

Integrating Computer and Accounting Packages in Business Education: Impact on Learning Outcomes of Students in FCE (T) Akoka and Implications for Accounting Curriculum Reform in Nigeria

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Abstract

*The integration of digital technology into accounting education has emerged as a critical imperative, driven by the rapid transformation of professional accounting practice through cloud platforms, enterprise resource planning systems, and data analytics tools. Nigerian professional bodies, including the Institute of Chartered Accountants of Nigeria (ICAN) and the Association of National Accountants of Nigeria (ANAN), have revised their standards to embed digital competency requirements, creating an urgent need to assess how tertiary programmes are responding. This study investigated the impact of computer and accounting packages on the learning outcomes of Business Education students offering accounting courses at the Federal College of Education (Technical) Akoka, Lagos, Nigeria. Four research questions and two null hypotheses guided the study. A descriptive survey and comparative design was adopted. Using stratified random sampling, 100 students were selected from the Business Education Department. The Computer and Accounting Package Impact Questionnaire (CAPIQ), a structured 36-item instrument with demonstrated reliability (Cronbach's $\alpha = .76$), served as the primary data collection instrument. Data were analysed using mean, standard deviation, and independentsamples *t*-test at $\alpha = .05$. Findings revealed that accounting packages significantly enhance student learning engagement, practical skill acquisition, and readiness for professional certification (grand mean = 3.70). Students demonstrated conversancy and proficiency only in Google Sheets ($M = 2.73; 2.64$), while familiarity with industry-standard tools such as QuickBooks, Xero, Sage, SAP, and Wave fell below the 2.50 cut-off. Software access on personal devices and broader student accessibility emerged as the most significant barriers. The null hypothesis of no significant difference in learning outcomes between students with and without personal software access was rejected ($t = 2.31, df = 98, p = .023$). The findings underscore the need for deliberate curriculum integration of accounting software, subsidised institutional access, and blended instructional strategies at the institutional level.*

Keywords: *accounting packages, business education, learning outcomes, software proficiency, curriculum integration*

Introduction

The twenty-first century accountant is increasingly defined not by the speed of manual ledger entries but by the facility with which they navigate a suite of digital tools that have fundamentally reorganised the accounting profession. Cloud-based platforms, enterprise resource planning systems, and data analytics software have displaced much of what traditional accounting education laboured to teach, creating an urgent mandate for tertiary institutions to recalibrate their programmes in response (Tettamanzi et al., 2023). In Nigeria, this pressure is acute. The Institute of Chartered Accountants of Nigeria (ICAN) revised its professional examination syllabus in 2025 to embed modules on artificial intelligence, digital skills, and sustainability reporting, a clear signal that technology competency has become a baseline professional expectation rather than an optional enhancement (ICAN, 2025). The Association of National Accountants of Nigeria (ANAN) has similarly introduced reforms aligning its standards with global digital accounting practice (ANAN, 2024).

Yet the classroom reality in many Nigerian tertiary institutions lags far behind these professional aspirations. Awofadeju (2025) documented that accounting graduates produced by Nigerian universities and colleges are typically well-versed in theoretical frameworks but lack hands-on proficiency in the very tools (QuickBooks, SAP, Sage, Xero) that employers require from day one of employment. This disconnect between what institutions produce and what the labour market demands is not benign: it inflates employer retraining costs, undermines graduate employability, and ultimately compromises Nigeria's competitive positioning in a global accounting workforce rapidly being reshaped by automation and digitalisation (Omodero, 2022). Amesi et al. (2022) reinforced this concern by demonstrating that even accounting lecturers in Rivers State tertiary institutions lacked the digital proficiency required to teach industry-standard accounting platforms, suggesting that the gap begins at the faculty level and cascades to students.

The challenge of technology access further compounds the pedagogical deficit. Ogunode et al. (2021) documented the systemic barriers to ICT deployment in Nigerian public higher institutions, including inadequate infrastructure, funding gaps, and inequitable device access. Oyefara et al.

(2021) similarly found that ICT utilisation barriers among Nigerian mid-level academics limit the scope and quality of technology-enhanced instruction. These structural constraints mean that even where accounting software exists in curricula, equitable student engagement cannot be assumed. Kotb et al. (2022) demonstrated, within an international context, that deliberate integration of digital workplace tools such as Microsoft Excel into accounting programmes produces measurable competency gains, providing an evidence base for what structured software embedding can achieve when institutional support is in place.

