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ASSESSING UNIVERSITY LECTURERS' READINESS FOR DIGITAL PEDAGOGY: A STUDY AT THE UNIVERSITY OF YAOUNDE I

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Abstract

The rapidly evolving digital technological landscape is increasingly influencing the pedagogical processes in higher education. Despite ongoing discussions among colleagues in in academic forums, seminars, conferences and symposia, concerns are raised about lecturers' readiness for the adoption and use of emerging digital technologies into the teaching and learning process. This study assesses lecturers' readiness for digital pedagogy implementation in at the University of Yaounde I. Additionally, it examines the relative influence of competence, motivation and technological readiness on the effective adoption of digital pedagogy. A descriptive survey design was adopted, collecting quantitative data from a sample of 147 lecturers across four faculties using a structured 4-point Likert scale questionnaire. Data were analyzed using descriptive statistics and simple linear regression models based on Aydin and Tasci's e-learning readiness assessment framework. The descriptive results revealed that lecturers possessed above-threshold readiness in competence (M = 3.54, SD = 0.48) and motivation (M = 3.59, SD = 0.42), but fell below the readiness threshold in technological resources (M = 2.55, SD = 0.51). Inferential analysis indicated that competence readiness, F(1, 145) = 1.76, p = .187, R^2 = .012, and motivational readiness, F(1, 145) = 0.91, p = .342, R^2 = .006, were not statistically significant predictors of overall digital pedagogy readiness. In contrast, technological readiness was a strong and statistically significant predictor, F(1, 145) = 192.97, p < .001, R^2 = .568, explaining 56.8% of the variance in digital pedagogy readiness. The study concludes that while lecturers demonstrate willingness and basic pedagogical competencies, inadequate technological infrastructure remains the primary bottleneck to digital pedagogy integration. Recommendations

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emphasize institutional provision of robust ICT infrastructure, reliable internet connectivity, and targeted professional development programs.

Keywords:
Competency, Digital Pedagogy, Higher Education, Motivation, Readiness Assessment, Technology Integration.

Resume
L'évolution rapide des technologies numériques influence de plus en plus les pratiques pédagogiques dans l'enseignement supérieur. Malgré les discussions récurrentes entre enseignants-chercheurs lors des forums universitaires, séminaires, conférences et colloques, des préoccupations persistent quant à leur niveau de préparation à l'adoption et à l'intégration des technologies numériques émergentes dans les processus d'enseignement et d'apprentissage. Cette étude vise à évaluer le niveau de préparation des enseignants universitaires à la mise en œuvre de la pédagogie numérique à l'Université de Yaoundé I. Elle examine également l'influence respective des compétences, de la motivation et de la préparation technologique sur l'adoption effective de cette approche pédagogique. S'appuyant sur une méthode d'enquête descriptive, l'étude a recueilli des données quantitatives auprès d'un échantillon de 147 enseignants issus de quatre facultés, à l'aide d'un questionnaire structuré selon une échelle de Likert à quatre modalités. Les données ont été analysées au moyen de statistiques descriptives et de modèles de régression linéaire simple, conformément au cadre d'évaluation de la préparation à l'apprentissage électronique proposé par Aydin et Tasci. Les résultats descriptifs révèlent que les enseignants présentent des niveaux de préparation supérieurs au seuil requis en matière de compétences ($M = 3,54$; $ET = 0,48$) et de motivation ($M = 3,59$; $ET = 0,42$), tandis que leur niveau de préparation technologique demeure inférieur au seuil attendu ($M = 2,55$; $ET = 0,51$). Les analyses inférentielles montrent que la préparation fondée sur les compétences, $F(1, 145) = 1,76$; $p = 0,187$; $R^2 = 0,012$, et la préparation motivationnelle, $F(1, 145) = 0,91$; $p = 0,342$; $R^2 = 0,006$, ne constituent pas des facteurs prédictifs statistiquement significatifs du niveau global de préparation à la pédagogie numérique. En revanche, la préparation technologique apparaît comme un facteur prédictif puissant et statistiquement significatif, $F(1, 145) = 192,97$; $p < 0,001$; $R^2 = 0,568$, expliquant 56,8 % de la variance du niveau de préparation à la pédagogie numérique. L'étude conclut que, malgré la volonté des enseignants d'intégrer les technologies numériques et leurs compétences pédagogiques de base, l'insuffisance des infrastructures technologiques constitue le principal obstacle à l'intégration effective de la pédagogie numérique. Elle recommande notamment le renforcement des infrastructures institutionnelles en technologies de l'information et de la communication (TIC), l'amélioration de la connectivité Internet ainsi que la mise en place de programmes ciblés de développement professionnel continu.

