




Original Research

Capacity Building Needs for Social ICT Skills Among Primary School Teachers in Enugu State

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ABSTRACT

This study examined the Social ICT capacity building needs of primary school teachers for effective technology integration to enhance teaching and learning in public primary schools in Enugu State. Two research questions and three null hypotheses guided the study. The study employed a descriptive survey research design. The population of the study comprises all 10,415 primary schools in Enugu State. The sample size of the study was 500. The instrument used for data collection was a structured questionnaire developed by the researcher, titled the Capacity Building Needs Questionnaire (CBNQ). This instrument was face validated by three experts from the University XXX. The reliability of internal consistency of the instrument was ascertained using Cronbach's alpha, which had an overall reliability index of 0.798. The data collected from 496 retrieved questionnaires for the study were analyzed using mean and standard deviation, while t-test and ANOVA were used to test the null hypotheses at a 0.05 level of significance. The study found that teachers in public primary schools in Enugu State require social ICT skills such as promoting responsibility and online safety, managing collaborative projects, among others. The study found that teachers do not possess social ICT skills to manage collaborative projects effectively, promote responsible technology use or support collaborative learning using smart boards. Hypothesis testing indicated that teachers' years of teaching experience, school location, and gender all significantly influenced the social ICT skills they possessed. Finally, teachers' years of experience, school location, and gender significantly influenced social ICT skills. Based on the findings, the study, among others, recommended that the Ministry of Education should organize regular, needs-based ICT training programs for public primary school teachers.

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1. INTRODUCTION

Technological advancements have transformed the educational landscape, making technology integration an essential component of curriculum implementation at all levels, including primary school education. Enugu State's ambitious "smart schools" initiative, aiming to integrate technology into primary education across 250 schools, necessitates a comprehensive assessment of primary school teachers' ICT

capabilities. The successful implementation of this project hinges on teachers' possession of the necessary technological skills to effectively utilize the new technologies (computers, interactive smartboards, projectors, and associated software) and deliver the Basic Education curriculum. Hence, the study becomes necessary to determine the capacity-building needs of primary school teachers for effective technology integration.

Primary schools constitute the foundational level of education where children receive primary education. In the Nigerian context, primary education is defined as the level of schooling aimed at fostering national consciousness and unity, and instilling the essential values and attitudes necessary for both individual survival and the advancement of Nigerian society (Federal Republic of Nigeria {FRN}, 2014). Idika and Okafor (2025) characterize primary school education as the most crucial educational phase in a child's life, serving not only individual developmental needs but also functioning as a critical foundation for national development and the broader educational system, thereby underscoring the importance of making the teaching profession attractive. Operationally, primary school education, also known as elementary education, is defined as the initial stage of formal schooling that children typically attend from approximately age 5 or 6 to age 11 or 12, during which they acquire foundational knowledge, essential skills, and core values that establish the basis for subsequent learning and holistic development.

Primary education provides the child with basic tools for further educational advancement, including preparation for trades and crafts of the locality. Through primary education, the art and act of writing, reading, and the acquisition of necessary skills, attitudes, and the basic information needed for appropriate adjustment into society and the world in general are imbibed (Osiesi, 2020). Hence, primary education aims at giving rise to a literate population and prepares the footing for secondary and higher education. According to Gunuc and Babacan (2017), in the 21st century, where technology is essential for driving economic growth and development, there is a pressing need to integrate technology into primary education.

Technology has shaped the world today in such a way that every sector of human life finds it useful. The United Nations Educational, Scientific, and Cultural Organization [UNESCO] (2023c) defines technology as the systematic application of organized knowledge and tangible objects to human activities, encompassing both the artifacts created and the processes used to create them. International Society for Technology in Education [ISTE] (2023) conceptualizes technology as the tools, systems, and processes that extend human capabilities and enable individuals to create, communicate, collaborate, and solve complex problems in innovative ways. Technology integration is the effective use of technological tools and resources in teaching and learning processes to enhance educational outcomes. Technology integration goes beyond simply using digital tools in the classroom. It is effective when the focus shifts from the technology itself to the learning task (Gunuc & Babacan, 2017). Using technological tools in teaching and learning becomes second nature to pupils when the usage of the tools is so familiar or ingrained that it is done without conscious thought. This allows pupils to focus on learning the content rather than the technological tools being used in the classroom (Ghavifekr & Rosdy, 2015). Integrating technology into education aims to enrich pupil learning, enhance engagement, cultivate critical thinking and problem-solving abilities, and prepare pupils for the digital age. Effective technology integration seamlessly incorporates digital tools into the curriculum, ensuring they serve as integral components rather than supplementary add-ons (Kharbach, 2024). In view of the above, it is clear that technology integration in primary schools requires the use of teachers who possess certain technological competencies.

