Int. j. adv. multidisc. res. stud. 2026; 6(6):981-993

Received: 04-10-2026
Accepted: 14-11-2026

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

Examining the Effectiveness of Vocational Education Training Programs in Enhancing Youth Job Creation Strategies: A Case Study of Isoka Central Constituency, Zambia

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Abstract

This study examined the effectiveness of Vocational Education and Training (VET) programmes in enhancing youth job creation strategies in Isoka Central Constituency, Zambia. The study specifically assessed the effectiveness of the VET curriculum in meeting labour-market demands, examined employment outcomes among VET graduates, and investigated limitations affecting programme implementation. A mixed-methods approach incorporating a descriptive survey and case study design was employed. Quantitative data were analysed using descriptive statistics, while qualitative information was analysed thematically. The findings revealed that the VET curriculum was generally effective in responding to labour-market demands, with an overall positive assessment of 69%. Specifically, 64% of respondents agreed that the curriculum was relevant to current workplace needs, while 76% indicated that industrial attachment improved workplace readiness. Training quality and practical training were each rated positively by 80% of respondents, demonstrating a strong practical foundation. However, instructor competence, ICT content and entrepreneurship preparation recorded lower positive assessments of 66%, 60% and 54%, respectively, indicating areas requiring improvement. Regarding employment outcomes, the findings showed that VET improved employability but did not consistently translate into actual employment. 76% of respondents reported improved employability, while 70% indicated that the programme prepared them for employment to a great or very great extent. Nevertheless, 50% had not yet secured employment, with 24% in formal employment and 30% self-employed. This demonstrates that self-employment represents an important pathway for graduates, although stronger employment linkages and support are required. The major implementation challenges were limited access to modern technology accounting for 56%, limited entrepreneurship support and inadequate training equipment, 44% each, transport/access challenges, 42%, and inadequate funding 40%. The study concludes that VET has substantial potential to enhance youth employability and job creation, but its effectiveness can be strengthened through modern equipment, entrepreneurship support, sustainable financing, instructor development and stronger employer partnerships.

Keywords: Vocational Education and Training, Youth Employment, Employability, Job Creation, Isoka Central Constituency

1. Introduction

Vocational Education Training Programme has increasingly become a central column in strategies to reduce youth unemployment. For instance, the International Labour Organization (ILO, 2024) [16] reports that global youth unemployment fell to around 13% in 2024. However, young people remain excessively affected by unemployment, skills mismatches, among others. These factors continue to undermine job quality and earnings.

To address the above concerns, UNESCO (2025) [31] launched the Vocational Education Training Programme Strategy 2022 to 2029. The strategy, emphasizes transforming Vocational Education Training Programme into a flexible and inclusive system that responds to digitalization, the green transition, and social equity. The strategy highlights the importance of employer engagement, and competency-based curricula. Apart from that, it underscores a lifelong learning as mechanisms for enhancing employability. In addition, the policy calls for stronger partnerships with industry, higher-level technical training, as well as recognition of prior learning. This will ensure Vocational Education Training Programme remains responsive to global shifts. Thus, at the global level, Vocational Education Training Programme is framed as a key driver of youth employability, lifelong

skills development, and sustainable economic transformation.

In Southern Africa, the African Union (2024) [1] adopted the Continental Strategy for Vocational Education Training Programme to foster youth employment through quality assurance, employer engagement, and the portability of qualifications across borders. The Southern African Development Community (SADC) has highlighted four critical themes for improving Vocational Education Training Programme: that is, (i) policy frameworks, (ii) labour-market responsiveness, (iii) articulation between Vocational Education Training Programme and higher education, and (iv) innovation, particularly in relation to the Fourth Industrial Revolution (SADC, 2024) [23]. These strategies underscore the importance of regional collaboration especially in strengthening Vocational Education Training Programme as a tool for tackling unemployment, enhancing productivity, and creating competitive labour forces within regional value chains.

In Zambia, Vocational Education Training Programme reforms have been embraced as a pathway for reducing youth unemployment and fostering economic growth. The Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA) is responsible to oversee standards, accreditation, and funding mechanisms. The introduction of the Skills Development Levy Act No. 46 of 2016 established the Skills Development Fund. This fund is used to finance industry-driven training and workplace learning initiatives (TEVETA, 2021) [24].

The Ministry of Technology and Science (MoTS) has further reinforced Vocational Education Training Programme through its Strategic Plan 2022-2026 and the E-Strategy 2023-2026. These strategies emphasize digital transformation, innovation, and employer collaboration (MoTS, 2023, 2024). In addition, the newly launched Science, Technology and Innovation Policy (2025) further links skills training to Zambia's aspirations for industrialization and economic diversification.

Despite these efforts, Zambia continues to face youth labour-market challenges. For instance, the World Bank data (2025) [40] show that youth unemployment stood at approximately 9.9% in 2024. Beyond these headline figures, many young people experience underemployment or are absorbed into low-paying informal work. This underscores the need for better alignment between training and job market demands (World Bank, 2025) [40].

To address the above challenges, main trade schools such as Isoka Trades Training Institute (ITTI) was established. It is located in Muchinga Province. These institutes offer programmes such as automotive mechanics, electrical technology, and bricklaying and masonry. Other programmes are agriculture, and fashion and textile (Isoka Trades Training Institute, 2024). This demonstrates both the expansion of access and the importance of Vocational Education Training institutes in providing practical training opportunities in rural Zambia (ZANIS, 2025).

