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ADDRESSING SKILLS GAP IN TECHNICAL EDUCATION: A CASE STUDY OF ALEX EKWUEME FEDERAL UNIVERSITY, NDUFU-ALIKE IKWO

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Abstract: *The study examined skills gap in Technical Education. A descriptive survey research design was employed. The instrument for data collection was a structured questionnaire titled "Soft Skills in Technical Education and Employability Outcomes Questionnaire (SSTEEOQ)." The data collected were analyzed using descriptive statistics. Descriptive statistical analyses were performed using SPSS version 25 for accuracy and clarity in data interpretation. Empirical data were gathered through the questionnaires that were administered on Technical education undergraduates (100- 300 levels) and 10 technical education lecturers. Findings revealed that: ICT skills significantly influence the employability of graduates in technical education, Communication skills significantly affect employability among graduates in technical education and Management skills play a critical role in shaping graduate employability in technical education. Conclusively, the curriculum of technical education must be structured to be more relevant to the needs and status of the Nigerian society. This will ensure national development.*
Keywords: *Skills Gap, Technical Education, Employability and Communication*

Introduction

Technical education is a career pathway designed to equip learners with the practical skills and applied knowledge required for specific trades, occupations, or professions. UNESCO (2026) noted that Technical education is a combination of programs that focuses on equipping learners with practical skills and knowledge necessary for specific occupation. Technical education bridges the gap between theory and practical. **Technical education**, as enshrined in the Nigerian national **policy** on **education**, is concerned with qualitative **technological** human resources development. Ihuoma (2024) noted that unlike the conventional subjects in formal schools, technical courses revolve around plumbing, motor mechanics, electrical fittings and maintenance, fabrication, carpentry and bricklaying among others. Technical education shares distinct similarities with vocational education. It combines formal (conventional) and informal (vocational) learning processes. In technical schools, students combine general knowledge taught in formal schools with practical vocational knowledge taught in workshops to prepare for a career in applied science and technology. In fact, Technical education in Nigeria holds immense significance in shaping the nation's development trajectory. It encompasses skills and knowledge crucial for industrial growth and economic sustainability. Alcorta (2017) contended that industrialization and its associated structural transformation is an engine of economic growth and a major source of employment generation.

Industrial growth drives economic sustainability and employability by creating structural transformation. By reallocating resources to high-value manufacturing and technology, nations expand their Gross Domestic Product (GDP), reduce poverty through wage premiums, and generate large-scale job opportunities.

Graduate employability is widely recognized as the ability of graduates to gain initial employment, remain employed, and progress in their careers (Eze & Okafor, 2022). It is not solely determined by academic qualifications but also by the possession of relevant skills, attitudes, and competencies demanded by employers. In Ebonyi State, there is a persistent concern about graduates struggling to secure jobs despite completing higher education programs. Scholars have argued that this is partly due to a mismatch between the skills acquired in school and those required in the labor market (Chinedu, 2021). Employability also includes adaptability, problem-solving, communication skills, and critical thinking, which Technical education programs are supposed to develop. Therefore, evaluating how Technical education skills influence employability is essential for understanding the challenges graduates

face and for providing insights into curriculum development. Improving employability outcomes has broader implications for reducing youth unemployment and promoting sustainable economic growth in Ebonyi State. When graduates are equipped with the right mix of skills, they are better positioned to compete for jobs and contribute meaningfully to society.

Today, global labor market is currently under serious stress because employers are increasingly prioritizing not only technical expertise but also the ability of graduates to demonstrate strong interpersonal, communication and emotional intelligence skills commonly referred to as soft skills. As industries change due to technological advancements, the expectations placed on employees have become more complex, requiring not only domain-specific knowledge but also transferable skills that enable adaptability in diverse professional environments (Succi & Canovi, 2020). Skills in problem-solving, leadership, decision-making, and entrepreneurship are highly valued, especially in dynamic work place environments. Studies have shown that graduates who possess these skills are more likely to secure jobs, perform effectively, and advance in their careers (Okeke & Nwankwo, 2020). The gap between the skills that graduate possess and the ones the employers want is known as skills gap. Peuneo (2023) define skills gap as the gap between education and employment. Skills gap can manifest in multiple dimensions:

a) Technical skills related to specific job functions
b) Soft skills like communication and problem-solving
c) Emerging technological competencies demanded by digital transformation