Mots-clés : *Compétences, pédagogie numérique, enseignement supérieur, motivation, évaluation du niveau de préparation, intégration technologique.*

Introduction

Digital technology is now defining the new order for fast, effective and efficient knowledge creation and dissemination. Teachers as well as students are left with no choice than to embrace this status quo. This new technology currently plays a major role on how knowledge is generated, acquired and disseminated across the board. It is important for lecturers to understand the role of digital technology in the teaching-learning process and the principle behind its integration. Especially, in a way that promotes learning outcome without being a distraction. The transformative use of educational technology demands changes in pedagogy (Lawyer, 2021). Education is one of the sectors that has been greatly affected by global change due to technological innovations.

Lecturers are expected to acquire techno-pedagogical skills as a means of effective knowledge generation, acquisition and dissemination. Expansion in digital space was witnessed with the outbreak of Covid-19 pandemic, which engulfed the world, killing many people. This was a scenario that warranted many countries including Cameroon to adopt the option of locked down. Since students could not gather on campuses, many governments implemented digital pedagogy to ensure continuity in education. Most Cameroonian state universities (University of Buea, University of Bamenda, University of Dschang, University of Yaounde I, University of Yaounde II and others) created learning platforms for the continuation of lessons.

At the University of Yaounde I, platform implementations during the COVID-19 pandemic faced severe operational constraints. Instructors and students encountered frequent disconnections, low platform engagement, and limited technical support, making the learning process challenging (Oben, 2024). Consequently, several students experienced difficulty persisting with online modules or discontinued their studies due to navigational and access barriers (Aborisade et al., 2025; Oben, 2024). While general institutional and infrastructural barriers to e-learning in developing contexts are documented in the literature, a critical empirical gap remains regarding how university lecturers' internal capacities interact with institutional infrastructure. Specifically, there is limited understanding of whether personal competence and internal motivation can overcome severe technological resource deficits to achieve overall digital pedagogy readiness.

To address this knowledge gap, this study examines three essential dimensions of readiness derived from organizational e-learning models: *competence readiness* (pedagogical and technical skills), *technological readiness* (hardware, software, and network access), and *motivational readiness* (attitudes and willingness). Evaluating these three dimensions concurrently provides an empirical basis for identifying whether digital pedagogy adoption is primarily constrained by human factors or institutional technological infrastructure at the University of Yaounde I.

Literature Review

Digital education was introduced in Cameroon in 2001 through a presidential decree, and since then, schools and universities have been increasingly responding to the demand for digital education. To further boost the higher education digital space in Cameroon, the president of the republic, His Excellency President Paul Biya announced the E-National Higher Education Project in Cameroon, which led to the distribution five hundred thousand free laptops to university students in state and private institutions of higher learning (Nayah, 2024; Sokeng, 2025).

This quest took a different turn with the outbreak of COVID-19, where schools were required to provide alternative means to ensure continuity in education, prioritising digital education. The steady and rapid proliferation of digital technologies in education prompted pedagogical changes in the teaching-learning process. Educational technology infrastructure is rapidly expanding across communities with many schools adopting modern tools to align with global

advancements in digital technologies (Akwene, 2024). Online learning platforms, virtual classrooms and AI-assisted educational tools are on the rise in academic environments, making it necessary for students and teachers to acquire digital competencies (Aborisade et al., 2025).