These programmes are directly linked to Zambia's key economic sectors, such as agriculture, construction, and energy. However, challenges such as limited infrastructure, inadequate equipment, insufficient employer collaboration, and low absorption rates into formal employment persist (TEVETA, 2021 [24]; MoTS, 2023). This raises critical questions about the extent to which Vocational Education Training Programme institutions are effectively addressing youth unemployment in their catchment areas.

Although global, regional, and national frameworks position Vocational Education Training Programme as a cornerstone of youth employment strategies, implementation challenges as those mentioned above remain. This study therefore seeks to examine the effectiveness of Vocational Education Training Programme in reducing youth unemployment through a case study of Isoka Trades Training Institute's skills programmes. Specifically, it investigates the alignment of curricula to labour-market needs, the employment outcomes of graduates, and the limitations affecting TVET implementation in Isoka.

1.1 General Objective

To examine the effectiveness of Vocational Education Training Programme in enhancing youth job creation strategies in Isoka Central Constituency.

1.1.1 Specific Objectives

1. To assess the effectiveness of the Vocational Education Training Programme curriculum to labour market demands.
2. To examine the employment outcomes of Vocational Education Training Programme graduates.
3. To investigate the limitations affecting Implementation of Vocational Education Training Programme implementation in Isoka Central Constituency.

1.2 Conceptual Framework

This study adopts a conceptual framework grounded in Employability Theory. It links vocational training to youth job creation outcomes through a set of interrelated variables. To start, the independent variable is the Vocational Education Training Programme. This is operationalised through key components such as curriculum relevance, quality of training, practical skills acquisition, and entrepreneurship training. The importance of these variables is that the elements will help determine the extent to which trainees acquire employability assets aligned with labour market demands (UNESCO, 2025) [31].

Second, the intervening variables consist of two broad categories. First are individual-level factors**.** These include, job search skills, adaptability, entrepreneurial orientation, and the ability to deploy acquired skills in real-life contexts. Second are contextual factors, include, labour market conditions, availability of jobs in rural areas, institutional support, access to finance, and industry linkages. These factors influence whether acquired skills are successfully translated into employment or self-employment opportunities (African Union, 2024) [1].

Third, the dependent variable are youth job creation outcomes**.** They are measured through indicators such as employment status, self-employment, entrepreneurship, income generation, and job sustainability among graduates. These outcomes reflect the overall effectiveness of the Vocational Education Training Programme in addressing youth unemployment in Isoka Central Constituency.

Lastly but not the least, the framework assumes that a well-designed and market-relevant Vocational Education Training Programme enhances employability assets. Nonetheless, the realization of positive employment outcomes depends on the interaction between individual capabilities and external labour market conditions. Where deployment mechanisms are weak or contextual constraints are significant. Even well-trained graduates may struggle to

secure employment (UNESCO, 2025) [31].

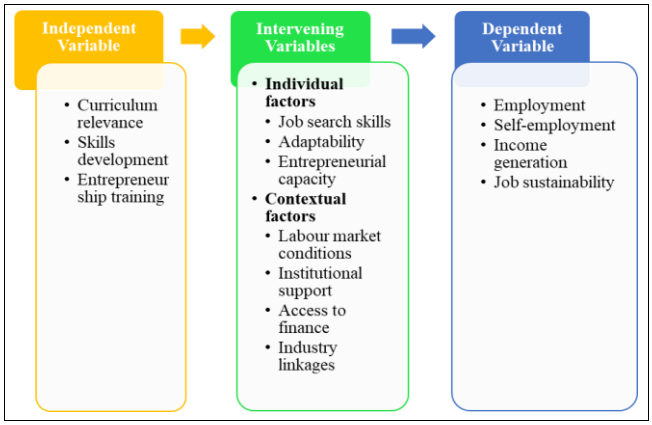


Fig 1: Conceptual framework

2. Literature Review

2.1 Effectiveness of the Vocational Education Training Programme Curriculum to Labour Market Demands

Globally, there is a persistent mismatch between the skills provided by VET institutions and those demanded by employers. Graduates often lack up-to-date technical skills as well as cross-cutting competencies such as problem-solving, digital literacy and communication, contributing to underemployment and difficulties in labour-market absorption (ILO, 2020) [13]. This mismatch is further associated with limited employer participation in curriculum development, outdated equipment and weak work-based learning linkages (UNESCO & World Bank, 2022). Competency-based education and stronger employer involvement have therefore been promoted to ensure that training focuses on demonstrable workplace competencies (OECD, 2021) [20].

Work-based learning, including apprenticeships, internships and industry attachments, is considered an important mechanism for improving the relevance of VET curricula. Such approaches expose learners to real workplace environments and enable employers to participate in training and assessment, thereby strengthening school-to-work transitions (UNESCO & World Bank, 2022).

Across Southern Africa, countries such as Rwanda, South Africa, Zimbabwe, Botswana, Malawi, Namibia and Tanzania have introduced various competency-based, apprenticeship and work-integrated learning reforms. However, challenges including inadequate funding, outdated equipment, weak employer participation, limited institutional capacity and insufficient labour-market information continue to affect curriculum effectiveness (African Development Bank, 2021 [4]; Akoojee & McGrath, 2019; Chinyamurindi, 2020 [6]).

Regular tracer studies and labour-market information systems are therefore important for ensuring that curriculum revisions respond to changing employment requirements (UNESCO & World Bank, 2022).

