Journal of Education and Human Development
ISSN: 2334-296X (Print), 2334-2978 (Online)

BRPI

Original Article | Open Access | Peer Reviewed

Check for Updates

Employability Skills Gaps Between Employed and Unemployed TVET Graduates in Uganda

Kaddu Mukasa Samuel [1], Wanami Simon [2], and Muthoka Kyalo [3]

[1,2,3] Department of Technology Education, University of Eldoret, Kenya.

ORCID iD:

[1] https://orcid.org/0009-0009-3828-8832

Address for Correspondence:

Kaddu Mukasa Samuel (kmukasasamuel@gmail.com).

Copyright and Permission:

© The authors. This is an open access article distributed under the Creative Commons Attribution 4.0 International License (CC BY 4.0), which permits sharing, adapting, and building upon this work, provided appropriate credit is given to the original author(s). For full license details, visit https://creativecommons.org/licenses/by/4.0/.

Article History:

Received: June 3, 2026; Accepted: June 19, 2026; Published: June 25, 2026

Abstract Studies have persistently justified high employment among youths as being created by skills disparity (Yiga, 2022). Skill mismatches have been constantly cited as a significant barrier to achieving better employment (Namuliira et al., 2025). Therefore, this study conducted a comparative analysis of the average differences between employed and unemployed TVET graduates. This study is part of the main study conducted to investigate the determinants of employment prospects of TVET graduates in Uganda's job market with a focus on skills acquisition, programme structure, and graduate characteristics. The data collection was done in three government-aided TVET institutions in central Uganda. While the study targeted about 7000 TVET graduates who had graduated between 2019 and 2024, the Morgan (1970) sample size formula allowed 365 respondents (TVET graduates) using a P of 0.5, a margin of error of 5%, and a chi-square value of 3.841 for a 95% confidence level. Eventually, simple random sampling was employed to ensure a more representative sample and an equal likelihood of participation in the study. TVET graduates who had graduated outside the considered range (2019-2024) were excluded from participation in the study. These were believed to be affected by other factors outside the control of the study. A survey questionnaire was designed in Ms. Word and later digitized in the Kobo Collect online data collection platform to aid in data collection and faster data processing. Using an independent t-test, the mean skills acquired at various TVET institutions were compared between the employed and non-employed TVET graduates. Socioeconomic factors such as sex, residence type, TVET institutions attended, field of study, internship, main type of work, training funding, mode, and qualifications obtained were captured as essential covariates. Significant differences were seen in social skills, practical technical skills, use of tools, and equipment skills. Likewise, soft skills seemed to differ between the two groups. This ranged from communication, teamwork, and collaboration, as well as work discipline. The findings revealed that TVET graduates who had a good combination of these skills found it easy to penetrate the job market and find employment.

Keywords: Skills Mismatch; Employability Skills; Employment; T-tests; Mean difference; TVET Graduates; TVET Institutions

Volume 15 (2026)

Publisher: The Brooklyn Research and Publishing Institute, 442 Lorimer St, Brooklyn, NY 11206, United States

DOI: https://doi.org/10.15640/jehd.v15p4

Reviewers

Dr. Fredrick Selfano Odoyo, United States International University-Africa, Kenya. Email: sodoyo@usiu.ac.ke

Dr. Kuah Yoke Chin, Department of Finance, Universiti Tunku Abdul Rahman, Malaysia. ORCID iD: https://orcid.org/0000-0003-3016-5677. Email: kuahyc@utar.edu.my

Citation: Samuel, K. M., Simon, W., & Kyalo, M. (2026). Employability skills gaps between employed and unemployed TVET graduates in Uganda. *Journal of Education and Human Development, 15*, 70–85. https://doi.org/10.15640/jehd.v15p4

Introduction

The global labour market has undergone a significant transformation due to technological advancement, globalization, digitalization, demographic shifts, and the transition toward knowledge-based economies, increasing the demand for employability skills among graduates across all sectors (Balliester et al., 2018; Comyn, 2018; Grimshaw, 2020). Employability skills, commonly referred to as soft skills, transferable skills, or generic competencies—include communication, teamwork, problem-solving, adaptability, critical thinking, entrepreneurship, digital literacy, and work ethics that enable graduates to effectively transition into and sustain employment (Charles et al., 2022). International organizations such as the International Labour Organization, UNESCO, and the World Bank have consistently emphasized that many Technical and Vocational Education and Training (TVET) systems worldwide are struggling to align training outcomes with evolving labour market needs (Mante et al., 2025).

Globally, employers increasingly report that graduates possess academic qualifications but lack practical and employability competencies required in modern workplaces (Comyn, 2018). The growing mismatch between graduates' skills and industry expectations has become a major concern for governments, educational institutions, and employers because it contributes to youth unemployment, underemployment, and reduced productivity (Jackson, 2010). Studies indicate that industries now prioritize graduates who can demonstrate innovation, adaptability, interpersonal communication, digital competence, and entrepreneurial capabilities in addition to technical knowledge (Khalifa, 2024; Wang & Wang, 2012; Wong & Saraih, 2024).

Particularly, this problem of employability skills mismatch is typical in Sub-Saharan Africa, where educational systems struggle to keep up with rapidly changing trends and industrial demands. For instance, Mayombe (2021) mentions that the employability skills mismatch is pertinent because many young people who have completed basic education still lack the limited employability skills needed for jobs and face a simultaneous lack of employment opportunities in their communities. Differently, Mante et al. (2025) observes that employability skills mismatch in Sub-Saharan Africa is driven by structural deficiencies in Technical and vocational education and training (TVET) systems. On the other hand, Herrera and Merceron (2013) reports that the Sub-Saharan African region lacks the resources to withstand long-term unemployment and is drawn into accepting disguised jobs even after attaining minimal skills at TVET institutions. Palmer (2017) found that informal apprenticeships, such as outreach programs, are a crucial source of technical and vocational skills development and a direct link to employment. Gurdia et al. (2021) argues that despite formal qualifications, young workers in SSA often lack the actual skills demanded by employers. Likewise, Filmer and Fox (2014) adds that while the young population in the SSA has a profound formal education qualification, they lack the skills to translate their education into productive employment. Conversely, Okoye et al. (2025) puts this predicament to structural and resource issues, as well as weak industry partnerships. Also, Oanda and Ngcwangu (2018) believes that the formal private sector is too small to absorb the growing labor force, while the public sector of most countries has been shrinking due to structural adjustment dynamics, thus increasing graduate unemployment.

