

Beyond Certification: Rethinking Colleges of Education in Nigeria in the Era of Dual-Mode Teacher Education A Critical Review and Scholarly Reflection on the Future of Teacher Preparation in Nigeria

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Abstract:

The transformation of teacher education has become a global priority in response to technological advancement, globalization, labour market shifts, and the changing nature of knowledge production. In Nigeria, the emergence of the dual-mode policy in Colleges of Education represents one of the most significant reforms in teacher education since the establishment of the Nigeria Certificate in Education (NCE). The policy permits Colleges of Education to concurrently award both NCE and Bachelor of Education (B.Ed.) degrees, thereby redefining their institutional identity and academic relevance. This paper critically examines the concept of “Beyond Certification” as a framework for rethinking Colleges of Education in Nigeria within the context of dual-mode teacher education. The paper argues that the traditional certification-oriented model has become inadequate for addressing

contemporary educational demands characterized by digital transformation, competency-based learning, entrepreneurship, and global competitiveness. Using a qualitative and descriptive research design, the study relies on secondary data from government reports, journal articles, policy documents, and comparative international educational practices. Findings reveal that while the dual-mode policy offers opportunities for institutional revitalization, enhanced teacher qualification, increased enrolment, and global competitiveness, major challenges remain in the areas of funding, digital infrastructure, curriculum modernization, staff development, and quality assurance. The study concludes that Colleges of Education in Nigeria must evolve beyond centres of credential acquisition into innovative institutions capable of producing technologically competent, research-oriented, entrepreneurial, and globally relevant educators.

Keywords: Teacher Education Reform; Dual-Mode Policy; Curriculum Modernization; Educational Innovation; Employability Skills.

Introduction

Education remains one of the most important instruments for national development, social transformation, economic growth, and technological advancement. The effectiveness of every educational system largely depends on the quality of its teachers. Consequently, teacher education occupies a strategic position in national development because no educational system can rise above the quality of its teachers.

In Nigeria, Colleges of Education (CoEs) were established primarily to train professional teachers for the basic education sector through the award of the Nigeria Certificate in Education (NCE). For several decades, these institutions served as the major centres for teacher preparation, particularly for primary and junior secondary schools.

Despite their historical significance, Colleges of Education have increasingly faced serious institutional challenges including declining student enrolment, poor societal perception, inadequate funding, obsolete infrastructure, graduate unemployability, curriculum rigidity, and weak integration of digital technologies [1].

In recent years, many Nigerian students have shown greater preference for university education because university degrees are perceived to offer higher social prestige and better employment opportunities than the NCE qualification [2].

The emergence of the dual-mode policy represents a major attempt by the Federal Government of Nigeria to reposition Colleges of Education within the country's higher education framework. The policy allows Federal Colleges of Education to concurrently award both NCE and Bachelor's degrees [3]. The reform seeks to improve teacher quality, increase institutional attractiveness, enhance employability, and align Nigerian teacher education with global educational trends [4].

Globally, teacher education has shifted from a narrow emphasis on certification toward competency-based, technologically driven, and research-oriented approaches [5]. Modern educational systems increasingly emphasize digital literacy, reflective teaching, critical thinking, lifelong learning, innovation, interdisciplinary learning, and entrepreneurship.

The phrase "Beyond Certification" reflects a growing recognition that educational qualifications alone are no longer sufficient indicators of teacher competence [6]. Contemporary educators must possess practical skills, technological competence, adaptability, creativity, emotional intelligence, and research capacity.

The dual-mode system has come at a time when global educational systems are increasingly embracing blended learning, virtual instruction, artificial intelligence, competency-based assessment, and flexible learning pathways [7].

Statement of the Problem

The traditional teacher education model in Nigeria has become increasingly inadequate in addressing the demands of contemporary society. Although Colleges of Education were originally established to produce qualified teachers, many graduates are often criticized for lacking practical teaching competence, digital literacy, entrepreneurial skills, and innovative capacity [8].

One of the major problems confronting Colleges of Education is the excessive emphasis on certification rather than competence. In many cases, educational success is measured by possession of certificates rather than demonstrable professional skills [9].

The declining societal perception of the NCE qualification has also contributed to falling enrolment in Colleges of Education. Many students increasingly prefer university degrees because they are perceived as more prestigious and economically rewarding [10].

Furthermore, the emergence of digital technologies, online learning systems, artificial intelligence, and blended learning models has transformed global educational practice. However, many Nigerian Colleges of Education still operate with outdated curricula, inadequate ICT facilities, weak internet connectivity, poor electricity supply, and limited digital competence among lecturers [11].