In Zambia, VET reforms under TEVETA emphasise competency-based education and training and greater involvement of industry stakeholders in curriculum development (TEVETA, 2023) [26]. Training programmes in areas such as construction, automotive mechanics, agriculture and hospitality are intended to reflect local and national economic activities. Entrepreneurship training has also been incorporated to enable graduates to pursue self-employment in response to limited formal employment opportunities (GRZ, 2015) [11]. Evidence indicates that graduates from provincial institutions such as Isoka Trades Training Institute engage in self-employment, although access to finance, mentorship and markets remains a challenge (TEVETA, 2022) [25].

Employer partnerships and workplace attachments further enhance practical skills, but these linkages remain weaker in rural areas (SADC, 2021) [21]. Overall, effective VET curricula in Zambia require continued curriculum modernisation, adequate infrastructure and equipment, stronger employer partnerships and sustained investment to ensure that graduates possess skills relevant to labour-market demands.

2.2 Employment outcomes of Vocational Education Training Programme graduates

The employment outcomes of Vocational Education and Training (VET) graduates vary considerably across countries, depending on the strength of links between training institutions and labour markets. Countries with strong work-based learning systems generally record better transitions from education to employment. For example, Germany's dual system combines classroom learning with company apprenticeships, while Switzerland has a highly developed apprenticeship model that supports rapid school-to-work transitions (OECD, 2021; World Bank, 2019) [20, 35].

Similar outcomes have been reported in Rwanda and Vietnam, where closer alignment between vocational curricula and industry needs has contributed to increased graduate employment (Open Knowledge Database, 2022; World Bank, 2020 [36]). In contrast, weak employer engagement, inadequate equipment and underfunded institutions can lead to underemployment and informal self-employment, as observed in Nigeria (UNESCO, 2021). Gender-sensitive programmes and transversal skills such as digital literacy and problem-solving can also improve employment opportunities and enable graduates to adapt to changing labour-market demands (OECD, 2021) [20].

In Southern Africa, VET graduate employment outcomes remain mixed, with many young people experiencing difficulties in transitioning into stable formal employment. Although some graduates obtain paid employment relatively quickly, regional labour markets continue to face high unemployment and limited job creation, resulting in significant numbers of graduates entering informal employment, casual work or self-employment (SADC, 2023) [22].

Evidence from South Africa and Namibia shows considerable variation in employment outcomes according to qualification, sector and programme design (World Bank, 2022) [38]. In Zambia, tracer evidence indicates high levels of self-employment alongside relatively low formal employment, reflecting limited formal-sector vacancies and weak connections between training providers and employers (TEVETA Zambia, 2021) [24].

Gender also influences employment outcomes, with women often concentrated in lower-paying service occupations and under-represented in higher-paying technical trades (UNESCO, 2021). Stronger employer involvement, structured apprenticeships, transferable skills, quality assurance and nationally recognised qualifications are therefore important for improving graduate absorption into formal employment (SADC, 2023) [22].

Employment outcomes for VET graduates in Isoka Central Constituency demonstrate both the opportunities and challenges associated with vocational training in rural Zambia. Graduates acquire skills in areas such as automotive mechanics, metal fabrication, electrical engineering, carpentry and hospitality, which are aligned with the country's skills-development priorities (Ministry of Technology and Science, 2022) [17]. VET also supports self-employment, particularly in construction, motor-vehicle repair and small-scale manufacturing, contributing to local economic development (GRZ, 2022 [12]; Mumba & Chanda, 2021). However, formal employment remains constrained by limited industrial capacity and regional economic disparities, causing some graduates to establish their own businesses or migrate to urban centres in search of employment (Chirwa *et al*., 2023) [7].

TEVETA reports that more than 40% of graduates from rural trades schools establish microenterprises within a year, while apprenticeship and internship partnerships provide additional opportunities for practical experience (TEVETA, 2021) [24]. Nevertheless, gender stereotypes, limited finance, weak rural infrastructure and insufficient formal employment opportunities continue to affect graduate outcomes, highlighting the need for stronger local industries, entrepreneurship support and public-private partnerships (World Bank, 2022; ILO, 2022) [38, 15].

2.3 Limitations affecting the Implementation Vocational Education Training Programme

The implementation of Vocational Education and Training (VET) programmes is constrained globally by inadequate funding, outdated infrastructure, weak curriculum labour market alignment, shortages of qualified instructors, and rapid technological change. Limited financial investment often results in inadequate workshops, obsolete equipment, insufficient training materials, and weak ICT infrastructure, thereby reducing the quality of practical training (AfDB, 2020) [3]. At the same time, VET curricula do not always keep pace with changing industry requirements, particularly in areas such as information technology, renewable energy, automation and advanced manufacturing (World Bank, 2021) [37]. The shortage of instructors with current industry experience and insufficient opportunities for continuous professional development further limits the capacity of institutions to deliver relevant competency-based training (UNESCO-UNEVOC, 2021) [33]. In addition, negative social perceptions that regard vocational education as inferior to university education can reduce enrolment and weaken support for VET programmes (UNESCO, 2019) [28].

Across Southern Africa, these challenges are reinforced by financial instability, weak employer linkages, governance fragmentation, inequitable access and limited digital readiness. Many VET institutions operate with inadequate workshops, outdated machinery, poor internet connectivity and insufficient resources for modern teaching approaches such as blended and simulation-based learning (DBSA, 2021).

Weak collaboration between training institutions and employers also contributes to skills mismatches because curricula are often developed without adequate industry consultation, while opportunities for internships and work-based learning remain limited (ACQF, 2021). Furthermore, fragmented governance involving different ministries and institutions can create overlapping responsibilities, inconsistent standards and weak accountability (OpenDevEd, 2022).

