younger lecturers often displaying greater willingness to experiment with digital platforms. The integration of technology resources into teaching and learning can improve interactions and performances to both lecturers and

students and also to provide efficient benefits in teaching and learning (Tolorunleke & Olonikawu, 2021).

Statement of the Problem

The ability to effectively manage learning time is an important element of electronic learner's success. In this digital era, business education lecturers in colleges of education are supposed to possess digital technology skills to enable them deliver instruction through the numerous ICT devices integrated in the classroom. This is because, technology lies at the core of the delivery of information to learners during teaching and learning processes. Although e-learning has become a dominant mode of instructional delivery in many parts of the world, its adoption in Nigerian Colleges of Education is still at a very minimal level. Only a handful of colleges have been able to carry out their academic activities fully through e-learning platforms. For most institutions, the reality of e-learning remains distant, largely due to weak technological infrastructure, limited resources, and poor institutional readiness. While some progress has been made in certain colleges that are attempting to embrace this new mode of teaching and learning, the majority still depend heavily on conventional classroom practices. This makes the integration of e-learning more of an aspiration than a reality. In fact, in some colleges, efforts to implement e-learning are often hindered by the challenges of inadequate funding, poor internet connectivity, unstable electricity supply, and insufficient training for both staff and students.

Another critical issue is that even where e-learning facilities exist, they are often underutilized due to lack of competence and confidence among lecturers and students. Many lecturers still prefer the traditional "chalk-and-talk" method of instruction, while students struggle with the digital literacy skills required to take full advantage of online learning platforms. As a result, the full benefits of e-learning such as flexible access to learning resources, collaborative learning opportunities, and improved student performance are yet to be realized in most Colleges of Education. This situation calls for a rethinking of how e-learning can be adopted and sustained within Colleges of Education. This missing link therefore, informed the researchers' quest to investigate the use of e-learning technologies and lecturers' competence as determinants of students' academic achievement in Business Education in College of Education, South-West, Nigeria.

Purpose of the Study

The aim of this study was to investigate the levels of e-learning technologies use and lecturers' competence in Business Education in Colleges of Education, South-West, Nigeria. Specifically, the objectives of the study were to examine:

1. the extent to which e-learning resources are available for teaching and learning of Business Education programme in Colleges of Education, South-West, Nigeria.
2. the level of lecturers' competence in the use of e-learning technologies in Business Education programme in Colleges of Education, South-West, Nigeria.

Research Questions

Based on the aims of this study, the following research questions guided the study:

Research Question 1: What is the extent to which e-learning resources are available for teaching and learning of Business Education programme in Colleges of Education, South-West, Nigeria?

Research Question 2: What is the level of lecturers' competence in the use of e-learning technologies in Business Education programme in Colleges of Education, South-West, Nigeria?

Research Hypothesis

Research Hypothesis: There is no significant relationship between lecturers' competences and the use of e-learning technologies in Business Education in Colleges of Education, South-West, Nigeria.

Method

Research Design

This study employed a quantitative survey design to investigate lecturers' competences and the use of e-learning technologies in Business Education in Colleges of Education, South-West, Nigeria. The design was appropriate because it provides opportunity for the authors to explore the levels of lecturers' competences and the use of e-learning technologies and the interplay between and among the variables.

Population and Sampling Procedure

The population of this study consist of participants from Business Education in Colleges of Education across South-West Nigeria. However, the study employed a purposive sampling technique to select 571 respondents who willingly participated in the study.

Research Instrument

Data were collected using a researcher-developed structured questionnaire segmented into four sections. The instrument focused on the extent to which e-learning resources are available for teaching and learning of Business Education programme in Colleges of Education, South-West, Nigeria. It also focused on the level of lecturers' competences in the use of e-learning technologies in Business Education programme in Colleges of Education, South-West, Nigeria. A 13-item questionnaire designed on four-point rating scale was used as the instrument for data collection.

Validation and Reliability of Instrument

Face and content validation of the instrument were established by three experts in Measurement and Evaluation and Business Education, while pilot testing was carried out to refine item clarity. To ensure the instrument's reliability, a series of internal consistency tests were conducted. Cronbach's alpha yielded a coefficient of 0.927, indicating excellent reliability suggesting that the instrument was consistent, stable, and appropriate for capturing the key constructs in the study.

