

# **PARTNERSHIP FOR DIGITIZING TEACHING IN POST-COVID NIGERIA: TRCN MASTER TRAINERS' DIGITAL LITERACY FOR TEACHERS AND SCHOOL ADMINISTRATORS**

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*ABSTRACT:* Aberration in teaching and learning caused by the Coronavirus (COVID-19) pandemic is still a stark reality. Efforts at ameliorating havoc in Nigeria necessitated the Global Partnership for Education (GPE) Accelerated Fund to support state-driven interventions to address gaps in delivering Education in Emergencies (EiE) and inequalities existing within the education sector. GPE is supported Nigeria with a COVID-19 response programme entitled 'Continuing learning through alternate home-based platforms' in 16 states across Nigeria to develop capacities of teachers and school leaders on effective use and application of technology in teaching and learning. The programme included a teacher capacity development component to enable teachers to utilize flexible digital and remote/home-based learning resources. The programme hopes to enhance teachers' and school leaders' capacity to deploy technology in classrooms and improve online and offline distance learning methods. Training needs assessment was conducted to ensure digital training was designed to fit the identified digital skills gap of teachers in Nigeria. This paper scrutinized secondary data to discuss various processes of the intervention. It further discussed outcomes of the programme on teachers who were target beneficiaries of the program and education in Nigeria. It then concluded with a focus on benefits of partnerships between donor agencies and Teachers Registration Council of Nigeria (TRCN), the training goal, desired outcomes, methodology, challenges, the way forward, and implications for school administrators on teaching and learning in Nigeria.

*Keywords:* digitizing, Master Trainers, teachers, school administrators, Nigeria

## **Background**

Nigeria is the most populous country in Africa, and, as of 2020, Nigeria's population was estimated at 206,139,589 million people (Worldometer, 2022). Nigeria is a clear example of multi-ethnic diversity. The country has 36 autonomous states, the Federal Capital Territory, and 774 Local Government Areas. The country is bordered to the North by the Niger Republic, to the East by Chad and Cameroon, to the South by the Gulf of Guinea of the Atlantic Ocean, and to the West by the Benin Republic (Ajayi et al., 2022). The education system in Nigeria operates in three different phases: Basic Education (nine years), Post-Basic/Senior Secondary Education (three years), and Tertiary Education (four to six years, depending on the course of study) (National Policy on Education Federal Republic of Nigeria, 2004). Education is on the Concurrent list, meaning Nigeria's federal, states, and local governments administer education. Administration and control of education by law are vested in federal and state governments. The Federal Ministry of Education (FME) is responsible for overall policy formation, and it ensures quality control through its numerous relevant agencies. The Teachers Registration Council of Nigeria (TRCN) is a leading FME quality assurance agency.

TRCN is empowered by the federal government of Nigeria CAP T3 to control and regulate all aspects and ramifications of the teaching profession, including public and private institutions (Federal Republic of Nigeria, 2004). TRCN's mandate includes determining who teachers are and ensuring quality assurance in the teaching profession. TRCN has mapped out several strategies for the achievement of its mandates.

Registration and licensing of teachers are means TRCN uses to ensure quality, meet international best practices, and achieve professionalization of practitioners. To qualify for registration and licensing, education graduates must pass Professional Qualifying Examinations.

COVID-19 wreaked monumental damage on education globally, but with more devastating consequences in Africa due to a serious dearth of digital infrastructural and poor technical expertise of teachers. Moreover, Olanrewaju et al. (2021) claimed COVID-19 exposed a digital infrastructural gap between countries and communities, thus emphasizing the significance of digital infrastructure. The global reality is this: information and communication technology (ICT) is paramount for viable education. However, Ifijeh et al. (2016, as cited in Olanrewaju et al., 2021), posited “access to information and communication technologies and digital literacy, which is vital to knowledge empowerment, information generation, and utilization, is unequally distributed both in terms of access to digital tools and infrastructure” (para. 1). This statement reflects the reality in most remote and rural areas in Nigeria. Similarly, speakers at the 74<sup>th</sup> session of the United Nations General Assembly in 2019 noted, “Despite global progress in expanding use of the Internet and information communications technology, the digital divide between developed and developing countries remains wide” (United Nations, 2019, p. 1). Ferri et al. (2020) ascribed such issues as poor internet connectivity, poor infrastructural facilities, lack of operational capabilities and low teacher quality as some barriers to operationalization of ICT in teaching and learning. This is consistent with Buabeng-Andoh’s (2012) finding the lack of sustainable investments in ICT infrastructure perpetuates digital exclusion despite technological advancements.

