



21st Century Skill Acquisition for Career Readiness of Business Education Undergraduates of Public Universities in Anambra State

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Abstract: This study examined the 21st century skill acquisition and career readiness of business education undergraduates in public universities in Anambra State. Two research questions guided the study. The study adopted a descriptive survey design. The population comprised 120 final year business education undergraduates and data were collected using a structured questionnaire developed by the researcher. The reliability coefficients were 0.76 for Cluster 1 and 0.84 for Cluster 2, yielding an overall reliability index of 0.80. Data were analyzed using mean and standard deviation. Findings revealed that digital literacy skills and communication skills significantly enhance career readiness. The study concludes that acquisition of 21st century skills is crucial for equipping undergraduates with the competencies required to meet workplace demands, adapt to technological changes and achieve career success. It is recommended that business education programmes integrate more digital literacy training, strengthen communication-oriented learning activities and promote creativity and innovation through practical-based instruction.

Key words: 21st Century Skills, Career Readiness, Business Education, Anambra State

INTRODUCTION

The 21st century has ushered in unprecedented changes in the world of work driven by globalization, digitalization, artificial intelligence and shifting socio-economic dynamics. Employers now seek graduates who possess not only technical knowledge but also adaptable, innovative and interpersonal skills necessary for sustainable career success. In this rapidly evolving global economy, business education remains a cornerstone for preparing students to meet workforce demands. However, traditional competencies alone are no longer sufficient because it focuses basically on fundamental knowledge, manual skills and less dependent on technology. Business education, as a discipline designed to prepare students for roles in administration, entrepreneurship, accounting, marketing and management, must therefore prioritize career readiness through acquisition of 21st century skills. There is growing concern that many graduates lack the practical and soft skills required to thrive in modern workplaces.

Also, public universities are expected to play a vital role in equipping undergraduate students with relevant skill necessary for career success. Challenges such as inadequate facilities, outdated curriculum, limited access to digital technologies and insufficient practical training may hinder acquisition of skills (Nwosu and Umezulike, 2021). The acquisition of 21st-century skills is no longer optional but essential for the career readiness of business education undergraduates in public universities in Anambra State

Career readiness in the 21st century extends beyond academic qualifications to encompass a broad range of transferable skills that enable graduates to function effectively in dynamic work

environments (National Association of Colleges and Employers [NACE], 2018). According to Savickas (2019) career readiness refers to the possession of knowledge, skills, and attitudes that enable individuals to successfully transition from education into the workforce and progress in their chosen careers. Career readiness is achieved when students can apply theoretical knowledge to real-world business situations, demonstrate professional behavior and respond effectively to workplace challenges (Conley 2022).

21st century skills involve a set of cognitive, social, emotional and digital competencies required for effective participation in modern society and the workplace (Trilling and Fadel 2019) World Economic Forum (2018) defined 21st century skills as foundational literacies, competencies, and character qualities that are essential for individuals to navigate fast-changing economies and societies. For business education students, these competencies are critical for securing employment, adapting to workplace demands, and contributing meaningfully to organizational goals.

Business Education students of this 21st century need to be equipped with the salable skills for employability. According to the National Bureau of Statistics (2023), youth unemployment and underemployment remain high, with a large proportion of graduates lacking practical skills required by employers. This reality underscores the urgency of repositioning business education programmes to focus on career readiness through the acquisition of 21st century skills that enhance employability, adaptability and productivity in the modern labour market.

In Anambra State, the major challenges confronting business education students is curriculum–industry mismatch. Ore (2023) Additionally, Bupo and Okiridu (2024) argued that many students face difficulties securing meaningful placements during the Students Industrial Work Experience Scheme (SIWES), which restricts their ability to translate theoretical knowledge into practical competence required for employment. Ore (2023) found that business education programmes in public universities has not adequately developed employability and 21st century soft skills required by employers among undergraduates, thereby limiting graduates' career readiness and workplace effectiveness. Adewole and Adegbenjo (2025) emphasized that emerging digital and entrepreneurial skills are increasingly required for employment, yet business education programmes struggle to keep pace with these demands, thereby limiting graduates' acquisition of essential 21st century skills such as digital literacy and communication skills are needed for their career readiness.