Data Collection and Analysis

Descriptive statistics were conducted to examine the use of e-learning technologies among Business Education lecturers in Colleges of Education in South-West Nigeria. Also, the hypothesis was tested using independent sample F-test at a 0.05 level of significance. Meanwhile, if the null hypothesis F-value is less than p-value at the significance level of a 0.05, it will be rejected, but otherwise accepted.

Research Question 1: What is the extent to which e-learning resources are available for teaching and learning of Business Education programme in Colleges of Education, South-West, Nigeria?

Table 1: The Extent to Which E-Learning Resources Are Available for Teaching and Learning of Business Education Programme in Colleges of Education, South-West, Nigeria.

Items	M	SD	SS	SE	KS	SE
Laptop	2.533	1.127	.061	.309	-1.384	.608
Desktop	2.250	1.159	.435	.309	-1.262	.608
Public Address System	2.783	0.958	-.143	.309	-1.036	.608
Internet Facilities	2.433	1.015	.137	.309	-1.046	.608
Digital Library	2.417	1.030	.232	.309	-1.058	.608
Multimedia Projector	2.550	0.999	.175	.309	-.615	.608
Magnetic Board	2.500	0.983	.055	.309	-.973	.608
Interactive White Board	2.600	1.045	.140	.309	-1.249	.608
Smart Phones	2.750	0.968	-.167	.309	-.989	.608

Note. M=Mean, SD=Standard Deviation, SS=Skewness Statistic, SE=Standard Error, KS=Kurtosis Statistic.

Table 1 provide insights on the extent to which e-learning resources are available for teaching and learning of Business Education programme in Colleges of Education, South-West, Nigeria. The mean scores for the technologies assessed indicate a moderate extent of availability across the institutions. Notably, the Public Address System (M = 2.78) and Smart Phones (M = 2.75) recorded the highest mean scores, suggesting that these are the most accessible or frequently available tools. Conversely, Desktop computers (M = 2.25) and Digital Libraries (M = 2.42) were the least rated, highlighting potential limitations in access to foundational digital infrastructure for teaching and learning. The standard deviation values, ranging from 0.96 to 1.15, indicate a moderate extent of variability in responses, reflecting differing experiences of respondents, based on institutional capacity and exposure. Furthermore, the skewness and kurtosis values suggest that the distribution of responses for all variables approximates normality. Skewness values fall within the acceptable range of ± 1 , indicating a fairly symmetrical distribution of responses across all technologies. Similarly, the negative kurtosis values (platykurtic) show that the distributions are relatively flat, meaning responses are more spread out rather than clustered around the mean. These patterns are important because they support the suitability of applying parametric statistical tests for further analysis. All in all, the findings highlight the need to improve access to key digital teaching tools, particularly desktops and digital libraries, in order to enhance the integration of e-learning in the delivery of Business Education programme.

Research Question 2: What is the level of lecturers' competences in the use of e-learning technologies in Business Education programme in Colleges of Education, South-West, Nigeria?

Table 2: The Level of Lecturers' Competence in the Use of E-Learning Technologies in Business Education Programme in Colleges of Education, South-West, Nigeria

S/N	Items	SA	A	D	SD	M	SD
1	I always use e-learning tools for teaching-learning and research based on need.	21 (35.0%)	17 (28.3%)	18 (30.0%)	4 (6.7%)	2.53	1.13
2	I am still planning on using e-learning tools for discovery on a regular basis.	16 (26.7%)	12 (20.0%)	28 (46.7%)	4 (6.7%)	2.25	1.16
3	I would still do my best to integrate ICT for instruction and researches.	13 (21.7%)	12 (20.0%)	20 (33.3%)	15 (25.0%)	2.78	0.96
4	I will advocate for the use of ICT in education due to their relevance and	13 (21.7%)	17 (28.3%)	22 (36.7%)	8 (13.3%)	2.43	1.01

	convenience.						
5	I enjoy the use of ICT for teaching-learning activities.	16 (26.7%)	19 (31.7%)	10 (16.7%)	15 (25.0%)	2.42	1.03
6	I use e-mail to send assignments and receive information from students.	15 (25.0%)	17 (28.3%)	17 (28.3%)	11 (18.3%)	2.55	1.00
7	I utilize video/teleconferencing for group assignments or projects.	11 (18.3%)	15 (25.0%)	23 (38.3%)	11 (18.3%)	2.50	0.98
8	I employ the compact disk to submit assignments in soft copy.	9 (15.0%)	15 (25.0%)	24 (40.0%)	12 (20.0%)	2.60	1.04
9	I always use Zoom technology for teaching and learning.	15 (25.0%)	14 (23.3%)	16 (26.7%)	15 (25.0%)	2.75	0.97
10	I use computer simulation to learn abstract ideas.	17 (28.3%)	16 (26.7%)	18 (30.0%)	9 (15.0%)	2.75	0.97
Mean Ratings		14.7 (24.5%)	15.4 (25.7%)	21.6 (36.0%)	10.4 (17.3%)	2.56	1.04

