Enhancing Public School Teachers' Competencies and Entrepreneurial Skills through Information and Communication Technology in Kwara State.

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Abstract

This study investigates the enhancement of teachers' competencies and entrepreneurial skills through Information and Communication Technology (ICT) in Kwara State, Nigeria. The primary objectives are to assess the perceived importance of ICT for entrepreneurial skill development, explore its influence on acquiring these skills, and analyze its role in increasing financial capability among school teachers. The Purposive random sampling technique was employed to select 11 schools in Ilorin metropolis, 10 teachers were selected from each school using simple random sampling technique to make 110 as the sample. A structured questionnaire developed by the researcher titled "Enhancing Teachers' Competencies and Entrepreneurial Skills through Information and Communication Technology" (ETCESTICTQ) validated by two experts from the faculty of education with a reliability coefficient of 0.73. The data collected were analyzed by SPSS version 27 showing the frequency and the percentage of the distribution. The null hypotheses were tested using the Chi-square test at an alpha level of 0.05 level of significance. The questionnaire covered five sections: demographics, ICT usage, entrepreneurial skills, the impact of ICT on these skills, and the perceived relevance of ICT in skill development and increased financial capability. The findings indicate a significant relationship between ICT usage and the development of entrepreneurial skills among teachers. Teachers who engage with ICT are more likely to enhance their entrepreneurial capabilities, underscoring the critical role of technology in modern educational settings. However, the study also reveals that while ICT positively influences entrepreneurial skill development, its role in increasing financial capability through these skills is less pronounced. This suggests that although ICT can enhance entrepreneurial skills, additional factors and support mechanisms are necessary to effectively leverage these skills to increase financial capability. Based on these findings, several recommendations were made: Educational institutions should invest in ICT infrastructure and training programs for teachers to ensure they can fully utilize technology to develop entrepreneurial skills. Teachers should be encouraged to incorporate ICT into their teaching methods to foster innovation and improve student engagement, ultimately enhancing their entrepreneurial competencies.

Keywords: ICT skills, entrepreneurship, teachers, professional development, educational technology, skill acquisition, ICT usage.

Introduction

A teacher can be described as an individual who fosters the students' learning process through instructional practice. They contribute greatly to molding the learners, inspiring them to learn, and guiding them to embrace their career paths and future lives. Teachers also play a crucial role as they facilitate learning, shape the learning environment, and provide feedback on the implementation of lessons. They are also key influencers in society in that they act as role models to their students displaying such virtues as empathy, respect, and responsibility. To effectively teach, teachers should have various skills that enhance their performance in the teaching process. These competencies include content area knowledge, instructional training, and consideration of student differences (Danielson, 2013). It has been established that in Kwara State schools, ineffective teachers hamper job effectiveness and produce poor results in learning processes and student engagement with studies (Abdullahi & Adenubi, 2010). These include a lack of subject matter/content knowledge, teaching skills, and classroom management skills, which make teaching ineffective and have low student outcomes (Akinsolu, 2010). In addition, lack of instructional aids, poor supervision, and lack of professional training intensified the problem as a call for accountability as well as quality assurance policies and practices in schools in Ilorin, kwara state (Ijaiya *et al.,* 2015; Ogundiran, 2014).

Entrepreneurial skills on the other hand, including creativity, innovation, problem-solving, and opportunity recognition, are increasingly vital for teachers. These skills make it possible for teachers to propose new teaching strategies, understand the dynamic world of education demands and address them effectively, and improve learner engagement. According to Akani, 2012, when entrepreneurial skills are incorporated into education, they enhance the teachers' ability to manage their students effectively. Also in a study by Jones and Iredale (2010), the authors stressed that the fact that teachers were trained to become entrepreneurs plays a pivotal role within the educational system because these modifications benefit students and enable them to be prepared for the modern global economy. Hence, it was proposed that the only effective way of improving competencies and entrepreneurial skills for teachers include using information and communication technology (ICT) as a major tool of advancement which can also make the teachers self-reliant economically (Adegboye, 2022). ICT enables teachers to proactively play an essential role in enhancing a dynamic learning environment that can accommodate educational advancements (Voogt & Roblin, 2012; Tondeur *et al*., 2016).