Furthermore, the core 21st century skills and competencies, digital literacy has emerged as one of the most critical skills required for career readiness. In the 21st century these include media literacy skills and technology literacy skills. Digital literacy according to Thompson (2021) referred not only to the ability to use digital devices but also to the capacity to access, evaluate, create, and communicate information effectively through digital platforms. Eze and Obi (2023) defined digital literacy as the ability of business education undergraduates to effectively use digital technologies for communication, collaboration, problem-solving and innovation in the work place settings. In the context of this study, Digital literacy is a foundational component of 21st-century skills, reflecting the increasing reliance on technology in all aspects of life and work. It involves the ability to access, evaluate, create and communicate information using digital technologies. In the modern workplace, digital competence is no longer optional but a fundamental requirement.

Digital literacy refers to the set of abilities that enables individuals to effectively find, evaluate, create, and communicate information using digital technologies. According to Okpue and Onojaif, (2025), digital literacy is the capacity to navigate and utilize information technologies for academic, social and professional purposes. Owenubiugie, (2022) define digital literacy as the ability to critically engage with digital content, including the effective use of software, applications and online platforms to support learning and problem-solving. Similarly, Umezulike and Okafor (2019) conceptualizes digital literacy as a multidimensional competence encompassing technical proficiency, information evaluation, and the ethical use of digital resources. For undergraduates in public tertiary institutions in Anambra State, such skills are indispensable for competing in a labour market that is increasingly digital and globally interconnected.

Similarly, communication skills are widely acknowledged as one of the most essential 21st century competencies required for employability and career readiness. They involve the ability to convey information clearly, listen effectively, and interact productively in both oral and written forms.

According to Adegbite and Akinwale (2019), communication skills are “the abilities that allow individuals to transmit and interpret messages effectively through verbal and non-verbal means within various contexts. Akinwale (2018) defined communication skills as the capacity to express ideas, thoughts and information clearly and appropriately through spoken, written and non-verbal channels in different social and professional contexts. This definition emphasizes clarity and appropriateness in message delivery.

Communication skills are students’ ability to articulate ideas logically, listen actively and engage meaningfully in academic and professional interactions (Yusuf and Afolayan 2021). According to Okeke (2020), communication skills are essential interpersonal competencies that enable collaboration, negotiation, and clear presentation of complex concepts. This definition links communication competence to academic success and workplace readiness. Similarly, Nwoye (2017) describes communication skills as the practical competence required to convey information, opinions and emotions effectively while considering audience, context, and purpose. This highlights the contextual and audience-sensitive nature of communication. For business education undergraduates, effective communication is not only necessary for academic success but also for functioning efficiently in managerial, entrepreneurial and administrative roles. The reason why the study focus on two 21st century skills for career readiness out of the other skills is because it address graduate employability challenges, align with business education objectives, it aligns with global education standards and focusing on them provide meaningful insight into graduate career readiness.

Statement of the Problem

In the 21st century, the demands of the workplace have shifted significantly, requiring graduates not only to possess theoretical knowledge but also practical competencies such as digital literacy and communication. These skills are globally acknowledged as indispensable for employability, entrepreneurship and national development. However, there is growing concern that many undergraduates in Nigeria, including those in Anambra State, are not adequately prepared for the realities of the modern workforce. This concern is more worrisome for business education undergraduates, whose programme is specifically designed to combine academic knowledge with practical skills for office work, entrepreneurship and self-reliance. When students fail to acquire essential 21st century skills during their training, they risk graduating without the competencies needed to compete for jobs, establish viable businesses, or adapt to changing work environments. This often results in high unemployment, underemployment, or dependence on low-paying and unsustainable jobs. In addition, the inability to demonstrate workplace readiness exposes graduates to criticism from employers who view them as half-baked, poorly trained and lacking in innovation.