Youth unemployment remains one of the most persistent socio-economic challenges facing many developing countries, particularly Uganda (Asiimwe, 2023; Egessa et al., 2021; Magelah & Ntambirweki-Karugonjo, 2014). In Uganda, despite increasing investment in education and skills development, a considerable proportion of graduates continue to experience difficulties transitioning from school to work (Julius & Audrey, 2025; Kintu et al., 2019; Kobugabe Rwomushana, 2024; Namuliira et al., 2025; Tulibaleka et al., 2021). The challenge is especially evident among graduates of Technical and Vocational Education and Training (TVET) institutions, which were established to equip learners with practical competencies, occupational knowledge, and employability skills required in the labour market (Barigye, 2024; Kintu et al., 2019). While TVET has increasingly been recognized as a strategic pathway for industrialization, productivity enhancement, and youth employment, especially in Uganda's Vision 2040 (Guloba et al., 2021), concerns persist regarding whether graduates possess the competencies demanded by employers. Research conducted in Uganda indicates that employers often perceive TVET graduates as lacking essential employability skills despite possessing technical qualifications (Angela & Kwizera, 2026; Kisilu & Ferej, 2019). A study on employers' perceptions of TVET graduates in Uganda found that employers highly value competencies such as communication, teamwork, problem-solving, self-management, and adaptability, yet many graduates demonstrate deficiencies in these areas (Kenneth & Ahmed, 2026; Kintu et al., 2019; Okumu & Bbaale, 2019; Yiga, 2022). Similarly, tracer studies on Ugandan TVET graduates reveal uneven transition patterns from training to employment, with many graduates facing difficulties securing meaningful jobs even after completing vocational programs (Kenneth & Ahmed, 2026; Nabunnya, 2018). Therefore, this study seeks to examine the employability skills gaps between employed and unemployed TVET graduates in Uganda.

Literature Review

Mengistu and Negasie (2022) investigated the employability skills of Technical-Vocational Education and Training Graduates of Valenzuela City Polytechnic College.
This study employed 423 graduates of TVET using convenience sampling and forty-five (45) employers who were selected purposively in the City of Valenzuela.
Among 423 TVET graduates of ValPoly from 2015 to 2019, the majority are employed, which had an employment rate of 87.94 percent, compared to a rate of 12.06 percent for those who were unemployed. Carpentry obtained the highest employment rate, while bread and pastry production got the lowest employment rate. In addition, communication skills were reported as the most useful skill in the workplace.

Mohamad (2017) investigated the employment barriers faced by graduates from Technical and Vocational Education and Training (TVET) programs, with a focus on the challenges of creating compelling cover letters and resumes and excelling in job interviews. Employing a comprehensive mixed-methods approach that combines quantitative surveys and qualitative interviews, this research explores the experiences of TVET graduates to understand the complexities of job-seeking challenges. The findings indicate that many graduates struggle with presenting their skills and experiences effectively in written applications and experience significant anxiety and a lack of preparation during interviews (Mohamad, 2017).

Chauke (2023) investigated the factors that determine youth unemployment among young Technical and Vocational Education and Training (TVET) college graduates and offers a solution to the problem in the Vhembe district of Limpopo Province, South Africa. Purposive and snowball sampling techniques were used to sample individuals. Thematic analysis was used to analyze the collected data. This study found that skill gaps and obsolescence due to the TVET college curriculum, as well as skills mismatch, nepotism, and tribalism, are among the other factors that determine unemployment among TVET college graduates. The study also found that the applicability of the skills provided by TVET colleges to job market demands is a key concern (Chauke, 2023).

Employability skills are a very significant attribute, especially for TVET graduates, as they are closely related to career readiness. Nevertheless, many studies have found the gap between TVET graduates' employability skills and industry needs. Their study found that industries need TVET graduates who possess communication skills, interpersonal skills, critical thinking, problem-solving, and entrepreneurial skills. However, many studies have found that TVET graduates have problems communicating effectively and a lack of self-confidence (Bassah & Noor, 2023).

Employability skills should be a necessity for every TVET graduate. This study verified indicators of employability skills needed by TVET graduates and produced proposals for employability skills frameworks for TVET graduates. This article reviews various relevant literature in order to explore the needs of appropriate employability skills. The results showed the employability skills needed by TVET sorted according to rank, namely: Social Skills, Knowledge in the Field of Engineering, Communication Skills, Information and Technology Skills, Management Skills, Creative and Innovative, Problem Solving, and Critical Thinking (Nugraha et al., 2020).

Nayan et al. (2024) focused on employability skills, the differences between job and employability skills, the importance of employability skills for TVET and non-TVET graduates, the consequences of fresh graduates not having adequate skills to join the workforce, and employers' expectations of fresh graduates. Twenty-one diploma students were involved in the study. Convenient sampling was used. A set of questionnaires with employability skills was distributed to respondents. The findings show that communication skills are the most crucial employability skills, followed by self-management, problem-solving, organization, planning, learning, teamwork, leadership, and technology (Nayan et al., 2024).

A study by Alam et al. (2024) addresses the major challenges that hinder the progress of TVET in Bangladesh. This study adopts a mixed-methods approach to thoroughly investigate the fundamental aspects of TVET's capacity to provide high-quality skills development programs, with the aim of increasing its graduates' employability. This study finds that individuals, upon their graduation from TVET institutions, face significant obstacles in the job market. These challenges, as the research finds, arise primarily due to discrepancies between graduates' skills and job market demands (Alam et al., 2024).

Soft skills are increasingly seen as being crucial for the modern workforce due to the rapid and pervasive digitalization that has transformed the nature of employment. To work with new technologies and keep pace with rapid technological change, graduates require employability skills. Despite the growing demand, there remains a shortage of employability skills, organisations frequently struggle to identify qualified candidates for digital jobs because

workforces frequently lack the skills necessary to manage digital change. Thus, the study that examined how soft skills can enhance TVET graduates' employability indicated that soft skills promote TVET graduates' employability (Awodiji & Magogodi, 2023).

Rodzalan et al. (2022) aimed to identify the occupational skills (including both soft and hard skills) that are perceived as important by those in public Higher Education Institutions (HEI) and the electrical and electronic (E&E) industry, which represent the manufacturing industry. A total of 58 academicians from public HEIs and 55 industry players from the E&E industry in Malaysia were chosen purposively. Findings revealed that there are skills gaps in terms of both soft and hard skills, which are all skills related to the career in the E&E industry (Rodzalan et al., 2022).

With the current gender gap in terms of employment, this study focuses on the employment status of female graduates of TVET, and the possible factors that influence the employment of Filipino female TVET graduates were determined. The survey data collected by the Technical Education and Skills Development Authority (TESDA) in 2018 for their employability study of 2017 women TVET graduates was utilized in this study. Binary First logistic regression models were fitted on subpopulations of TVET female graduates who were employed before and after training. Results have shown a significant increase in the proportion of employed women after graduation, which was indicated in the estimates before and after the training (Talento et al., 2022).

(Yamada & Otchia, 2020) looked at the perception gaps between teachers and students of technical and vocational education and training (TVET) related to garment production and the reasons behind such gaps. A questionnaire was developed by the authors. It was completed by 162 students and 53 teachers in garment-related programs of seven TVET colleges in Addis Ababa, the capital city of Ethiopia. Results indicated that while teachers tend to highlight the importance of practical skills, students desire broader coverage of practical and managerial skills and entrepreneurship (Yamada & Otchia, 2020).

The Uganda Business and Technical Examinations Board (UBTEB) has been assessing Technical Vocational Education and Training (TVET) students at certificate and diploma levels since 2011. Over the past decade, nearly 69,821 TVET graduates from technical institutions have entered the workforce across various engineering disciplines. Despite this, little is known about how these graduates transition into employment. To address this gap, UBTEB conducted a Tracer Study of National Diploma Engineering Graduates (2016–2019), focusing on employment timelines, programme relevance, employability factors, employer satisfaction, and curriculum alignment with industry needs. A structured approach with a sample size of 249 graduates and 39 employers was employed. The findings revealed that while most graduates secure employment within a year, systemic challenges persist in curriculum relevance (particularly digital skills gaps), ineffective internships, and unequal job access (Nakawala, 2025).

