

AN ANALYSIS OF SKILLS ACQUISITION PROGRAMMES AND CAREER READINESS OF UNDERGRADUATE UNIVERSITY STUDENTS IN JIGAWA STATE

Associate Professor Rabi Abdulkadir Kurfi

Career Development Centre,

Federal University of Technology Babura, Jigawa State, Nigeria

rabiabdulkadirkurfi@gmail.com

Abstract

The study analysed skills acquisition programmes and career readiness of undergraduate university students in Jigawa state, Nigeria. Two research questions were formulated to guide the study. The study employed descriptive survey research design and targeted over one thousand students in FUT Babura, Jigawa state and disproportionate random sampling technique was employed where three hundred and twenty two (322) were selected as sample. Skills Acquisition Questionnaire (SAQ) was the instrument used for data collection. It is validated by experts and reliability result was 0.87 using PPMC. The data collected was analysed using mean and standard deviation and a midpoint of 2.5 and above indicate agreement while below 2.5, disagreement. The findings indicate that students perceive the greatest skills acquisition in practical business and entrepreneurship training, vocational technical skills as moderately developed, while digital competencies and structured internships show weaker outcomes. Soft skills development is reported as the least effective, with highly inconsistent results among undergraduate students. While entrepreneurship initiatives were viewed with marginally more favour, all other critical areas including digital literacy, technical workshops, professional development and internships were consistently rated low. The study concluded that there is a significant disconnect between the objectives of skills acquisition programmes and the experiences of undergraduate university students in Jigawa state. The study recommended that universities should immediately revise their skills acquisition framework to systematically embed and strengthen modules on digital literacy.

Key words: Skills Acquisition Programmes, Career Readiness, Undergraduate Students.

Introduction

The 21st-century global economy characterized by rapid technological advancement, globalization and the rise of the Fourth Industrial Revolution (4IR), has fundamentally altered the landscape of work. Industries now demand a workforce that is agile, technologically literate, and possesses a blend of specialized hard skills and adaptable soft skills. This shift has placed higher education institutions, particularly those with a vocational and applied learning mandate under immense pressure to evolve (Alegieuno, 2025). Universities of technology are at the epicentre of this pressure. Their foundational *raison d'être* is to serve as a critical bridge between academic knowledge and the practical needs of industry, thereby acting as engines of national economic development and innovation (Uba, 2022).

According to Ogbonna and Asukwo (2023), the concept of "graduate employability" has thus moved from a peripheral concern to a central metric of institutional success. It is no longer sufficient for graduates to possess a diploma; they must be "career-ready." Career readiness encompasses the demonstration of competencies such as critical thinking, problem-solving,

digital literacy, professionalism, and teamwork that prepare them for a seamless transition into the dynamic workplace (Uba, 2022). In response to this paradigm shift, ancillary units within universities, specifically Entrepreneurship Development Centres (EDCs), have seen a significant expansion of their traditional roles. Initially focused on fostering new venture creation and an entrepreneurial mind-sets, EDCs are now increasingly recognized as pivotal hubs for broader skills acquisition and employability enhancement. Ubogu (2023) posited that they are tasked with delivering programs that complement the academic curriculum, ranging from technical upskilling workshops (e.g., in data analytics, CAD software, digital marketing) to essential soft skills training (e.g., communication, leadership, interview techniques) and work-integrated learning (WIL) opportunities.

In the specific context of Nigeria that is a developing nation or a specific region undergoing industrial transformation, the role of universities of technology is even more pronounced. These universities are often integral to government strategies for reducing youth unemployment, driving industrialization, and building a sustainable, skilled domestic workforce (Alegieuno, 2025). The EDCs within these universities are, therefore, not just academic support units but are potentially key instruments of public policy. However, the effectiveness of this entire ecosystem where UoTs produce graduates that industries readily absorb is contingent upon a robust, synergistic, and responsive collaboration between the academia and the industry. The strength of this industry-academia linkage determines the relevance of the skills taught, the effectiveness of the career readiness processes, and ultimately, the employability of the graduates. This background sets the stage for investigating the skills acquisition and career readiness of undergraduate students in the University of Technology, Babura Jigawa State, Nigeria.

