

**THE NATIONAL ARTIFICIAL INTELLIGENCE STRATEGY 2025
FUNDING ARCHITECTURE AND TEACHER READINESS FOR
THE NEW JUNIOR SECONDARY CURRICULUM: A POLICY
ANALYSIS OF RURAL AND URBAN NORTH-CENTRAL NIGERIA**

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Abstract

Nigeria introduced Digital Technologies, a subject that carries coding, robotics and artificial intelligence (AI), into the Junior Secondary curriculum from the 2025/2026 session, and released the National Artificial Intelligence Strategy ten days after the approved subject list. The Strategy committed government to teacher training but attached no budget line to it. This paper analysed how that funding architecture conditioned the readiness of teachers in rural and urban schools of North-Central Nigeria, namely Benue, Kogi, Kwara, Nasarawa, Niger, Plateau and the Federal Capital Territory (FCT). The study applied qualitative content analysis to the Strategy, the 2025 and 2026 federal education budgets, Universal Basic Education Commission (UBEC) returns, national household and school surveys, and comparator frameworks from Estonia, Kenya, Rwanda and the Republic of Korea. Findings revealed a curriculum mandated nationally but resourced locally. UBEC's 2026 allocation fell by 31.39 per cent, and information and communications technology received 0.11 per cent of the identifiable basic-education capital envelope. In North-Central Nigeria, 66.3 per cent of residents were multidimensionally poor and 53.2 per cent of households had no electricity; across the country, rural junior secondary schools had 35 students per digital device against 20 in urban schools, and only 20.1 per cent of rural households had internet access against 51.2 per cent of urban households. Because the available teacher training was largely virtual, rural North-Central teachers carried the steepest readiness deficit. The paper was rounded off with a costed amendment to the Universal Basic Education Act, carrying a rural-priority envelope, for the 2027 fiscal cycle.

Keywords: *National AI Strategy, teacher readiness, rural–urban divide, Universal Basic Education Commission, North-Central Nigeria*

Introduction

A curriculum reform succeeds or fails where the teacher meets the syllabus. On 9 September 2025, the Nigerian Educational Research and Development Council (NERDC) released the approved subject list for the revised basic and senior secondary curriculum, and Digital Technologies appeared among the twelve to fourteen subjects for Junior Secondary School (JSS) one to three, to take effect at JSS 1 in the 2025/2026 session (Adesina, 2025). UNESCO (2026) described the revised curriculum as one that included AI, robotics and digital literacy. Ten days later, on 19 September 2025, the Federal Ministry of Communications, Innovation and Digital Economy (FMCIDE) released the National Artificial Intelligence Strategy as a living document (Digital Policy Alert, 2025). The Strategy pledged to "launch a comprehensive AI skills development programme, including curriculum reform, teacher training, and reskilling initiatives" (FMCIDE, 2025, p. 40). It named no amount, no budget line and no responsible agency for that training. In Riyom, Toto or Kwali, the curriculum arrived before the training, the power supply and the devices. That gap was what this study examined.

Three variables organised the inquiry. Funding architecture referred to the chain of instruments through which money for teacher capacity moved from federal policy to the classroom: the Strategy, the Appropriation Acts, the UBEC intervention fund and state counterpart contributions. Teacher readiness was read against the European Framework for the Digital Competence of Educators (DigCompEdu), which grouped twenty-two competences under six areas (Redecker & Punie, 2017). School location, rural or urban, was treated as the condition under which the first variable acted on the second. A teacher in Wuse and a teacher in a village in Nasarawa receive the same subject list. They do not receive the same electricity, bandwidth or devices.

