DRESSING FOUNDATIONAL IMPEDIMENTS TO QUALITY TEACHER EDUCATION IN NIGERIA: IMPERATIVES FOR CURRICULUM REFORM

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Abstract

This study examined foundational impediments to quality teacher education in Nigeria and the curriculum reforms needed to address them. It identified key challenges, assessed how well the current curriculum addresses them, examined priorities for curriculum reform, and considered the implications of integrating information and communication technology (ICT), pedagogy, and teaching practice into teacher education. Guided by four research questions, the study adopted a descriptive survey design. The population comprised 1,500 final-year (400-level) pre-service teachers, from whom a sample of 300 was determined using Cochran's formula and selected through proportionate sampling. Data were collected using a 32-item, four-point Likert questionnaire titled Foundational Impediments to Quality Teacher Education (FIQTE), with a reliability coefficient of 0.86. Frequency counts and mean scores were used to analyse the data. Findings identified inadequate funding, outdated curricula, poor infrastructure and weak admission standards as major impediments to quality teacher education (mean = 2.99). Respondents rated the current curriculum as inadequate in addressing these challenges (mean = 1.82). They also supported reforms to raise admission requirements, increase funding and provide ICT facilities (mean = 3.33), as well as integrate digital pedagogy and competency-based assessment (mean = 3.42). The study concludes that Nigeria needs curriculum reform to strengthen teacher education. It recommends that the government and policymakers review the NCE and B.Ed. curricula to include digital pedagogy and competency-based assessment, raise minimum admission requirements and address resource constraints.

Keywords: Keywords: Foundational impediments, Curriculum reform, Quality teacher education, Information and Communication Technology, Nigeria

Introduction

Teacher quality shapes learners' educational experiences and, in turn, national development. Teacher education is therefore foundational to an effective education system (UNESCO, 2021). In Nigeria, prospective teachers are prepared through Colleges of Education, Faculties of Education in universities and the National Teachers' Institute (NTI). These programmes aim to produce competent professionals who can implement the objectives of the National Policy on Education (Federal Republic of Nigeria, 2021). Despite this mandate, concerns persist about the quality of teacher preparation. Reported foundational impediments include outdated curricula, weak

admission standards, inadequate funding, dilapidated infrastructure, insufficiently prepared teacher educators and weak supervision of teaching practice (Oni, 2022; Adeyemi & Akpotu, 2020).

The curriculum used in many Colleges of Education and universities has been described as overly theoretical and insufficiently responsive to current needs, including information and communication technology (ICT), critical thinking and inclusive education (NCCE, 2022). Admission to teacher education is also sometimes viewed as a last choice by candidates, which may affect entrants' academic preparation (TETFund, 2024). In the context of competency-based education and Sustainable Development Goal 4, these concerns point to the need to review teacher education curricula (Ogunode & Okwelogu, 2023). Curriculum reform could help prepare teachers with stronger digital, pedagogical and professional competencies (Eze & Nwosu, 2025).

Teacher education comprises the policies, processes and provision intended to equip prospective teachers with the knowledge, attitudes, behaviours and skills needed to work effectively in schools. In Nigeria, it is provided through Colleges of Education, which award the Nigeria Certificate in Education (NCE); university Faculties of Education, which offer qualifications such as the B.Ed. and B.Sc.Ed.; and the NTI (Federal Republic of Nigeria, 2021). Foundational impediments include structural and systemic weaknesses that can undermine these programmes, such as weak admission requirements, inadequate funding, outdated curricula, poor infrastructure, and insufficiently qualified teacher educators (Adeyemi & Akpotu, 2020). Curriculum reform involves systematically reviewing and updating educational programmes in response to current social, technological, and global needs (Eze & Nwosu, 2025). In teacher education, this may include strengthening ICT integration, pedagogy, inclusive education, entrepreneurship and competency-based training (NCCE, 2022). Quality teacher education should prepare graduates to facilitate learning, use technology, manage diverse classrooms and assess learners effectively (Okebukola, 2023).

This study is informed by Fullan’s theory of educational change and Darling-Hammond’s model of teacher quality. Fullan (2020) argues that successful reform requires shared understanding, adequate resources and capacity building. Accordingly, curriculum reform depends on whether educators understand the changes, have the resources to implement them, and receive appropriate training. Darling-Hammond’s model emphasises the importance of entry standards, the quality of

teacher preparation and ongoing professional development (Darling-Hammond, 2020). These considerations relate directly to the foundational challenges this study examines.