Teachers are supposed to be on the frontlines of national response to ensure continuity of learning outside the classroom; however, their inability to respond calls for urgent capacity-building in distance learning modes and resilient education systems. Addressing the issue of technical support for teachers in Nigeria, Tella et al. (2007) noted “Technical support [is] lacking in schools and teachers’ lack expertise in using ICT” both hinder “teachers’ readiness and confidence of using ICTs during lessons” (p. 5). Similarly, Global Business Coalition for Education (2017) found “a significant number of schoolchildren and teachers who lack access to digital technologies” as well as “the competence” to use them (par. 2). Kumari and D’Souza (2016) adjudged the “[d]igital literacy level of Secondary School teachers” and “the extent to which ICT is used ... is average” (p. 141). These shortfalls in teachers’ digital knowledge raise serious concerns because teachers are supposed to be vanguards and sources of useable knowledge for learners, especially in times of pandemics and other disasters when online virtual education becomes the most viable option.

The Global Partnership for Education (GPE) initiated an intervention in 16 Nigerian states to ensure teachers are equipped with technology-supported solutions to aid teaching and learning. GPE is a multi-stakeholder partnership and funding platform focused on strengthening and transforming education systems in low-income countries. GPE seeks to give opportunities to the most vulnerable children, improve teaching and learning, and build resilient education systems to withstand challenges of the 21<sup>st</sup> century.

GPE's intervention in Nigeria was a way of responding to challenges of COVID-19. The goals were repositioning the future of teaching and learning in Nigeria and ensuring more schoolchildren are granted access to structured learning during unforeseen emergencies such as COVID-19.

### **Process of the GPE Intervention**

The GPE Accelerated Fund supported Nigeria with a COVID-19 response program on 'Continuing learning through alternate home-based platforms.' The intervention addressed gaps created by COVID-19 and issues arising from insurgency in Northeast Nigeria and the Indigenous People of Biafra secession. Both scenarios resulted in school closures and occasional nonattendance, which contributed to learning losses.

The GPE program was a teacher capacity development component and designed to enable teachers to utilize flexible digital and remote/home-based learning resources. The intervention began in 2021 with a needs assessment using pilot testing, materials development workshop, Master Trainers' training, and teachers' training aspect across 16 selected focal states in Nigeria.

A Teacher Training Committee, a sub-committee under the GPE COVID-19 response program, was assembled with the mandate to supervise "education system enhancing systemic capacity and preparedness response against the pandemic for children's safety and wellbeing and resilience for future shocks" (TRCN, 2021b, p. 4). Committee members comprised TRCN, National Teachers Institute, National Education Research and Development Council (NERDC), Universal Basic Education Commission, National Commission for Colleges of Education, UNESCO, Federal Ministry of Education-Federal Education Quality Assurance Service and TRCN Content Developers (Axiom Learning). Notably, a training needs assessment was conducted ab initio to ensure digital training was all encompassing and designed to fit teachers' identified digital skills gaps. The fund for teachers' training in identified states were released in batches, so trainings were also phased into batches. The State Ministries of Education and State Universal Basic Education Board (SUBEB) in focal states were contacted to nominate eligible teachers, and nominees were invited to the programme in cohorts.

Additionally, Computer Based Testing (CBT) centers that fell within the baseline standard for effective delivery of a digital literacy course. Identified facilitators received a one-day virtual Training of Trainers (TOT) session to ensure hitch-free training at CBTs.