The consequences of these deficiencies are far-reaching. Business education graduates who lack digital literacy may be unable to function effectively in today’s technology-driven offices. Those who do not develop adequate communication skills may struggle with teamwork, presentations, and professional relationships. Ultimately, these skills gap not only threatens the career prospects of individual graduates but also undermines the role of business education in supporting economic growth, youth empowerment and industrial development in the state. This study seeks to examine the extent of 21st century skill acquisition and career readiness among business education undergraduates in public universities in Anambra State.

Research Questions

The study was guided by the following research questions:

- RQ1; What is the influence of digital literacy skill on the career readiness of business education undergraduates in public universities in Anambra State?
- RQ2: What is the influence communication skill on the career readiness of business education undergraduates in public universities in Anambra State?

METHOD

This study adopted a descriptive survey research design. The population comprised 120 final year business education students from Nnamdi Azikiwe University and Chukwuemeka Odumegwu Ojukwu University. The study employed census approach as the entire population is relatively small and manageable. Data were collected using a structured questionnaire. The instrument has two sections A

and B. Section A contained demographic profile of the respondents. Section B had two clusters, B1-B4 which contain 5 items respectively. The instrument was structured on a 4-point Likert scale ranging from strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2, Strongly Disagree (SD) = 1. The instrument was validated by three experts. Reliability of the Instrument was executed by administering 20 copies of the instrument on the 21st century skills acquisition and career readiness of business education undergraduate in public universities in Anambra State in a trial test. Cronbach's Alpha coefficient was employed to evaluate the internal consistency of the instrument. The results indicated that cluster 1 had a coefficient of 0.76 and cluster 2 had a coefficient of 0.84, yielding an overall reliability index of 0.80. Questionnaires were administered and retrieved by the researcher with assistance from three trained personnel using the direct delivery and collection method. Out of the 120 questionnaires distributed, 104 copies (87%) were properly completed and deemed suitable for analysis. The data collected were analyzed using the Statistical Package for Social Sciences (SPSS) version 26. Statistical tools employed for data analyses mean and standard deviation. A mean of 2.50 was used as the cutoff point for making decisions. The decision rule was that any item that scored a mean of 2.50 and above would be seen as having attracted positive responses, while items that scored less than 2.50 would be regarded as having attracted negative responses.

RESULTS

Influence of digital literacy skills on the career readiness among business education undergraduate in public universities in Anambra State

Table 1: The mean rating of digital literacy skills on the career readiness among business education undergraduate in public universities in Anambra State

| S/N | Item Statements | X | SD | Remarks |
|---------------------|---|--------------|---------------|---------------|
| 1 | I can adapt to new technologies and software with minimal assistance. | 1.57 | 1.309 | Disagreed |
| 2 | I understand how to protect my personal data and privacy online. | 1.56 | 1.067 | Disagreed |
| 3 | I use digital technologies to enhance my productivity. | 3.58 | .497 | Agreed |
| 4 | I can use digital tools to solve academic or real-life problems. | 3.72 | .450 | Agreed |
| 5 | I can integrate multiple digital tools to complete complex tasks. | 3.80 | .435 | Agreed |
| Cluster Mean | | 2.846 | 0.7516 | Agreed |

The results in Table 1 show the mean score ratings of the digital literacy skills on the career readiness. The respondents rated effective use of computer applications such as I can integrate multiple digital tools to complete complex tasks. ($\bar{x} = 3.80$, $SD = .435$) and I can use digital tools to solve academic or real-life problems. ($\bar{x} = 3.72$, $SD = .450$) as highly needed. Similarly, I use digital technologies to enhance productivity and efficiency. ($\bar{x} = 3.58$, $SD = .497$) were rated as essential. However, I can adapt to new technologies and software with minimal assistance. ($\bar{x} = 1.57$, $SD = 1.309$) and I understand how to protect my personal data and privacy online. ($\bar{x} = 1.56$, $SD = 1.067$) were disagreed with. The cluster mean of 2.846 ($SD = 0.752$) indicates that digital literacy skills significantly enhance career readiness among the respondents.