The comparative record was instructive. Estonia began its ProgeTiiger programme in 2012 with about 70,000 euros of public funding for learning resources and training for teachers in roughly twenty pilot schools (Olson, 2012), and the programme later passed to the Education and Youth Board under the Ministry of Education and Research, which ran in-service courses and model lessons (European Commission, n.d.). The Republic of Korea set aside 381.8 billion won, about US\$276 million, in 2024 to prepare teachers

for AI-based digital textbooks (Choi, 2024) and planned 34,000 lead teachers by 2026 (Kwon, 2024). Yet on 4 August 2025 the National Assembly removed the textbook status of those materials (Straits Times, 2025), and the 2026 digital education budget dropped to 50 billion won from the 300 billion earlier contemplated (AI Revolution, 2025). Korea, then, showed that money for teachers was necessary but not sufficient. Policy stability mattered too.

Within Africa, Kenya's Teachers Service Commission and ICT Authority, under the World Bank-supported Kenya Digital Economy Acceleration Project, set out in June 2026 to train more than 62,000 junior school teachers from over 20,000 schools in all forty-seven counties (Education News, 2026), and the ICT Authority reported in September 2026 that more than 62,000 teachers had been trained (ICT Authority, 2026). Earlier, the Safaricom Foundation, the Vodafone Foundation and Kenya's Ministry of Education launched a KSh 240 million programme for thirty-five teacher training colleges (Kenya News Agency, 2024). Rwanda's Education Board built its ICT Essentials for Teachers course on fourteen competencies drawn from the UNESCO ICT Competency Framework for Teachers (UNESCO, 2023). The common thread was a named agency, a defined cohort and national coverage.

Nigeria's fiscal record ran the other way. UBEC's allocation fell from ₦644,146,704,032 in 2025 to ₦441,923,867,349 in 2026, a decline of 31.39 per cent; education's share of the federal budget fell from 7.82 to 6.15 per cent; and information and communications technology (ICT) and EdTech lines took ₦279,755,000, or 0.11 per cent, of an identifiable basic-education capital envelope of ₦246.78 billion (Development Research and Projects Centre [DRPC], 2026). Personnel costs absorbed ₦427.82 billion, or 97.3 per cent, of UBEC's 2026 budget, leaving ₦12.11 billion for capital (Best Nigerian Schools, 2026). In 2025, ₦92.4 billion in matching grants went to twenty-five states and the FCT, and ₦19 billion was earmarked for teacher professional development (Adeleke, 2025). The matching grant itself carried a fifty per cent counterpart requirement (Go Beyond Local, 2026). In March 2026 the Minister of Education stated that almost ₦240 billion remained unaccessed (BusinessDay, 2026), and in August 2026 the Executive Secretary of UBEC reported that more than ₦65 billion in matching grants was still unaccessed while about ₦267 billion of released

intervention funds lay unutilised (Radio Nigeria, 2026). Niger State alone left about ₦3.55 billion and the FCT about ₦1.52 billion unaccessed for 2024 (The Nigeria Education News, 2026).

The rural–urban picture in North-Central Nigeria sharpened the problem. In 2022, 72.0 per cent of rural Nigerians were multidimensionally poor against 42.0 per cent of urban dwellers, and the North-Central zone recorded 66.3 per cent, with Plateau at 84.0 per cent and Kwara and the FCT each at 48.3 per cent (National Bureau of Statistics [NBS], 2022). By 2023/24, 82.2 per cent of urban households had electricity against 40.4 per cent of rural households, and 53.2 per cent of North-Central households had none; internet use among North-Central residents aged ten and above stood at 18.6 per cent for males and 18.9 per cent for females (NBS, 2024). In schools, rural JSS had 35 students per digital device against 20 in urban JSS (De Simone & Manolio, 2024). Ideally, a teacher expected to teach coding should hold the competence, the device and the power to practise it. In rural North-Central Nigeria, many held none of the three.

The study was aimed at establishing how the funding architecture of the National AI Strategy conditioned teacher readiness for Digital Technologies in rural and urban junior secondary schools of North-Central Nigeria. Four specific objectives that guided the study were to: map the gap between the Strategy's teacher-training commitment and actual federal and UBEC allocations; compare the readiness conditions of rural and urban junior secondary schools in North-Central Nigeria; benchmark Nigeria's arrangement against Estonia, Korea, Kenya, Rwanda and DigCompEdu; and draft a costed legislative amendment for the 2027 fiscal cycle. The general question was: how did the funding architecture of the Strategy condition teacher readiness in rural and urban North-Central Nigeria? Three specific questions followed. What teacher-training commitment did the Strategy make, and what did the 2025 and 2026 budgets provide? How did readiness conditions differ between rural and urban schools across the six states and the FCT? What could Nigeria draw from the comparator systems?