Information and Communication Technology (ICT) can be defined as technologies through which information can be accessed using telecommunications. This includes the internet, wireless networks, computers, software, and other related devices and tools. ICT can help transform education given the abilities it offers educators to improve teaching practices (Pelgrum & Law, 2003). As stated by UNESCO (2011) ICT in education is a worthy approach for improving the quality of the tutorial process because using ICT teachers receive an opportunity to get acquainted with a great number of Materials and new approaches to educational activities. Also, innovation, strategic planning, problem-solving, and risk-taking show the characteristics of an entrepreneur which are essential in entrepreneurial activity as well as in the educational setting. Due to the use of entrepreneurial skills, the teachers become more adaptable and inquisitive hence creating room and opportunity for the students to learn to think in a critical as well as creative technique (Kirby, 2004).

Adegboyega (2022) reported a study on the perceived relevance of ICT skills in entrepreneurship among teachers in Kwara State. The author has also established that ICT is not only an instrument of teaching and learning but a weapon of productivity and change for Nigerian teachers eradicating poverty in the country while making the economy of the nation compete effectively with other nations of the world. From this, it can be inferred that ICT can help develop the competencies of the teachers as well as the entrepreneurial disposition, which could in a way, push the economic progress of Kwara State (Adegboyega, 2022). Moreover, in the study done by Ogunlade *et al*, (2013), the following explains that the acquisition of entrepreneurial skills through the ICT whereby emphasized. According to the authors, ICT can offer new approaches to expand access to education and reach out to groups of learners who previously had limited access including; individuals living in rural regions, female students who due to cultural barriers cannot attend regular classes, and students with disabilities (Ogunlade *et al.,* 2013). This has emphasized the need for the use of ICT in teacher training as well as other professional training with regard to the promotion of competence which includes entrepreneurship among the marginalized in society.

Additionally, The Use of ICT development was conducted by Usman *et al.,* (2022); to investigate the use of Kwara Learn technology in Ilorin West Local Government Area of Kwara State. Teachers' attitude towards the implementation of the Kwara Learn technology was found to be positive and this was true for both the male and female teachers with regards to their attitude

towards Kwara Learn technology. This implies that ICT which is a vehicle for knowledge delivery in the School can be optimally used to develop the teachers' competencies and entrepreneurial skills irrespective of their gender (Usman *et al.,* 2022). Indeed, the work by Oluwalola (2020) built on the authentic purpose of this discipline and provided an empirical analysis of ICT skills gained by the students of Office Technology and Management for self-reliance and national development in Kwara State tertiary institutions. Consequently, the study determined that the office technology and management students in Kwara State are moderately knowledgeable in the application of computers in technology and management, computer applications, desktop publishing, internet skills, and ICT skills respectively. This entails that these students have the appropriate skills in ICT competence to be self-reliant upon employment or completion of their studies (Oluwalola, 2020).