Skills gap leads to unemployment Chiamogu (2026) noted that Technical and Vocational Education and Training (TVET) plays a pivotal role in equipping graduates with industry-relevant competencies critical for workforce productivity, technological advancement, and sustainable development but skills gaps undermine the effectiveness of technical education. There is high rate of graduate unemployment, which persists even among individuals who have completed tertiary education programs. This suggests that formal education alone is insufficient without the acquisition of practical skills and soft skills that meet labor market demands (Eze & Okafor, 2022). It is still evident that unemployment rate is still high in Nigeria. World Economic Outlook (April 2026) stated that Nigeria has unemployment percentage of 22.6%. Unemployment leads to poverty and serious social problems. A lot of Nigerian graduates are unemployed because of the emphasis on theory in Nigerian schools at the expense of skills (Agbaegbu cited in Oviawe 2020). He added that the issue of unemployment has led to many graduates roaming the streets in search of what to do. Many countries have improved employment rate by revitalizing TVET programmes and this has resulted in their development. Adeyemo cited in Oviawe, 2020 stated that through Technical and Vocational Educational and Training programmes, China created 2/7 million jobs between 2012 and 2013. This is proof that an effective TVET programme can lead to job creation and sustainable development. Many graduates lack the necessary competencies in communication, management skills that are critical for job readiness (Okeke & Nwankwo, 2020). Skills gap reduces technical education competitiveness and limits opportunities for meaningful employment. Auzie, Jimoh, Igwe, Ibrahim and Raymond (2026) stated that representatives of labour market tag graduates from Nigerian universities as half baked because the graduates lack employability skills.

Robust technical education exposure through internships, simulations, and entrepreneurship projects may provide students with the experience needed to navigate workplace realities. These approaches increase graduates' confidence, competence, and competitiveness, making them more attractive to potential employers. Graduates who have benefited from well-structured technical education programs may demonstrate better employability outcome. Enhancing skill acquisition not only improves individual career prospects but also contributes to the overall economic growth of the state through a more competent and productive workforce.

This study aim to examined skills gap in Technical Education; specifically the study seeks to:

1. Determine the influence of ICT skills on the employability of technical education graduates.
2. Determine the impact of communication skills on the employability of technical education graduates.

3. Find out the effect of management skills on the employability of technical education graduates.

Methodology

The study adopted a descriptive survey research design, which is appropriate for investigating opinions, perceptions, and experiences of graduates regarding employability factors. It is suitable for this study as it enables the researcher to collect data from a group of individuals at a single point in time without manipulating any variables. The study was conducted at Alex Ekwueme Federal University, Ndufu-Alike (AE-FUNAI), located in Ndufu-Alike town within Ikwo Local Government Area of Ebonyi State, Nigeria. AE-FUNAI lies approximately between latitude 5°47'N and longitude 7°35'E, positioned in the southeastern part of Nigeria. The university is strategically situated near several secondary schools and is accessible via major road networks connecting it to Abakaliki, the state capital, which is about 32 kilometers away. The target population for this study comprised all undergraduate students of the Technical Education Department at Alex Ekwueme Federal University, Ndufu-Alike (AE-FUNAI) Ebonyi State and 10 technical education lecturers. The population is diverse in terms of gender, age, and academic performance, allowing for a comprehensive understanding of skill acquisition and its potential impact on employability in Ebonyi State.

There was no sampling since the population was of manageable size. Empirical data were gathered through the questionnaires that were administered on the respondents. Completed questionnaires were collected immediately where possible, or within a specified timeframe, targeting a response rate of at least 90%. Direct engagement with respondents during data collection helped address any questions and ensured clarity in completing the questionnaire. The instrument for data collection is a structured questionnaire titled Soft Skills in Technical Education and Employability Outcomes Questionnaire (SSTEEOQ). The questionnaire is divided into four sections: The questionnaire items were adapted from validated tools used in similar studies on soft skills and employability, modified to suit the local context. The data collected were analyzed using both descriptive statistics, such as mean scores, frequency counts, and percentages were used to analyse the data. All statistical analyses were performed using SPSS version 25 for accuracy and clarity in data interpretation.

Result and Analysis

Table 1: Descriptive statistics of ICT skills on the employability of graduates in technical education

S/N		**X**	**SD**	**Remark**
1	My ability to use computer applications effectively increases my chances of securing a job.	3.18	0.70	Accepted
2	Employers prefer graduates who are proficient in ICT skills during recruitment.	3.31	0.81	Accepted
3	ICT competence helps me adapt easily and improves my problem-solving ability in employment settings.	3.28	0.88	Accepted
4	Knowledge of ICT improves my problem-solving	3.16	0.76	Accepted
5	ICT skills make me more competitive than graduates without such skills.	3.46	0.78	Accepted

The findings in Table 1 show that, ICT skills have a strong and positive influence on the employability of graduates in technical education. The highest-rated item (X = 3.46) revealed that ICT skills make graduates more preferable than those without such competencies, highlighting the importance of digital knowledge in today's job market. Similarly, the ability to use computer applications effectively (X = 3.18) and adapt in employment settings through ICT competence (X = 3.28) further underscore the value placed on technical proficiency by employers. The relatively low standard deviations, ranging from 0.70 to 0.88, indicate a high level of agreement among respondents, showing consistency in perception. Importantly, employers' preference for ICT-proficient graduates (X = 3.31) suggests that digital competence is now a basic requirement rather than an added advantage. Overall, ICT competence not

only improves problem-solving skills but also increases graduates' chances of securing jobs and advancing in their careers.