A teacher is a person who helps others to acquire knowledge, competencies, or values. According to Wolcott (2018), a good teacher should possess strong subject matter knowledge, the ability to build relationships with pupils, commitment to feedback and reflection, focus on social and emotional learning, use of formative assessments, and engage in instruction; and help pupils reach their full potential and become well-rounded individuals. Teachers should possess certain ICT skills to successfully implement the Basic Education curriculum in these smart schools. The use of ICT resources by educators includes a wide range of methods and strategies. According to Amini and Oluyide (2020), some teachers successfully use ICT resources to develop interactive lesson plans, give multimedia-rich presentations, and include pupils in online forums and group projects. These instructors appreciate the transformational potential of technology in boosting educational methods and supporting pupil-centered learning experiences. Other teachers who find it difficult to use digital platforms, modify course materials for online distribution, or successfully incorporate ICT into their teaching strategies when it comes to lesson content. To identify gaps and inform strategies that enhance teaching and learning in primary schools, understanding the level of ICT skills among these teachers is essential.

ICT skills among teachers encourage innovation and continuous improvement of instructional strategies. The vast array of digital tools and resources available for use in the classroom is well known to teachers who are proficient in using ICT resources. They are adept at selecting and adapting ICT resources to meet each pupil's particular needs, preferences, and learning objectives. Additionally, competent teachers utilize ICT to create inclusive and differentiated classes that cater to the many backgrounds, skill levels, and

learning preferences of their pupils. UNESCO's ICT Competency Framework for Teachers lists the following six domains: policy, curriculum and assessment, pedagogy, application of digital skills, organization and administration, and teacher professional learning (UNESCO, 2018, 2023a). Every skill is essential to making sure that using computers and other digital tools improves the educational process. Hence, this study will venture into social skills.

Social skills are the skills and talents people utilize to effectively connect, communicate, and work together with others. Social ICT skills are the capacity to use digital tools in ways that promote networking, cooperation, and engagement among diverse online and offline communities. This covers collaboration, empathy, communication, conflict resolution, and interpersonal skills.

Empirical evidence has shown that teachers lack the necessary social ICT skills applied in the classroom. Dauda et al., (2015) reported that teachers' use of ICTs in tertiary schools has remained poor in Nigeria. While Ugwu and Okeke (2018) showed that ICT was not used effectively in lesson preparation, instructional delivery, individualized learning, and collaborative learning of computer studies in public secondary schools in Nsukka Education Zone. Similarly, Onu and Agundu (2024) also reported that teachers in Udi Local Government Area are still ICT illiterate, and the teachers' use of ICT is below the standard set by the International Society for Technology in Education (ISTE). However, there is still a missing link, as most of these studies were not carried out among primary school teachers in Enugu State. Therefore, this present study will ascertain the social ICT capacity building needs of primary school teachers for technology integration in the implementation of the basic education curriculum in Enugu State.

Capacity building is an investment in the effectiveness and future sustainability of society. Therefore, it is pertinent to know the skills or competencies possessed by these teachers in order to know the areas to invest. This study also considers that there may be differences in skills possessed based on teachers' years of teaching experience.

In teaching, experience is an added advantage to a teacher who has it because it makes the teaching task easier and enables pupils to comprehend quickly. This can help tailor professional development programs to meet the specific needs of teachers at various stages of their careers, ultimately enhancing the implementation of the basic education curriculum in smart schools. Another moderating variable in this study is school location.