Research Framework

This study was grounded in the social learning theory. Originally developed by Bandura and Walters (1977), the social learning theory states that people acquire new behaviors, attitudes, and emotional reactions by observing and imitating others within a social context, emphasizing observational learning or modeling. In this regard, it relates strongly to the presumption that TVET institutions, by observing the trends and demand of the job market, would tailor their training to meet the necessary industry requirements in a bid to secure employment for their trainees. Social Learning does not require TVET institutions to sit in class; it only requires them to follow up on the industries, companies that hire their graduates, and customize the nature of training to meet the industry needs and maximize their potential for the good of their learners. This study recognizes three aspects for the successful social learning model to take place: the learner, the environment, and the work practices that are observed to enhance employability prospects.

Studies have shown how the social learning theory tries to emulate the structure of the TVET teaching to achieve better employment outcomes. For example, Rojuli and Rahayu (2017) revealed that attentional, retention, motor reproduction/behavioral, and motivational processes are indicators of observational learning that contribute positively to job readiness. Sanusi and Abdullahi (2025) revealed that individuals gain knowledge and skills by observing others, imitating behaviors, and engaging in experiential learning within a social context, which is the mechanism of skill acquisition in entrepreneurship practice. In addition, Lent (2020) revealed that people develop outcome expectations and choice goals regarding academic and career paths from various direct and vicarious learning experiences, suggesting that effective TVET training and positive outcomes lead to relevant career intentions and job searches. Also, Krumboltz et al. (1976) added that an individual is more likely to pursue a course or occupation if their learned skills match the educational or occupational requirements, which depend on training opportunities and

learning experiences. Social learning theory explains skill acquisition at TVET institutions by emphasizing learning through observation, imitation, and modeling of behaviors demonstrated by instructors, peers, and industry role models. In TVET contexts, students acquire employable skills not only through formal instruction but also by observing trainers and experienced workers during industrial attachments or work-based learning, which shapes their attitudes, competencies, and job performance (Ismail et al., 2021; Nkunya & Mwila, 2024). The theory highlights the importance of social interactions and mentorship in developing both technical skills and soft skills such as decision-making and professional behavior, which are critical for employment readiness

(Ismail et al., 2021; Vasilev & Petkova, 2025). Studies show that when TVET students engage with competent instructors or industry mentors who act as role models, their motivation and skill acquisition improve significantly, enhancing their employability (Ismail et al., 2021; Nkunya & Mwila, 2024). However, challenges such as limited practical training opportunities and weak industry linkages reduce the effectiveness of social learning in some TVET settings, underscoring the need for stronger partnerships between institutions and employers to facilitate real-world learning experiences (Singh et al., 2022).

Hypotheses

The study hypotheses in this study were twofold;

i) H_o1: There is no difference in demographic and socioeconomic factors between the employed and the unemployed TVET graduates
ii) H_a1: Demographics and socioeconomic factors differ between employed and non-employed TVET graduates
iii) H_o2: Employability skills acquired do not differ between the employed and the non-employed graduates
iv) H_a2: There is a difference in specific employability skills acquired between employed and non-employed TVET graduates

Materials and Methods

Research Design

This study is part of the main study aimed at investigating the determinants of employment outcomes among TVET graduates in Uganda. The main study employed the sequential mixed methods design. According to Creswell (2013), the sequential mixed methods procedures are those in which the researcher seeks to elaborate on or expand the findings of one method with those of another. Both quantitative (using cross-sectional) and qualitative (using purposive sampling) methods were employed in the primary study. However, this paper focused only on the quantitative approach because of the random nature of the selection of participants in the study and due to the desire to estimate findings that pull-out differences and variability among the two groups of graduates being compared.

Study Area

The study was conducted within the central region of Uganda, a hub for industrial and vocational activity in Uganda. The selected government-aided TVET institutions include Nakawa Vocational Technical College (VTC), Lugogo Vocational Technical Institute (VTI), and Ntinda Vocational Technical Institute (VTI). This area was chosen due to the high concentration of both TVET institutions and potential employers. In addition, the selection of TVET graduates from these institutions was since they conduct regular tracer approach assessment as part of their annual and quarterly evaluations to identify potential trades and fields that require critical attention.

Target Population

The target population comprised 7,000 graduates who completed their vocational training from registered Technical and Vocational Education and Training (TVET) institutions in Uganda between 2019 and 2024.

Sample Size and Sampling Techniques

Sample Size Determination

The sample size for this study was determined using the Krejcie and Morgan (1970) formula to ensure the sample is representative of the target population:

$$n = \frac{\chi^2 NP(1-P)}{e^2(N-1) + \chi^2 P(1-P)}$$

Where:

- n = Required sample size.
- χ^2 = The table value of chi-square for 1 degree of freedom at the desired confidence level (e.g., 3.841 for 95% confidence).
- N = The population size.
- P = The population proportion (assumed to be 0.50 to provide the maximum sample size).
- e = Margin of error or the degree of accuracy (expressed as a proportion, e.g., 0.05).

Based on this formula, a total sample of 365 respondents was targeted.

Sampling Techniques

A multi-stage sampling technique was utilized. Purposive sampling was first used to select representative TVET institutions. Subsequently, simple random sampling was applied to select individual graduates from institutional alumni databases to ensure every graduate had an equal chance of participation.

Inclusion and Exclusion Criteria

Inclusion criteria were limited to graduates who completed a minimum of a certificate-level course within the last five years between 2019 and 2024. Exclusion criteria included graduates currently enrolled in further full-time academic programs or those who were unreachable via the provided contact databases.

Data Collection Methods

A quantitative survey method was employed. This approach was chosen to facilitate the collection of standardized data from a large sample, enabling robust statistical comparison between groups. Questionnaires for quantitative analysis were designed manually in MS. Word using modules informed by the study objectives. To speed up the process of data collection and reduce the extra costs of fieldwork, the questionnaire was later digitized in Kobo Toolbox Collect to allow the data collectors to extract data from participants with less strain and time. First, it involved creating individual accounts and registering on the Kobo server. Later, the researcher assigned the data collectors specific roles ranging from viewing and making submissions to the server without allowing them to edit and manipulate field data. This process ensured that the data was collected on time, allowed skip patterns and validation rules, and data collection was smooth compared to the paper-based data collection.

Data Collection Instruments

The primary tool for data collection was a structured, self-administered questionnaire. The instrument was divided into sections covering demographic profiles and a specialized module using Likert-scale items to measure perceived employability skills. Structured questionnaires were distributed to TVET graduates, with predetermined questions and fixed response options, to gather quantitative data on various aspects, such as employment status, job satisfaction, and skills acquired during their TVET training. These questionnaires ensured consistency in data collection and facilitated quantitative analysis.

Validity and Reliability of Instruments

To ensure content validity, the instrument was reviewed by academic experts in the fields of technical education, TVET, and skills development. Reliability was established through a pilot study of 10 graduates, with internal consistency measured using Cronbach's Alpha (α), seeking a threshold of ≥ 0.70.