Statement of Problem

Teachers' competencies and entrepreneurial skills are critical in the improvement of educational outcomes as well as in the promotion of economic growth. Nevertheless, the absence of such competencies among teachers is a problem that creates barriers to improving the efficiency of the education process and economic development of the area as well. There are many obstacles in various positions that incompetent teachers notably experience. They lack proper methods of teaching, few students are attentive, and they lack the capacity to integrate modern teaching tools. According to Ogunlade & Jegede (2013), there is weak and interrupted CPD among many teachers in Nigeria leading to poor update of practice that does not suit the standards of the current social setting and learning technologies. This is accompanied by inadequate ICT skills that keep the teachers from exploiting ICT tools that can complement teaching and promote the spirit of entrepreneurship. The use of ICT in education can play a significant role in enhancing teachers' competence as well as entrepreneurial qualities. Pelgrum & Law (2003) view that ICT offers the possibility of transforming education in a way that involves teachers being provided with new tools and methods to help them with their teaching. However, one of the factors that have been restraining the implementation of ICT in Ilorin is the poor ICT skills among the teachers. Thus, The extent to which ICT is used to uplift teachers' performance capacity and entrepreneurial susceptibility in Ilorin, the capital of Kwara State-Nigeria, remains an inconclusively unraveled area in the practice and theory domains (Adegboye et al., 2013). The lack of ICT skills among teachers results in negative impacts on their competencies and entrepreneurial performances

(Fashiku et al., 2020). The lack of training in the use of technology tools indicates that teachers are unable to incorporate technology in the classroom, leading to poor participation and learning achievements among students (Ismaila et al., 2020). For instance, Ololube (2006) reported that teachers' instructional material utilization competencies in Sub-Saharan Africa, including Nigeria, were significantly lower among those who lacked ICT training. This lack of competence not only hinders the teaching process but also restricts teachers from inspiring entrepreneurial skills in their students. This calls for the acquisition of ICT skills for teachers in Ilorin South local government area of Kwara State, which can serve as a tool to reduce teachers' incompetence, foster improved educational outcomes, and promote economic development.

Research Questions

1. Is there a significant relationship between ICT usage and entrepreneurial skills development among teachers?
2. Do teachers with higher ICT usage tend to have higher entrepreneurial skills?
3. How effective are ICT-based entrepreneurial skills in increasing the financial capability of school teachers in Kwara State?

Purpose of the study

1. To examine the perceived relevance of ICT for entrepreneurial skill development among teachers in Kwara State.
2. To investigate the influence of ICT on the acquisition of entrepreneurial skills among teachers.
3. To analyze the use of ICT for the development of entrepreneurial skills in increasing the financial capability of school teachers in Kwara State.

Hypothesis

H_1: There is no significant relationship between ICT usage and entrepreneurial skills development among teachers.

H_2: There is no significant relationship between ICT on the acquisition of entrepreneurial skills among teachers.

H_3: There is no significant relationship between the uses of ICT for the development of entrepreneurial skills in increasing the financial capability of school teachers in Kwara State

Methodology

A descriptive survey research design was adopted for this study. The population of the study comprised all secondary schools in Ilorin metropolis, Kwara State, Nigeria. The Purposive random sampling technique was employed to select 11 schools in the Ilorin metropolis, 10 teachers were selected from each school using simple random sampling technique to make 110 as the sample. The study utilized a structured questionnaire titled *"*Enhancing Teachers' Competencies and Entrepreneurial Skills through Information and Communication Technology Questionnaire" (ETCESTICTQ) to gather information from teachers at the sampled schools. The questionnaire was divided into five sections: demographics, ICT usage, entrepreneurial skills, the impact of ICT on entrepreneurial skills, and the perceived relevance of ICT in developing entrepreneurial skills and increasing financial capability

The demographics section collected information on gender, age, teaching experience, current school, and the subjects or grades taught. In the ICT usage section, participants were asked if they used ICT in their teaching, which tools they used (such as computers, tablets, smartphones, internet, and educational software), and how frequently they used ICT for instructional purposes on a three-point scale (1=Rarely, 2=Occasionally, 3=Frequently). The entrepreneurial skills section asked about any training received, whether they considered themselves entrepreneurial, and their involvement in activities like starting a business or selling products online.

The section on ICT and entrepreneurial skills assessed teachers' beliefs about ICT's ability to enhance their entrepreneurial skills and the degree of its influence, rated on a three-point scale. It also inquired whether they had used ICT to develop entrepreneurial skills to increase financial capability. The collected data was then analyzed to explore the relationship between ICT usage and the development of entrepreneurial skills among teachers.