Influence of communication skills on the career readiness of business education undergraduates in public universities in Anambra State

Table 2: The mean rating of communication skills on the career readiness of business education undergraduates in public universities in Anambra State

| S/N | Item Statements | X | SD | Remarks |
|-----|---|-------------|--------------|-----------|
| 6 | I find it difficult to resolve conflicts through effective communication. | 1.49 | 1.263 | Disagreed |
| 7 | I actively listen and respond appropriately during discussions and group activities. | 3.51 | .503 | Agreed |
| 8 | I can adapt my communication style to suit different audiences and situations. | 3.54 | .501 | Agreed |
| 9 | I seldom see the need to use professional communication skills when collaborating with peers and instructors. | 1.66 | 1.476 | Disagreed |
| 10 | I can express my ideas clearly and confidently in oral and written forms. | 3.70 | .462 | Agreed |
| | Cluster Mean | 2.78 | 0.841 | Agreed |

The results in Table 2 reveal the mean rating of communication skills on the career readiness. Specifically, adapting communication styles to suit different audiences ($\bar{x} = 3.54$, $SD = .501$), actively listening and responding during group activities ($\bar{x} = 3.51$, $SD = .503$), and expressing ideas clearly in oral and written forms ($\bar{x} = 3.70$, $SD = .462$) were all agreed upon as important. Conversely, statements such as I find it difficult to resolve conflicts through effective communication. ($\bar{x} = 1.49$, $SD = 1.263$) and seldom seeing the need for professional communication ($\bar{x} = 1.66$, $SD = 1.476$) were disagreed with. The cluster mean of 2.78 ($SD = 0.841$) confirms that communication skills significantly enhance career readiness.

DISCUSSION

The findings revealed that digital literacy skills are needed for career readiness among business education undergraduates in Anambra State. Respondents strongly agreed that digital technologies to enhance my productivity, digital tools to solve academic or real-life problems and I can integrate multiple digital tools to complete complex tasks. are critical for academic and professional success. This result corroborates the submission of Nwosu and Eze (2022), who emphasized that digital proficiency enhances employability by equipping graduates with the competencies required to adapt to the modern workplace. Similarly, Isa et al. (2023) found that digital skills facilitate problem-solving, collaboration and career adaptability in technologically dynamic environments. However, the findings also revealed a gap, as many students still lack advanced digital problem-solving skills, which aligns with Okoye (2020) who observed that digital illiteracy remains a barrier to full career readiness in Nigerian tertiary institutions

The study also found that communication skills are perceived as crucial for career readiness. Respondents agreed on the importance of expressing ideas clearly, adapting communication styles to diverse audiences and actively listening during collaborative engagements. These findings align with the position of Adamu and Yusuf (2021), who noted that effective communication underpins professional collaboration and workplace integration. Furthermore, Adeyemi and Salami (2020) stressed that communication strengthens interpersonal relationships and improves organizational outcomes, which are key to employability. The disagreement with items suggesting that communication skills are unnecessary demonstrates students' awareness that professional success depends on effective interaction with peers, instructors and potential employers. In line with the theoretical framework, communication skills represent a pull factor, attracting undergraduates towards active career preparedness by building confidence, teamwork and adaptability in professional contexts.

CONCLUSION

This study concludes that the career readiness of business education undergraduates in public tertiary institutions in Anambra State is largely influenced by their acquisition of digital literacy and communication skills. Although the findings indicate that students demonstrate a relatively high awareness and basic application of these skills, notable gaps remain in advanced digital problem-solving

and professional communication practices. This suggests a stronger emphasis on theoretical knowledge than on the practical application of real-world, career-relevant skills, underscoring the need for greater experiential and skill-oriented learning approaches within business education programmes.