Method

The study adopted a qualitative policy-analysis design using directed qualitative content analysis (Hsieh & Shannon, 2005). No fieldwork or

human participants were involved; the evidence was documentary and publicly available. Four groups of sources were analysed. The first was the National AI Strategy (FMCIDE, 2025) and the Universal Basic Education Act 2004 (Universal Basic Education Act, 2004). The second comprised fiscal records: the DRPC (2026) analysis of the 2025 and 2026 budgets, UBEC's 2026 budget breakdown, and official statements on matching grants. The third comprised national surveys that disaggregated data by rural and urban location and by state: the NBS (2022) Multidimensional Poverty Index survey, the NBS (2024) General Household Survey-Panel Wave 5, and the World Bank analysis of UBEC's National Personnel Audit (De Simone & Manolio, 2024). The fourth comprised comparator documents from Estonia, Korea, Kenya and Rwanda, together with DigCompEdu.

Coding began with categories drawn from Ely's (1990) conditions for implementing educational technology and from DigCompEdu, and new categories were allowed to emerge where the documents demanded them. Each provision was placed on a three-axis matrix: whether it was funded or unfunded, whether it targeted teachers or other actors, and whether its effect fell on rural or urban schools. Each coded entry was linked to a page or table number in its source, so that any reader could retrace the analysis. The comparator cases were chosen because each had funded teacher preparation for computing or AI at the lower secondary level within the last fifteen years.

Conceptual Clarification and Theoretical Framework

A funding gap was understood here as the distance between a policy commitment and the resources appropriated to deliver it. Adeyemi (2011) traced Nigeria's chronic underfunding of education and the dependence of basic education on intergovernmental transfers. The Tunani policy brief observed that the AI Strategy contained "few binding commitments, measurable KPIs, or dedicated budget lines" and was "a strategy without a roadmap or a budget" (Ibrahim, n.d.). Teacher readiness was taken as the combination of competence, confidence and the material conditions needed to teach a new subject. Guskey (2002) argued that professional development changes classroom practice first, and that teachers' beliefs change only after they see improved learning outcomes in their students. Readiness, on that view, is not built by a single workshop; it needs

sustained practice, which in turn needs devices and power. The technological pedagogical content knowledge framework (Mishra & Koehler, 2006; Chai et al., 2013) added that technology knowledge must be joined to pedagogy and content before it becomes teachable. The two concepts were therefore related inversely: the wider the funding gap, the lower the readiness, and location widened or narrowed that relationship.

Rogers' (2003) diffusion of innovations theory explained why adoption spreads unevenly, from innovators and early adopters to laggards, and why the latter tend to be those with fewer resources and weaker networks. Ely (1990) set out eight conditions for implementing educational technology, the third of which was the availability of resources. Fullan (2007) insisted that educational change depends on what teachers do and think, and that it fails where capacity is not built. Taken together, the three explained the North-Central case. The Strategy supplied the innovation. The budget withheld Ely's resources. Rural teachers, with weaker infrastructure, were positioned to become Rogers' late adopters, not by choice but by allocation.