School location refers to the rural and/ or urban setting of a school. It refers to a place where a school is situated, which could be rural or urban in nature. School location may significantly influence teachers' access to technological resources, exposure to training opportunities, and overall readiness for effective technology integration in teaching and learning. This implies that Urban teachers may have different capacity-building needs when compared to rural teachers, thus justifying the inclusion of school location in this study. Another moderating variable of interest in this study is gender.

Gender is seen as the categorization of individuals into male and female. According to the United Nations Educational, Scientific, and Cultural Organization (UNESCO, 2023b), gender refers to the characteristics of women, men, girls, and boys that are socially constructed. This includes norms, behaviors, and roles associated with being a woman, man, girl, or boy, as well as relationships with each other. Studies have indicated that gender differences can influence teachers' confidence levels, willingness to adopt innovations, and patterns of technology use in the classroom (Ayite et al., 2022). In some contexts, male teachers are reported to have greater exposure to ICT training and more frequent use of technological tools, while female teachers may face barriers related to societal expectations or limited access to professional development opportunities (Katsande et al., 2023).

Despite the growing emphasis on ICT in education and its proven potential to enhance instructional delivery, many teachers still lack the necessary technological, pedagogical, and social skills to use digital tools such as computers, projectors, PowerPoint, and smartboards meaningfully in the classroom. However, in many public primary schools in Enugu State, the effective use of computers, projectors, smartboards, and other ICT resources remains limited, largely due to gaps in teachers' social skills (Idika & Okafor, 2025). Addressing these disparities is crucial for ensuring that all pupils, regardless of their background, benefit from technology-enhanced learning experiences that prepare them for the demands of the 21st century. Thus, this study sought to find out the capacity building needs of primary school teachers for effective technology integration to enhance teaching and learning in public primary schools in Enugu State.

1.1. Research questions

The following research questions guided this study:

1. What are the social ICT skills required by teachers for effective technology integration in teaching and learning in public primary schools in Enugu State?
2. What are the social ICT skills possessed by teachers for effective technology integration in teaching and learning in public primary schools in Enugu State?

1.2. Hypotheses

The following null hypotheses were formulated and tested at a 0.05 level of significance.

H₀₁: There is no significant difference in the social ICT skills possessed by teachers for effective technology integration in teaching and learning in public primary schools in Enugu State based on teachers' years of teaching experience

H₀₂: There is no significant difference in the social ICT skills possessed by teachers for effective technology integration in teaching and learning in public primary schools in Enugu State based on school location

H₀₃: There is no significant difference in the social ICT skills possessed by teachers for effective technology integration in teaching and learning in public primary schools in Enugu State based on teachers' gender

2. METHOD

2.1. Design of the study

The study adopted a descriptive survey research design. A descriptive survey design aims at explaining the characteristics of a given population. According to Nworgu (2015), descriptive survey research design is a purpose-based category of survey research that aims at collecting data and describing in a sequential and systematic manner the attributes of a specific population. This research design is the most appropriate for this study because it enabled the researcher to describe the social ICT capacity building needs of primary school teachers for effective technology integration in primary schools in Enugu State.

2.2. Area of the study

The study was carried out in Enugu State. Enugu State is located in the South-East geopolitical zone of Nigeria. Enugu state consists of 17 local government education authorities. Enugu State is an appropriate choice for this study because of the state government's deliberate efforts to digitize primary education through the introduction of "smart schools" equipped with modern ICT facilities. However, the success of such innovations depends heavily on the technological competence of teachers, as the presence of advanced facilities alone does not guarantee effective technology integration; thus, the choice of this area for this study.

2.3. Population

The population of the study comprised all 10,415 primary school teachers in 1,205 primary schools in the 17 local government education authorities LGEAs in Enugu State (Enugu State Annual School Census Report, 2025).

2.4. Sample and sampling techniques

The sample size for this study was 500 respondents. This minimum sample size of 371 was ascertained using Raosoft's sample size calculator. A simple random sampling technique was used to select ten local government education authorities (LGEAs) out of the 17 LGEAs. A simple random sampling technique was used to select 50 teachers from each of the LGEA.