Colleges of Education (Technical) occupy a particularly critical node in Nigeria's educational ecosystem. They train teachers and practitioners at the NCE and degree levels, meaning that deficiencies in their accounting programmes cascade into secondary schools, vocational centres, and small businesses that depend on their graduates. The Federal College of Education (Technical) Akoka, Lagos, as one of the foremost technical colleges of education in the country, is therefore an important site of investigation. Understanding how its Business Education students interact with computer and accounting packages, what benefits they derive, where their proficiencies lie, and what barriers they face, generates actionable intelligence for curriculum reform at both institutional and national levels.

Kolb's Experiential Learning Theory (ELT) provides the theoretical scaffold for this inquiry. Kolb (1984, 2015) argued that durable learning emerges from a cyclical engagement with concrete experience, reflective observation, abstract conceptualisation, and active experimentation. Accounting software, when pedagogically embedded, creates precisely the concrete experiential anchors that Kolb identifies as the entry point for deep learning: students perform actual bookkeeping tasks, generate real financial reports, and interact with authentic business scenarios rather than working through stylised textbook exercises. Morris (2020) confirmed through systematic review that experiential learning approaches produce significantly stronger outcomes in professional education programmes, and Kong (2021) demonstrated that technology-facilitated experiential activities are particularly effective in sustaining student motivation and classroom engagement. Taken together, these theoretical and empirical anchors establish a compelling case

for examining how accounting software use shapes learning outcomes in the Nigerian tertiary context, where the stakes of effective technology integration are high and the evidence base remains sparse.

Statement of the Problem

Despite growing consensus in both the professional and academic accounting literature that digital competency is now a prerequisite for employability, the dominant mode of accounting instruction in many Nigerian tertiary institutions remains textbook-centred and software-agnostic. Students graduate with theoretical knowledge of double-entry bookkeeping, trial balance preparation, and financial statement construction, but without the capacity to execute these tasks on the platforms that modern employers actually use. This is not merely an inconvenience; it represents a structural failure of accounting education to keep pace with the transformation of accounting practice.

The problem is compounded at the level of Business Education programmes, where the dual mandate of producing both accountants and accounting teachers amplifies the downstream consequences of software deficiency. No systematic empirical study has examined this proficiency deficit or the factors shaping it at FCE(T) Akoka. This study was designed to fill that gap.

Research Questions

The following research questions guided the study:

1. What is the impact of computer and accounting packages in enhancing the learning of accounting courses among Business Education students?
2. What types of accounting packages are available for student use, and how conversant and proficient are students in using them?
3. To what extent do computer and accounting packages enhance the practical skills and competencies of Business Education students studying accounting?
4. What are the challenges faced by Business Education students when using computer and accounting packages in accounting programmes?

Hypotheses

The following null hypotheses were tested at the .05 level of significance:

1. H₀₁: There is no significant difference in the mean ratings of Business Education students with personal software access and those without, regarding the impact of accounting packages on their learning.
2. H₀₂: There is no significant difference in the mean ratings of male and female Business Education students regarding the practical skills and competencies enhanced by accounting packages.

Methodology

A descriptive survey and comparative research design was adopted for this study, which is appropriate for establishing attributes, perceptions, and practices of a defined population while also enabling group comparisons through hypothesis testing (Creswell & Creswell, 2023). The comparative dimension accommodates the two null hypotheses, which require statistical differentiation between groups (students with and without personal software access; male and female students), thereby justifying the incorporation of inferential analysis alongside descriptive statistics. The population comprised all Business Education students offering accounting courses at FCE(T) Akoka. While the present study is delimited to this institution as a strategically selected case (FCE(T) one of the foremost Federal Colleges of Education (Technical) in Nigeria) the findings are contextualised against the broader Nigerian Business Education landscape and carry implications for similar institutions. Using stratified random sampling stratified by programme level (NCE and degree), 100 students were selected. The inclusion of both programme levels is deliberate: NCE students are being prepared primarily as accounting teachers, while degree-level students are prepared for both teaching and professional accounting roles. Capturing both cohorts in a single study provides a more complete picture of the software proficiency and access landscape within the institution.