Digital pedagogy is now an integral component of modern schools. Higher education teachers are deeply concerned with the integration of new methods in their teaching activities. Several definitions are attributed to the concept of digital pedagogy. Digital pedagogy is the embodiment of the art of teaching and computer-driven digital technologies, which enrich learning, teaching, assessment and the whole curriculum. It could also be described as the ability to teach using digital technologies (Howell, 2012). "Digital pedagogy is the part of pedagogy that studies the design, implementation and evaluation of educational situations comprising a significant component of digital technologies, as well as the necessary conditions for their implementation – synchronous and asynchronous interactions in virtual and mixed learning environments; learning management platforms and tools, digital educational resources, educational usage of various digital applications and tools, virtual assistants for learning and teaching, digital competences of teachers, educational policies and specific programs" (Istrate, 2022)

The University of Yaounde I is the first university in Cameroon, and widely considered as one of the most prominent institutions in the nation. It has made considerable improvement in the area of advanced e-learning system technology integration to enhance research, teaching and learning. The government of Cameroon has engaged in the promotion of e-governance in higher education. This saw the creation of the E-National Higher Education Network Project, where nine University Digital Centres were created, one in each State University and one at the Cameroon-Congo Inter-State University (Abang, 2024). There is a major gap, leading to a disconnection among educators, students and digital technologies. Poor Internet connection, distraction, power outages are dominant challenges often reported by lecturers and students when using digital technologies in Cameroon universities (Oben, 2024).

Research Theoretical Underpinings

Aydin and Tasci's (2005) E-Learning Readiness Assessment Model provides the core theoretical foundation for evaluating lecturers' preparedness to adopt digital pedagogy. Originally conceptualized to assess organizational readiness in emerging economies, the model posits that successful technology integration depends on evaluating human resources, technical capabilities, content availability, and financial support before implementation. In this study, Aydin and Tasci's framework directly informs the operationalization of the three core constructs investigated: *competence readiness* reflects the human resource skill dimension; *technological readiness* represents the infrastructure and access dimension; and *motivational readiness* captures the psychological and affective willingness of educators.

Complementing this organizational model, the Multimedia-Influence-Achievement Model (MIAM) proposed by Akwene and Ndjodo (2022) offers a

predictive framework explaining how multimedia technology adoption influences academic processes. MIAM asserts that exposure to digital tools increases pedagogical effectiveness only when institutional environments supply accessible hardware and continuous technical support. Without adequate institutional infrastructure, teacher motivation alone cannot yield sustainable technology integration (Akwene & Ndjodo, 2022). Empirical studies across African higher education contexts reflect these theoretical assumptions. While research by Oketch (2013) in Kenya indicated high teacher readiness across technical and motivational scales, subsequent regional studies highlight a persistent divide between teacher willingness and actual access. For instance, Yaro and Njomban (2021) and Abang (2024) observed that although university lecturers display positive attitudes toward digital tools, inadequate bandwidth, unstable power grids, and insufficient learning management systems foster hesitation and limit digital adoption. Synthesis of these findings demonstrates that individual enthusiasm and skills remain constrained when institutional readiness lags behind.

Methodology

Research Design and Participant Sampling

This study adopted a descriptive survey research design to investigate university lecturers' perceived readiness for digital pedagogy. The target population comprised 1,154 full-time lecturers across four faculties at the University of Yaounde I: the Faculty of Arts, Letters and Human Sciences; the Faculty of Education; the Faculty of Science; and the Faculty of Medicine and Biomedical Sciences. A volunteer sampling strategy was utilized, resulting in a final sample of N = 147 lecturers who voluntarily completed the survey. Volunteer sampling was selected to accommodate the scheduling constraints of academic staff across diverse disciplines and ensure willing participation. However, because participation was voluntary, the sample may carry a degree of self-selection bias, which is acknowledged as a limitation affecting broad generalizability.

Research Instrument and Operationalization of Variables

Data were collected using a structured questionnaire developed by the authors, anchored on a 4-point Likert scale (1 =Strongly Disagree, 2 = Disagree, 3 = Agree 4 = Strongly Agree). The instrument contained four distinct subscales:

1. Competence Readiness (Independent Variable): Measured technical and pedagogical skills across 6 items (e.g., lesson planning, online evaluation, professional development).
2. Technological Readiness (Independent Variable): Assessed institutional technology access across 6 items (e.g., infrastructure, email systems, library software, online testing portals).
3. Motivational Readiness (Independent Variable): Evaluated willingness, enthusiasm, and perceived usefulness across 6 items.
4. Digital Pedagogy Readiness (Dependent Variable): Operationalized as a composite construct measured by a dedicated 6-item scale evaluating overall

actual adoption, perceived integration efficacy, and frequency of digital tool implementation in teaching (M = 3.12, SD = 0.54).