2.5. Instrument

The instrument for data collection was a structured questionnaire titled 'Capacity Building Needs for Effective Technology Integration Questionnaire (CBNETIQ)'. CBNETIQ consists of two sections: A and B. Section A consists of biodata information of the respondents, such as teacher years of experience, school location, and gender; Section B consists of two clusters: Cluster A addresses social ICT skills required by primary school teachers, consisting of 15 items; Cluster B elicited information on social ICT skills possessed by primary school teachers, consisting of 15 items. Clusters A was on a four-point rating scale of Highly Required-HR (4); Moderately Required-MR (3); Lowly Required-LR (2); Not Required-NR (1), while Clusters B was on a four-point rating scale of Highly Possessed-HP (4); Moderately Possessed-MP (3); Lowly Possessed-LP (2); Not Possessed-NP (1). The reliability coefficient of the instrument was determined using Cronbach's alpha. The reliability coefficient 0.798 was obtained.

2.6. Data analysis

The data collected from 496 retrieved questionnaires were analyzed using mean and standard deviation were analyzed using mean and standard deviation. A mean score of 2.50 was used as the criterion level to accept or reject the mean responses. Items with a mean score of 2.50 and above were accepted, while items with a mean score of 2.49 and below were rejected. The null hypotheses were tested using the t-test and ANOVA at a 0.05 level of significance. The decision rule for the null hypotheses was to reject the null hypothesis if the p-value is less than 0.05 and not reject it if greater than 0.05.

3. RESULTS

3.1. Research question one

Table 1 shows the responses of respondents on the social ICT skills required by teachers for effective technology integration in teaching and learning in public primary schools in Enugu State. The mean values of items 1–15, which are 3.07, 3.04, 3.13, 2.99, 2.98, 3.21, 2.94, 2.97, 3.16, 3.13, 2.99, 3.13, 3.01, 2.83, and 3.01, are all above the 2.50 acceptance benchmark, which implies that they are accepted. Hence, teachers require social ICT skills such as teaching students about responsibility and online safety, managing collaborative projects, modeling responsible use of technology, using digital tools to promote teamwork and communication, connecting the classroom with the wider community, and facilitating collaborative learning through smart boards. The grand mean of 3.04, which is also above the 2.50 acceptance benchmark, further implies that teachers in public primary schools in Enugu State require social ICT skills for effective technology integration in teaching and learning. The standard deviation values for the social ICT skills required by teachers range from 0.91 to 1.13, with a grand standard deviation of 1.02. This reflects a moderate spread of responses, showing that while the respondents largely agreed that these social ICT skills are required, minor differences existed in their views, which may result from varying levels of exposure to technology-supported social interaction in schools. However, the mean gain of 2.83 for item 14 could be a result of teachers being unfamiliar with collaborative learning experiences using smart boards in Enugu state. While the mean gains of 3.21 for item 6 could be a result of prior knowledge of the content.

Table 1. Mean rating and standard deviation on the social ICT skills required by teachers for effective technology integration in teaching and learning in public primary schools in Enugu State

S/N	Item Statements	N	Mean	SD	Decision
1	teach students about responsibility	496	3.07	1.09	Required
2	manage collaborative projects using digital tools.	496	3.04	0.94	Required
3	model responsible use of technology	496	3.13	0.92	Required
4	use technology to connect the classroom with the wider community, including parents and global networks.	496	2.99	1.11	Required
5	manage students' engagement during projector-based lessons	496	2.98	0.91	Required
6	ensure all students can see/hear the projected content	496	3.21	0.91	Required
7	communicate clearly with students, using the projector	496	2.94	1.05	Required
8	teach students about online safety	496	2.97	1.04	Required
9	promote teamwork using digital tools	496	3.16	1.03	Required
10	promote communication skills using digital tools.	496	3.13	1.03	Required
11	maintain eye contact during technology enabled lessons	496	2.99	1.04	Required
12	design presentations that are culturally inclusive.	496	3.13	1.06	Required
13	use PowerPoint as a tool to build a sense of community in the classroom.	496	3.01	1.07	Required
14	facilitate collaborative learning experiences using smart boards	496	2.83	1.13	Required
15	use smart boards to enhance communication between teachers and students	496	3.01	1.01	Required
Grand Mean		496	3.04	1.02	Required