Review of Related Studies

Redecker and Punie (2017) developed DigCompEdu as a reference framework of twenty-two educator competences across six areas, from professional engagement to facilitating learners' digital competence; its value for this study lay in setting the competences a Digital Technologies teacher would need. Mishra and Koehler (2006) showed that teachers' technology knowledge cannot be separated from pedagogy and content, and Chai et al. (2013) reviewed TPACK research and concluded that teacher education programmes needed sustained, design-based approaches to build it. Adeyemi (2011) found that Nigeria's education finance was inadequate and unevenly distributed, and that basic education relied heavily on federal transfers. De Simone and Manolio (2024) analysed the 2021 Multiple Indicator Cluster Survey and the 2022 National Personnel Audit and found that 3.4 per cent of rural households owned a computer against 16.2 per cent of urban households, and that urban schools held about 345,000 computers against about 155,000 in rural schools. Ibrahim (n.d.) assessed the AI Strategy and found it weak on budget and measurable targets. None of these studies, however, connected the Strategy's funding architecture to teacher readiness for the new JSS curriculum, nor did any disaggregate that

question by rural and urban location in North-Central Nigeria. That was the gap the present study addressed.

Results

On the first question, the Strategy committed government to teacher training but gave it no amount, timeline or agency (FMCIDE, 2025, p. 40). The 2026 budget gave ICT and EdTech 0.11 per cent of the identifiable basic-education capital envelope (DRPC, 2026). Teacher AI training that did occur was donor-led and mostly virtual. Google.org provided a ₦2.8 billion grant to Data Science Nigeria for the Experience AI programme, which targeted 25,000 educators teaching 125,000 young people across Nigeria (FMCIDE, 2024). The National Senior Secondary Education Commission (NSSEC) began virtual AI training for 6,000 senior secondary teachers in the thirty-six states and the FCT, sponsored by Google Research (Punch, 2025), and its programme page recorded 130 teachers in Nasarawa State then in training (NSSEC, n.d.). The Teachers Registration Council's Naija Teacher AI platform, built with GMind AI, cost about US\$30 per teacher per year, targeted 1.5 million teachers and onboarded more than 50,000 in its pilot (UNESCO, 2026). None of these was a federal budget line for JSS Digital Technologies teachers.

On the second question, the rural–urban difference was consistent across every condition examined. Table 1 sets out the evidence, and Table 2 shows the state-level poverty profile of North-Central Nigeria.

Table 1: Rural and urban readiness conditions relevant to Digital Technologies teaching

Condition	Rural	Urban	North-Central
Multidimensionally poor population, 2022	72.0%	42.0%	66.3%
School-attendance deprivation, 2022	31.9%	13.4%	—
Households with electricity, 2023/24	40.4%	82.2%	46.8%
Households with a computer, 2021	3.4%	16.2%	—
Households with internet at home, 2021	20.1%	51.2%	—
JSS students per digital device, 2022	35	20	—

Sources: NBS (2022, pp. 24, 105); NBS (2024, Table 3.9); De Simone and Manolio (2024). North-Central electricity is computed as 100 minus the 53.2% of households reported without electricity. A dash shows that no zonal figure was published.

Table 2: Multidimensional poverty in North-Central Nigeria, 2022

State	Benue	Kogi	Kwara	Nasarawa	Niger	Plateau	FCT
MPI headcount	75.0%	61.3%	48.3%	60.7%	69.1%	84.0%	48.3%

Source: NBS (2022, pp. 100–101).

On the third question, every comparator tied teacher preparation to a named agency and a defined cohort. Estonia funded it from the start and institutionalised it (Olson, 2012; European Commission, n.d.). Korea funded it heavily but saw its programme cut back when the policy behind it changed (Straits Times, 2025). Kenya reached teachers in every county through a single project (Education News, 2026). Rwanda anchored its course in an international competency framework (UNESCO, 2023). Nigeria's Strategy did none of these for JSS teachers.

Discussion

The central finding was that the curriculum was mandated nationally but resourced locally, and the locality that resourced it least was rural. This agreed with Adeyemi's (2011) account of dependence on federal transfers and with Ibrahim's (n.d.) judgement that the Strategy lacked a budget. It also confirmed Ely's (1990) third condition in the negative: where resources were absent, implementation stalled. The rural–urban data showed how the stall was distributed. Virtual training of the kind NSSEC ran assumed electricity and bandwidth, yet 40.4 per cent of rural households had electricity and 20.1 per cent had internet at home (NBS, 2024; De Simone & Manolio, 2024). A rural teacher in Plateau, where 84.0 per cent of residents were multidimensionally poor (NBS, 2022), was therefore least likely to complete an online course and least likely to have a device on which to practise what it taught. Guskey's (2002) model made the consequence plain: without practice, there were no improved student outcomes to change teachers' beliefs, and the cycle of change never closed.