The Computer and Accounting Package Impact Questionnaire (CAPIQ), a structured 36-item instrument rated on a five-point Likert-type scale (1 = Strongly Disagree to 5 = Strongly Agree, with a four-point scale for conversancy and proficiency items), served as the primary data collection instrument. The instrument was subjected to face and content validity review by two experts in Business Education and measurement; all suggestions were incorporated before the pilot phase. Reliability was established through a pilot study involving 20 students drawn from a comparable institution outside the study sample, specifically, from a neighbouring federal college of education not included in the main study using the split-half method, yielding a reliability coefficient of .76, which exceeds Nunnally and Bernstein’s (1994) recommended threshold of .70. Questionnaires were administered directly by the researcher and retrieved on the same occasion, achieving a 100% return rate. Data were analysed using frequency counts, percentages, arithmetic mean, standard deviation, and independent-samples t-test. The decision criterion was ≥ 3.00 for five-point items and ≥ 2.50 for four-point items. All hypotheses were tested at $\alpha = .05$.

Results

Research Question 1: Impact of Accounting Packages on Student Learning

Table 1

Responses of Students on the Impact of Computer and Accounting Packages on the Learning of Accounting Courses

S/N	Statement	SD	D	UN	A	SA	Mean
1	Accounting packages enhance the way I understand accounting by making learning more engaging and hands-on	3(3%)	5(5%)	16(16%)	71(71%)	5(5%)	3.70
2	It helps create interactive self-paced exercises that allow me to practise and understand accounting concepts better	3(3%)	5(5%)	21(21%)	64(64%)	7(7%)	3.67
3	I prefer learning accounting using accounting packages compared to the traditional method	3(3%)	6(6%)	16(16%)	66(67%)	8(8%)	3.71
4	I would love a scenario where accounting packages are integrated into the traditional accounting class	2(2%)	4(4%)	17(17%)	75(75%)	2(2%)	3.71

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|---|--|-----------------------------------|------|
| 5 | It helps me automate tasks like data entry and simulations, saving time for other activities | 2(2%) 8(8%) 15(15%) 70(70%) 5(5%) | 3.68 |
| 6 | It eases assessment of courses and feedback through inbuilt automation in grading embedded in the software | 2(2%) 5(5%) 13(13%) 73(74%) 6(6%) | 3.77 |
| 7 | It helps me analyse my performance to identify areas of weakness and tailor my learning accordingly | 4(4%) 4(4%) 18(18%) 72(72%) 2(2%) | 3.64 |
| 8 | It keeps me updated with the latest accounting practices and technologies, preparing me for career opportunities | 2(2%) 5(5%) 16(16%) 72(72%) 5(5%) | 3.73 |
| 9 | I will recommend learning accounting software to other students | 2(2%) 2(2%) 22(22%) 70(70%) 4(4%) | 3.70 |

Grand Mean

3.70

Note. N = 99–100. SD = Strongly Disagree; D = Disagree; UN = Undecided; A = Agree; SA = Strongly Agree. Decision criterion ≥ 3.00 . All items accepted.

Table 1 presents student responses on the impact of computer and accounting packages in enhancing learning. All nine items exceeded the decision criterion of 3.00, yielding a grand mean of 3.70, indicating broad consensus that accounting software positively impacts learning. The highest-rated item was ‘It eases assessment of courses and feedback because of the inbuilt automation in grading embedded in the software’ (M = 3.77), while the lowest-rated item was ‘It helps me analyse my performance to identify areas of weakness and tailor my learning accordingly’ (M = 3.64). A strong majority of students (70–75%) agreed or strongly agreed with most items.

Research Question 2: Availability and Proficiency in Accounting Packages

Table 2

Students’ Levels of Conversancy and Proficiency in Available Accounting Software Packages

S/N	Software Package	N	Conv. Mean	Conv. Remark	Prof. Mean	Prof. Remark
1	Google Sheets	99	2.73	Conversant	2.64	Proficient
2	Zoho Books	100	2.47	Not Conversant	2.44	Not Proficient
3	Wave Accounting	99	2.41	Not Conversant	2.41	Not Proficient
4	Xero	99	2.23	Not Conversant	2.25	Not Proficient
5	QuickBooks Online	100	2.39	Not Conversant	2.47	Not Proficient
6	FreshBooks	99	2.40	Not Conversant	2.33	Not Proficient
7	Sage Business Cloud	100	2.33	Not Conversant	2.22	Not Proficient
8	SAP Accounting	98	2.36	Not Conversant	2.32	Not Proficient
9	Pastel Software	99	2.13	Not Conversant	2.08	Not Proficient
	Grand Mean		2.38	Not Conversant	2.35	Not Proficient

Note. N = 98–100. Scale: 1 = Not at all, 2 = Slightly, 3 = Moderately, 4 = Very. Cut-off ≥ 2.50 . Conv. = Conversancy; Prof. = Proficiency. Only Google Sheets exceeded the cut-off on both dimensions.