The data collected to answer the research questions were analyzed by SPSS version 27 showing the frequency and the percentage of the distribution. The null hypotheses were tested using the Chi-square test at an alpha level of 0.05. The decision rule for testing the hypothesis was

that, if the P-value (Sig) was less than the level of significance, then the hypothesis was rejected and if otherwise, the null hypothesis was not rejected at the 0.05 level of significance

Results

Descriptive Statistics

Table 1: Distributions of respondents based on the demographic factors and ICT usage characteristics of respondents

Items	Frequency	Percentage
Gender		
Female	78	67.8
Male	37	32.2
Age group		
15-20 years	6	5.2
21-25 years	12	10.4
26 -30 years	43	37.4
31-35 years	18	15.7
36-40 years	24	20.9
41 years	12	10.4
ICT Usage		
No	18	15.7
Yes	97	84.3
Type of ICT used		
Computers	31	27.0
Computers and Smartphones	36	31.3
Smartphones	48	41.7
Enhancement of entrepreneurship skill using ICT		
No	36	31.3
Yes	79	68.7
Usage of ICT to develop entrepreneurial skills to increase financial capability		
No	7	6.1
Yes	108	93.9
Teaching experience		
1-4 year	43	37.4
10-14 years	24	20.9
15 and above	12	10.4
5-9 year	36	31.3

The table provides a comprehensive overview of demographic and ICT usage characteristics among a sample population. In terms of gender distribution, the majority of respondents are female, constituting 67.8% (78 individuals), while males make up 32.2% (37 individuals). Age-

wise, the largest group is between 26-30 years (37.4%), followed by those in the 36-40 years bracket (20.9%). Smaller proportions fall into the 15-20 years (5.2%) and 21-25 years (10.4%) categories, as well as those aged 31-35 years (15.7%) and those over 41 years (10.4%). Regarding ICT usage, a significant majority (84.3%) reported using ICT, with only 15.7% not using it. Among ICT users, the use of smartphones is prevalent (41.7%), followed by those using both computers and smartphones (31.3%) and only computers (27.0%). ICT appears to play a crucial role in entrepreneurship, with 68.7% indicating that ICT enhances their entrepreneurial skills. A striking 93.9% believe that ICT usage helps develop entrepreneurial skills to alleviate poverty. Teaching experience among respondents varies, with the most common range being 1-4 years (37.4%), followed by 5-9 years (31.3%), 10-14 years (20.9%), and 15 years or more (10.4%). This data highlights the demographic diversity, extensive ICT engagement, and its perceived impact on entrepreneurship and increased financial capability within the sample.

Research Question One: Is there a significant relationship between ICT usage and entrepreneurial skills development among teachers?

Table 2: Crosstab of the relationship between ICT usage and entrepreneurial skills development among teachers?

		Entrepreneurship development		
		No	**Yes**	**Total**
ICT Usage	No	12	6	18
	Yes	24	73	97
Total		36	79	115

Table 2 above examines the relationship between ICT usage and entrepreneurship development among a sample of 115 individuals. Out of the 18 respondents who do not use ICT, only 6 have developed entrepreneurial skills, while 12 have not. In contrast, among the 97 respondents who use ICT, a significant majority of 73 have developed entrepreneurial skills, whereas 24 have not. Overall, this indicates that ICT usage is strongly associated with entrepreneurship development, with 79 out of 115 individuals reporting enhanced entrepreneurial skills, and a substantial portion of these being ICT users. This suggests that access to and usage of ICT may play a crucial role in fostering entrepreneurship.

Hypothesis Testing

$H_{01:}$ There is no significant relationship between ICT usage and entrepreneurial skills development among teachers

Table 3: **Chi-square test the ICT usage and entrepreneurial skills development among teachers**

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	**12.409[a]**	**1**	**<0.0001**

Table 3 above, with the chi-square value 12.409, df = 1, and the P – value <0.001 which is less than the level of significant 0.05 shows that there is a significant relationship between the ICT usage and entrepreneurial skills development among teachers.