The landscape of skills acquisition programs in Nigerian universities is diversifying, moving beyond the traditional curriculum to address chronic graduate unemployment. A dominant type documented in the literature is entrepreneurial skills acquisition. Studies by Adelaja et al. (2023) and Oluotase, Brijlal and Yan (2023) affirm that targeted entrepreneurship education, which includes practical modules in business plan development, financial literacy, and venture creation, significantly enhances students' entrepreneurial intentions and self-efficacy. These programs are often championed by entrepreneurship development centres which Alegieuno (2025) identifies as crucial for delivering strategies like student business incubators and mentorship schemes. The underlying premise is that equipping students with entrepreneurial skills fosters a mind-set of self-reliance and job creation, as emphasized by Ubogu (2023), who posits such education as a strategic option for national development.

Concurrently, there is a growing emphasis on digital and 21st-century skills acquisition. In the contemporary global economy, proficiency in digital tools is no longer optional. However, Adeyemi and Oni (2021) critically highlight a significant challenge: the persistent digital divide in Nigeria which can limit equitable access to these crucial skills. Despite this barrier, research indicates a push for integration. Ogbonna and Asukwo (2023) found that virtual learning tools, when effectively deployed, can facilitate the acquisition of skills like critical thinking and collaboration. Furthermore, Akpan, Oyakhirome, and Udoh (2024) project this further,

exploring the potential of harnessing Artificial Intelligence (AI) to prepare students for sustainable lifelong learning, suggesting that future-focused skills in data analytics and AI literacy are becoming essential components of a modern skills acquisition program.

Despite these documented program types, a critical gap exists between their proposed design and their effective implementation. While the literature is replete with prescriptions for what should be taught from entrepreneurship (Otache, Edopkolor & Kadiri, 2022) to digital fluency there is less empirical evidence on the scalability, quality, and student engagement levels of these programs across different Nigerian universities, particularly in newer institutions like the University of Technology, Babura. Uba (2022) indirectly alludes to this by reviewing philosophical issues in educational law and policies, suggesting that systemic and policy-level constraints may hinder the consistent delivery of high-quality, practical skills training. Therefore, while the types of programs are well-articulated in theory (Shuaibu et al., 2020), their on-the-ground prevalence, accessibility, and structure require localized investigation.

The link between skills acquisition and career readiness is a central theme in contemporary educational research, with career readiness encompassing the possession of competencies that make a graduate immediately valuable in the workplace or capable of creating one. The literature strongly suggests that entrepreneurial skills acquisition directly contributes to career readiness by shaping career intentions. The works of Otache et al. (2022) and Tsaknis, Sahinidis and Kavagia (2023) demonstrate that entrepreneurship education does not operate in a vacuum; it influences students' orientation and motivation, which are key antecedents to entrepreneurial intention a clear indicator of readiness for self-employment. This is supported by Adelaja et al. (2023), who applied the Experiential Learning Theory (ELT) to show that the effectiveness of different types of entrepreneurial education is measured by their success in fostering this intention to pursue self-employment as a viable career path.

Beyond entrepreneurial intent, career readiness for formal employment is increasingly tied to digital and soft skills acquisition. Employers consistently demand competencies such as problem-solving, adaptability, and technological proficiency. The research by Akpan et al. (2024) argues that harnessing AI and other advanced technologies in education is not just about technical skill but about preparing students for a future of continuous learning, a cornerstone of sustainable career readiness. Similarly, practical, experiential learning strategies advocated by Alegieuno (2025) are designed to bridge the theory-practice gap, thereby making students more "job-ready." This aligns with the broader view that career readiness is enhanced when students can apply knowledge in real-world contexts, a function that effective skills acquisition programs are meant to serve. However, a critical examination reveals that the mere presence of skills acquisition programs does not automatically guarantee career readiness. The contribution is mediated by the quality and relevance of the programs. For instance, the digital divide cited by Adeyemi and Oni (2021) means that without adequate infrastructure, programs aimed at digital skills acquisition may fail to reach their intended audience, thereby exacerbating inequality in career readiness among graduates. Furthermore, while programs may successfully instill skills, their ultimate contribution to readiness is measured by tangible outcomes such as employment rates, successful enterprise creation, or demonstrably higher

employability skills. The literature calls for more empirical studies that directly correlate participation in specific types of skills programs with measurable career readiness indicators among Nigerian graduates, moving beyond intentions to actual career outcomes and sustainability, as the foundational concepts of entrepreneurship (Shuaibu et al., 2020) must eventually translate into functional economic participation.