RECOMMENDATIONS

1. Public universities in Anambra State should integrate advanced ICT courses into business education curricula, with a strong focus on practical applications such as data analysis, digital collaboration and ethical use of technology.
2. Educators should adopt blended learning approaches that expose students to digital tools regularly, while institutions should provide modern computer laboratories and internet facilities to ensure access and practice.
3. Lecturers should adopt interactive teaching strategies such as debates, group projects, presentations, and peer-to-peer feedback sessions that promote oral and written communication skills. Institutions should also introduce professional communication workshops to equip undergraduates with adaptable skills for diverse workplace settings.

REFERENCES

- Adegbite, W., & Akinwale, A. A. (2019). Communication competence and workplace effectiveness in Nigerian organizations. *Journal of Language and Communication Studies*, 12(2), 45–58.
- Adewole, E. G., & Adegbenjo, A. O. (2025). Business Educators' Perception of Digital Skills Required by Business Education Students. *Nigerian Journal of Business Education*.
- Akinwale, A. A. (2018). Language, communication, and employability skills in Nigeria. *Nigerian Journal of Educational Studies*, 15(1), 73–85
- Bupo, G. O., & Okiridu, F. O. (2024). Challenges Faced by Business Education Students During Their Students Industrial Work Experience Scheme. *Nigerian Journal of Business Education*
- Conley, D. T. (2022). A complete definition of college and career readiness. Educational Policy Improvement Center.
- Eze, J. U., & Obi, C. A. (2023). Digital literacy and employability skills of business education undergraduates in South-East Nigerian universities. *Nigerian Journal of Business Education*, 10(2), 45–56.
- National Association of Colleges and Employers (NACE). (2018). Career readiness competencies. NACE.
- National Bureau of Statistics. (2023). Labour force statistics: Unemployment and underemployment report. Abuja: NBS.
- Nwosu, A., & Umezulike, C. (2021). ICT integration in business education in Nigeria universities. *International Journal of Education Research*, 9(2), 77-89
- Nwoye, O. G. (2017). Communication competence in educational and professional settings. *Journal of Nigerian Languages and Linguistics*, 10(1), 21–34.
- Okoro, E. (2020). Effective communication and organizational performance in Nigeria. *International Journal of Communication Research*, 8(3), 101–114.
- Okpue, E. M. and Onojaif, C. A. (2025) Impacts of Digital Literacy in Enhancing Business Education Students' Entrepreneurial Activities in Delta State University, Abraka. *International Journal of Innovative Information Systems & Technology Research* 13(2):47-52, April-June, 2025
- Ore, E. R. (2023). Effectiveness of Business Education Programme and the Development of Employability Skills of Business Education Students in Public Universities in Lagos State, Nigeria. *African Journal of Educational Management*, 23(1), 57–73
- Owenvbiugie, R. O. (2022). Relevant soft skills required by business education students for enhancing employability. *International Journal of Management and Digital Business*, 1(1), 24-36.
- Savickas, M. L. (2013). Career construction theory and practice. In R. W. Lent & S. D. Brown (Eds.), *Career development and counseling* (2nd ed., pp. 147–183). Wiley.
- Thompson, O. I. (2021). Accelerating creativity and skill acquisition in economic education: a strategic approach to poverty eradication in Nigeria. *International Journal of Innovation, Management and Social Sciences*, 1.
- Trilling, B., & Fadel, C. (2019). 21st century skills: Learning for life in our times. Jossey-Bass.

- World Economic Forum. (2018). The future of jobs report 2018. Geneva: WEF
- Yorke, M. (2006). Employability in higher education: What it is – what it is not. Higher Education Academy.
- Yusuf, M. O., & Afolayan, J. A. (2021). Communication skills and students' academic and career success. Nigerian Journal of Business Education, 8(2), 112–126.
- Umezulike, A. N., & Okafor, V. E. (2019). Curriculum innovation in business education and 21st century employability skills. Nigerian Journal of Business Education, 6(1), 172–183.