Although the dual-mode policy was introduced to address some of these challenges, concerns remain regarding the preparedness of Colleges of Education to effectively implement degree programmes alongside the NCE structure [12].

Without proper restructuring, there is a risk that the dual-mode system may merely transform Colleges of Education from “certificate factories” into “degree factories” without achieving meaningful educational transformation.

Methodology

Method of Data Collection

This study adopted a qualitative descriptive research design based on secondary data analysis. Data were collected from multiple documentary and institutional sources to ensure comprehensive coverage of issues relating to dual-mode teacher education and the transformation of Colleges of Education in Nigeria.

The sources of data included:

- government policy documents and official reports;
- publications from the Federal Ministry of Education and the National Commission for Colleges of Education (NCCE);
- journal articles and conference proceedings;
- textbooks and scholarly publications on teacher education;
- newspaper reports and online educational databases;
- institutional reports from Colleges of Education;
- and comparative international studies on teacher education reforms.

The study also incorporated relevant statistical data obtained from educational policy reports, institutional publications, and existing literature to illustrate trends in enrolment, teacher qualification, digital readiness, and higher education reforms in Nigeria.

For instance, recent reports indicate a steady decline in enrolment into some Colleges of Education due to growing preference for university degree programmes, while the introduction of the dual-mode policy has begun to stimulate renewed institutional interest and increased admission

applications in selected Federal Colleges of Education [13].

Illustrative comparative analysis was also used to examine teacher education models in countries such as Finland, Singapore, Canada, and India. These countries were selected because of their recognized achievements in teacher professionalism, digital pedagogy, curriculum innovation, and competency-based education systems.

The collected data were analyzed using thematic content analysis and descriptive analytical techniques. The analysis focused on identifying recurring themes and patterns relating to:

- institutional relevance;
- curriculum reform;
- competency-based learning;
- digital transformation;
- blended learning systems;
- teacher professionalism;
- employability;
- funding challenges;
- and sustainability of the dual-mode policy.

Simple statistical illustrations and trend descriptions were used where necessary to support arguments and provide clearer understanding of the ongoing transformation within teacher education in Nigeria.

The qualitative approach was considered appropriate because it enabled an in-depth exploration of policy issues, institutional challenges, and emerging reforms associated with dual-mode teacher education in Nigeria.

Sample Conceptual Model for Dual-Mode Teacher Education in Nigeria

The proposed dual-mode teacher education model illustrates how Colleges of Education can move beyond traditional certification toward competency-based, technology-driven, and globally relevant teacher preparation.

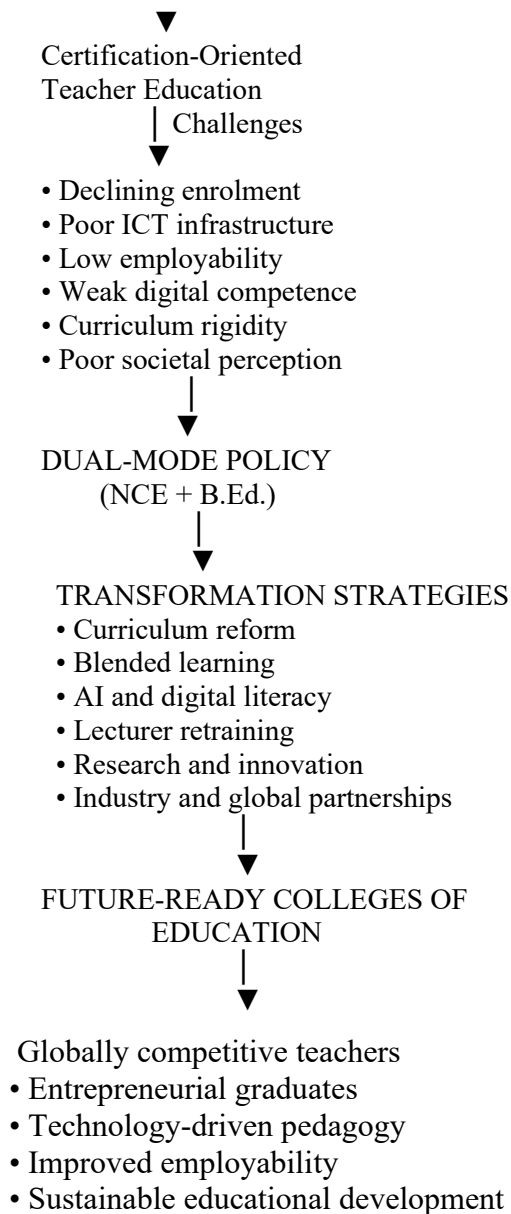
Components of the Model

Traditional System	Transitional Reform (Dual-Mode)	Transformative Future Model
Certificate-oriented learning	NCE + B.Ed. structure	Competency-based education
Theory-based curriculum	Curriculum modernization	Digital and innovation-driven curriculum
Limited ICT integration	Blended learning adoption	Fully technology-integrated pedagogy
Low research culture	Research improvement initiatives	Research-oriented teacher education
Teacher production focus	Skills and employability focus	Education workforce development
Limited entrepreneurship	Entrepreneurial education	Educational innovation and startups