Statement of the Problem

Despite the explicit mandate of universities of technology to produce industry-ready graduates, there is growing concern from employers, policymakers, and graduates themselves about a persistent skills gap. This potential shortcomings in the current skills acquisition programs and career readiness initiatives orchestrated by key units like the entrepreneurship development centres (EDCs). While EDCs are established to bridge this gap, the efficacy of their programs and the robustness of their industry linkages are not well documented (Alegieuno, 2025).

Significant challenges such as technical workshops provide hands-on expertise for 21st century specific roles, misaligned curricula, logistical constraints, and perhaps a lack of strategic commitment from partners are often speculated but not systematically investigated within the context of the study area. Therefore, this study is motivated by the empirical investigating skills acquisition and career readiness of undergraduate students in the University of Technology, Babura Jigawa State, Nigeria.

Objectives of the Study

The following objectives guided the study:

1. To ascertain the skills acquired during skill acquisition programs by undergraduate students at the University of Technology Babura, Jigawa state, Nigeria?
2. To determine the extent of participation in skills acquisition programs in contributing to the career readiness of undergraduate students at the University of Technology Babura, Jigawa state, Nigeria?

Research Questions

The study sought to answer the following research questions:

1. What types of skills acquired during skill acquisition programs by undergraduate students at the University of Technology Babura, Jigawa state, Nigeria?
2. To what extent does participation in skills acquisition programs is contributing to the career readiness of undergraduate students at the University of Technology Babura, Jigawa state, Nigeria?

Methodology

The study employed a quantitative research method using descriptive survey research design and targeted over one thousand students in FUT Babura, Jigawa state and disproportionate random sampling techniques was employed where a total number of three hundred and twenty two (322) were selected and questionnaires was the instrument used for data collection. It is validated by experts and reliability result was 0.87 using PPMC. The data collected was analysed using descriptive statistics. The data collected was analysed using mean and standard deviation. A total of 322 questionnaires distributed to the respondents in the study. Out of the distributed questionnaire, 260 (80.8%) were duly filled and returned, while 62 (19.2%) of the

distributed questionnaire were not returned. The high response rate was achieved as a result of subsequent follow-ups by the researcher, alongside the research assistants that were employed for the study.

Research Question One: What types of skills acquired during skill acquisition programs by undergraduate students at the University of Technology Babura, Jigawa state, Nigeria?

Table 1: Mean and standard deviation on the types of skills acquired during skill acquisition programs

Items	Mean	Std
Practical training for starting and managing a business	2.70	.99
Intensive training in essential software, coding, and digital marketing	2.32	.99
Hands-on vocational training in fields like renewable energy or agri-tech.	2.51	1.00
Structured work placements to gain practical, on-the-job experience	2.18	1.01
Workshops focused on communication, leadership, and interview skills	2.09	1.96

Based on the mean scores in table 1 revealed that student perceptions of skills acquisition at the University of Technology, Babura vary significantly across program types. The highest mean score (2.70) indicates that practical business and entrepreneurship training is perceived as the most effective area of skills development. Hands-on vocational training in fields like agro-tech also fares relatively well with a mean of 2.51. However, students report substantially lower acquisition levels in other critical areas: digital skills training (2.32), structured work placements (2.18), and especially soft skills workshops (2.09), which shows both the lowest mean and remarkably high standard deviation, suggesting inconsistent program quality and generally inadequate skills development in these essential competencies.

Research Question Two: To what extent does participation in skills acquisition programs is contributing to the career readiness of undergraduate students at the University of Technology Babura, Jigawa state, Nigeria?