Data Collection Procedure

Following institutional clearance, the questionnaire was administered via Kobo Toolbox. Participants were provided with an introductory brief on the study, and data collection took place over a period of 2 weeks. Actual data collection began with visiting the selected TVET institutions for contact details of the previously graduated or yet to graduate

students. After obtaining the lists which contained their contacts and companies they were attached to, we tracked them over a period of 2 weeks. We successfully obtained their information and interviewed them at their work premises.

Study Variables

The **independent variable** for this study was employment status, defined as a binary categorical variable: *employed* (engaged in any income-generating activity, formal or informal) and *unemployed* (actively seeking employment). The **dependent variable** (outcome) was the level of employability skills acquired, treated as a continuous variable derived from the composite Likert-scale scores.

Statistical Data Analysis

Data were cleaned and analyzed using STATA 17.0. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize respondents' characteristics and employability skill levels. An independent samples t-test was conducted to assess whether the mean employability skill scores differed significantly between employed and unemployed graduates. Statistical significance was evaluated at the 5% level ($p < 0.05$).

The hypotheses tested were:

$$H_0: \mu_E = \mu_U$$
$$H_A: \mu_E \neq \mu_U$$

where:

- μ_E= mean employability skill score among employed graduates
- μ_U= mean employability skill score among unemployed graduates

The independent samples t-statistic was computed as:

$$t = \frac{\bar{X}_E - \bar{X}_U}{\sqrt{\frac{s_E^2}{n_E} + \frac{s_U^2}{n_U}}}$$

where:

- $\bar{X}_E$= mean employability skill score of employed graduates
- $\bar{X}_U$= mean employability skill score of unemployed graduates
- s_E^2= variance of employability skill scores among employed graduates
- s_U^2= variance of employability skill scores among unemployed graduates
- n_E= number of employed graduates
- n_U= number of unemployed graduates

A statistically significant t-statistic ($p < 0.05$) would indicate that employment status is associated with differences in the level of employability skills acquired among graduates.

$$Y_i = \beta_0 + \beta_1 Employment_i + \varepsilon_i$$

where:

- Y_i= employability skill score for graduate i
- $Employment_i$ = 1if employed and 0if unemployed
- β_0= mean employability skill score among unemployed graduates
- β_1= mean difference in employability skill scores between employed and unemployed graduates
- ε_i= random error term

Ethical Considerations

Ethical approval was obtained from the Uganda Christian University Research Ethics Committee (UCUREC) and registered by the Uganda National Council for Science and Technology (UNCST). Participation was entirely voluntary, and informed consent was obtained from all respondents. Data were anonymized to ensure the confidentiality and protection of all participants.

Results

Table 1 presents the socio-demographic and training characteristics of the TVET graduates by employment.

Table 1: Socio-demographic and Training Characteristics of Respondents by Employment Status (N=346)

Variable/Category	Not Employed n (%)	Employed n (%)	Total n (%)
Sex			
Male	47 (19.9)	189 (80.1)	236 (68.4)
Female	23 (21.1)	86 (78.9)	109 (31.6)
Current Residence			
Kampala	45 (25.1)	134 (74.9)	179 (51.9)
Wakiso	13 (14.0)	80 (86.0)	93 (27.0)
Mukono	6 (17.1)	29 (82.9)	35 (10.1)
Luweero	2 (22.2)	7 (77.8)	9 (2.6)
Other districts in the Central Region	3 (13.0)	20 (87.0)	23 (6.7)
Outside Central Region	0 (0.0)	6 (100.0)	6 (1.7)
TVET Institution Attended			
Nakawa Technical Institute	45 (38.8)	71 (61.2)	116 (33.8)
Ntinda Vocational Institute	7 (15.9)	37 (84.1)	44 (12.8)
Lugogo Vocational Institute	6 (18.2)	27 (81.8)	33 (9.6)
Other Public TVET Institutions	3 (2.9)	99 (97.1)	102 (29.7)
Private TVET Institutions	7 (14.6)	41 (85.4)	48 (14.0)
Field of Study			
Electrical Installation	8 (9.3)	78 (90.7)	86 (24.9)
Plumbing	2 (6.1)	31 (93.9)	33 (9.5)
Welding and Fabrication	14 (25.5)	41 (74.5)	55 (15.9)
Automotive Mechanics	26 (35.1)	48 (64.9)	74 (21.4)
Building Construction	7 (20.6)	27 (79.4)	34 (9.8)
ICT/Computer Applications	3 (37.5)	5 (62.5)	8 (2.3)
Tailoring and Garment Making	5 (23.8)	16 (76.2)	21 (6.1)
Hairdressing and Beauty	0 (0.0)	11 (100.0)	11 (3.2)
Other	5 (20.8)	19 (79.2)	24 (6.9)
Industrial Training			
Yes	68 (20.6)	262 (79.4)	330 (96.5)
No	0 (0.0)	12 (100.0)	12 (3.5)
Main Type of Work			

Formal Wage Employment	1 (0.6)	174 (99.4)	175 (50.9)
Informal Wage Employment	5 (6.4)	73 (93.6)	78 (22.7)
Self-employment	1 (3.6)	27 (96.4)	28 (8.1)
Not Currently Working	62 (98.4)	1 (1.6)	63 (18.3)
Training Funding			
Government-sponsored	9 (19.1)	38 (80.9)	47 (13.7)
Self-sponsored	1 (2.1)	47 (97.9)	48 (14.0)
Parent/Guardian Support	54 (25.8)	155 (74.2)	209 (60.8)
NGO/Donor-supported	4 (11.4)	31 (88.6)	35 (10.2)
Employer-sponsored	0 (0.0)	4 (100.0)	4 (1.2)
Other	1 (100.0)	0 (0.0)	1 (0.3)
Mode of Training			
Full-time	48 (21.1)	180 (78.9)	228 (66.3)
Half-time	19 (18.6)	83 (81.4)	102 (29.7)
Block/Modular	2 (14.3)	12 (85.7)	14 (4.1)
Qualification Obtained			
Modular Certificate	51 (20.9)	193 (79.1)	244 (70.9)
Craft Certificate	6 (13.6)	38 (86.4)	44 (12.8)
Advanced Craft Certificate	5 (29.4)	12 (70.6)	17 (4.9)
Diploma	6 (15.8)	32 (84.2)	38 (11.0)
Other	0 (0.0)	1 (100.0)	1 (0.3)

Source: Primary Data Collected from Nakawa TVC, Lugogo VTI, and Ntinda VTI (2025)

Employment rates were high for both genders. 80.1% (n = 189) of the males and 78.9% (n = 86) of the females were employed. Regarding residence, the majority resided in Kampala (51.9%, n = 179) and Wakiso (27.0%, n = 93), with the highest employment rate observed among those from Wakiso (86.0%). Most TVET graduates cluster around the city's suburbs to attract potential investors and companies.

In terms of institutional training, the largest proportion of graduates were from Nakawa Technical Vocational Institute (33.8%, n = 116), followed by other public TVET institutions (29.7%, n = 102). Shockingly, graduates from other public TVET institutions exhibited the highest employment rate at 97.1% (n = 99), while those from Nakawa Technical Vocational Institute had a comparatively lower employment rate of 61.2% (n = 71). Aside from government-aided TVET institutions, private graduates invest heavily in their skilling programs and the time to seek employable activities as compared to their counterparts from public TVET institutions.