Previous studies have identified persistent challenges in Nigerian teacher education. Adeyemi and Akpotu (2020), in a survey of 600 lecturers, reported that 78% identified inadequate funding, 65% cited outdated curricula, and 71% identified weak admission standards as major impediments. Oni (2022) reported that many teacher education institutions lacked functional ICT laboratories and that 60% of teacher educators in the study had not received training in the preceding five years. TETFund (2024) also reported continuing infrastructure needs in Colleges of Education, including facilities for teaching practice and science laboratories. These findings point to the importance of examining both the conditions of teacher education and the curriculum's capacity to address them.

Reform initiatives have also been reported. NCCE (2022) reviewed the NCE minimum standards and introduced courses such as ICT in Education, Entrepreneurship Education and Inclusive Education. The report describes a pilot in six Colleges of Education associated with improved graduate competence in lesson delivery. Eze and Nwosu (2025), in a quasi-experimental study involving 400 teacher trainees in five universities, reported higher pedagogical-skills scores among students exposed to a competency-based curriculum, $t(398) = 6.42$, $p < .05$. Ogunode and Okwelogu (2023) found that existing curricula did not adequately address twenty-first-century skills and recommended integrating critical thinking, collaboration and digital literacy. Okebukola (2023) likewise called for greater use of technology in teacher education and reported limited access to stable internet among institutions.

Overall, the literature identifies funding, admission, curriculum and infrastructure as continuing challenges in Nigerian teacher education (Adeyemi & Akpotu, 2020; Oni, 2022; TETFund, 2024). Although recent reforms and studies point to possible responses, less attention has been given to the curriculum implications of these foundational impediments as a connected set. Much of the existing research describes individual challenges or examines a single reform. This study addresses that gap by linking foundational impediments to specific curriculum reform priorities, including the integration of ICT, pedagogy and teaching practice.

Statement of the Problem

Concerns persist about the quality of teacher preparation in Nigeria. Reports from the West African Examinations Council and the National Examinations Council have described students' weak

performance, which some studies have linked to teacher competence (WAEC, 2023; Adeyemi & Akpotu, 2020; Oni, 2022). Identified challenges include curricula that do not adequately integrate ICT and pedagogy, admission requirements that may not ensure strong academic preparation, limited practical experience and inadequate funding for teacher education institutions (Okebukola, 2023; TETFund, 2024). Although agencies such as NCCE and TRCN have pursued reforms, questions remain about how fully curriculum changes address these underlying challenges (NCCE, 2022).

The central problem is the limited evidence connecting these foundational impediments to specific curriculum reform priorities. Without such evidence, it is difficult to determine whether current curricula adequately prepare teachers or what changes are needed to strengthen digital pedagogy, competency-based assessment and teaching practice. This study therefore examines the foundational impediments to quality teacher education in Nigeria, assesses the extent to which the current curriculum addresses them, and identifies reform priorities, including the integration of ICT, pedagogy and teaching practice.

Research questions

The following research questions guided the study:

1. What are the foundational impediments to quality teacher education in Nigeria?

2. To what extent does the current teacher education curriculum address these foundational impediments?

3. What are the curriculum reform imperatives needed to address challenges in teacher education?

4. What are the curriculum implications for integrating ICT, pedagogy, and teaching practice in teacher education reform?

Methodology

The study adopted a descriptive survey design and was conducted in Lagos, Oyo and Ekiti States in southwestern Nigeria. Four research questions guided it. The population comprised 1,500 final-year (400-level) pre-service teachers in universities and Colleges of Education across the three states. A sample of 300 was determined using Cochran's sample-size formula and selected through proportionate sampling. The sample was allocated according to each state's share of the

population: 120 respondents from Lagos (40%), 108 from Oyo (36%) and 72 from Ekiti (24%). Within each state, respondents were divided equally between one university and one College of Education.