Note. SA=Strongly Agree, A=Agree, D=Disagree, SD=Strongly Disagree, M=Mean, SD=Standard Deviation.

Table 2 reveal a moderate level of lecturers' competence in the use of e-learning technologies in Business Education programme in Colleges of Education, South-West, Nigeria. While there is evidence of adoption, the overall mean score of 2.56 (SD = 1.04) on a 4-point scale indicates that the use of these tools is not yet fully embedded across all instructional practices. Specifically, a notable 63.3% of lecturers (21 strongly agree; 17 agree) affirmed that they use e-learning tools based on need, with a corresponding mean of 2.53 (SD = 1.13). This suggests a moderately positive disposition toward integrating technology when necessary. However, enthusiasm appears to wane when asked about future intentions: only 46.7% (16 strongly agree; 12 agree) indicated they are planning regular use of e-learning tools, while a significant proportion (56.7%) disagreed or strongly disagreed. This item received a relatively low mean score of 2.25 (SD = 1.16), reflecting hesitancy in sustained planning. The willingness to integrate ICT for instruction and research also varied, with 41.7% agreeing and 58.3% disagreeing with or undecided. The mean for this item stood at 2.78 (SD = 0.96)—the highest among the ten items indicating a stronger-than-average recognition of ICT's instructional value despite inconsistent behavior. Advocacy for ICT use showed similar ambivalence, with a mean of 2.43 (SD = 1.01), while enjoyment of ICT in teaching-learning activities was slightly lower at 2.42 (SD = 1.03). Furthermore, Lecturers reported moderate use of specific tools such as email (M = 2.55, SD = 1.00) and video/teleconferencing (M = 2.50, SD = 0.98), although disagreement rates remained high (over 38%). The use of compact disks for submitting assignments showed the highest disagreement (40.0%), though it maintained a mid-range mean score of 2.60 (SD = 1.04). Meanwhile, Zoom technology and computer simulation both scored relatively higher (M = 2.75, SD = 0.97 for each), suggesting that newer, more flexible platforms are more readily embraced for teaching and conceptual learning. This finding suggests that on average, lecturers tended to agree more than disagree across the items, with mean agreement levels at 24.5% strongly agree and 25.7% agree, compared to 36.0% disagree and 17.3% strongly disagree. Despite these moderate scores, the variability captured in standard deviations around 1.0 for most items highlights inconsistencies in usage patterns among the academic staff. From the finding, it can be deduced that while there is moderate and growing engagement with ICT tools among lecturers, the findings suggest a need for improved training, stronger institutional ICT strategies, and continued investment to raise usage levels from occasional or conditional to consistent and transformative teaching practices.

Hypothesis Testing

Research Hypothesis: There is no significant relationship between lecturers' competences and the use of learning technologies in Business Education in Colleges of Education, South-West, Nigeria.

Table 3: Linear Regression on the Relationship Between Lecturers' Competences and the Use of E-Learning Technologies in Business Education in Colleges of Education, South-West, Nigeria.

Model	SS	df	MS	F	Sig.
Regression	14022.251	2	7011.126	22.847	.000 ^b
Residual	174606.901	569	306.866		
Total	188629.152	571			

Note. SS=Sum of Squares, df=Degree of Freedom, MS=Mean Squares, Sig.=Significant.

a. Dependent Variable: Use of E-Learning Technologies.

b. Predictors: (Constant), Lecturer's Competences Technologies, Use of e-learning Technologies.