Table 2: Mean and standard deviation on participation in skills acquisition programs is contributing to the career readiness

Items	Mean	Std
Entrepreneurship skills acquisition programs develop start-up skills and self-employment readiness	2.70	.99
Digital training builds essential technological proficiency	2.32	.99

Technical workshops provide hands-on expertise for 21 st century		
specific roles	2.51	1.00
Professional development hones communication and leadership		
capabilities	2.18	1.01
Internships bridge academic knowledge with practical workplace		
application	2.09	1.96

The analysis of the mean scores reveals a nuanced perception among students regarding the contribution of skills acquisition programs to their career readiness. The marginal score for entrepreneurship programs (2.52) suggests it is perceived as the most effective initiative, with students recognizing a tentative, though not strong, development of their start-up and self-employment capabilities. In contrast, the consistently lower mean scores for all other items including digital training (2.12), technical workshops (2.07), professional development (2.29), and internships (2.17) paint a clear picture of collective ineffectiveness. This pattern indicates that students generally do not perceive these key programs as successfully building their technological proficiency, providing hands-on expertise, or honing the vital communication and leadership capabilities necessary to bridge the gap between their academic knowledge and practical workplace application.

Discussion of Findings

What types of skills acquired during skill acquisition programs by undergraduate students at the University of Technology Babura, Jigawa state, Nigeria? The finding indicate that students perceive the greatest skills acquisition in practical business and entrepreneurship training. Vocational technical skills are moderately developed, while digital competencies and structured internships show weaker outcomes. Soft skills development is reported as the least effective, with highly inconsistent results among students. The highest mean score for practical business management (2.70) strongly aligns with the national push for entrepreneurship education as a panacea for graduate unemployment, a priority extensively documented by scholars like Ubogu (2023) and Alegieuno (2025). This contrasts sharply with the significantly lower acquisition scores in digital skills (2.32), which likely mirrors the "digital divide" Adeyemi and Oni (2021) identified as a critical challenge to equitable skill development in Nigeria. The low perception of skills gained from structured internships (2.18) further found a troubling gap between theoretical university training and the practical realities of the workplace, indicating that while the intent of a broad-based skills curriculum exists, its execution is inconsistent and fails to deliver competency across all promised domains.

To what extent does participation in skills acquisition programs is contributing to the career readiness of undergraduate students at the University of Technology Babura, Jigawa state, Nigeria? The findings indicate that undergraduate students at the University of Technology,

Babura, perceive a general lack of effectiveness in the skills acquisition programs designed to enhance their career readiness. While entrepreneurship initiatives were viewed with marginally more favour, all other critical areas including digital literacy, technical workshops, professional development, and internships were consistently rated low. This pattern suggests that the current ecosystem of skills training is not successfully equipping students with the competencies needed for a successful transition into the workforce. This aligns critically with the work of Akpan et al. (2024) who argue that merely offering training is insufficient without harnessing modern tools and pedagogical strategies to ensure sustainable lifelong learning. The very low scores for soft skills and internships are particularly damning, as these are directly linked to employability; this finding directly contrasts with the models proposed by Ogbonna and Asukwo (2023) and Oluuase et al. (2023), which posit that virtual tools and experiential learning are key to developing career-ready competencies. Therefore, the collective data suggests that the university's skills acquisition ecosystem is not effectively bridging the gap between academic instruction and the multifaceted demands of the 21st-century job market, leaving students largely underprepared.

Conclusion

In conclusion, this study reveals a significant disconnect between the objectives of skills acquisition programmes and the lived experiences of undergraduate students at the University of Technology, Babura. While practical entrepreneurship training demonstrates a degree of effectiveness, the overall ecosystem is failing to impart a comprehensive suite of competencies. The consistently low perceptions regarding digital literacy, structured internships, professional soft skills, and even technical workshops indicate that the current model is inadequate for developing the well-rounded, career-ready graduates required by the modern Nigerian economy. This overarching inadequacy threatens to undermine the university's core mandate and perpetuates the cycle of graduate un-employability.

Recommendations

Based on these findings, the following two recommendations are proposed:

1. The university should immediately revise its skills acquisition framework to systematically embed and strengthen modules on digital literacy (e.g., data analytics, essential software) and soft skills (e.g., communication, leadership) across all academic departments, moving beyond standalone, optional workshops to a mandatory, credit-bearing model.
2. The university must establish a dedicated industry liaison and internship office to proactively develop formal memoranda of understanding with local and national industries. This office would be responsible for standardizing internship experiences, ensuring meaningful on-the-job training, and providing ongoing supervision and assessment, thereby bridging the critical gap between theoretical knowledge and practical workplace application.