The specific field of study appears to be a significant driver of these outcomes. Electrical installation was the most common trade (24.9%, n = 86) and maintained a high employment success rate of 90.7%. Similarly, specialized fields like Plumbing (93.9%) and hairdressing and beauty (100%) demonstrated nearly total workforce absorption. In contrast, graduates from ICT/Computer Applications and Automotive Mechanics faced more competition or fewer immediate openings, resulting in higher non-employment rates of 37.5% and 35.1%, respectively. This suggests that while the majority of TVET graduates find work, the speed and success of this transition are heavily influenced by the specific trade and the institution attended.

Regarding the mode of training, most respondents pursued their studies full-time (66.3%, n = 228). While this traditional route yielded a high employment rate of 78.9%, those who engaged in block/modular training saw an even stronger transition, with 85.7% (n = 12) in active employment. Graduates who opted for half-time study also performed well, reaching an 81.4% employment rate, suggesting that flexible training schedules do not hinder, and

may even slightly enhance labor market readiness. In terms of qualifications obtained, the sample was heavily weighted toward holders of the modular certificate (70.9%, n = 244), of whom 79.1% were employed. Higher-level technical certifications also showed strong results; 86.4% of those with a craft certificate and 84.2% of diploma holders successfully secured employment. Conversely, the advanced craft certificate recorded the highest rate of non-employment at 29.4% (n = 5).

Table 2 shows a clear difference in the specific employability skills acquired during TVET training between employed and unemployed graduates in Uganda.

Skills Acquired from TVET Institutions	Employed (1) Mean	SD	Unemployed (0) Mean	SD	t-value	p-value	Mean Difference	95% CI Lower	95% CI Upper
Social skills	4.75	0.62	4.23	1.20	-4.98	<0.001	-0.52	-0.72	-0.31
Practical technical skills	4.79	0.48	4.43	1.21	-3.89	<0.001	-0.36	-0.55	-0.18
Use of tools and equipment	4.79	0.53	4.43	1.17	-3.72	<0.001	-0.35	-0.54	-0.17
Ability to apply theory	4.58	0.70	4.37	1.18	-1.94	0.053	-0.21	-0.43	0.00
Health and safety practices	4.69	0.62	4.42	1.17	-2.60	0.01	-0.27	-0.47	-0.06
Problem-solving	4.61	0.62	4.54	0.94	-0.73	0.467	-0.07	-0.25	0.12
Digital and ICT skills	3.57	1.20	3.57	1.35	-0.02	0.985	0.00	-0.33	0.32
Communication skills	4.78	0.50	4.43	1.20	-3.72	<0.001	-0.35	-0.53	-0.16
Teamwork and collaboration	4.87	0.42	4.44	1.25	-4.78	<0.001	-0.43	-0.61	-0.25
Work discipline	4.79	0.51	4.39	1.17	-4.34	<0.001	-0.40	-0.59	-0.22
Entrepreneurship skills	4.57	0.82	4.29	1.11	-2.38	0.018	-0.28	-0.51	-0.05
Job search skills	4.30	0.83	4.24	1.08	-0.49	0.626	-0.06	-0.29	0.18

Source: Primary Data Collected from Nakawa TVC, Lugogo VTI, and Ntinda VTI (2025)

The larger differences in the first three mean skills between TVET-employed and unemployed graduates paint a clear picture of skill gaps and a significant skills mismatch between these two groups of graduates. A clear observation also shows that there is a clear discernment between taught and acquired skills, and they differ across the two groups. To add a layer of context to it, the first three (3) significant skills are taught at various TVET institutions, such as social skills; practical technical skills, including plumbing, automotive, fashion and design, welding, and machinery/metal fabrication; and building and construction, woodwork/carpentry, and many other trades, all of which involve the use of tools and equipment. On the other hand, the other comparable differences were seen in the soft skills, which are very pertinent to the employed graduates. These skills range from communication, teamwork, and collaboration to work discipline.

Specifically, employed graduates reported significantly higher levels of social skills ($M = 4.75, SD = 0.62$) compared to unemployed graduates ($M = 4.23, SD = 1.20$), and this difference was statistically significant ($t = -4.98, p < 0.001$). The mean difference of -0.52, with a 95% confidence interval ranging from -0.72 to -0.31 suggests a substantial disparity between the two groups. Similarly, practical technical skills were significantly higher among employed graduates ($M = 4.79, SD = 0.48$) than unemployed graduates ($M = 4.43, SD = 1.21$) ($t = -3.89, p < 0.001$), with a mean difference of -0.36. Skills relating to the use of tools and equipment also differed significantly between the groups, with employed graduates scoring higher ($M = 4.79, SD = 0.53$) than unemployed graduates ($M = 4.43, SD = 1.17$) ($t = -3.72, p < 0.001$). This implies that the practical and hands-on competencies acquired during training may strongly influence graduates' employability outcomes.

Moreover, the job - and industry - acquired soft skills showed significant differences between employed and unemployed TVET graduates, particularly in communication, teamwork and collaboration, and work discipline. Communication skills were significantly higher among employed graduates ($M = 4.78, SD = 0.50$) compared to

unemployed graduates ($M = 4.43, SD = 1.20$), and the difference was statistically significant ($t = -3.72, p < 0.001$). Similarly, teamwork and collaboration skills were significantly higher among employed graduates ($M = 4.87, SD = 0.42$) than unemployed graduates ($M = 4.44, SD = 1.25$), with a statistically significant difference ($t = -4.78, p < 0.001$). Work discipline skills also differed significantly, with employed graduates reporting higher levels ($M = 4.79, SD = 0.51$) compared to unemployed graduates ($M = 4.39, SD = 1.17$) ($t = -4.34, p < 0.001$). On the other hand, statistically significant differences were observed in health and safety practices ($t = -2.60, p = 0.010$) and entrepreneurship skills ($t = -2.38, p = 0.018$), where employed graduates again reported higher competency levels.

Conclusions

First, the study findings point to the existence of a substantial employability skill gap and a clear mismatch between the competencies possessed by unemployed graduates and those demanded in the labour market, clearly justifying delays in their placements. The consistently higher competency levels reported by employed graduates suggest that employability is strongly tied to both technical proficiency and workplace readiness. Regarding the determinants of employability prospects, residence status, TVET institution attended, internship, funding, and qualification were imperative, but the most outstanding factor was the field of study.

Secondly, the study highlighted that practical competence is a major determinant of employment outcomes among TVET graduates. Graduates who were able to effectively apply hands-on technical skills and operate tools and equipment appear to have a greater likelihood of securing employment. This suggests that labour market success depends not only on formal training attendance but also on the actual acquisition and demonstration of occupational competencies.

Third, the findings reveal an important distinction between skills taught in TVET institutions and skills effectively acquired and utilized by graduates. This implies that exposure to training alone may not be sufficient to guarantee employability unless graduates attain adequate practical mastery and industry-relevant competence. The results, therefore, raise concerns about the extent to which some TVET programmes translate training into measurable workplace capability.

Fourth, the study demonstrates that soft skills are equally critical for employment success. Skills such as communication, teamwork, collaboration, and work discipline appear to differentiate employed graduates from unemployed ones, suggesting that employers value behavioral and interpersonal competencies alongside technical expertise. This further implies that employability in the modern labor market increasingly requires a balanced combination of technical and non-technical skills.