Marginalised groups, including rural youth, women, people with disabilities and low-income learners, also face financial, geographical and social barriers to participation (UNESCO-UNEVOC, 2020) [32]. Weak recognition of prior learning and limited research, tracer studies and reliable labour-market data additionally reduce the ability of governments to design evidence-based VET reforms (Govet, 2020).

In Zambia, particularly in Isoka Central Constituency**,** the broader VET challenges are reflected in inadequate funding, infrastructure deficiencies, shortages of qualified instructors, weak industry linkages, limited digital capacity and access barriers. Vocational skills training accounted for only about 2.2% of the education budget between 2015 and 2021, contributing to difficulties in maintaining workshops, purchasing consumables and developing staff (World Bank, 2024) [39]. Institutions such as Isoka Trades Training Institute face challenges associated with outdated equipment and inadequate practical facilities, which can limit students' exposure to modern technologies required by employers (World Bank, 2025 [40]; Isoka Trades Training Institute, 2023). Curriculum relevance is also affected by slow curriculum revision and limited employer participation, while small and informal businesses may have limited capacity to provide internships or practical placements (Isoka Trades Training Institute, 2023).

In addition, rural learners experience barriers related to accommodation, transport and other indirect costs, while limited internet connectivity and digital literacy constrain the effective use of e-learning platforms (TEVET Bursary System, 2023) [26].

2.4 Literature gap

The existing studies and policy documents highlight national and regional strategies for aligning Vocational Education Training Programme with labour-market needs but provide limited empirical evidence on rural training institutes like Isoka Trades. There is insufficient analysis of how infrastructure deficits, unpredictable funding, and weak private-sector presence in remote areas affect curriculum delivery and graduate employability (Isoka Trades Training Institute, 2023).

Another research gap is graduate employment trajectories in rural Zambia. While tracer studies exist for urban centres, few have systematically tracked rural graduates' transitions into self-employment or formal work. The long-term sustainability of microenterprises created by rural Vocational Education Training Programme graduates and their contribution to local economies remains underexplored (Mumba & Chanda, 2021).

In addition, although global literature notes gender disparities in technical trades, there is little empirical work examining how these dynamics play out in rural Zambian institutions. The effectiveness of mentorships or bursary schemes in overcoming stereotypes and improving women's participation in non-traditional trades at Isoka Central Constituency Trades Training Institute is not well documented (Chirwa *et al*., 2023) [7].

It is also worth noting that while blended learning and digital platforms are mentioned, there is a gap in understanding how rural colleges with limited connectivity, such as Isoka Trades Training Institute, can adopt e-learning

tools effectively for skill-based courses. The impact of digital divides on training quality and labour-market outcomes remains unclear despite the challenges main colleges faced during the COVID 19 period (UNESCO, 2016) [27].

Lastly but not of least importance is employer engagement models for Low-Industry regions. Most literature emphasizes employer partnerships for curriculum relevance, yet research on innovative engagement models suitable for low-industry rural districts is lacking. This includes alternative approaches like those that community-based internships or cooperative-led work placements tailored to remote economies (SADC, 2024) [23].

3. Research Methods

3.1 Research Design

The study will adopt a descriptive survey design complemented by a case study approach**.** To strengthen findings, a mixed-methods approach will be used. This will integrate both quantitative in form of questionnaires and descriptive statistics while qualitative will be in form of interviews, and thematic analysis approaches. This methodological is consistent with Creswell's (2018) [8] recommendation that combining methods increases the reliability and validity of findings while also capturing the complexity of Vocational Education Training Programme delivery in Zambia.

3.2 Target population

The study area focuses on the Isoka Central Constituency, which serves the Isoka residents. According to the 2022 Census of Population and Housing, Isoka district's population is approximately 1.1 million people. (Zambia Statistics Agency, 2022) [41]. It comprises of stakeholders directly or indirectly involved in Vocational Education Training Programme. These include, Students and graduates enrolled in skills craft and trade programmes, Instructors and trainers**,** Administrative staff and management**,** and Employers and community leaders**,** who interact with graduates and provide feedback on the relevance of skills imparted.

3.3 Sampling design

The study used mixed sampling design in collecting samples. For instance, systematic sampling method was used in selecting service area respondents. Further, convenience sampling was used to select Heads of department, and employees at Lusaka city council. Respondents were selected based on their proximity and availability to the study, targeting staff at Lusaka city council (Creswell & Creswell, 2018) [9].

3.4 Sample Size determination

The study will target 50 respondents. This will be structured as follows: 20 Current students from different programmes. 10 Graduates of the Institute. 10 Instructors and trainers, and administrative and management staff. 10 Local employers and community leaders. This sample size is considered adequate to provide reliable insights while remaining feasible within time and resource constraints (Creswell & Creswell, 2018) [9].

3.5 Data Presentation

Primary Data included the use of structured questionnaires, which were distributed to respondents to gather data on the topic under study, while Semi-structured interviews were conducted with instructors, administrators, and employers to capture deeper insights on curriculum relevance, infrastructure adequacy, and labour market alignment. Lastly, direct observation was carried out in workshops and classrooms to assess training facilities, equipment, and learning processes.

Secondary Data was collected by reviewing Institutional documents such as annual reports, enrolment statistics, curriculum outlines, Zambia Vocational Education Training Programme Authority (TEVETA) policy guidelines, and National Vocational Education Training Programme frameworks and government policy documents (TEVETA, 2022) [25].

3.6 Data Analysis

3.6.1 Qualitative Data

Qualitative data from interviews was transcribed and analysed using thematic analysis**,** following Virginia Braun and Victoria Clarke (2021).) Six-step framework involved following steps; familiarization, coding, theme development, review, definition, and reporting.