References

- Adelaja, A. A., Akinbami, C. A. O., Jiboye, T., & Ogbolu, G. (2023). Students' intention towards self-employment: An application of ELT theory on the effectiveness of entrepreneurial education types. *International Journal of Management Education*, 21, Article 100738. <https://doi.org/10.1016/j.ijme.2022.100738>
- Adeyemi, J. O. & Oni, S. (2021). Realising sustainable development goal 4 in nigeria: the challenge of digital divide. *Covenant University Journal of Politics and International Affairs*, 9(1), 121 -132.
- Akpan, A. O., Oyakhirome, A. H., & Udoh, A. P. (2024). Harnessing artificial intelligence for 21st century skills acquisition and undergraduate students' preparation for sustainable lifelong learning in Nigeria. *International Journal of Research and Innovation in Social Science (IJRISS)*, 8(3). Retrieved from <https://dx.doi.org/10.47772/IJRISS.2024.803074S>
- Akpan, A. O., Oyakhirome, A. H., & Udoh, A. P. (2024). Harnessing artificial intelligence for 21st century skills acquisition and undergraduate students' preparation for sustainable lifelong learning in Nigeria. *International Journal of Research and Innovation in Social Science*, 8(3). <https://dx.doi.org/10.47772/IJRISS.2024.803074S>
- Alegieuno, C. N. (2025). Entrepreneurship education strategies required by undergraduate students for skills acquisition in universities in North Central, Nigeria. *International Journal of Innovative Education Research*, 13(1), 346–356. SEAH Publications. Retrieved from <http://www.seahipublications.org>
- Alegieuno, C. N. (2025). Entrepreneurship education strategies required by undergraduate students for skills acquisition in universities in North Central, Nigeria. *International Journal of Innovative Education Research*, 13(1), 346–356. <http://www.seahipublications.org>
- Ogbonna, C. A., & Asukwo, O. U. (2023). Virtual learning tools in classrooms and undergraduate students acquisition of 21st century skills in Nigeria. *International Journal of Education and Science Development*. 2(2), 26-39. Retrieved from <https://rsisinternational.org/journals/ijriss/articles/harnessing-artificial-intelligence-for-21st-century-skills-acquisition-and-undergraduate-students-preparation-for-sustainable-lifelong-learning-in-nigeria/>

- Olutuase, S. O., Brijlal, P., & Yan, B. (2023). Model for stimulating entrepreneurial skills through entrepreneurship education in an African context. *Journal of Small Business & Entrepreneurship*, 35, 263–283. <https://doi.org/10.1080/08276331.2020.1786645>
- Otache, I., Edopkolor, J. E., & Kadiri, U. (2022). A serial mediation model of the relationship between entrepreneurial education, orientation, motivation and intentions. *International Journal of Management Education*, 20, Article 100645. <https://doi.org/10.1016/j.ijme.2022.100645>
- Shuaibu, H, Kamin, Y.B, Isa, U.M and Cleduma, A.M (2020). The Concept of Entrepreneurship. DOI: 10.5772/intechopen.94857
- Tsaknis, P. A., Sahinidis, A. G., & Kavagia, C. A. (2023). Entrepreneurship education reveals antecedents of intention: What really matters? *Development and Learning in Organizations: An International Journal*, 38(1), 27–30. <https://doi.org/10.1108/DLO-02-2023-0035>
- Uba, K. (2022). Review of philosophical issues of education law and policies in Nigeria. *African Journal of Humanities and Contemporary Education Research*, 3, 77–85. https://scholar.google.com/scholar_lookup?title=Review%20of%20philosophical%20issues%20of%20education%20law%20and%20policies%20in%20Nigeria&publication_year=2022&author=K.%20Uba
- Ubogu, R. (2023). Entrepreneurship education in universities in Nigeria: A strategic option for national development. *Tropical Journal of Education*, 5(1/2), 1– 8, 2023 (Online). DOI <http://doi.org/10.47524/tje.v5i1.2>
- Ubogu, R. E. (2010). Functional entrepreneurship education in universities in Nigeria. *Unizik Orient Journal*, 5(1) 116-122.