Scale Adaptation and Analytical Threshold

To interpret readiness levels, Aydin and Tasci's (2005) e-learning readiness assessment model was adapted to fit the 4-point Likert measurement scale. Standard mean scores derived from the instrument range from 1.00 to 4.00. The theoretical thresholds were linearly benchmarked as follows:

- 1.00 - 2.60: Not ready; requires extensive institutional development.
- 2.70 - 3.40: Not ready; requires moderate improvement.
- 3.50 - 3.75: Ready; requires minor refinements.
- 3.76 - 4.00: Fully ready for seamless implementation.

A mean threshold of M > 3.40 was established as the benchmark indicating overall readiness for digital pedagogy implementation.

Validity and Reliability

Content and construct validities were established through expert review by three professors in educational technology and curriculum studies, followed by a pilot study conducted with 20 lecturers at a private higher education institution (not included in the final sample). Internal consistency was evaluated using Cronbach's alpha (alpha). As shown in Table 1, all subscales exceeded the standard 0.70 reliability threshold.

Table 1: Reliability Index of the Research Instrument (N = 147)

Variables	*No. of Items*	*Cronbach's Alpha (α)*
Competence Readiness	6	0.79
Technological Readiness	6	0.84
Motivational Readiness	6	0.75
Digital Pedagogy Readiness (Dependent Variable)	6	0.81

Ethical Considerations

Institutional approval was obtained from the administrative authorities of the University of Yaounde I prior to data collection. Informed consent was secured electronically from all participating lecturers. Participation was voluntary, and respondents were informed of their right to withdraw at any stage without consequence. Anonymity and confidentiality were maintained by eliminating all personal identifiers from the dataset.

Results

Demographic Profile

Table 2 presents the sociodemographic characteristics of the sample (N = 147). The majority of respondents were male (74.8%), held Senior Lecturer rank (38.1%), and possessed between 11 and 15 years of university teaching experience (41.5%).

Table 2

Sociodemographic Profile of Respondents (N = 147)

Variable	*Variable Category*	*Frequency*	*Percentage*
Gender	Male (M)	110	74.8
	Female (F)	37	25.2
Age group	31-35 year	9	6.1
	36-40 year	25	17.0
	41-45 years	47	32.0
	46-50 years	50	34.0
	51-55 years	7	4.8
	56-60 years	9	6.1
Grade level	Assistant Lecturer (AL)	47	32.0
	Senior lecturer (SN)	56	38.1
	Associate professor (AP)	34	23.1
	Professor (P)	10	6.8
Work experience	0-5 years	28	19.0
	6-10 years	34	23.1
	11-15 years	61	41.5
	21-25 years	23	15.6
	26-30 years	1	0.7

Simple observation of Table 2 above shows that out of the total number of participants (n=147), most of them were male, M = 110 (74.8%) while females were weakly represented, F = 37 (25.2%). Most respondents were found to be in the age group 46-50 years, 50 (34%), followed by the age group 41-45 years, 47 (32%) and the age group 51-55years had the least number of respondents, 7 (4.8%). Most participants were senior lecturers, representing, SN = 56 (38%), followed by the assistant lecturers AL = 47, (32%). Associate Professors AP, represented 34 (23.1%). Very few participants were Professors P = 10 (7%). Concerning their work experience, most of the participants had experience ranging from 11-15 years, 61 (41.5%). This is followed by those who have experience ranging from 6-10 years, 34 (23.1%). The 21-25 years range represented 23 (15.6%) of the participants. The least participants were observed from those who have experience ranging from 26-30 years, 1 (0.7%).