3.2. Research question two

Table 2 shows the responses of respondents on the social ICT skills possessed by teachers for effective technology integration in teaching and learning in public primary schools in Enugu State. The mean values of items 1–15, which are 2.14, 2.13, 2.09, 2.06, 2.20, 2.15, 2.11, 2.19, 2.15, 2.11, 2.21, 2.10, 2.04, 2.15, and 2.19, are all below the 2.50 acceptance benchmark, which implies that they are not possessed. Hence, the result indicates that teachers in public primary schools in Enugu State do not possess adequate social ICT skills, such as managing collaborative projects using digital tools, modeling responsible use of technology, connecting classrooms with the wider community, promoting teamwork and communication skills using digital tools, and facilitating collaborative learning through smart boards. The grand mean of 2.14, which is also below the 2.50 acceptance benchmark, further implies that teachers in public primary schools in Enugu State do not possess sufficient social ICT skills for effective technology integration in teaching and learning. The standard deviation values for the social ICT skills possessed by teachers range from 1.09 to 1.20, with a grand standard deviation of 1.06. This indicates a moderate level of dispersion in the responses. It implies that although most respondents agreed that teachers do not possess sufficient social ICT skills, there were some differences in perception, suggesting that a few teachers might possess limited abilities in certain social ICT areas.

Table 2. Mean rating and standard deviation on the social ICT skills possessed by teachers for effective technology integration in teaching and learning in public primary schools in Enugu State

S/N	Item Statements	N	Mean	SD	Decision
1	teach students about responsibility	496	2.14	1.17	Not Possessed
2	manage collaborative projects using digital tools.	496	2.13	1.14	Not Possessed

3	model responsible use of technology	496	2.09	1.13	Not Possessed
4	use technology to connect the classroom with the wider community, including parents and global networks.	496	2.06	1.09	Not Possessed
5	manage students' engagement during projector-based lessons	496	2.20	1.19	Not Possessed
6	ensure all students can see/hear the projected content	496	2.15	1.19	Not Possessed
7	communicate clearly with students, using the projector	496	2.11	1.11	Not Possessed
8	teach students about online safety	496	2.19	1.16	Not Possessed
9	promote teamwork using digital tools	496	2.15	1.19	Not Possessed
10	promote communication skills using digital tools.	496	2.11	1.10	Not Possessed
11	maintain eye contact during technology enabled lessons	496	2.21	1.18	Not Possessed
12	design presentations that are culturally inclusive.	496	2.10	1.15	Not Possessed
13	use PowerPoint as a tool to build a sense of community in the classroom.	496	2.04	1.13	Not Possessed
14	facilitate collaborative learning experiences using smart boards	496	2.15	1.15	Not Possessed
15	use smart boards to enhance communication between teachers and students	496	2.19	1.20	Not Possessed
Grand Mean		496	2.14	1.06	Not Possessed

3.3. Hypothesis one

Table 3 presents the summary of ANOVA analysis on the influence of teachers' years of teaching experience on the social ICT skills possessed by teachers for effective technology integration in teaching and learning in public primary schools in Enugu State. The result shows that the calculated F-value of 4.296 with a significance value (p) of 0.005 is less than the 0.05 level of significance. This indicates that the difference in the mean social ICT skills possessed by teachers based on their years of teaching experience is statistically significant. Hence, the null hypothesis, which states that there is no significant difference in the social ICT skills possessed by teachers for effective technology integration in teaching and learning in public primary schools in Enugu State based on teachers' years of teaching experience, is rejected. This implies that teachers' years of teaching experience have a significant influence on the social ICT skills they possess, suggesting that more experienced teachers are likely to demonstrate higher social ICT skills in their teaching practices.