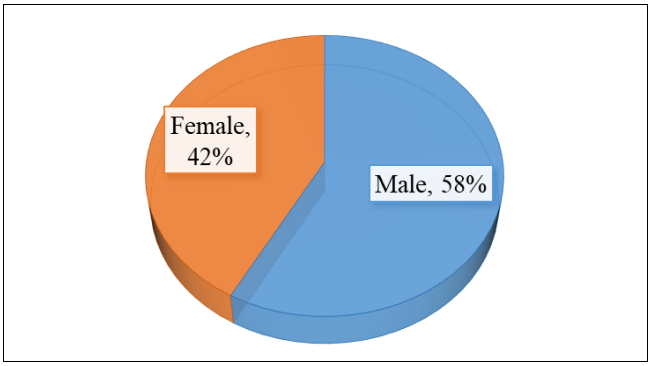
3.6.2 Quantitative analysis

Quantitative data collected from questionnaires will be coded and analysed using statistical software such as SPSS to generate descriptive statistics frequencies, means, and percentages. (Creswell, 2018) [8]. This helped to summarise respondents' views and identify patterns relevant to the research topic. As a result, this provided measurable evidence on the effectiveness of the phenomenon under investigation (John W. Creswell, 2018) [8].

4. Findings and Results

This chapter presents the findings of the study. The findings are organised according to the study objectives, namely; (i) To assess the effectiveness of the Vocational Education Training Programme curriculum to labour market demands. (ii) To examine the employment outcomes of Vocational Education Training Programme graduates. (iii) To investigate the limitations affecting Implementation of Vocational Education Training Programme implementation in Isoka Central Constituency.

Fig 2 shows the categories of respondents. The distribution shows that the largest category was Male, accounting for 58% while females stood at 42%.

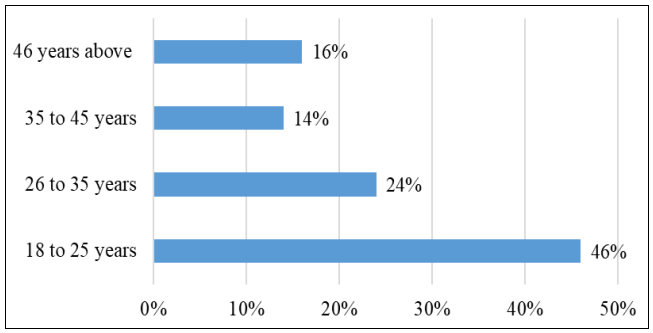


Source: Primary data, 2026

Fig 2: Categories of respondents

Moreover, on the age range of respondents, the findings in Fig 3 indicate that the largest category was 18 to 25,

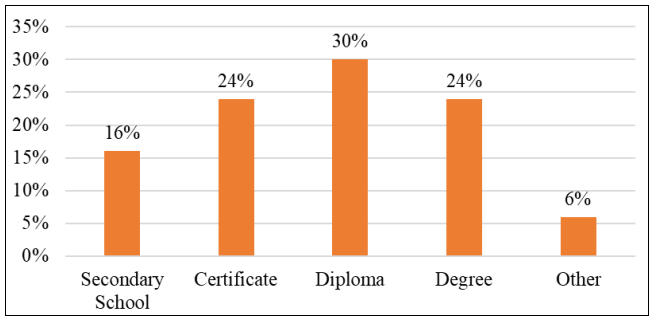
accounting for 46%. While 26 to 35 years accounted for 24%. Additionally, those aged between 36 to 45 years accounted for 14% and those above 45 years were 16%.



Source: Primary data, 2026

Fig 3: Age group of respondents

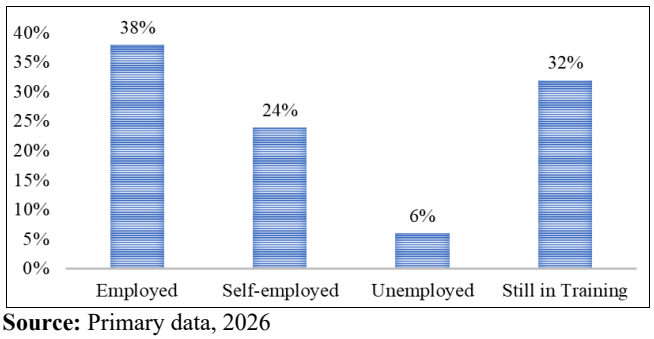
When it comes to highest level of education, findings presented in Fig 4 show that Diploma holders constituted 30 of respondents, degree holders 24%, certificate holders 24%, secondary school leavers 16%, and respondents with other qualifications 6%.



Source: Researcher's compiled data, 2026

Fig 4: Highest level of education

The findings in Fig 5 further show that on the current employment status 38% of respondents were employed, 32% were still in training, 24% were self-employed, and 6% were unemployed. Employment was therefore the largest category at 38%, followed by those still in training at 32%, self-employment at 24%, and unemployment at 6%. The results show that the sample included both labour-market participants and trainees who had not yet completed their transition into employment.