Table 3 presents the Linear Regression for a model examining extent of relations between e-learning technologies and lecturers' competence in Business Education in Colleges of Education, South-West, Nigeria. The result indicates that the F-statistic is 22.847 with 2 degrees of freedom for the regression (df) and 569 degrees of freedom for the residual (df) ($F_{2, 569} = 22.847$). The corresponding significance value (Sig.) is .000 ($p < 0.001$). Since this p-value (0.000) is less than the conventional alpha level of 0.05, it indicates that the regression model is statistically significant. Therefore, overall, the regression model statistically and significantly predicts students' academic achievement in Business Education programmes in Colleges of Education, Southwest, Nigeria. Since the significance level is less than 5%, the hypothesis was rejected and the study concludes that there is a significant combined relationship between e-learning technologies and lecturers' competence in Business Education in Colleges of Education, South-West, Nigeria.

Discussion

The study investigated the extent to which e-learning resources are available for teaching and learning of Business Education programme in Colleges of Education, Southwest, Nigeria. The level of lecturers' competence in the use of e-learning technologies in Business Education programme in Colleges of Education, South-West, Nigeria. The findings from the hypothesis revealed that there is a significant combined relationship between e-learning technologies and lecturers' competence in Business Education in Colleges of Education, South-West, Nigeria. This finding could be explained in twofold, first, e-learning technologies are not effective in isolation; their impact is unlocked by a skilled educator. A competent lecturer does not just present information using a projector; they select the appropriate technology to make abstract business concepts tangible. For instance, they might use simulation software to teach market analysis, a collaborative platform for a group business plan, or online databases for real-world case study research. This skillful integration transforms passive listening into active, engaged learning. The finding corroborates Ganiyu (2019) who found that technology provides the potential for a dynamic educational experience, while the lecturer's competence is the catalyst that turns that potential into measurable academic achievement for students.

Second, the combination directly addresses core educational challenges like student engagement and personalized learning. A competent lecturer can use e-learning tools to move beyond a one-size-fits-all approach. They can provide remedial resources for students who are struggling and

advanced materials for those ahead, all within the same learning management system. Furthermore, by using interactive tools like polls, digital whiteboards, or video conferencing with industry experts, they can make lessons more engaging and relevant. The finding is in line with the study of Crossdale and Nwosu (2022) who opined that the dual benefit of meeting individual student needs while increasing overall engagement creates a more effective learning environment, which naturally leads to improved student performance and academic success.

The finding that there is a significant combined influence of the use of e-learning technologies and lecturers' competence on students' academic achievement in Business Education is a cornerstone of modern pedagogical research. This result suggests that neither technology nor teacher skill alone is sufficient to guarantee success; rather, it is the powerful synergy between the two that creates a truly effective learning environment. This conclusion is strongly supported and illuminated by the provided empirical literature. This study is also in support of the findings of Oladeji & Nuhu (2021) who assert that the critical role of the lecturer as the first pillar of this combined influence, is extensively detailed in the study on the determinants of e-learning adoption in Rivers State. This research found a high positive relationship between instructors' "behavioral intentions, performance expectancy, and effort expectancy" and their adoption of e-learning. This means that a lecturer's belief in the technology's usefulness and their confidence in their ability to use it are primary drivers of its implementation. Therefore, a "competent" lecturer is not just someone who knows the subject matter, but one who is also motivated, confident, and intentional about integrating technology. Without this internal drive and competence from the lecturer, even the best e-learning resources would likely remain underutilized, and their potential impact on student achievement would never be realized. This directly explains why lecturer competence is a significant variable; it is the gatekeeper to the effective use of the tools.

Conclusion

The findings of this study confirm the critical role of digital literacy and competent instructional delivery in shaping teaching and learning in Business Education in Colleges of Education in South-West, Nigeria. The significant influence of lecturers' competences and the use of e-learning technologies highlights the importance of integrating both factors into institutional teaching strategies. While the use of e-learning tools positively correlates with academic achievement, insufficient lecturer competence may counteract these benefits, underlining the need for professional development.

Recommendations

Based on findings from this study, the following recommendations were suggested.

1. There should be a continuous training and capacity building be provided for lecturers in the use of digital tools for instruction.
2. Workshops should focus on practical integration of e-learning platforms with Business Education content to improve teaching quality and student engagement.
3. Institutions should endeavor to adopt blended learning methods that combine traditional classroom techniques with online platforms. This will help align lecturer competence with digital teaching strategies and maximize learning outcomes.
4. Government and institutional bodies should endeavor to implement policies that promote the adoption of e-learning technologies. This includes funding for digital infrastructure, capacity building, and curriculum development geared toward technology-enhanced learning.

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