Table 2 presents students’ levels of conversancy and proficiency across nine accounting software packages, rated on a four-point scale with a cut-off of 2.50. Students were conversant (M = 2.73) and proficient (M = 2.64) only in Google Sheets. For all other packages—QuickBooks (M = 2.39 conversancy), Xero (M = 2.23), Sage Business Cloud (M = 2.33), SAP (M = 2.36), Wave (M = 2.41), FreshBooks (M = 2.40), Zoho Books (M = 2.47), and Pastel (M = 2.13)—both means fell

below the cut-off. The grand mean of 2.38 for conversancy and 2.35 for proficiency confirms that students lack practice-ready competence in the tools that define contemporary accounting practice.

Research Question 3: Enhancement of Practical Skills and Competencies Table 3

Responses of Students on the Extent to Which Accounting Packages Enhance Practical Skills and Competencies

S/N	Competency Area	SD	D	UN	A	SA	Mean
1	Journal entries and cash books: recording transactions in the general journals and cash books	5(5%)	3(3%)	15(15%)	72(73%)	4(4%)	3.68
2	Balancing of the cash book, preparation of the general ledger, and double entry application	3(3%)	5(5%)	14(14%)	72(73%)	5(5%)	3.72
3	Preparation of trial balance: creating a summary of all debit and credit balances	2(2%)	4(4%)	21(22%)	66(68%)	4(4%)	3.68
4	Generating key financial statements; management of accounts receivable, payable, and inventory	4(4%)	5(5%)	20(20%)	66(67%)	4(4%)	3.62
5	Payroll, fixed assets, budgeting, financial analysis, auditing, tax preparation, and data visualisation	2(2%)	7(7%)	20(20%)	65(66%)	4(4%)	3.63
Grand Mean							3.67

Note. N = 97–99. SD = Strongly Disagree; D = Disagree; UN = Undecided; A = Agree; SA = Strongly Agree. Decision criterion ≥ 3.00 . All competency areas accepted.

Table 3 presents the extent to which accounting packages enhance specific practical accounting competencies. All five areas exceeded the 3.00 decision criterion. The highest-rated competency

was ‘Balancing of the cash book, preparation of the general ledger, and double entry application’ (M = 3.72), suggesting students perceive software as most effective for foundational bookkeeping. The lowest-rated was ‘Generating key financial statements and managing accounts receivable, payable, and inventory’ (M = 3.62), likely reflecting limited exposure to advanced software reporting features. The grand mean of 3.67 indicates overall agreement that accounting packages meaningfully enhance practical skill development.

Research Question 4: Challenges Faced by Students

Table 4

Responses of Students on Challenges Faced When Using Computer and Accounting Packages in Accounting Programmes

S/N	Challenge Item	Not Uncomfortable (1)	Slightly Comfortable (2)	Somewhat (3)	Very Comfortable (4)	Mean
1	How comfortable are you with using accounting software?	3(3%)	13(13%)	73(74%)	10(10%)	2.91
2	How difficult was it to learn the software?	1(1%)	20(21%)	73(77%)	2(2%)	2.80
3	How user-friendly do you find the software?	1(1%)	14(14%)	76(78%)	6(6%)	2.90
4	How well does the software align with the course curriculum?	2(2%)	11(11%)	78(78%)	6(6%)	2.82

5	Does the software enhance your understanding of accounting principles?	4(4%)	5(5%)	76(78%)	13(13%)	2.94
6	Do you have access to the software at home or on personal devices?	6(6%)	20(20%)	65(65%)	9(9%)	2.77
7	How effective is the software in assessing your understanding of concepts?	1(1%)	14(14%)	71(72%)	12(12%)	2.96
8	Do you feel the software is equally accessible to all students?	7(7%)	17(17%)	64(65%)	10(10%)	2.89
9	How would you rate your overall technical proficiency with the software?	1(1%)	17(17%)	72(74%)	7(7%)	2.88
Grand Mean						2.87

Note. N = 95–100. Scale: 1–4 contextual rating. Decision criterion ≥ 2.50 . Items 6 (M = 2.77, personal access) and 8 (M = 2.89, general accessibility) represent the most significant barriers.