Overall program aims were the following:

- to bridge the gap created by outbreak of the pandemic that severely affected the country's education system;
- to provide capacity development opportunities for teachers and school leaders to deploy technology in classrooms and distance learning methods using both online and offline modalities to continue learning;
- to train teachers and school leaders in emergency preparedness and response to provide safe school practices including COVID-19; and,
- to build resilience against future shocks.

## Pilot Testing

The committee commenced a Teacher Needs Assessment (TNA) in five basic education institutions within two area councils of the Federal Capital Territory (FCT): Abuja Municipal Area Council and Bwari Area Councils of the FCT with a total of 501 respondents (teachers). The exercise lasted a week March (2021b). Ten data collection officers (5 per Area Council) visited ten purposely selected schools—six primary and four junior secondary—to collect and collate data. A checklist/instrument titled “GPE COVID-19 response: Continuing Learning through alternative home-based platform - Teacher Needs Assessment (TNA)” was developed and administered to teachers. The instrument had a bio-data section and nine other sections: (1) general awareness of the digital ecosystem; (2) presentation for in-person and remote learning; (3) use of MS office, Google Apps and IT support for teaching and learning; (4) use of technology for CPD; (5) use of internet for educational/ instructional research and content creation; (6) integration of ICT for teaching and learning; (7) use of multimedia for teaching and learning; (8) challenges to using ICT in teaching and learning; and (9) access to digital infrastructure.

Findings from the pilot study generally revealed that, although some respondents were aware of the digital ecosystem, 71.66% had not utilized it for teaching and learning purposes. Respondents were unable to complement lesson plans with digital tools and unaware of tools used for creating digital learning content. Respondents’ schools had insufficient digital infrastructure. Most respondents had not attended training in the last five years, and the few who had were face-to-face. On average, respondents did not browse and search the internet to collect learning materials or resources for developing lessons; similarly, respondents did not believe use of ICT makes students concentrate more on their learning. Most respondents could not say whether insufficient number of internet-connected computers affects use of ICT in teaching because they did not use ICT in teaching. Most respondents did not have internet access in their schools.

The study revealed some gaps identified in Nigerian teachers’ digital literacy levels, and those gaps were addressed in development of the training manual, including the following:

1. use of digital tools for complementing lesson plans
2. use of MS Office Suite for designing lessons, teaching, and creating presentation slides
3. process of content creation for TV or radio teaching
4. use of internet for collection of information, learning materials, or resources for teaching and learning
5. process of creating digital learning materials for lessons
6. use of ICT to provide feedback and/or assess students’ learning
7. process of capturing and editing digital photos, movies, or other graphics for teaching and learning
8. use of emails, blogs, or websites
9. organization of computer files in folders and subfolders
10. creation of presentation with video or audio clips

11. online safety tips and ethical standards
12. use of multimedia for teaching and learning

### **Materials Development Workshop**

A materials development workshop was conducted between 8<sup>th</sup> and 13<sup>th</sup> of November 2021. Members of the GPE sub-committee Teacher Training Committee reviewed the draft training manual and developed a final manual and guidelines for digital literacy training. According to TRCN (2021a) at the end of the workshop, the committee achieved the following:

- a robust digital literacy training manual and facilitators' guide.
- a monitoring work plan and activity schedule for monitors.
- a training programme of events; and,
- a concise identified role of partners in the training programme.

### **Professional Development: Why Is It Important?**

Training and development are educational activities geared for improving individuals' job performance and comprise several stages including assessment, motivation, design, delivery, and evaluation. Training, according to Richards and Farrell (2005), refers to activities focused on present responsibilities with immediate and short-term goals in preparation for new responsibilities involving understanding basic concepts and principles to apply to the new assignment.