Table 3: Summary of ANOVA analysis on the influence of teachers' years of teaching experience on the social ICT skills possessed by teachers for effective technology integration in teaching and learning in public primary schools in Enugu State

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	14.306	3	4.769	4.296	.005*
Within Groups	546.089	492	1.110		
Total	560.395	495			

*= P is significant at <0.05

3.3. Hypothesis two

Table 4 presents the summary of t-test analysis on the influence of school location on the social ICT skills possessed by teachers for effective technology integration in teaching and learning in public primary schools in Enugu State. The result shows that the calculated t-value of 2.527 with a significance value (p) of 0.012 is less than the 0.05 level of significance. This indicates that the difference in the mean social ICT skills possessed by teachers based on school location (urban vs. rural) is statistically significant. Hence, the null hypothesis, which states that there is no significant difference in the social ICT skills possessed by teachers for effective technology integration in teaching and learning in public primary schools in Enugu State based on school location, is rejected. This implies that school location has a significant influence on the social ICT skills possessed by teachers, with teachers in urban schools generally demonstrating higher social ICT skills than their counterparts in rural schools.

Table 4: Summary of t-test analysis on the influence of school location on the social ICT skills possessed by teachers for effective technology integration in teaching and learning in public primary schools in Enugu State

School Location	N	Mean	SD	T	df	Sig. (2-tailed)
Urban	271	2.24	1.10	2.527	494	0.012*
Rural	225	2.01	1.01			

*= P is significant at <0.05

3.3. Hypothesis three

Table 5 presents the summary of the t-test analysis on the influence of teachers' gender on the social ICT skills possessed for effective technology integration in teaching and learning in public primary schools in Enugu State. The result shows that the calculated t-value of 8.820 with a significance value (p) of 0.000 is less

than the 0.05 level of significance. This indicates that the difference in the mean social ICT skills possessed by male and female teachers is statistically significant. Hence, the null hypothesis, which states that there is no significant difference in the social ICT skills possessed by teachers for effective technology integration in teaching and learning in public primary schools in Enugu State based on teachers' gender, is rejected. This implies that teachers' gender has a significant influence on the social ICT skills possessed, with male teachers generally demonstrating higher social ICT skills than female teachers.

Table 5: Summary of t-test analysis on the influence of gender on the social ICT skills possessed by teachers for effective technology integration in teaching and learning in public primary schools in Enugu State

Gender	N	Mean	SD	t	Df	Sig. (2-tailed)
Male	194	2.32	1.11	8.820	494	0.000*
Female	302	2.12	0.91			

*=P is significant at <0.05

4. DISCUSSION

The study found that teachers require social ICT skills such as promoting responsibility and online safety, managing collaborative projects, modeling responsible technology use, enhancing teamwork and communication using digital tools, connecting classrooms to the wider community, and facilitating collaborative learning through smart boards. The findings suggest that social ICT skills have become essential for teachers because the modern classroom increasingly relies on digital interaction, collaboration, and responsible online engagement. As technology integration shifts from mere technical usage to participatory and student-centered learning, teachers are now expected to guide learners in navigating digital spaces safely and ethically. In alignment with this finding, Noushad (2010) and Dave (2017) emphasized that teachers require competencies in social and ethical ICT use, including responsible online behavior, digital collaboration, and community engagement, to foster safe and interactive learning environments. Similarly, Ilfa, Milia, Mohd and Jamia (2024) found that student teachers acknowledged the importance of social ICT skills in professional practice.

The study found that teachers do not possess social ICT skills to manage collaborative projects effectively, promote responsible technology use, facilitate teamwork and communication, connect classrooms with the community, teach online safety, or support collaborative learning using smart boards. Hypothesis testing showed that teachers' years of experience, school location, and gender significantly influenced social ICT skills. The findings indicate that teachers in public primary schools lack the essential social ICT skills required for effective technology-driven teaching and learning. This deficiency suggests that although technological resources may be present in some schools, the capacity to use them for collaborative, interactive, and socially constructive learning remains limited.

The influence of years of teaching experience on social ICT skills suggests that newer teachers, who may have undergone more recent ICT-oriented training, are more capable of integrating social technologies than their longer-serving counterparts. Conversely, experienced teachers may rely more on traditional teaching approaches, resulting in limited exposure to emerging digital pedagogies and collaborative tools. School location also played a significant role: teachers in urban schools generally have better access to digital infrastructure, training opportunities, and exposure to ICT-enabled practices, whereas teachers in rural schools may face systemic barriers such as poor connectivity, limited digital resources, and fewer professional development opportunities. These disparities reinforce the need for equitable ICT capacity-building initiatives across different school contexts. Gender-based differences in social ICT skills point to broader socio-cultural and systemic influences on technology adoption in education. In many educational environments, gender norms and stereotypes may affect digital confidence, access to ICT training, or exposure to technology-enhanced professional development. Such disparities may create imbalances in how male and female teachers engage with collaborative digital platforms and model technology use for learners.