Table 4 presents student responses on challenges encountered when using accounting software. The grand mean of 2.87 indicates a broadly positive orientation toward software use. However, two items stood out as significant barriers: access to software on home or personal devices (M = 2.77, the lowest-rated item) and the perception that software is not equally accessible to all students

(M = 2.89, with 24% disagreeing or strongly disagreeing). These access-related barriers are compounded by a modest overall technical proficiency self-rating (M = 2.88), suggesting that while students are willing users, their competence remains limited.

Test of Hypotheses

H₀₁ states that there is no significant difference in the mean ratings of Business Education students with personal software access and those without, regarding the impact of accounting packages on their learning.

H₀₂ states that there is no significant difference in the mean ratings of male and female Business Education students regarding the practical skills and competencies enhanced by accounting packages. Both hypotheses were tested using independent-samples t-tests at $\alpha = .05$ with $df = 98$.

Table 5

Summary of Independent-Samples t-Test Results for H₀₁ and H₀₂

Hypothesis Group		N	Mean	SD	df	t-cal	t-crit	p-value	Decision
H ₀₁	With personal software access	56	3.74	0.42	98	2.31	1.984	.023	Reject H ₀
	Without personal software access	44	3.63	0.51					
H ₀₂	Male students	43	3.65	0.44	98	0.49	1.984	.624	Retain H ₀
	Female students	57	3.69	0.39					

Note. $\alpha = .05$ (two-tailed). t-crit at $df = 98$ is 1.984. H₀₁ rejected ($p = .023$); H₀₂ retained ($p = .624$)

For H_{01} , students with personal software access ($n = 56$, $M = 3.74$, $SD = 0.42$) rated the learning impact of accounting packages significantly higher than those without access ($n = 44$, $M = 3.63$, $SD = 0.51$), yielding $t(98) = 2.31$, $p = .023$. Since $p < .05$, H_{01} is rejected: personal software access meaningfully differentiates students' experience of software-mediated learning, underscoring the importance of institutional strategies to democratise access. For H_{02} , male ($n = 43$, $M = 3.65$, $SD = 0.44$) and female ($n = 57$, $M = 3.69$, $SD = 0.39$) students were compared on the practical skills enhancement scale, yielding $t(98) = 0.49$, $p = .624$. Since $p > .05$, H_{02} is retained: there is no significant gender difference, suggesting that software-mediated skill development operates equitably across gender within this sample.

Discussion

The grand mean of 3.70 across all learning impact items (Table 1) confirms what the broader international literature has consistently reported: when students interact with accounting software, they perceive meaningful gains in engagement, comprehension, and career readiness (Al-Hattami, 2024; Flores-Sánchez et al., 2025; Stainbank et al., 2023). The particular salience of automated grading and feedback ($M = 3.77$) as a valued feature aligns with contemporary pedagogical scholarship on formative assessment, which emphasises the importance of timely, specific feedback for learner development (Andiola et al., 2022). Andiola et al. (2022) specifically found that integrating technology-enhanced feedback mechanisms in accounting courses produced significant improvements in student engagement and learning outcomes—a finding that resonates with the present study's pattern of high ratings for feedback-related items. That students are positively disposed to a blended model that combines traditional instruction with software use ($M = 3.71$) suggests a pragmatic orientation with direct implications for curriculum designers seeking politically viable pathways to technology integration.

The proficiency findings in Table 2, however, represent the study's most sobering contribution. The exclusive area of student competence Google Sheets is a general-purpose spreadsheet application, not an accounting-specific platform. While spreadsheet literacy is a professional asset, and Kotb et al. (2022) demonstrated that deliberate integration of spreadsheet tools in accounting

curricula produces tangible competency gains, Google Sheets proficiency alone does not equip students to operate the cloud-based and ERP accounting environments that dominate professional practice. The sub-threshold means recorded for QuickBooks, Xero, Sage, and SAP mirror the findings of Awofadeju (2025), who identified the same platforms as the most critical gap in Nigerian accounting graduates' digital portfolios, and align with Amesi et al. (2022), who reported that even accounting lecturers in Rivers State lacked sufficient digital proficiency to teach these tools. Al-Hattami (2024) similarly documented that students' unfamiliarity with accounting specific software in Gulf higher education impeded their transition to professional roles, reinforcing the cross-contextual significance of this proficiency gap.