Professional development, on the other hand, is learning undertaken beyond the point of initial professional training (Craft, 2000). The process of professional development is for career growth. Barnard (2021) describes professional development as "something with great value and should be actively pursued by anyone wishing to be the best they can be in their profession" (par. 1). Professional development enables career progression and positions people to be authorities and eventual mentors in their careers. Additionally, professional development allows people to remain topical in their chosen fields, build confidence and credibility, develop leadership skills, increase efficiency, build networking, and acquire new skills. Therefore, many professions, such as teaching, require professional development for their members in the renewal of licenses to keep their members abreast of trends and topically relevant. Professional development can take the form of workshops, seminars, virtual presentations, and even professional meetings. To support innovativeness and effective teaching and learning, teachers constantly need to be involved in professional development (Boudersa, 2016). Programmes such as GPE Master Trainers' Training are necessary ingredients to support innovative and beneficial teaching.

**Figure 1.** *The Continuing Professional Development learning cycle (Barnard, 2021)*

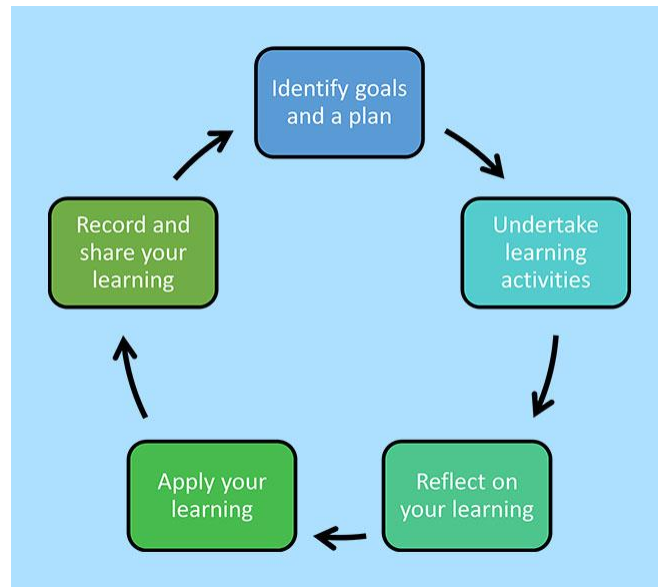


Figure 1 shows Continuous Professional Development (CPD) is individual-centered; thus, every teacher needs to be intentional with their professional development goals. Barnard (2021) succinctly stated professionals’ validity and competence are determined through their commitment to CPD. Thus, the CPD journey entails planning, taking a giant stride toward obtaining desired knowledge, then applying the outcome of such knowledge to job execution for improved job performance.

### **Master Trainers’ Training**

The GPE/TRCN programme used materials already developed to train Master Trainers in a three-day training exercise. Training was held concurrently in eight locations in the 16 targeted states (Sokoto, Kaduna, Kano, Benue, Enugu, Katsina, Gombe and Plateau) at CBT centers for proper hands-on experience. Master Trainers were teachers and ICT focal persons in their various states selected by SUBEB. Of the targeted 480 individuals, 456 attended. Their capacities were built digitally with the plan of cascading their training to 30,000 teachers across the identified 16 states (TRCN 2022a).

At the conclusion of Master Trainers’ training, the education sub-committee overseeing GPE intervention convened a steering committee meeting to evaluate Master Trainers’ training. Reports from monitors—education sub-committee members who visited training centers to ensure compliance—and facilitators—ICT personnel designated to educate teachers of Master Trainers’ training—revealed only a few trained Master Trainers were able to step down the training and conduct workshops for teachers. Therefore, the education sub-committee and GPE intervention funders decided to deploy some facilitators to assist Master Trainers in transferring their training to other teachers.

### **Teachers' Step-down Training (3 days each cohort)**

Each state held eight identified teacher-training classes with one lead facilitator and two Master Trainers (MTs). Two monitors, eight facilitators and 16 MTs officially oversaw each cohort. Independent monitors from United Nations Children Fund (UNICEF) and FME were present at each training. Additionally, TRCN State Coordinators and key officers were on ground at all locations for assistance (TRCN 2022b).

Following discovery of MTs' incapacities, facilitators trained teachers in most locations. Exposure of MTs' deficiencies showed a deep level of digital ineptitude in Nigerian teachers and confirmed assertions by Tella (2007), Kumari and D'Souza (2016), and others regarding Nigerian teachers' digital illiteracy.