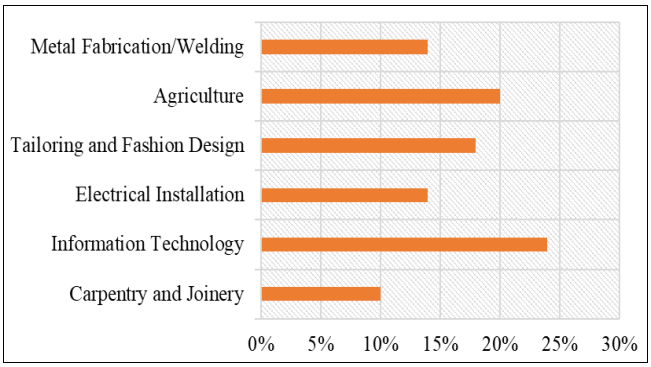


Source: Primary data, 2026

Fig 5: Current employment status

4.1 Presentation of Results Based on Thematic Area Developed from Objective One: Effectiveness of The Vocational Education Training Curriculum in Meeting Labour Market Demands

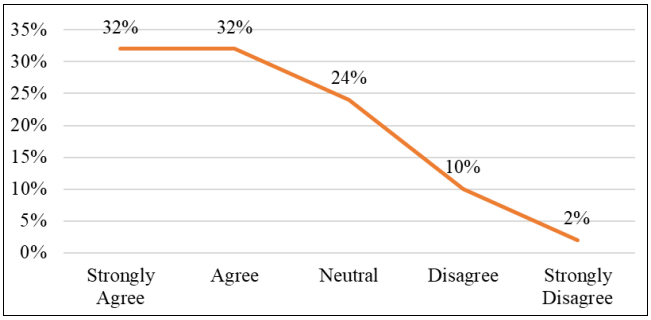
The effectiveness of the Vocational Education Training Curriculum in meeting labour market demands was explored in terms of curriculum relevance and skills development, Training's ability to provide adequate practical skills, whether training prepares trainees for entrepreneurship and Relevance of ICT to workplace requirements. To start with, with regards to programmes each student studied, Information Technology accounted for 24.0%, Agriculture 20%, Tailoring, Fashion and Design 18%, Electrical Installation 14%, Metal Fabrication and Welding 14%, and Carpentry and Joinery 10%. Information Technology was the largest programme at 24%, while Carpentry and Joinery was the smallest at 10%. The distribution demonstrates coverage of both digital and traditional vocational fields.



Source: Field data, 2026

Fig 6: Programme of study

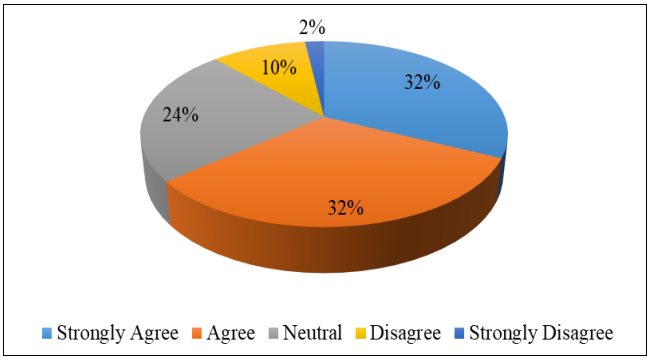
Coming to curriculum relevance and skills development, Fig 7 indicates that responses were distributed as follows; 64%, Agreed or strongly agreed that the curriculum was relevant for skills development. While 24% remained neutral, with 10% and 2% disagreed and strongly disagreed, respectively.



Source: Field data, 2026

Fig 7: Curriculum relevance and skills development

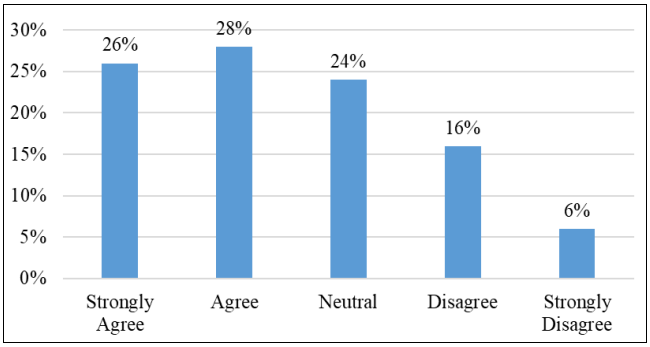
On the training provides adequate practical skills, findings in Fig 8 show that the responses were distributed as follows: 32%, Agreed, and 32% strongly agreed that the training provides adequate practical skills. While 24% remained neutral, with 10% and 2% disagreed and strongly disagreed, respectively.



Source: Primary data, 2026

Fig 8: Training provides adequate practical skills

Fig 9 presents findings on whether Training prepares trainees for entrepreneurship. 26%, Agreed, and 28% strongly agreed that the training provides adequate practical skills. While 24% remained neutral, with 16% and 6% disagreed and strongly disagreed, respectively.



Source: Primary data, 2026

Fig 9: Training prepares trainees for entrepreneurship

When it comes to procedures, findings show that 14% of respondents agreed and 46% of respondents strongly agreed that ICT content is relevant to workplace requirements. This gives a combined positive response of 60%. Meanwhile, 20% of respondents were neutral, while 16% of them disagreed, and 4% strongly disagreed.