Graphical Illustration of the Dual-Mode Transformation Model

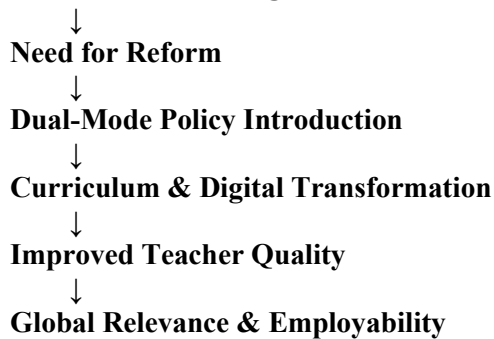
TRADITIONAL COLLEGES OF EDUCATION





Sample Analytical Framework

Educational Challenges



This framework explains the logical relationship between educational challenges, policy reforms, institutional transformation, and expected outcomes in Nigerian teacher education.

Result and Discussion

Discussion of findings

The Crisis of Relevance in Nigerian Colleges of Education

One of the major findings of this study is that Colleges of Education in Nigeria have experienced a crisis of relevance resulting from excessive emphasis on certification rather than competence. The traditional NCE structure became increasingly unattractive to students due to low societal prestige and limited career opportunities [14].

The findings align with global debates on credentialism, which criticize educational systems that prioritize academic qualifications over practical competence [15].

The dual-mode policy therefore represents an institutional survival strategy aimed at repositioning Colleges of Education within the higher education system (Federal Ministry of Information and National Orientation, 2025).

Curriculum Reform and Competency-Based Teacher Education

The study reveals that many existing curricula in Colleges of Education remain heavily theoretical and examination-oriented. Contemporary teacher education, however, requires practical engagement, digital competence, project-based learning, and critical thinking (ResearchGate, 2025).

Internationally, countries with strong educational systems emphasize practical teaching immersion, collaborative learning, technology integration, reflective practice, and continuous professional development.

The implication is that Nigerian Colleges of Education must redesign curricula to reflect twenty-first century educational realities.

Digital Transformation and Blended Learning

The study also found that digital transformation has become central to modern teacher education. Globally, teacher preparation increasingly combines face-to-face learning, virtual classrooms, online assessment, remote supervision, and micro-credentialing (ResearchGate, 2025).

The COVID-19 pandemic further accelerated the adoption of online and blended learning systems worldwide.

However, the study identified major digital challenges confronting Nigerian Colleges of Education, including inadequate ICT infrastructure, unstable electricity, poor broadband connectivity, lecturer digital illiteracy, and weak learning management systems.

Without substantial investment in digital infrastructure, the dual-mode policy may face serious implementation challenges (The Star, 2026).

International Perspectives on Teacher Education Reform

Countries such as Finland and Singapore have transformed teacher education through strong research culture, rigorous teacher preparation, technological integration, institutional autonomy, and continuous professional development (ResearchGate, 2025).

Singapore emphasizes continuous teacher development and technology integration through its “Teach Less, Learn More” philosophy.

These international models demonstrate that successful teacher education reforms require long-term investment, policy consistency, and institutional innovation.

Employability and Entrepreneurial Education

Another major finding is that modern teacher education must extend beyond classroom teaching to broader educational and entrepreneurial opportunities. Which affirm the work of Ojimba (2012) who adjudged that some part of TVET curricula to be too academic and overloaded with intellectual

content in pure science and mathematics at the expense of basic vocational and technological skills.

Graduates of Colleges of Education can increasingly function as instructional designers, educational consultants, online tutors, educational content developers, curriculum specialists, and educational technology entrepreneurs (ResearchGate, 2025).

This reflects the growing transition from “teacher production” to “education workforce development.”

The Role of Vocational Education in the Dual-Mode Era

Technical and Vocational Education and Training (TVET) has become increasingly important in the contemporary era of dual-mode teacher education in Nigeria. In the dual-mode era, vocational education enables Colleges of Education to produce graduates who are not only qualified teachers but also competent professionals capable of functioning in multiple sectors of the economy.