Table 2: Descriptive statistics of communication skills on the employability of graduates in technical education

S/N		X	SD	Remark
1	Effective oral communication increases my employability prospects.	3.16	0.87	Accepted
2	Employers value graduates with good written communication skills.	3.01	1.03	Accepted
3	My ability to communicate clearly enhances teamwork in the workplace.	3.01	0.87	Accepted
4	Poor communication skills can limit my employment opportunities.	2.90	1.08	Accepted
5	Communication competence helps me to perform better during job interviews.	2.91	0.94	Accepted

Table 2 presents results indicating that communication skills play a significant role in determining the employability of graduates in technical education. Effective oral communication (X = 3.16) was highly rated, emphasizing its importance in job interviews and workplace interactions. Written communication skills were also valued (X = 3.01), as employers often consider clarity in written reports and correspondence crucial. Teamwork enhancement through clear communication (X = 3.01) shows that communication is not only an individual skill but also critical for collaboration in modern workplaces. Interestingly, the statement on poor communication limiting opportunities (X = 2.90) reflects that lack of competence in this area can serve as a barrier to employability. The relatively higher standard deviations, especially in items two (1.03) and four (1.08), suggest some variation in responses, possibly due to differing experiences among graduates. However, the overall results confirm that both oral and written communication significantly improve job prospects and performance.

Table 3: Descriptive statistics of management skills on the employability of graduates in technical education

S/N		X	SD	Remark
1	Employers prefer graduates who can demonstrate leadership abilities.	3.23	0.73	Accepted
2	My ability to manage people and resources increases my job prospects.	3.06	0.88	Accepted
3	Graduates with problem-solving and decision-making skills are more employable.	3.02	1.02	Accepted
4	Effective time management is a critical factor for employability.	3.25	0.98	Accepted
5	Management skills prepare me to handle workplace responsibilities effectively.	3.45	0.83	Accepted

The results in Table 3 highlight that management skills strongly influence graduate employability in technical education. The most highly rated item (X = 3.45) shows that management skills prepare graduates to handle workplace responsibilities effectively, indicating that employers value competence in leadership and organization. Similarly, effective time management (X = 3.25) and leadership ability (X = 3.23) were emphasized as critical skills that enhance job retention and career growth. The responses also showed that the ability to manage people and resources (X = 3.06) and engage in problem-solving and decision-making (X = 3.02) are key attributes for workplace readiness. Although standard deviations were slightly higher for decision-making (1.02), indicating some response differences, the general pattern shows agreement that management skills are vital. These results suggest that beyond technical and communication competencies, employers expect graduates to demonstrate leadership, planning, and organizational effectiveness, which significantly boost their employability.

Summary of Findings

1. ICT skills significantly influence the employability of graduates in technical education.
2. Communication skills significantly affect employability among graduates in technical education.
3. Management skills play a critical role in shaping graduate employability in technical education.

Discussion of Findings

The findings of this study revealed that ICT skills significantly influence the employability of graduates in technical education. The descriptive results showed consistently high mean scores above the criterion mean of 2.5, indicating that respondents believed ICT competence improved their job prospects. Specifically, skills in computer applications, adaptability, and digital problem-solving were identified as factors that increase competitiveness in the labor market. This aligns with Ugwu and Nwankwo (2020), who emphasized that ICT proficiency enhances productivity and attracts employers seeking technologically skilled candidates. Similarly, Okafor & Nwosu, (2023) reported that graduates with ICT knowledge adapt faster in modern work place.

The analysis further revealed that communication skills significantly affect employability among graduates in technical education. Responses showed that effective oral and written communication were perceived as essential in securing and maintaining jobs. Employers, according to respondents, value graduates who can articulate ideas clearly, contribute meaningfully to teamwork, and demonstrate confidence in interviews. This finding corroborates with Eze & Okafor (2022). S, who observed that poor communication is a key factor in the high unemployment rate of Nigerian graduates despite their academic qualifications. In support, Ihuoma found that communication competence enhances collaboration and leadership in organizational settings. The study's findings also highlight that inadequate communication creates barriers that reduce employability opportunities, especially during job interviews where first impressions matter most. This implies that beyond technical knowledge, the ability to communicate ideas persuasively remains a central employability skill.

The results also revealed that management skills play a critical role in shaping graduate employability in technical education. Findings showed that leadership, decision-making, time management, and resource management are highly valued by employers, as reflected in mean scores above the criterion value. Respondents indicated that the ability to manage people and tasks effectively makes graduates more attractive to organizations. This agrees with Chukwu & Eze (2021), who reported that employers increasingly demand leadership potential and organizational competence from new entrants into the labor market. In addition, Opara & Nwachukwu, (2020). argued that graduates with problem-solving and decision-making abilities demonstrate workplace readiness and adaptability, giving them an edge over others. The implication is that management skills bridge the gap between theoretical knowledge and practical execution, which determines how well graduates transition into employment. Based on the evidence, the null hypothesis was rejected, confirming that management skills significantly influence graduate employability.

Conclusion

The curriculum of technical education must be structured to be more relevant to the needs and status of the Nigerian society. This will ensure national development.

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