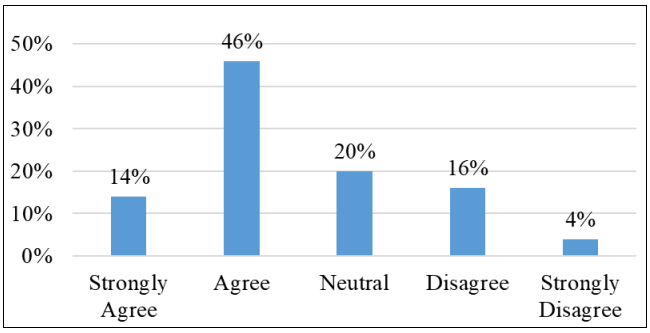
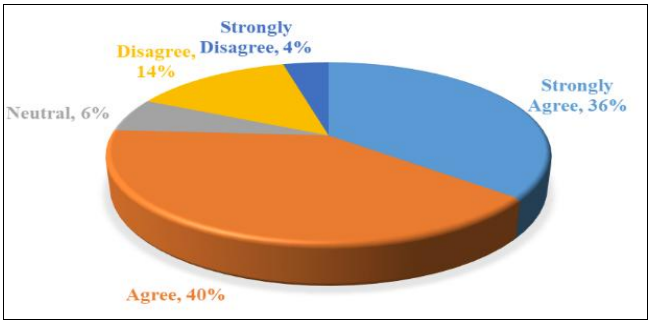


Fig 10: Relevance of ICT to workplace requirements

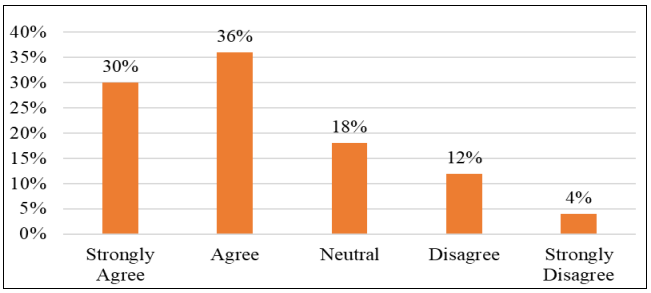
When it comes to whether industrial attachment improves workplace readiness**,** findings in Fig 11 indicate that 36% of respondents agreed and 40% of respondents strongly agreed that ICT content is relevant to workplace requirements. This gives a combined positive response of 60%. Meanwhile, 6% of respondents were neutral, while 14% of them disagreed, and 4% strongly disagreed. Overall, agreement (strongly agree and agree) accounted for 76%, while disagreement (disagree and strongly disagree) accounted for 18%.



Source: Primary data, 2026

Fig 11: Industrial attachment improves workplace readiness

Fig 12 present's data on communication skills are useful for employment. Findings indicate that 30% of respondents agreed and 36% of respondents strongly agreed that communication skills are useful for employment. This gives a combined positive response of 51%. Meanwhile, 18% of respondents were neutral, while 12% of them disagreed, and 4% strongly disagreed.



Source: Field data, 2026

Fig 12: Agreement on how communication skills are useful for employment

Coming to the the assessment of training quality, it focused on five key areas, namely curriculum relevance, training quality, instructor competence, equipment availability and practical training. To start, the findings show that curriculum relevance was generally viewed positively. 48% of respondents rated it as good, while a further 22% rated it as excellent, giving an overall positive assessment of 70%.

Secondly, training quality received a strong positive assessment. 46% of respondents rated it as good and 34% as excellent, meaning that 80% considered the overall quality of training satisfactory or better.

Third, instructor competence received a positive but comparatively weaker assessment. 42% rated instructor competence as good, while 24% rated it as excellent**.** This suggests that most respondents were satisfied with the competence of instructors. However, the comparatively lower overall rating, together with the 16% who rated instructor competence as poor, indicates a need for continuous professional development, particularly in modern teaching methods, practical instruction and the application of current industry knowledge.

Third, equipment availability was also rated favourably, with 48% of respondents rating it good and 30% excellent. The finding suggests that learners generally have access to the equipment necessary for their training.

Practical training was among the strongest-rated aspects of training quality. 48% of respondents rated it good**,** while 32% rated it excellent, resulting in a combined positive assessment of 80%.

Table 1: Assessment of training quality

Training Quality Dimension	Very Poor (%)	Poor (%)	Fair (%)	Good (%)	Excellent (%)	Positive Assessment
Curriculum relevance	4%	4%	22%	48%	22%	70%
Training quality	2%	6%	6%	46%	43%	80%
Instructor competence	0%	8%	9%	42%	24%	66%
Equipment availability	0%	6%	5%	24%	15%	78%
Practical Training	2%	6%	10%	48%	32%	80%

Source: Primary data,2026

When it comes to extent of employability, the distribution from findings was as follows, to 26% rated the training programme to have prepared students for employment or self-employment, while great extent was rated for 44%. Moderate extent accounted for 20%, while small extent was at 8%, and Not at all accounted for 2%). A combined 70% reported a very great or great extent, while 30% reported a moderate, small or no extent.

Table 2: Extent to which training prepared respondents for employment

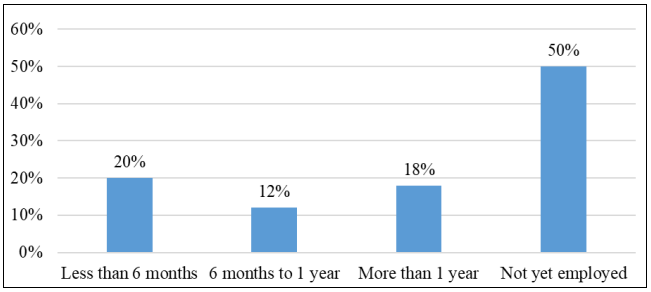
Response	Frequency	Percentage (%)
To a very great extent	13	26%
To a great extent	22	44%
To a moderate extent	10	20%
To a small extent	4	8%
Not at all	1	2%

Source: Researcher's data, 2026

The following suggestions were made on curriculum improvements. Increase entrepreneurship training, business start-up support and links to local employers so trainees can move into self-employment. Introduce more ICT and digital skills across programmes, including digital marketing, online business and basic computer applications. Update equipment and tools to reflect current workplace technology, strengthen practical lessons, and expand industrial attachments. Strengthen partnerships with local businesses and workshops so trainees receive relevant workplace exposure and mentorship. Increase funding for consumables, modern machinery and maintenance of training equipment, especially for practical subjects.