Finally, the findings suggest that TVET institutions may need to strengthen competency-based training approaches, industry partnerships, workplace exposure, and soft-skills integration within training curricula. Addressing these gaps could improve alignment between graduate competencies and labor market expectations, thereby enhancing the employability prospects of TVET graduates.

Discussion of findings

Findings revealed the existence of employability skill gaps between employed and unemployed TVET graduates. This finding is in line with several previous results; for instance, Geressu (2017) cited substantial skill deficiencies among TVET graduates, even among the employed ones. In Turkey, a high horizontal skill mismatch was observed among employed graduates in the field of education (zer & Suna, 2020). Differently, Shrestha (2016) acknowledges a gap in the training linkage between institutions and the industries. Operating in a different intellectual sense, Vandeweyer and Verhagen (2020) attributed the skills mismatch to wrong placements. He added that due to a high degree of unemployment, some TVET graduates find themselves in jobs for which their skills cannot be used. Eventually, Liu (2025) found that persistent soft-skill deficits, especially in the fields of communication, teamwork, leadership, and problem solving, have held graduates from China from reaching their maximum potential.

Hands-on technical competence, such as mastery in the use of tools, equipment, and trade-specific tasks, facilitated employment identification. In line with this study, Hanapi et al. (2014) revealed that graduates with a weak mastery of taught skills lagged in employment. Yamada and Otchia (2021) highlight that while teachers emphasize the importance of practical skills, students seek broader coverage of practical and managerial skills and entrepreneurship, indicating a difference in expected competencies for work. Zira (2025) confirms that graduates struggled with employment because their competencies did not fully align with industry needs, confirming previous reports of skills

mismatch and underemployment. Also, Audu et al. (2013) indicate that industries in Nigeria frequently complain about TVET graduates possessing low-level skills required for employment, low practical knowledge, and a lack of confidence in carrying out duties. He further cited inadequate resources, such as insufficient training equipment, leading to a lack of hands-on practice, causing the training to remain theoretical, and subsequently resulting in graduates who are not considered more skilled than their academic counterparts by the labor market (Audu et al., 2013).

Being taught a skill does not necessarily translate into effective acquisition of jobs. Therefore, TVET programmes may need stronger alignment between curriculum delivery and real-world workplace requirements. This differs from the findings presented by Tripney et al. (2013) that most TVET training has a small but positive effect on employment. Attah et al. (2026) added that TVET training fosters practical skill acquisition and can be transformed into employment through effective post-training systems. Kisilu and Ferej (2019) argued that there is a direct linkage between TVET training and employment. Additionally, Tan and Nam (2012) showed that the main objective of Technical and Vocational Education and Training (TVET) is to equip enrollees with job-relevant skills that can facilitate, though not guarantee, a smoother transition to gainful employment.

Lastly and most importantly, findings revealed that soft skills such as communication, teamwork, collaboration, and work discipline strongly influence employability outcomes. This finding is in line with several studies' results. For example, Cheruiyot (2021) highlights that employers often demand more soft skills than technical skills, indicating their importance for job readiness. Nayan et al. (2024) indicate that the marketability of graduates, including TVET graduates, is impacted by their weak employability qualities, such as teamwork, flexibility, critical thinking, leadership, and communication. Khilji and Roberts (2022) explain that while technical and occupational skills are foundational for economic capacity, the knowledge economy necessitates enhanced personal and social capabilities that draw on all aspects of human communication. Vasilev (2025) explains that communication and cognitive skills are critical for enhancing the employability and adaptability of VET graduates in the rapidly evolving labor market driven by digitalization, automation, and artificial intelligence. Another study by Bassah and Noor (2023) found that employability skills, including communication and interpersonal skills, are a significant attribute for Technical and Vocational Education Training (TVET) graduates because they are closely related to career readiness and marketability. Likewise, Valenzuela (2020) revealed that 21st-century employers largely agree that soft-skills mastery is essential for students to transition successfully into the workforce. Moving on, Suroto et al. (2017) stressed that communication skills, including presentation skills, are essential for vocational students to build their careers, specifically for getting a job, pursuing further studies, or starting their own business. Also, Wafi et al. (2022) added that developing soft skills among students is a priority for Higher Education Institutions (HEI) and elevates employability skills to meet industry demands.

Conflict of Interest: None declared.

Ethical Approval: Not applicable.

Funding: None.

References

Alam, M. J., Reza, A., Ogawa, K., Hossain, A., & Ahsan, M. (2024). Sustainable employment for vocational education and training graduates: the case of future skills matching in Bangladesh. *International Journal of Training Research*, *22*, 266-288. https://doi.org/10.1080/14480220.2024.2308224

Angela, G., & Kwizera, G. (2026). From Classroom to Career: A Systematic Review of How Ugandan TVET Pathways Shape Youth Employability, Earnings, And Transition to Decent Work. *AIJFR-Advanced International Journal for Research*, *7*(2).

Asiimwe, G. B. (2023). Interrogating unemployment amid growth: tracking youth unemployment in neo-liberal Uganda, 1990--2019. *Journal of Asian and African Studies*, *58*(5), 812--828.

Attah, P., Chibe, P., & Ifiora, P. (2026). Vocational Training, Skills Acquisition, and Post-Training Support as Determinants of Employability among Technical and Vocational Education and Training (Tvet) Graduates in Nigeria. *Gidan Madi Multi-Disciplinary Journal of Teacher Education (GMMJTE)*, *2*(1), 156--173.

Audu, R., Abdulkadir, M., & Abdul, B. K. (2013). Technical Vocational Educational (TVE) Institutions and Industries Partnership: Necessity for Graduates Skills Acquisition.

Awodiji, O., & Magogodi, C. (2023). Nexus between soft skills and technical vocational education and training graduate employability. *INVOTEC*. https://doi.org/10.17509/invotec.v19i1.56340

Balliester, T., Elsheikhi, A., & et al. (2018). The future of work: a literature review. *ILO research department working paper*, *29*, 1--54.

Bandura, A., & Walters, R. H. (1977). *Social learning theory* (Vol. 1). Prentice-hall Englewood Cliffs, NJ.

Barigye, D. (2024). Technical vocational education and training in Uganda: Career guidance and practices. *African Journal of Career Development*, *6*(1), 100.

Bassah, N. A. S. H., & Noor, M. A. M. (2023). Employability skills needed for TVET graduates in Malaysia: perspective of industry expert. *Online Journal for TVET Practitioners*, *8*(1), 52--59.

Charles, L., Xia, S., & Coutts, A. P. (2022). Digitalization and employment: A review.

Chauke, T. (2023). Determinants of Youth Unemployment among TVET College Graduates in the Vhembe District. *Journal of Culture and Values in Education*. https://doi.org/10.46303/jcve.2023.24

Cheruiyot, B. (2021). Integration of soft skills into education and training systems by TVET institutions in Kenya. *The Kenya Journal of Technical and Vocational Education and Training*, 51.

Comyn, P. J. (2018). Skills, employability and lifelong learning in the Sustainable Development Goals and the 2030 labour market. *International Journal of Training Research*, *16*(3), 200--217.

Creswell, J. W. (2013). Steps in conducting a scholarly mixed methods study.

Egessa, A., Nnyanzi, J. B., & Muwanga, J. (2021). Determinants of youth unemployment in Uganda: The role of gender, education, residence, and age. *IZA Journal of Labor Policy*, *11*(1), 1--29.