Data were collected using a researcher-developed questionnaire titled Foundational Impediments to Quality Teacher Education (FIQTE). Two experts in Curriculum Studies at Adeyemi Federal University of Education, Ondo, reviewed the instrument, and their suggestions were incorporated into the final version. The questionnaire contained two sections: Section A collected demographic information, while Section B comprised 32 items in four clusters corresponding to the research questions. Items used a four-point scale. For Research Questions 1, 3 and 4, the response options were Strongly Agree (4), Agree (3), Disagree (2) and Strongly Disagree (1). For Research Question 2, the options were Very High Extent (4), Moderate Extent (3), Low Extent (2) and Very Low Extent (1). A mean score of 2.50 or higher was interpreted as agreement, while a score below 2.50 was interpreted as disagreement. The midpoint was calculated as $(4 + 3 + 2 + 1) \div 4 = 2.50$.

The instrument was piloted with students outside the study area: 30 each from the College of Education, Ila-Orangun, and Obafemi Awolowo University, Ile-Ife, both in Osun State. Cronbach's alpha was reported as 0.86, which was considered evidence of satisfactory internal consistency. The researcher and three research assistants administered the questionnaires in person. Data were analysed using frequency counts and mean scores.

Results

Research Question 1: What are the foundational impediments to quality teacher education in Nigeria?

Table 1: Respondent's Views on Foundational Impediments to Quality Teacher Education

S/N	Item	SA	A	D	SD	Σfx	$\bar{x}$	Decision
1.	Inadequate government funding for Colleges of Education and Faculties of Education affects the quality of teacher training	600 (150)	300 (100)	20 (10)	40 (40)	960 300	3,20	Agree
2.	Many teacher educators lack current training in modern pedagogy and digital teaching methods.	480 (120)	390 (130)	50 (25)	25 (25)	945 300	3.15	Agree

3.	The current teacher education curriculum is outdated and does not reflect 21st century skills like ICT and critical thinking.	440 (110)	360 (90)	80 (40)	60 (60)	940 300	3.13	Agree
4.	Poor admission standards that admit low-performing candidates into teacher education programs is a major impediment to quality.	400 (100)	450 (150)	10 (20)	40 (40)	910 300	3.03	Agree
5.	Poor infrastructure such as dilapidated classrooms, lack of laboratories and ICT facilities hinders effective teacher education.	440 (110)	360 (120)	40 (20)	50 (50)	890 300	2.97	Agree
6.	The societal perception that "teaching is for failures" discourages high-performing students from enrolling in teacher education.	480 (120)	240 (80)	90 (45)	55 (55)	865 300	2,88	Agree
7.	Inadequate teaching and learning resources such as textbooks, projectors and laboratory equipment affect training quality.	400 (100)	330 (110)	70 (35)	55 (55)	855 300	2.85	Agree
8.	Lack of continuous professional development for teacher educators contributes to poor quality of graduates.	360 (90)	288 (96)	104 (52)	62 (62)	814 300	2.71	Agree
	Cluster $\bar{x}$						2.99	Agree

Table 1 shows that respondents generally agreed that foundational impediments to quality teacher education exist (cluster mean = 2.99), exceeding the 2.50 benchmark. The item stating that multiple foundational impediments exist received the highest mean score (3.20), indicating the strongest agreement among the reported items.

Research Question 2: To what extent does the current teacher education curriculum address these foundational impediments?

Table 2: Respondent's Views on Extent the Current Curriculum Addresses the Foundational Impediments

S/N	Item	VHE	HE	LE	VHE	Σfx	$\bar{x}$	Decision

9.	The admission policy into teacher education programmes currently attracts high-achieving students.	80 (20)	60 (20)	360 (180)	80 (80)	580 300	1.93	Low Extent
10.	Funding provisions in the current curriculum implementation plan are adequate for quality training.	40 (10)	69 (23)	404 (202)	65 (65)	578 300	1.92	Low Extent
11.	The existing curriculum provides sufficient practical teaching experience for student-teachers.	32 (8)	60 (20)	404 (202)	70 (70)	566 300	1.89	Low Extent
12.	The current curriculum adequately prepare teachers for ICT use.	40 (10)	60 (20)	380 (190)	80 (80)	560 300	1.87	Low Extent
13.	The current curriculum addresses inclusive education for learners with special needs.	40 (40)	90 (30)	320 (160)	100 (100)	550 300	1.83	Low Extent
14.	Assessment methods in the current curriculum effectively measure teacher trainees' competence.	48 (12)	69 (23)	328 (164)	100 (100)	545 300	1.82	Low Extent
15.	The present teacher education curriculum integrates 21st century skills like problem-solving and collaboration	40 (10)	60 (20)	300 (150)	120 (120)	520 300	1.73	Low Extent
16.	The current NCE/B.Ed curriculum adequately prepares teachers for the use of ICT in the classroom.	60 (15)	75 (25)	170 (85)	175 (175)	480 300	1.60	Low Extent
	Cluster $\bar{x}$						1,82	Low Extent