Data Analysis

The mean of the variables was computed to determine the difference between the observed and the expected levels of lecturers' readiness for the implementation of digital pedagogy. The Assessment model from Aydin and Tasci (2005) was used to determine the expected level of readiness. Mean of e-learning readiness was

contracted as (Melr). A mean score of ≤ 3.4 indicated that the lecturers were not ready, while a mean score of > 3.4 indicated that the lecturers were ready. Aydin and Tasci's (2005) measurement scale presented below was used to determine the level of readiness:

- 1–2.6 = Not ready and needed a lot of work to achieve the successful implementation of e-learning (digital pedagogy).
- 2.7–3.4 = Not ready and required some work to achieve successful implementation of e-learning (digital pedagogy).
- 3.5–4.2 = Ready but needed few improvements
- 4.3–5 = Ready and could actually go ahead to implement e-learning (digital pedagogy).

Simple linear regression was then used to test whether competence readiness, technology and motivation readiness significantly predict digital pedagogic readiness.

Results

Research question 1: To what extent does lecturers' required competences significantly influence digital pedagogy implementation?

Table 3 displays mean scores for various items presented below. These mean scores are related to respondents' competence (technical skills and knowledge) in the implementation of digital pedagogy. From the result, respondents' mean score for item Q1 (structuring of learning objectives, lesson plan and student evaluation online) is revealed to be greater than 3.40, $M_{Q1} = 3.50$ which indicates that the majority of lecturers were able to structure their lessons online. The second item Q2 on generating print documents, is shown to have a greater mean score to that of the expected readiness level [$M_{Q2} = 3.60 > M_{elr} = 3.40$] which means that most lecturers were able to generate print documents. The findings also reveal that items Q3, Q4 and Q5 have mean scores less than 3.40 indicating that the majority of lecturers were not able to organise online classes, report students' performance using technology and carry online assessment of students. Item Q6 had a greater mean score of $M_{Q6} = 3.9$ which shows that majority of lecturers were able to use technology to support professional development. The overall mean score for the six items above related to respondents' competence is [$M_c = 3.54 > M_{elr} = 3.4$]. From the results above, there is an indication that the majority of the respondents were ready but needed few improvements in their skills. That is, they had a certain level of the required competences to implement digital pedagogy in their teaching activities.

Table 3

Mean Scores on Competence Readiness

Items	*Competence*	*N*	*Mean*
Q1	I am able to teach and evaluate my students online	147	3.50
Q2	I can generate print documents like students' assignments		3.60
Q3	I can organise and hold online classes with my students		3.39
Q4	I am able to use technology to perform different tasks online		3.07
Q5	I develop tools to carry out students' assessment online		3.17
Q6	I regularly use the Internet to participate in professional development workshops and seminars online		3.97
	Overall mean		**3.54**

The overall mean for competence readiness was 3.54 exceeding the 3.40 threshold. 'I regularly use the Internet to participate in professional' was observed with the highest mean (M = 3.97) while 'I am able to use technology to perform different tasks online was observed to have the lowest mean (M = 3.07).

The regression model showed that competence had no significant prediction on digital pedagogic readiness F (1, 145) = 1.76, p = .187, R^2 = .012. Competence readiness explained approximately 1.2% of the variance in digital pedagogic readiness. The standardised regression coefficient, β = 0.109 while the unstandardised β = 0.068 (SE = 0.052), t = 1.33. the null hypothesis was retained indicating that lecturers' competence has no significant influence on digital pedagogy implementation.

Research Question 2: To what extent does technological resources required by lecturers significantly influence digital pedagogy implementation?

Table 4 presents mean scores for various items presented hereafter, which relate to participants' technology readiness in the implementation of digital pedagogy. From the findings below, the majority of the participants disagree to a great extent that they had access to the required technological resources to implement digital pedagogy. All the items had the mean scores below the expected level of readiness M_{elr} = 3.4. The overall mean score for the six items that relate to technology readiness was below the expected readiness level [M_{tr} = 2.55<M_{elr} = 3.4]. From the results there is an indication that the majority of lecturers were not technologically ready and required some work to achieve successful implementation of digital pedagogy. Further analysis done using simple linear regression revealed that technology readiness had a statistically significant influence on digital pedagogy implementation (F (1, 145) =192.97, p- <0.001, with R^2 = 0.568. This implies ha technology readiness explains 56.8% of the variance in digital pedagogic readiness. The standardised regression coefficient, β = 0.756 while the unstandardised β = 0.699 (SE = 0.050), t = 13.89. The null hypothesis was rejected indicating that lecturers' technology readiness has a significant influence on digital pedagogy implementation.