Filmer, D., & Fox, L. (2014). *Youth employment in sub-Saharan Africa*.

Geressu, B. S. (2017). Impact of competence-based training on employability of Technical and Vocational graduates in Ethiopia.

Grimshaw, D. (2020). International organisations and the future of work: How new technologies and inequality shaped the narratives in 2019. *Journal of Industrial Relations*, *62*(3), 477--507.

Guloba, M. M., Kakuru, M., Ssewanyana, S. N., & Rauschendorfer, J. (2021). Employment creation potential, labor skills requirements and skill gaps for young people. *Economic Policy Research Centre and Brookings Institute Working paper*, *37*.

Gurdia, L., Mancini, F., Jacobetty, P., & Maina, M. (2021). Graduates' employability skills in East Africa. *Journal of Teaching and Learning for Graduate Employability*, *12*(2), 169--184.

Hanapi, Z., Nordin, M. S., & Rus, R. C. (2014). Unemployment problem among graduates of technical field: Competencies of the graduates and quality of the education. *Sains Humanika*, *2*(2).

Herrera, J., & Merceron, S. (2013). Underemployment and job mismatch in Sub-Saharan Africa. *Urban labor markets in sub-Saharan Africa*, 83--107.

Ismail, J. B., Chik, C., & Hemdi, M. A. (2021). TVET Graduate Employability: Mismatching Traits Between Supply and Demand. *International Journal of Academic Research in Business and Social Sciences*. https://doi.org/10.6007/ijarbss/v11-i13/8522

Jackson, D. (2010). An international profile of industry-relevant competencies and skill gaps in modern graduates. *International Journal of Management Education (Oxford Brookes University)*, *8*(3).

Julius, A., & Audrey, A. (2025). Beyond Skills Training: Addressing the Systemic Pathologies in Uganda's Education System for Genuine Work Readiness. *International Journal of Academic Multidisciplinary Research*.

Kenneth, K., & Ahmed, F. (2026). The Impact of the Skilling Uganda Programme on Youth Employment Outcomes in Eastern Uganda. *Asian Journal of Education and Social Studies*, *52*(1).

Khalifa, O. (2024). *Soft Skills for Today's Job Market and Employability*.

Khilji, N. K., & Roberts, S. A. (2022). *Soft skills acquisition for the knowledge economy: a research strategy for policy evolution in technical and vocational education and training (TVET) in intermediate and emergent economies*

Kintu, D., Kitainge, K., & Ferej, A. (2019). An exploration of strategies for facilitating graduates' transition to the world of work: A case of technical, vocational education and training graduates in Uganda.

Kisilu, M. K., & Ferej, A. (2019). Employers 'perceptions about the employability of technical, vocational education and training graduates in Uganda.

Kobugabe Rwomushana, L. (2024). Skill Gap and Employability of Higher Education Graduates in Uganda.

Krumboltz, J. D., Mitchell, A. M., & Jones, G. B. (1976). A social learning theory of career selection. *The counseling psychologist*, *6*(1), 71-81.

Lent, R. W. (2020). Career development and counseling: A social cognitive framework. *Career development and counseling: Putting theory and research to work*, *129*.

Liu, Z. (2025). China's higher vocational education and training (HVET) graduates' soft-skill gap: individual aspirations and structural constraints. *Research in Post-Compulsory Education*, *30*(4), 698--722.

Magelah, P., & Ntambirweki-Karugonjo, B. (2014). Youth unemployment and job creation in Uganda: Opportunities and Challenges. *Report of Proceedings of the 49th Session of the State of the Nation Platform. Advocates Coalition for Development and Environment (ACODE) Info Sheet*, *26*.

Mante, D. A., Okoye, M. C., & Hui, X. (2025). A systematic literature review of technical and vocational education and training (TVET) systems: an insight from China and sub-Saharan Africa. *Pedagogy and Psychology of Sport*, *23*, 64486--64486.

Mayombe, C. (2021). *Vocational education and training in Sub-Saharan Africa*.

Mengistu, A. B., & Negasie, R. D. (2022). Evaluating the Employability and Entrepreneurial Skills and the Impact on Employment of Public TVET Graduates. *Education Journal*. https://doi.org/10.11648/j.edu.20221103.11

Mohamad, H. (2017). The Impact of Problem-based Learning on Students' Competencies in Technical Vocational Education and Training. *Aalborg Universitetsforlag*.

Morgan, K. (1970). Sample size determination using Krejcie and Morgan table. *Kenya Projects Organization (KENPRO)*, *38*(1970), 607-610.

Nabunnya, M. G. (2018). Vocational Education and Entrepreneurial Performance of Youths in Uganda.

Nakawala, L. (2025). Factors Affecting Employability among TVET Graduates in Water, Civil, Electrical, and Mechanical Engineering: A National Diploma Tracer Study in Uganda (2016–2019). *International Journal of Advanced Research*. https://doi.org/10.37284/ijar.8.2.3842

Namuliira, P., Kasirye, I., Okillong, P., Atwine, B., Nakkazi, S. C., Nakitende, P., & Kajumba, M. M. (2025). Skills acquisition in Uganda: bridging the gap between education and employment in the era of digital transformation. In *Skills acquisition in Uganda: bridging the gap between education and employment in the era of digital transformation: Namuliira, Phionah| uKasirye, Ibrahim| uOkillong, Philemon| uAtwine, Blessing| uNakkazi, Sheila C.| uNakitende, Pauline| uKajumba, Mary M.*

Nayan, M. U., Panja, S., Sultana, A., Zaman, L. A., Vora, L. K., Sillman, B., Gendelman, H. E., & Edagwa, B. (2024). Polymer delivery systems for long-acting antiretroviral drugs. *Pharmaceutics*, *16*(2), 183.

Nkunya, H., & Mwila, P. (2024). Bridging the Gap Between TVET Skills and Labor Market Demands an Analysis of the Influence of Training Outcomes in Dar Es Salaam, Tanzania. *International Journal of Research and Innovation in Social Science*. https://doi.org/10.47772/ijriss.2024.8120057

Nugraha, H., Kencanasari, R., Komari, R. N., & Kasda, K. (2020). Employability Skills in Technical Vocational Education and Training (TVET). *Innovation of Vocational Technology Education*, *16*, 1-10. https://doi.org/10.17509/invotec.v16i1.23509

Oanda, I., & Ngcwangu, S. (2018). Destination and outcome trends for graduates from sub-Saharan African countries: Implications for South Africa. *Higher Education Pathways*, 260.

Okoye, M. C., Hui, X., & David, A. M. (2025). Comparative analysis of technical and vocational education and training systems in China and Sub-Saharan Africa for sustainable development. *Discover Education*, *4*(1), 535.

Okumu, I. M., & Bbaale, E. (2019). Technical and vocational education and training in Uganda: A critical analysis. *Development Policy Review*, *37*(6), 735--749.

Palmer, R. (2017). Jobs and skills mismatch in the informal economy.

Rodzalan, S., Noor, N. N. M., Abdullah, N., & Saat, M. M. (2022). TVET Skills Gap Analysis in Electrical and Electronic Industry: Perspectives from Academicians and Industry Players. *Journal of Technical Education and Training*. https://doi.org/10.30880/jtet.2022.14.01.014

Rojuli, S., & Rahayu, A. (2017). Observational Learning on Industry Work Practices toward Job Readiness. *Educational Research and Reviews*, *12*(9), 554-558.