Table 2 shows that respondents rated Items 9–16 as addressed to a low extent, with the cluster mean below the 2.50 benchmark. This suggests that, in respondents' view, current teacher-education provisions are inadequate to address the foundational impediments. In particular, respondents disagreed that current admission policies attract high-achieving candidates (mean = 1.93), that funding provisions are adequate for quality training (mean = 1.92), that the curriculum provides sufficient practical teaching experience (mean = 1.89), or that it adequately prepares pre-service teachers to use ICT (mean = 1.87). Overall, respondents considered the current provision insufficient and in need of reform.

Research Question 3: What are the curriculum reform imperatives needed to address challenges in teacher education?

Table 3: Respondent's Views on Curriculum Reform Imperatives for Admission, Funding and Infrastructure

S/N	Item	SA	A	D	SD	*Σfx*	x̄	Decision
17.	The reformed curriculum should include a dedicated fund for teaching practice and micro-teaching.	600 (150)	375 (125)	20 (10)	15 (15)	1010 300	3.37	Agree
18.	Government should increase budgetary allocation to teacher training institutions through curriculum policy. .	720 (180)	300 (100)	10 (5)	15 (15)	1055 300	3.52	Agree
19.	Curriculum reform should mandate aptitude test and interview for admission into teacher education programmes.	640 (160)	360 (120)	10 (5)	15 (15)	1025 300	3.42	Agree
20.	Raising the minimum entry requirement to Credit in 5 subjects including English and Math will improve teacher quality.	680 (170)	360 (120)	16 (8)	2 (2)	1058 300	3.53	Agree
21.	Curriculum reform should require all teacher training institutions to have functional ICT and science laboratories.	600 (150)	390 (130)	10 (5)	15 (15)	1015 300	3.38	Agree
22.	E-learning facilities should be made compulsory in the curriculum for all teacher education programs.	240 (160)	300 (100)	40 (20)	20 (20)	1000 300	3.33	Agree

23.	The reformed curriculum should link funding release to accreditation and quality assurance standards.	600 (150)	375 (125)	20 (10)	15 (15)	1010 300	3.37	Agree
24.	TETFund intervention should be made a compulsory component of the teacher education curriculum plan.	360 (90)	288 (96)	104 (52)	62 (62)	814 300	2.71	Agree
	Cluster x̄						**3.33**	**Agree**

Table 3 shows that respondents agreed that curriculum reform is needed to address challenges in teacher education (cluster mean = 3.33), exceeding the 2.50 benchmark. The highest-rated priorities were increasing budget allocations and linking funding to accreditation (mean = 3.53), raising admission requirements through aptitude tests and rigorous interviews (mean = 3.52), integrating twenty-first-century skills such as ICT and critical thinking (mean = 3.42), and requiring ICT laboratories and e-learning facilities (mean = 3.38). These findings indicate strong support for policy and curriculum reforms to address the identified challenges.

Research Question 4: What are the curriculum implications for integrating ICT, pedagogy, and teaching practice in teacher education reform?

Table 4: Respondent's Views on Curriculum Implications for ICT, pedagogy and Teaching Practice

S/N	Item	SA	A	D	SD	*Σfx*	x̄	Decision
25.	The curriculum should include digital pedagogy and educational technology as core courses for all teacher trainees.	720 (180)	300 (100)	10 (5)	15 (15)	1055 300	3.52	Agree
26.	Assessment in the curriculum should shift from theory-only to competency-based assessment.	680 (170)	360 (120)	16 (8)	2 (2)	1058 300	3.53	Agree

27.	The curriculum should require all trainees to develop and teach at least one e-lesson during training.	600 (150)	390 (130)	10 (5)	15 (15)	1015 300	3.38	Agree
28	The curriculum should align teacher education with TRCN professional standards	640 (160)	360 (120)	10 (5)	15 (15)	1025 300	3.42	Agree
29	The curriculum should mandate training of all teacher educators on 21st century teaching skills.	680 (170)	360 (120)	16 (8)	2 (2)	1058 300	3.53	Agree
30.	Teacher education curriculum should integrate AI, coding, and multimedia tools into subject methods.	600 (150)	390 (130)	10 (5)	15 (15)	1015 300	3.38	Agree
31.	Teaching practice should be increased to 12 weeks and digitally supervised in the reformed curriculum.	360 (90)	288 (96)	104 (52)	62 (62)	814 300	2.71	Agree
32.	Pedagogy courses in the reformed curriculum should emphasize learner-centered and inquiry-based methods.	600 (150)	375 (125)	20 (10)	15 (15)	1010 300	3.37	Agree
	Cluster $\bar{x}$						**3.23**	**Agree**