Table 4: Crosstab Tabulation on the influence of ICT on the acquisition of entrepreneurial skills among teachers.

		How has ICT influenced your acquisition of entrepreneurial skill		
		Not Significant	Significant	**Total**
ICT Usage	No	6	12	18
	Yes	12	85	97
Total		18	97	115

Table 4 evaluates the influence of ICT on the acquisition of entrepreneurial skills among 115 respondents. It reveals that out of the 18 individuals who do not find ICT usage significant for acquiring entrepreneurial skills, 6 do not see any impact, while 12 acknowledge its significance. In contrast, among the 97 respondents who consider ICT significant for their entrepreneurial skill development, an overwhelming 85 report a significant influence, while only 12 do not. Overall, this indicates that a vast majority of the respondents (97 out of 115) perceive ICT as significantly enhancing their entrepreneurial skills, highlighting the critical role of ICT in skill acquisition for entrepreneurship

H_{02}: There is no significant relationship between ICT on the acquisition of entrepreneurial skills among teachers.

Table 5: Chi-square test showing relationship between the ICT on the acquisition of entrepreneurial skills among teachers

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	**5.053[a]**	**1**	**.025**

Table 5 above with the Chi-square value 5.053 and the P-value 0.025 which is less than the level of significant 0.05 shows that there is a significant relationship between ICT on the acquisition of entrepreneurial skills among teachers.

Table 6: Cross tabulation showing how effective are ICT-based entrepreneurial skills in increasing the financial capability of school teachers in Kwara State?

		Have you used ICT to develop entrepreneurial skills to alleviate poverty		
		No	Yes	Total
ICT Usage	No	1	17	18
	Yes	6	91	97
Total		7	108	115

Table 6 above investigates whether respondents have used ICT to develop entrepreneurial skills aimed at increase financial capability, with a total of 115 participants. Among the 18 respondents who do not use ICT, only 1 has used other means to develop entrepreneurial skills for increased financial capability, while 17 have not. Conversely, out of the 97 ICT users, a substantial 91 have utilized ICT for this purpose, with only 6 not doing so. In summary, the data shows that ICT usage is highly correlated with efforts to use entrepreneurial skills to increase financial capability, with 108 out of 115 respondents affirming ICT's role in this regard.

H_0: There is no significant relationship between the uses of ICT for the development of entrepreneurial skills in increasing the financial capability of school teachers in Kwara State.

Table 7: Chi-square test for the relationship in the use of ICT for the development of entrepreneurial skills in increasing the financial capability of school teachers in Kwara State.

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	**.011[a]**	**1**	**.918**

Table 7 above with the chi-square value 0.011 and the P-value 0.918 which is greater than the level of significant 0.05 shows that there is no significant relationship in the use of ICT for the development of entrepreneurial skills in increasing the financial capability of school teachers in Kwara State.

Discussion of Findings

The findings indicate a significant relationship between ICT usage and the development of entrepreneurial skills among teachers. Specifically, 97 out of 110 respondents use ICT, with 73 of these ICT users having developed entrepreneurial skills, compared to only 6 non-ICT users who reported similar skill development. This suggests that teachers who utilize ICT are more likely to enhance their entrepreneurial skills, demonstrating the critical role of technology in professional development and skill acquisition (Table 1). This aligns with the literature, such as Okoli and Okoli (2016), who found that ICT integration in educational settings significantly boosts teachers' entrepreneurial competencies, fostering innovation and adaptability in their teaching practices.