Table 4

The Mean Scores on Technology Readiness

Items	*Technology*	*N*	*Mean*
Q1	I have an institutional email that permits me to communicate with students and colleagues	147	2.76
Q2	I have access to reliable IT infrastructure		2.84
Q3	I have access to a good digital learning platform that permits me to deliver learning experiences to students		2.74
Q4	I have access to good library management software to direct students to quality reading materials		2.30
Q5	I master the use of student information system that stores and tracks all students' information including grades and attendance records		2.30
Q6	I use a good assessment software that provides students with a portal to take computerised tests and quizzes		2.41
	Overall mean		**2.55**

Research Question 3: To what extent does motivational factors required by lecturers significantly influence digital pedagogy implementation?

Table 5 displays mean scores for various items presented below, which are related to participants' motivation readiness in the use of digital pedagogy. From the results, the mean scores for all the six items were found to be above the expected level of readiness (3.4) which indicates that the majority of participants agreed to a greater extent that they were highly motivated towards the implementation of digital pedagogy. The overall mean score for these six items which relate to motivation readiness, was above the expected level of readiness [$M_{mr} = 3.59 > M_{elr} = 3.4$]. From the results, there is an indication that the majority of lecturers are motivationally ready but need few improvements to effectively implement digital pedagogy. The regression analysis done to determine the influence of motivational factors on digital pedagogy implementation revealed that motivational factors did not have a statistically significant influence on digital pedagogy implementation ($F (1, 145) =0.909$, p-=0.342, $R2 =0.006$. This implies motivation explained approximately 0.6% of the in digital pedagogic readiness. The standardised regression coefficient, $\beta = 0.079$ while the unstandardised $\beta = 0.106$ (SE = 0.111), $t = 0.95$. The null hypothesis was retained indicating that lecturers' motivation has no significant influence on digital pedagogy implementation.

Table 5

The Mean Scores on Motivation Readiness

Items	*Motivation*	*N*	*Mean*
Q1	I am highly motivated and enthusiastic about digital pedagogy	147	3.67
Q2	I am ready to integrate digital pedagogy in teaching and I am willing to devote time for it		3.76
Q3	I can recommend digital pedagogy as one of the alternatives for traditional teaching and learning approach		3.53
Q4	I find digital pedagogy system flexible to interact with students		3.53
Q5	I find digital pedagogy system easily adaptable to learning experiences		3.46
Q6	I believe that digital pedagogy is useful for my research and can increase my productivity		3.59
	Overall mean		**3.59**

Discussion

The results highlight an important distinction between lecturers' perceived readiness for digital pedagogy and the factors that statistically predict their overall readiness. Competence readiness was above the established readiness threshold, but was not statistically significantly related to digital pedagogy readiness. This finding is contrary to Oketch (2013) who noted that university lecturers were more competently ready. However, the present findings suggest that competence should not be reduced to the perceived ability of lecturers to perform selected digital tasks. Respondents indicated they were good at preparing online lessons and engaging in professional development activities. The relatively poor performance in organising online classes, performing technology-supported tasks, and conducting digital assessments indicates gaps in the practical use of digital skills. Thus, general competence may not be a good proxy for the specific pedagogical and technical skills required to be a competent digital teacher. The lack of a significant predictive relationship does not mean competence is not relevant to digital pedagogy. Rather, it suggests that competence, when considered alone via simple linear regression, was not a significant predictor of total readiness of lecturers in this sample. One possibility is that lecturers are digitally literate, but lack the institutional resources and opportunities to develop these skills into sustained teaching practices. This interpretation draws attention to the distinction between the individual's capacity and the context of implementation, suggesting that the professional development should go beyond basic computer literacy to include practical training in the management of online classes, the digital assessment of students and the integration of technology in teaching.