Table 4 shows that respondents agreed with the proposed curriculum implications for integrating ICT, pedagogy and teaching practice into teacher education (Items 25–32; cluster mean = 3.23), above the 2.50 benchmark. The highest-rated proposals were making digital pedagogy and educational technology core courses (mean = 3.53), training all teacher educators in twenty-first-century teaching skills (mean = 3.53), shifting assessment from theory alone to competency-based approaches (mean = 3.52), and aligning teacher education with Teachers Registration Council of Nigeria (TRCN) professional standards (mean = 3.42). These responses indicate support for reforms that strengthen pedagogy, ICT integration and practical competence.

Discussion of Findings

Findings for Research Question One indicated that respondents identified several foundational impediments to quality teacher education, including inadequate funding, outdated curricula, poor infrastructure, weak admission standards and insufficient training for teacher educators. These findings align with Adeyemi and Akpotu (2020) and Oni (2022), who also reported inadequate funding, outdated curricula, limited ICT access, and limited professional development for teacher educators. Taken together, the findings suggest that curriculum improvement may have limited effect unless it is accompanied by attention to funding, infrastructure, admission standards and staff development. Addressing these conditions is important to efforts to strengthen teacher quality and achieve Sustainable Development Goal 4 (UNESCO, 2021).

For Research Question Two, respondents generally considered the current curriculum inadequate in addressing the identified impediments. This finding aligns with Ogunode and Okwelogu (2023), who argued that teacher education curricula remain largely theory-based and insufficiently integrate ICT, critical thinking and inclusive education. The responses point to a perceived gap between current provision and the practical and digital competencies expected of teachers. They support a curriculum review to make it more responsive to current classroom needs.

For Research Question Three, respondents supported reforms related to admission, funding and infrastructure, including raising entry requirements, introducing aptitude tests, increasing budget allocations and providing ICT laboratories. This is consistent with Darling-Hammond's (2020) emphasis on entry standards and adequate resources in teacher preparation. Eze and Nwosu (2025) also reported higher pedagogical-skills scores among trainees exposed to a reformed curriculum. The present study's findings reflect respondents' views on reform priorities; they do not establish that any single policy change will itself improve graduate competence. They suggest considering curriculum reform alongside structural measures addressing admission, funding, and institutional resources.

For Research Question Four, respondents supported integrating digital pedagogy, competency-based assessment, practical teaching experience and training for teacher educators into teacher education. This aligns with Eze and Nwosu (2025), who reported higher pedagogical-skills scores among students exposed to a competency-based curriculum. The findings indicate that respondents favour a more practical, digitally informed and competency-based approach to teacher preparation.

Implementing such changes would require appropriate resources, staff development and opportunities for pre-service teachers to practise the competencies they are expected to develop.

Conclusion

The study concludes that foundational impediments remain a significant challenge to quality teacher education in Nigeria and that, in respondents' views, the current curriculum does not adequately address them. The findings indicate a need for curriculum reform that integrates ICT, strengthens admission standards, improves funding and expands practical teaching experience. With appropriate resources and implementation, these changes could help reposition teacher education in Nigeria.

Recommendations

Based on the findings, the following recommendations are made:

1. The Federal Government, NCCE and NUC should review the NCE and B.Ed. curricula to integrate digital pedagogy and competency-based learning in alignment with TRCN standards.
2. Policymakers should review admission requirements for teacher education, including the possible use of aptitude tests and interviews. Government should also increase funding for teacher education institutions and link appropriate funding to performance and accreditation standards.
3. TETFund and other stakeholders should establish dedicated support for ICT and laboratory infrastructure in Colleges of Education and university Faculties of Education.
4. Teacher education institutions should consider extending teaching practice to three months and incorporating digital supervision. They should also establish e-learning centres and provide lecturers with annual professional development in twenty-first-century pedagogy.

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