Sanusi, D., & Abdullahi, A. (2025). Enhancing Practical Skills Acquisition through Entrepreneurship Practical in Vocational and Technical Education. *Gidan Madi Multi-Disciplinary Journal of Teacher Education (GMMJTE)*, *1*(1), 1-16.

Shrestha, B. R. P. (2016). Vocational education and training graduates: Challenges in practical skills to the job market. *International Journal of Social Sciences and Management*, *3*(3), 141--145.

Singh, A., Singh, H. P., Alam, F., & Agrawal, V. (2022). Role of Education, Training, and E-Learning in Sustainable Employment Generation and Social Empowerment in Saudi Arabia. *Sustainability*. https://doi.org/10.3390/su14148822

Suroto, M., Susilaningsih, M., & Harini, M. (2017). *Toward Successful Career Of Vocational Education Students Through Improving Business Communication Skills*

Talento, M. S., Tandang, N., Rogelio, R. A., & Araña-Roldan, R. A. (2022). Factors Influencing Employment of Female Graduates of Technical and Vocational Education and Training Program in the Philippines. *Philippine Journal of Science*. https://doi.org/10.56899/151.03.30

Tan, J.-P., & Nam, Y.-J. J. (2012). Pre-employment technical and vocational education and training: Fostering relevance, effectiveness, and efficiency. *The Right Skills for the Job*, 67--103.

Tripney, J., Hombrados, J., Newman, M., Hovish, K., Brown, C., Steinka-Fry, K., & Wilkey, E. (2013). Technical and vocational education and training (TVET) interventions to improve the employability and employment of young people in low-and middle-income countries: A systematic review. *Campbell systematic reviews*, *9*(1), csr--2013.

Tulibaleka, P. O., Nakalema, K., & Ndohtabi, D. E. (2021). Family Support and School-to-Work Transition: Perceptions and Experiences of University Graduates in Kampala City, Uganda. *Educational Research and Reviews*, *16*(12), 428--437.

Valenzuela, V. (2020). The exploration of employers', educators', and students' perceptions regarding the influence of soft skills for transitioning into the workforce.

Vandeweyer, M., & Verhagen, A. (2020). The changing labour market for graduates from medium-level vocational education and training. *OECD Social, Employment, and Migration Working Papers*(244), 0_1--156.

Vasilev, A. E. I., & Petkova, A. P. I. (2025). Development of Social and Professional Skills during Educational Practice through Work and Enterprise-Based Learning in VET: An Empirical Study. *International Journal of Current Science Research and Review*. https://doi.org/10.47191/ijcsrr/v8-i2-42

Vasilev, I. (2025). Beyond technical skills: A focus on the importance of communication and cognitive skills in the discourse of VET. *Rhetoric and Communications*, *47*.

Wafi, A. A., Subri, U. S., Zulkifli, R. M., Mohamed, S., Hanapi, Z., Che'Rus, R., & Kamal, M. F. M. (2022). 'You are Hired': Technical and Vocational Education and Training Graduate Employability and Experts' Views. *Pertanika Journal of Social Sciences \& Humanities*, *30*(2).

Wang, Y., & Wang, Y. (2012). *Education in a changing world: Flexibility, skills, and employability* (Vol. 69104).

Wong, R., & Saraih, U. N. (2024). Integrating technology skills with interpersonal competencies to enhance graduate employability in Malaysian Technical University Network. *Finansha: Journal of Sharia Financial Management*, *5*(2).

Yamada, S., & Otchia, C. (2020). Perception gaps on employable skills between technical and vocational education and training (TVET) teachers and students: the case of the garment sector in Ethiopia. *Higher Education, Skills and Work-based Learning*, *11*, 199-213. https://doi.org/10.1108/heswbl-08-2019-0105

Yamada, S., & Otchia, C. S. (2021). Perception gaps on employable skills between technical and vocational education and training (TVET) teachers and students: the case of the garment sector in Ethiopia. *Higher Education, Skills and Work-Based Learning*, *11*(1), 199--213.

Yiga, S. (2022). Assessment methodologies and determinants of employability and skills level among Technical and Vocational Education Training (TVET) graduates in Central Uganda. *International Journal of Vocational and Technical Education*, *14*(2), 40--47.

zer, M., & Suna, H. E. (2020). The linkage between vocational education and labor market in Turkey: Employability and skill mismatch. *Kastamonu Education Journal*, *28*(2), 558--569.

Zira, W. B. (2025). Exploring the Perceptions and Experiences of Vocational and Technical Education (VTE) Graduates, Employers, and Educators. *International Journal of Educational Management*, *23*(2), 236--242.

Author Biography

Kaddu Mukasa Samuel is an accomplished Ugandan professional, a building and construction engineer, TVET expert, and a doctoral researcher currently pursuing his Ph.D. in the Department of Technology Education at the University of Eldoret (UOE). As the Chief Head Trainer at Bukedea Technical Vocational Institute (Bukedea TVI), he merges administrative leadership with innovative pedagogy, spearheading institutional infrastructure development and pioneering competency-based training frameworks. Eng. Kaddu Mukasa is a passionate advocate for the practical application of real-life projects across both physical sites and online learning platforms, transforming traditional vocational lessons into immersive, hybrid learning experiences. His scholarly contributions, tracked via his ORCID identifier (https://orcid.org/0009-0009-3828-8832), focus heavily on optimizing technical skills transfer

in East Africa, as evidenced by his research paper examining the integration of hybrid project-based workflows within building and construction trades.

Dr. Simon Wanami is an esteemed East African scholar, researcher, and Senior Lecturer at the University of Eldoret within the School of Education's Department of Technology Education. Widely recognized as an authority in Technical and Vocational Education and Training (TVET) structures, his comprehensive research heavily intersects curriculum design, online and blended learning framework deployment, and competency-based education and training (CBET). Over his academic career, Dr. Wanami has authored and co-authored numerous high-impact peer-reviewed studies cataloged on his Google Scholar Profile, tracking systemic solutions for regional technical instructor strategies, industrial collaboration models, and real-life project-based implementations for trainee development across Kenya and Uganda.

Dr. Muthoka Kyalo is a distinguished Kenyan academic, researcher, and Lecturer in the Department of Technology Education within the School of Education at the University of Eldoret (UOE). As an expert in Technical and Vocational Education and Training (TVET) systems, his research concentrates on student adaptability, competency-based education and training (CBET) deployment, and institutional-industrial collaboration frameworks. Dr. Kyalo is an active research supervisor and co-author, whose published literature in peer-reviewed repositories, such as the University of Eldoret Institutional Repository, examines the socio-educational correlates influencing technical skill acquisition and regional TVET enrolment impacts across East Africa. A champion of immersive pedagogy, he integrates real-life physical projects with online hybrid training workflows to modernize technical instructor capacity and streamline workforce readiness.

Disclaimer/Publisher's Note: The views, opinions, and data presented in all publications are exclusively those of the individual author(s) and contributor(s) and do not necessarily reflect the position of BRPI or its editorial team. BRPI and the editorial team disclaim any liability for any harm to individuals or property arising from the use of any ideas, methods, instructions, or products mentioned in the content.