In alignment with this finding, Dave (2017) reported that ICT competence in social and ethical domains varied according to age, teaching experience, and institutional type, supporting the current observation that demographic factors shape social ICT skill levels. Similarly, Balzhan et al. (2023) found significant gender and age differences in self-efficacy for internet use and collaborative ICT activities. However, in disagreement, Amini and Oluyide (2020) noted that gender did not significantly affect ICT competencies among distance learning students, suggesting that contextual and cultural factors may mediate these effects. The findings are also in agreement with UNESCO (2023a) who recommended among others the application of digital skills among teachers as needed by teachers for capacity building.

4.1. Theoretical Implications of the study

The findings of this study offer important theoretical insights for teachers as they show that social ICT skills, such as collaborating with colleagues, sharing resources, and communicating digitally, are essential for

effective teaching among primary school teachers. This suggests that while the UNESCO framework provides a solid guide, it needs contextual adaptation to address local realities, including training. The findings also emphasize that ICT competency is as much about human interaction and professional collaboration as it is about technical skills. As a result, building teachers' ICT capacity requires approaches that are practical, socially grounded, and sensitive to the everyday challenges of teaching.

4.2. Limitations of the study

The study was limited to selected primary school teachers within Enugu State. As a result, the findings may not be fully generalizable to all primary school teachers in other States.

5. CONCLUSION AND RECOMMENDATIONS

Based on these findings, the study concluded that teachers in public primary schools in Enugu State require comprehensive capacity building and ICT integration. Teachers need extensive technological social ICT skills to operate digital devices and software applications effectively. They also need social ICT skills to foster collaboration, digital citizenship, and community engagement through technology. The study concluded that teachers currently possess minimal competencies in these areas. Their existing skills are limited to basic tasks such as connecting computers to power sources. The study concluded that teachers' years of teaching experience significantly influence their social ICT skills, with more experienced teachers demonstrating higher competencies. Gender also plays a significant role, as male teachers generally possess higher ICT skills compared to their female counterparts. This could be a result of unequal access to ICT training and professional development for female teachers. By implication, the findings of this study can reinforce gender stereotypes, potentially influencing recruitment and training between male and female primary school teachers. School location significantly affects social ICT skills possessed by teachers, with urban school teachers demonstrating greater competencies than rural school teachers. The study concluded that the capacity-building needs identified are substantial and urgent.

Based on the findings, the study hereby recommends the following:

- (1) The Ministry of Education should organize regular, needs-based ICT training programmes for public primary school teachers. These trainings should emphasize practical, hands-on mastery of software applications, digital lesson delivery, online safety, collaborative digital tools, and smart board usage.
- (2) Teacher-training institutions and certification bodies should revise their curricula and accreditation requirements to incorporate mandatory ICT competency standards. Pre-service teachers should be trained in digital pedagogy, technology-assisted assessment, multimedia content creation, and digital citizenship to ensure that new entrants into the profession possess the required ICT skills.
- (3) Education authorities should develop clear monitoring frameworks to evaluate teachers' ICT competencies and classroom application after training. Regular assessments, performance reviews, and ICT-based lesson supervision should be institutionalized to ensure that teachers translate acquired skills into effective instructional practice.

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Not Applicable.

DECLARATION OF INTEREST

The authors declare no conflict of interest.

RESEARCH FUNDING

Not Applicable.

ETHICAL STATEMENT

Ethical considerations were strictly adhered to by the researchers in the course of this study. Permission was obtained from the appropriate authorities before the commencement of this research. Respondents were duly informed on the purpose of the study and their consent was sought before administering the research instrument. Respondents were assured of confidentiality and anonymity of information provided. The data collected were strictly used for academic purpose.

AI USE STATEMENT

The authors declare that no generative artificial intelligence (AI) tools were used in the preparation, analysis, or writing of this manuscript.

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