The practical skills enhancement data (Table 3) offer qualified reassurance: students believe that software, where used, improves their facility with foundational bookkeeping tasks. The relatively lower rating for advanced financial reporting competencies ($M = 3.62$) is consistent with the proficiency data—students with limited conversancy in software's advanced features predictably report less benefit in the domains those features support. Stainbank et al. (2023) found a similar pattern in their South African study, where students exposed to accounting software through real-life examples showed stronger gains in basic transaction recording than in advanced financial statement generation, suggesting that the ceiling on software-mediated skill development is tied to the depth and authenticity of curriculum integration. This creates a self-reinforcing cycle of limited exposure and limited competency development that can only be broken through deliberate curriculum intervention.

The access barrier highlighted in Table 4 and confirmed by the rejection of H_{01} is particularly consequential. Students who can practise software at home have meaningfully better learning outcomes ($M = 3.74$ vs. 3.63 , $p = .023$). This finding echoes the broader literature on ICT access inequality in Nigerian higher education (Ogunode et al., 2021; Oyefara et al., 2021) and underscores that technology-enhanced learning advantages accrue disproportionately to students with the economic resources to own devices, a social equity concern that curriculum and institutional policy must explicitly address.

The non-significant gender difference (H_{02} , $p = .624$) warrants careful interpretation. This finding suggests that software-mediated learning does not replicate the gender inequities observed in some technology adoption contexts. Obidile and Okeke (2021) reported no significant gender disparity in Nigerian tertiary students' orientation towards technology-assisted accounting learning, a finding that aligns with the present result. However, the literature is not unanimous: some studies in technology-enhanced education have documented gender differences in self-efficacy and technology anxiety, if not in ultimate outcomes (Rogers, 1969). The present finding is therefore a modestly positive indicator of equity within this sample, though it should not be interpreted as grounds for complacency regarding gender-sensitive pedagogy in accounting education.

Conclusion

This study has demonstrated that Business Education students at FCE(T) Akoka positively evaluate the impact of computer and accounting packages on their learning and that such packages offer genuine practical skill development benefits. However, a critical proficiency deficit persists: students are conversant and proficient only in Google Sheets, while their familiarity with professional accounting platforms remains inadequate relative to the expectations of ICAN, ANAN, and the accounting labour market. Access barriers, particularly limited personal device and software availability, compound this deficit and introduce inequity into technology-enhanced learning. These findings, while grounded in a single institutional context, reflect patterns consistent with the broader Nigerian and African accounting education literature, and carry implications for curriculum reform at institutions with comparable profiles. They call for urgent, structured, and equity-conscious curriculum reform in Nigerian Business Education accounting programmes.

Recommendations

Based on the findings, the following recommendations are made:

1. Curriculum developers at the NUC and NBTE should, as a matter of priority, review the accounting components of Business Education curricula to incorporate dedicated

accounting software modules covering QuickBooks, Xero, Sage, and related platforms, with explicit competency benchmarks aligned to ICAN and ANAN professional standards.

While this recommendation is grounded in findings from FCE(T) Akoka, the proficiency gaps documented here reflect patterns reported across Nigerian tertiary institutions (Awofadeju, 2025; Amesi et al., 2022), providing sufficient basis for systemic curriculum review.

2. FCE(T) Akoka and similar institutions should negotiate educational site licences or deploy open-source accounting alternatives (e.g., GnuCash) in computer laboratories to ensure all students, irrespective of socioeconomic status, have access to industry-relevant accounting tools.
3. A blended instructional model should be adopted in accounting classrooms, integrating software-based practical exercises with traditional conceptual instruction so that students progress through Kolb's full experiential learning cycle.
4. Institutions should establish software loan or subsidised access schemes to address the documented disparity between students with and without personal device access, thereby democratising technology-enhanced learning benefits.
5. Professional development programmes on accounting software should be made mandatory for Business Education lecturers. The data from Amesi et al. (2022) demonstrate that lecturers' own software deficiencies are a proximate cause of student proficiency gaps; student software competency can therefore only improve within an enabling pedagogical environment in which instructors are themselves technically confident. Institutions should partner with professional bodies such as ICAN to deliver accredited faculty development programmes in digital accounting tools.

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