The FCT complicated the picture, usefully. Its poverty rate matched Kwara's at 48.3 per cent, and its urban schools stood closer to power, connectivity and the donor programmes flagged off in Abuja. Yet the FCT also left about ₦1.52 billion of its 2024 matching grant unaccessed, as did Niger State with about ₦3.55 billion (The Nigeria Education News, 2026). Money was available but was not drawn down. That pointed to a second

failure, of counterpart funding and state capacity, rather than a simple shortage. Rogers (2003) would read the result as adoption skewed towards better-resourced urban schools, and Fullan (2007) as change without capacity. Korea's reversal (Straits Times, 2025) added a warning for Nigeria. Funding without a stable legal basis could be withdrawn as quickly as it was granted.

Strategies Drawn from Comparative Evidence

Three strategies emerged. First, teacher preparation for Digital Technologies needed a named owner and a statutory budget line, as Estonia's Education and Youth Board and Kenya's Teachers Service Commission had. Second, the line needed protection in law so that it could survive a change of policy, the lesson of Korea. Third, donor and private support needed to be steered towards national coverage, as Kenya's project covered all forty-seven counties, rather than left to settle where connectivity was already good. For North-Central Nigeria, that meant writing a rural priority into the allocation itself rather than hoping it would follow.

Conclusion

The study found that the National AI Strategy committed Nigeria to teacher training without paying for it, at a time when UBEC's allocation fell by almost a third. Across North-Central Nigeria, the effect was not uniform. Urban teachers, particularly in the FCT, were closer to the power, connectivity and donor programmes that made training possible. Rural teachers in states such as Plateau, Benue and Niger faced the deepest poverty and the weakest infrastructure, and so carried the steepest readiness deficit. Unless the funding architecture is changed, Digital Technologies risks becoming an urban subject taught by name only in rural schools.

Recommendations

The following recommendations were made.

1. The National Assembly should amend section 11 of the Universal Basic Education Act 2004 in the 2027 fiscal cycle to create a ring-fenced teacher digital-competence line equal to five per cent of UBEC's annual allocation. On the 2026 allocation of ₦441,923,867,349, this would have been about ₦22.10 billion, or

about ₦53,000 for each of the 416,291 JSS teachers recorded in 2022 (BusinessDay, 2024).

2. At least sixty per cent of that line should be reserved for schools recorded as rural in UBEC's National Personnel Audit, with North-Central states such as Plateau, Benue and Niger, where multidimensional poverty was highest, given first call.
3. UBEC should publish each state's access to the teacher-competence line and its counterpart contribution every quarter on a public online dashboard, so that unaccessed funds of the kind recorded for Niger State and the FCT are visible early.
4. The Federal Ministry of Education, NERDC and the Teachers Registration Council of Nigeria should adopt a Digital Technologies teacher competence standard drawn from DigCompEdu and the UNESCO ICT Competency Framework for Teachers, and should provide offline or low-bandwidth versions of training for rural teachers.
5. The Federal Ministry of Communications, Innovation and Digital Economy should revise the living National AI Strategy to add a costed teacher-training target, a lead agency and a timeline, and should require donor-funded teacher programmes to report how many rural teachers they reach in each state.

References

- Adeleke, D.-M. (2025). *A review of the 2025 Federal Government education budget allocations*. Education Out Loud. https://educationoutloud.org/wp-content/uploads/2026/07/Academic_Review_of_2025_Federal_Education_Budget.pdf
- Adesina, M. (2025, September 9). *Full list: FG releases approved subjects for schools*. P.M. News. <https://pmnewsnigeria.com/2025/09/09/full-list-fg-releases-approved-subjects-for-schools/>
- Adeyemi, T. O. (2011). Financing of education in Nigeria: An analytical review. *American Journal of Social and Management Sciences*, 2(3), 295–303. <https://doi.org/10.5251/ajsms.2011.2.3.295.303>
- AI Revolution. (2025, August 26). *South Korea halts ambitious AI textbook programme amid teachers' and parents' criticism*.