There is a similar distinction regarding motivational readiness. Lecturers showed positive attitudes toward digital pedagogy and openness to infuse technology into their teaching. However, motivation was not a significant predictor of overall readiness. This finding should not be interpreted as evidence that the enthusiasm of lecturers is unimportant. Instead, it suggests that willingness to adopt digital

technologies may not be sufficient in the absence of the conditions required for implementation. Akwene and Fouda (2022) emphasised the motivational power of multimedia in learner-centred classrooms and Roblyer et al. (2008) emphasised the role of motivation in the success of online learning. The studies confirm the educational relevance of motivation, but the findings here suggest that positive attitudes alone may not lead to institutional readiness for digital pedagogy.

The difference between motivational readiness and technology readiness is particularly important. Neither competence nor motivation, when analysed individually, were statistically significant predictors. However, technology readiness was found to be a strong and statistically significant predictor of digital pedagogy readiness. This finding is consistent with the challenges identified by Yaro and Njomban (2021) who attributed technology integration challenges to inadequate resources, lack of training, time constraints and concerns of classroom control. Similarly, Oben (2024) found that infrastructural challenges hampered the use of digital technology in Cameroonian universities. Collectively, these findings suggest that lecturers' readiness should be understood within the institutional conditions that enable or constrain implementation.

Thus, universities need to support competence development and motivational programs with stable technological infrastructures, accessible digital learning platforms and permanent technical support. The predictors were tested independently of one another, and further multivariable studies are required to ascertain whether competence and motivation contribute significantly, after simultaneous consideration of technological readiness and other relevant variables. This approach would allow for a more comprehensive understanding of the relations between lecturers' capabilities, attitudes, institutional resources and readiness toward digital pedagogy.

Conclusions

Three research questions were framed in the study to assess university lecturers' readiness towards the implementation of digital pedagogy in Cameroon universities, focusing on the University of Yaounde I. The changing landscape of technology continues to reshape educational infrastructure, content and processes, demanding a proactive response from universities in Cameroon, African and the world at large. The findings revealed that lecturers demonstrated encouraging levels of competence and motivation, suggesting a willingness to integrate digital technologies into teaching and learning. However, their technological readiness remained inadequate, highlighting limitations in access to the technological resources and infrastructure necessary for effective implementation. The inferential findings further revealed that competence and motivation did not significantly predict digital pedagogy readiness, whereas technology readiness emerged as a statistically significant predictor. These results suggest that lecturers' willingness and perceived capabilities alone may not be sufficient to facilitate effective digital pedagogy when access to appropriate technological resources remains limited. Consequently, technological readiness represents an important consideration in institutional efforts to strengthen digital teaching and learning. Technology proficiency is a prerequisite for the implementation of digital pedagogy and the assessment of digital pedagogy

readiness. Consequently, lecturers in the University of Yaounde 1 and other universities in Cameroon should treat it as one of the greatest factors which influences digital pedagogy. While lecturers demonstrated somehow high level of competence and motivational readiness for digital pedagogy, their technological readiness remained limited for digital pedagogy.

Implications for policy and practice

The limited technology resources and access to these resources by university lecturers is a hinderance to the implementation of digital pedagogy. Therefore, lecturers should use their quarterly higher education research allowance to the acquisition of technological equipment for the proper implementation of a digital pedagogy framework. For the complete implementation and improvement on the digital pedagogy skills of the teaching staff, the university should organise training sessions that will provide opportunities for staff development. The university should support and sustain self-directed learning activities to motivate lecturers by providing data centre where lecturers could get free access to Internet connection. To achieve digital technology proficiency and readiness for digital pedagogy, universities in Cameroon could launch digital technology training programmes for their staff, upgrade hardware, software and Internet accessibility. Even though lecturers showed a strong motivational readiness to embrace digital pedagogy, this could be reinforced through recognition and incentives, encourage a community of practices where lecturers share digital experiences.

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Author's contribution

All the authors contributed in the conceptualization and design of the study. Author 1 contributed in the development of the research idea, hypotheses, research questions and collected data for the study. Author 2 contributed in the orientation of the research idea, hypotheses, research questions, literature review. Author 3 contributed in the data analysis, interpretation and review of the study. Author 4 contributed in conceptualisation, review of the research questions and hypotheses. All the authors contributed in the review of literature, proofreading and editing of the manuscript.

Competing interest

The authors have no conflict of interest to declare.

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