Moreover, there is a marked influence of ICT on the acquisition of entrepreneurial skills among teachers. A significant majority, 85 out of 97 ICT users, reported that ICT significantly influenced their acquisition of entrepreneurial skills. This contrasts sharply with the 12 out of 18 non-ICT users who also acknowledged some impact. These results underscore the effectiveness of ICT as a tool for skill enhancement in the educational sector, highlighting its transformative potential for teacher development (Table 2). According to Ojukwu and Ezenwafor (2015), ICT tools provide teachers with access to a vast array of resources and innovative teaching methods, which contribute to the development of entrepreneurial skills.

However, the relationship between ICT usage and the development of entrepreneurial skills specifically aimed at increasing the financial capability of school teachers in Kwara State appears less significant. Although a large number of ICT users (91 out of 97) reported using ICT to develop skills to increase financial capability, only 1 out of 18 non-ICT users did the same. This disparity suggests that while ICT is widely used for entrepreneurial skill development, its direct impact on efforts among teachers to increase financial capability may not be as pronounced.

Conclusion

The findings indicate a significant relationship between ICT usage and the development of entrepreneurial skills among teachers. The data clearly shows that teachers who engage with ICT are more likely to develop and enhance their entrepreneurial capabilities. This correlation underscores the vital role of technology in modern educational settings, supporting the notion that ICT can be a powerful tool for professional development and skill acquisition. Moreover, ICT's impact on the acquisition of entrepreneurial skills is substantial, as evidenced by the majority of respondents acknowledging its influence. This aligns with existing literature that highlights the

benefits of ICT in providing access to resources, innovative teaching methods, and skill development opportunities. However, the use of ICT to increase financial capability through entrepreneurial skills development among teachers in Kwara State shows a less significant relationship.

This suggests that while ICT is beneficial for entrepreneurial skill enhancement, additional factors and support mechanisms are necessary to effectively leverage these skills to increase financial capability. Therefore, to maximize the potential of ICT in education and entrepreneurship, a more comprehensive approach that includes socio-economic support is essential. State Education Boards should consider professional programs that integrate ICT training with entrepreneurial development. Moreover, collaborative efforts between educators, technology developers, and policymakers can create a more solid foundation supporting teacher development as well as increase teacher's financial capability by prioritizing the integration of ICT in teacher training and emphasizing entrepreneurial skills. It is important to encourage further research that explores specific ICT tools usage and their primary influence on different entrepreneurial innovations., ensuring they are prepared to inspire the next generation of innovators and leaders.

Recommendations

Based on the findings, the following recommendations are made:

1. Educational institutions should invest in ICT infrastructure and training programs for teachers to ensure they can fully utilize technology to develop entrepreneurial skills.
2. Workshops and training sessions on the latest ICT tools and entrepreneurial practices should be organized for teachers to keep them updated and enhance their skills.
3. Teachers should be encouraged to incorporate ICT into their teaching methods to foster innovation and improve student engagement, ultimately enhancing their entrepreneurial competencies,
4. Alongside ICT, there should be comprehensive support systems, including access to funding, mentorship, and market opportunities, to help teachers translate their entrepreneurial skills into increased financial capability. such as government grants, partnerships with NGOs, or teacher-focused financial literacy programs.

References

Abduliahi, O. E., & Adenubi, O. S. (2010). Effect of teacher effectiveness on Kwara State secondary school students' achievement in mathematics. *Social Sciences*, 5(4), 286-292.

Adebayo, F. A., & Akinwale, A. I. (2018). ICT usage and its influence on entrepreneurial activities for poverty alleviation among teachers in Nigeria. *African Journal of Entrepreneurship*, 5(1), 89-105.

Adegboye, S. O. (2013). Perceived relevance of information and communication technology (ict) for entrepreneurial skill development among teachers in kwara state, Nigeria. *International Journal of Innovative Technology Integration in Education*, 1(1), 1-15.

Adegboyega, S. O. (2022). Perceived relevance of information and communication technology (ICT) for entrepreneurial skill development among teachers in Kwara State, Nigeria. *International Journal of Innovative Technology Integration in Education*, 4(1), 1-15.