### **Outcomes of the GPE Programme on Beneficiary Teachers and Education in Nigeria**

At the end of the GPE programme, capacity of teachers and school leaders improved in deployment of technology in classrooms and distance learning methods using both online and offline modalities to continue teaching and learning. Post-workshop evaluation found participants demonstrated high motivation and excitement with skills acquired from training. Further, participants' indicated in evaluations

- their training experience would improve their use of digital tools.
- technology would play a significant role in their teaching practice.
- more than 70% believed they had an intermediate skill in digital tools, while others could not adequately classify their skills levels.
- most were better equipped to deal with challenges of learning during periods of disruption.
- some expressed their learning can only transform into something beneficial if they were supported in the acquisition of digital tools or provided with digital infrastructure in their schools.

Since a majority of participants exhibited great enthusiasm and engagement during sessions on some digital apps, facilitators described training as beneficial. Although facilitators agreed tools provided for training were adequate, they feared what might happen once training was over.

### **Challenges and Lessons Learned**

As much as GPE intervention recorded some success stories and positive impact on teachers, some challenges were noted, as listed below:

- Most teachers complained about non-existence of infrastructural tools in their schools; thus, going back to apply knowledge gained would be near impossible.
- A sizable number of teachers do not have functional mobile phones; thus, communication would be inhibited. Those who had phones lacked ability to connect to the internet to use simple digital applications such as WhatsApp and

Google Classroom for teaching and learning purposes. Moreover, their poor remuneration would not allow them to afford such ‘luxuries.’

- Three days allotted for training of both Master Trainers and teachers seemed grossly inadequate for attainment of any significant learning; thus, more training days were suggested for subsequent training.
- Teachers and Master Trainers expected to receive laptops or smart phones to reinforce their learning; however, capacity building training did not incorporate provision of tools.

Based on observed challenges, analysis suggested subsequent interventions, such as providing digital tools for teachers to reinforce their learning and deploy acquired knowledge in their various schools. Further, analysis suggested teachers should dedicate a whole week for such training to ensure better understanding and mastery of concepts.

### **Conclusion and Recommendations for Further Interventions**

Interventions such as GPE in Nigeria contributed greatly to reducing learning losses caused by COVID-19 and other disasters, such as civil insurgency. The relevance of partnerships between donor agencies and TRCN in accomplishing the Council’s mandates cannot be underestimated, thus emphasizing the need for continued alliances. Stakeholders at the 2022 Digital Rights and Inclusion Forum faulted the Nigerian government for limited attainment of its digital revolutionary promises. The Forum called upon government for more partnerships with “industry players to avoid being left behind” (Daniel, 2022, par. 2) in the digital economy (newspaper). However, it is time Nigeria’s government seriously considers the issue of building viable digital infrastructure in public schools to ensure the nation joins the comity of globalized worlds where a digital economy is well established. Such consideration will ensure teaching and learning are well institutionalized in the “digital space” (par. 3). Stakeholders in Nigeria’s education sector emphasized “the need for more investment in capacity training for teachers, formulation of digital learning policy and provision of digital infrastructure to build a resilient educational system that could help mitigate learning losses occasioned by the COVID-19 pandemic or any other disruptions” (Lawal, 2022, p. 1). Limited investments in ICT infrastructure could lead to exclusion regardless of advancements in technology (Buabeng-Andoh, 2012).

Although the training goal for GPE intervention was largely accomplished, future interventions would benefit from recognizing some lessons learned. Additionally, school administrators who are key holders of school system should take advantage of such interventions by creating avenues for Internally Generated Revenues (IGRs). Resources from IGRs could be used to expand training for other teachers and support government efforts to acquire technological tools that aid digital teaching and learning. School administrators could also leverage service providers, suppliers, and other business stakeholders to deliver on their national Corporate Social Responsibility duties by helping schools provide training and build infrastructure to enhance quality education delivery.

The successful digital literacy training and experience could help improve delivery of training in other Nigerian states.



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