The integration of TVET into dual-mode teacher education is particularly important in areas such as:

- agricultural education;
- business education;
- computer and digital technology education;
- home economics;
- industrial technical education;
- entrepreneurship education;
- and vocational pedagogy.

This aligns with global educational trends that increasingly emphasize competency-based learning and employability skills (ResearchGate, 2025).

Furthermore, vocational education supports the broader objective of moving Nigerian Colleges of Education beyond mere certification toward sustainable human capital development. Rather than producing graduates who depend solely on government teaching jobs, vocational education equips learners with skills for self-employment, educational consultancy, digital content development, instructional technology services, and small-scale enterprise creation.

The dual-mode system also creates opportunities for Colleges of Education to establish stronger partnerships with industries, technical institutes, private organizations, and innovation hubs for practical training, internship programmes, and research collaboration (The Guardian Nigeria, 2024).

Digital transformation further strengthens the role of vocational education in the dual-mode era. Modern vocational training increasingly incorporates:

- artificial intelligence (AI);
- digital fabrication;
- online learning platforms;
- simulation technologies;
- virtual laboratories;
- and blended learning systems.

Consequently, vocational teacher education must evolve to prepare teachers who can effectively integrate technology into skills acquisition and technical instruction.

Studies have shown that countries with strong vocational and technical education systems such

as Germany, Singapore, Finland, and South Korea achieve higher levels of industrial productivity, innovation, and youth employability because their educational systems emphasize practical competence and lifelong learning (ResearchGate, 2025).

In Nigeria, the successful integration of vocational education into the dual-mode framework requires:

- curriculum modernization;
- adequate workshop and laboratory facilities;
- digital infrastructure;
- industry collaboration;
- lecturer retraining;
- and sustainable funding mechanisms.

Without these reforms, the dual-mode policy may not fully achieve its objective of transforming Colleges of Education into globally relevant institutions.

Therefore, vocational education remains a central pillar for the success of dual-mode teacher education because it bridges the gap between theory and practice, enhances employability, promotes entrepreneurship, and contributes to national economic development (Vanguard Media Limited, 2024).

Conclusion

This study concludes that the future of Colleges of Education in Nigeria lies beyond the traditional emphasis on certification. The emergence of the dual-mode policy represents a significant opportunity to reposition teacher education and restore institutional relevance within Nigeria's higher education system (Federal Ministry of Information and National Orientation, 2025).

However, meaningful transformation requires more than the ability to award Bachelor's degrees. Colleges of Education must evolve into innovative institutions capable of producing technologically competent, research-oriented, entrepreneurial, and globally competitive educators.

1. The study further concludes that the success of dual-mode teacher education depends on curriculum modernization, digital transformation, lecturer retraining, infrastructural development, sustainable funding, and effective quality assurance systems (The Star, 2026). Which agrees with the findings of Nwogu and Nwanoruo (sited in Igberadja, 2014) that the challenges of TVET are numerous, and it includes lack of skilled manpower and acute shortage of TVET teachers. If these problems would be addressed, our economy will surely be revamped and our vision 20-20-20 will be a reality. Today we are already in 2026.

Recommendations

Based on the findings of this study, the following recommendations are made:

1. The Federal Government should provide adequate and sustainable funding for Colleges of Education to improve infrastructure, research capacity, and digital facilities (Federal Ministry of Information and National Orientation, 2025).
2. Colleges of Education should redesign curricula to emphasize competency-based learning, STEM education, entrepreneurship, AI literacy, and practical teaching skills in line with global educational trends (ResearchGate, 2025).
3. ICT infrastructure and internet accessibility should be improved to support blended and online learning systems, especially within the framework of dual-mode teacher education (The Star, 2026).
4. Continuous professional development programmes should be organized for lecturers to enhance digital competence, pedagogical innovation, and technology integration in teaching

- and learning (ResearchGate, 2025).
5. Strong partnerships should be established between Colleges of Education, industries, schools, NGOs, and international educational institutions to improve research collaboration, innovation, and professional exposure (The Guardian Nigeria, 2024).
 6. Quality assurance agencies such as NCCE and NUC should develop clear operational frameworks and monitoring mechanisms for the effective implementation of the dual-mode system (Federal Ministry of Information and National Orientation, 2025).
 7. Teacher education institutions should promote research, innovation, and educational technology integration to align with global best practices in teacher preparation and professional development (ResearchGate, 2025).
 8. Greater emphasis should be placed on Technical and Vocational Education and Training (TVET) to improve graduate employability, entrepreneurship, self-reliance, and national productivity (Vanguard Media Limited, 2024).

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