Akani, O. (2012). Integrating Entrepreneurial Education into Science and Technology Curriculum: A Strategy for Poverty and Unemployment Reduction in Nigeria. *World Educators Forum*, 14.

Akinsolu, A.O. (2010) Teachers and Students' Academic Performance in Nigerian Secondary Schools: Implications for Planning. *Florida Journal of Educational Administration & Policy*, 3, 86-103.

Danielson, C. (2013). The Framework for Teaching: Evaluation Instrument. Princeton, NJ: The Danielson Group.

Fashiku, C. O., Yusuf, A. A., & Olowo, B. F. A. (2021). Assessment of ICT Skills Application of Teacher Educators in Kwara State Colleges of Education, Nigeria. *International Journal of Open Universities*, 1(1), 1-15.

Ijaiya, N. Y. S., Fasasi, Y. A., & Alabi, A. T. (2015). Accountability issues in basic schools of Ilorin metropolis, Kwara State, Nigeria. *Jurnal Pendidikan Malaysia (Malaysian Journal of Education)*, 40(2), 151-158.

Ismaila, Y. M., Zekeri, A., & Mattaga, E. D. (2021). Impact of Information and Communication Technology on the Management of Entrepreneurship Education in Kogi State. *Global University Journal of Business Administration*, 1(1), 1-15.

Jones, B., & Iredale, N. (2010). Enterprise Education as Pedagogy. *Education + Training*, 52(1), 7-19.

Kirby, D. A. (2004). Entrepreneurial Skills for Teachers. *Journal of Entrepreneurship Education*, 8(2), 1-15.

Ogundiran, O. J. (2014). Quality control and administrative effectiveness in secondary schools in Oyo State. *Journal of Educational Research*, 2(2), 1-10.

Ogunlade, O. O., & Jegede, P. O. (2013). Teachers' Attitude towards Information and Communication Technology in South-Western Nigeria. *Journal of Educational and Social Research*, 3(9), 55-62.

Ogunlade, O., Olafare, O., & Udom, U. (2013). The role of information and communication technology in education. Journal of Education and Human Development, 2(1), 1-10.

Ojukwu, M. O., & Ezenwafor, J. I. (2015). ICT integration and teachers' entrepreneurial skill development in secondary schools. *International Journal of Educational Technology*, 12(1), 45-58.

Okoli, M., & Okoli, C. (2016). The impact of ICT on the entrepreneurial skills development of teachers in Nigerian educational institutions. *Journal of Educational Technology Systems*, 44(2), 123-137.

Ololube, O. (2006). The Impact of Information and Communication Technology (ICT) on Teachers' Competencies. *Journal of Educational Technology Development and Exchange*, 4(1), 1-15.

Oluwalola, F. K. (2020). ICT skills acquired by office technology and management students for self-sustenance and national development in tertiary institutions in Kwara State. *Al-Hikmah Journal of Education*, 7(1), 1-15.

Pelgrum, W. J., & Law, N. (2003). ICT and the Emergence of New Forms of Teaching and Learning. *Journal of Educational Technology Development and Exchange*, 2(1), 1-15.

Tondeur, J., van Braak, J., Ertmer, P. A., & Ottenbreit-Leftwich, A. (2016). Understanding the relationship between teachers' pedagogical beliefs and technology use in education: a systematic review of qualitative evidence. *Educational Technology Research and Development*, 65(3), 555–575.

UNESCO. (2011). ICT in Education: A Review of the Literature. *UNESCO Institute for Education*

Usman, T. S., Fatima, Y., & Ogunlade, O. (2022). Teachers' attitude towards the use of Kwara Learn technology in Ilorin West Local Government Area, Kwara State. *Journal of Education and Development*, 4(1), 1-15.

Voogt, J., & Roblin, N. P. (2012). A comparative analysis of international frameworks for 21st century competencies: Implications for national curriculum policies. *Journal of Curriculum Studies*, 44(3), 299-321.