<https://airevolution.poltextlab.com/south-korea-halts-ambitious-ai-textbook-programme-amid-teachers-and-parents-criticism/>

- Best Nigerian Schools. (2026, February 12). *UBEC to spend 97.3% of 2026 budget on salaries*. <https://www.bestnigerianschools.net/ubec-to-spend-97-3-of-2026-budget-on-salaries/>
- BusinessDay. (2024, August 2). *Basic students learning behind on 194,000 teacher shortage*. <https://businessday.ng/news/article/basic-students-learning-behind-on-194000-teacher-shortage/>
- BusinessDay. (2026, March 25). *FG eyes \$500m education boost, deepens reform push*. <https://businessday.ng/education/article/fg-eyes-500m-education-boost-deepens-reform-push/>
- Chai, C. S., Koh, J. H. L., & Tsai, C.-C. (2013). A review of technological pedagogical content knowledge. *Educational Technology & Society*, 16(2), 31–51. <https://www.jstor.org/stable/jeductechsoci.16.2.31>
- Choi, J.-y. (2024, April 15). S. Korea to allocate \$276m for classroom digitization. *The Korea Herald*. <https://www.koreaherald.com/article/3370842>
- De Simone, M. E., & Manolio, N. (2024). *Digital skills in Nigeria: A summary of the population's skills and the availability of digital infrastructure in schools*. World Bank. <https://thedocs.worldbank.org/en/doc/a607bb6e3b76d2be0f3db8db34dcf73e-0140022025/original/1Nigeria-TF0C2441-Digital-Skills-Report-final.pdf>
- Development Research and Projects Centre. (2026). *Nigeria's education budget in a time of fiscal stress: Allocations, execution, and policy implications*. <https://drpcngr.org/wp-content/uploads/2026/01/Nigerias-Education-Budget-in-a-time-of-fiscal-stress-Updated.pdf>
- Digital Policy Alert. (2025). *National Artificial Intelligence Strategy 2025–2029*. <https://digitalpolicyalert.org/change/19911-national-artificial-intelligence-strategy>
- Education News. (2026, June 21). *TSC, ICT Authority to train over 62,000 JSS teachers in digital skills programme*. <https://educationnews.co.ke/tsc-ict-authority-to-train-over-62000-jss-teachers-in-digital-skills-programme/>

- Ely, D. P. (1990). Conditions that facilitate the implementation of educational technology innovations. *Journal of Research on Computing in Education*, 23(2), 298–305. <https://doi.org/10.1080/08886504.1990.10781963>
- European Commission. (n.d.). *Estonia: 8.7 Fostering the creative use of new technologies*. Youth Wiki. <https://national-policies.eacea.ec.europa.eu/youthwiki/chapters/estonia/87-fostering-the-creative-use-of-new-technologies>
- Federal Ministry of Communications, Innovation and Digital Economy. (2024, October 31). *Ministry announce N2.8billion Google support to advance AI talent development in Nigeria*. <https://fmcide.gov.ng/ministry-announce-n2-8billion-google-support-to-advance-ai-talent-development-in-nigeria/>
- Federal Ministry of Communications, Innovation and Digital Economy. (2025). *National artificial intelligence strategy*. National Centre for Artificial Intelligence and Robotics. <https://ncair.nitda.gov.ng/wp-content/uploads/2025/09/National-Artificial-Intelligence-Strategy-19092025.pdf>
- Fullan, M. (2007). *The new meaning of educational change* (4th ed.). Teachers College Press.
- Go Beyond Local. (2026, March 24). *Nigeria's UBEC funds: N240bn waiting for classrooms*. <https://gobeyondlocal.com/education/nigeria-ubec-funds-and-the-fight-for-transparency-in-education-grants/>
- Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching*, 8(3), 381–391. <https://doi.org/10.1080/135406002100000512>
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Ibrahim, A. P. (n.d.). *Nigeria's National AI Strategy: Ambition, execution gap, and the path to credible implementation* [Policy brief]. Tunani. <https://tunanihq.org/assets/publication/Policy-Brief-NNAIS-Strategy-final.pdf>

- ICT Authority. (2026, September 14). *Government, World Bank review progress on digital economy project*. <https://ict.go.ke/government-world-bank-review-progress-digital-economy-project>
- Kenya News Agency. (2024, October 25). *State partners with Safaricom to launch a Sh240 million digital skills program for teachers*. <https://www.kenyanews.go.ke/state-partners-with-safaricom-to-launch-a-sh240-million-digital-skills-program-for-teachers/>
- Kwon, H. (2024, April 15). *The Ministry of Education will train 34,000 leading teachers who can effectively utilize artificial intelligence (AI) digital textbooks*. Maeil Business Newspaper. <https://www.mk.co.kr/en/society/10990925>
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017–1054. <https://doi.org/10.1111/j.1467-9620.2006.00684.x>
- National Bureau of Statistics. (2022). *Nigeria multidimensional poverty index (2022)*. <https://www.nigerianstat.gov.ng/pdfuploads/NIGERIA%20MULTIDIMENSIONAL%20POVERTY%20INDEX%20SURVEY%20RESULTS%202022.pdf>
- National Bureau of Statistics. (2024). *General household survey-panel wave 5 (2023/2024): Survey report*. <https://nigerianstat.gov.ng/pdfuploads/GHS-Panel%20Wave%205%20-%20Survey%20Report.pdf>
- National Senior Secondary Education Commission. (n.d.). *Robotics & AI initiative*. <https://www.nssec.gov.ng/programs/robotics-ai>
- Olson, P. (2012, September 6). *Why Estonia has started teaching its first-graders to code*. *Forbes*. <https://www.forbes.com/sites/parmyolson/2012/09/06/why-estonia-has-started-teaching-its-first-graders-to-code/>
- Punch. (2025, February 26). *FG begins AI training for 6,000 teachers*. <https://punchng.com/fg-begins-ai-training-for-6000-teachers/>
- Radio Nigeria. (2026, August 11). *UBEC tasks states on education fund utilisation*. <https://radionigeria.gov.ng/2026/08/11/ubec-tasks-states-on-education-fund-utilisation/>

- Redecker, C., & Punie, Y. (2017). *European framework for the digital competence of educators: DigCompEdu* (EUR 28775 EN). Publications Office of the European Union. <https://doi.org/10.2760/159770>
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.
- Straits Times. (2025, August 4). *South Korea pulls plug on AI textbooks, leaving schools, companies without funding for them*. <https://www.straitstimes.com/asia/east-asia/south-korea-pulls-plug-on-ai-textbooks>
- The Nigeria Education News. (2026, October 16). *Falana blames states for Nigeria's out-of-school crisis, says over ₦97bn in UBEC grants remains unaccessed*. <https://thenigeriaeducationnews.com/2026/10/16/falana-blames-states-for-nigerias-out-of-school-crisis-says-over-%E2%82%A697bn-in-ubec-grants-remains-unaccessed/>
- UNESCO. (2023, May 31). *ICT Competency Framework for Teachers as a game changer for digital capacity building for teachers*. <https://www.unesco.org/en/articles/ict-competency-framework-teachers-game-changer-digital-capacity-building-teachers>
- UNESCO. (2026). *Naija Teacher AI: An AI-powered system transforming teacher capacity at scale*. <https://www.unesco.org/sdg4education2030/en/knowledge-hub/naija-teacher-ai-ai-powered-system-transforming-teacher-capacity-scale>
- Universal Basic Education Act, No. 66 (2004). Federal Republic of Nigeria. <https://ubec.gov.ng/wp-content/uploads/2021/09/NGA87623-UBE-ACT-2004.pdf>