4.2 Presentation of Results Based on Thematic Area Developed from Objective Two: Employment Outcomes of Vocational Education Training Graduates

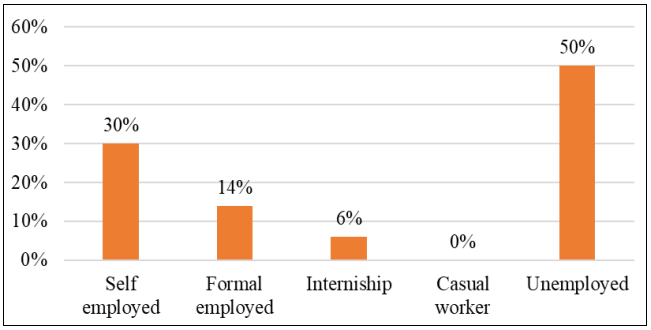
This section focused on the employment outcomes of vocational education training graduates. The findings in Fig 13 below indicate that those who were employed in less than 6 months 20% while 6 months to 1 year were 12%. Additionally, those who secured employment in more than 1 year accounted for 18%, while those who have not yet employed were 50%.



Source: Primary data, 2026

Fig 13: Time taken to secure employment

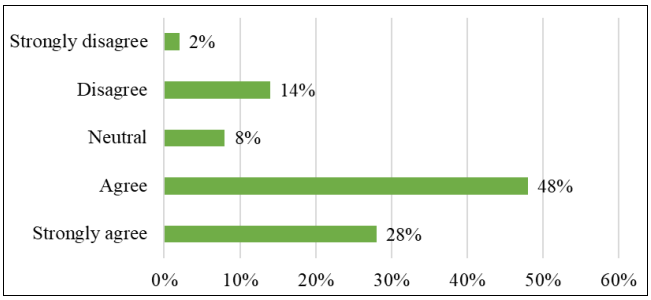
On the type of employment type secured, Out of those employed, 30% were self-employed, 14% were in formal employment, and 6% were in internship while 50% were unemployed.



Source: Field data, 2026

Fig 14: Current employment type

On chances of employability, the responses were as follows; 28% strongly agreed that technical training increased their chances of being employed. Another 24% agreed with 8% remaining neutral. On the other hand, 14% disagreed and 2% strongly disagree. Thus, 76% agreed or strongly agreed, while 24% were neutral or disagreed.



Source: Primary data, 2026

Fig 15: Agreement on whether training improved employability

Furthermore, on the ways of how the vocational training programme influenced employment opportunities or livelihood, the findings reported were as follows; The training provided practical skills that can be used to take small contracts and generate income while looking for formal employment. The skills have supported small-scale

businesses and piecework, particularly where graduates have access to tools and local markets. The programme improved confidence and employability, although access to capital and equipment remains a major barrier to self-employment. The programme improved career prospects, but stronger employer linkages and business start-up support are still needed.

Industrial exposure and practical skills made it easier to understand workplace expectations and identify income-generating opportunities. Practical skills usable for small contracts and income generation were mentioned by 30% of respondents while support to small-scale businesses and piecework by 20%. Moreover, improved confidence and employability, although constrained by capital and equipment was also mentioned, improved career prospects but a need for stronger employer linkages and business start-up support and industrial exposure helping respondents understand workplace expectations and identify income opportunities.

4.3 Presentation of Results Based on Thematic Area Developed from Objective Three: Challenges Affecting Implementation of Vocational Education Training Programmes

The findings indicate that respondents identified several challenges affecting the effective implementation of vocational education and training programmes. Limited access to modern technology emerged as the most frequently mentioned challenge. Respondents indicated that inadequate access to up-to-date technological tools can make it difficult for learners to acquire skills that correspond with contemporary workplace requirements. This may reduce the ability of training institutions to expose learners to modern production methods and digital technologies.

Another group of respondents highlighted limited entrepreneurship support as a major challenge. They explained that although vocational training equips learners with practical skills, graduates may struggle to establish businesses when they lack business-development guidance, start-up support, access to finance and mentorship.

Respondents also identified limited training equipment as a significant constraint. They suggested that inadequate or outdated equipment can reduce opportunities for hands-on learning and prevent learners from gaining sufficient practical experience. Since vocational education is strongly dependent on practical instruction, limitations in training equipment can affect the extent to which graduates are prepared for actual workplace conditions.

Transport and access challenges were also reported by respondents. These challenges were associated with difficulties experienced by learners in accessing training institutions and, in some cases, accessing opportunities outside the institution.

Inadequate funding was another important concern raised by respondents. They indicated that insufficient financial resources can affect the acquisition of equipment, maintenance of facilities, procurement of training materials and implementation of practical activities. Limited funding can therefore have implications across several aspects of training delivery.

Some respondents pointed to the high cost of training materials as an additional challenge. They explained that expensive materials may limit the frequency with which learners undertake practical exercises. This can particularly affect students who depend on their own resources to obtain materials required for practical assignments and training activities.

Respondents further identified limited industrial attachment opportunities. They indicated that opportunities to gain workplace experience are important because they allow learners to apply classroom knowledge in real employment environments. Limited attachment opportunities may therefore create a gap between theoretical learning and the practical expectations of employers.

Weak employer-institution linkages were also identified as a challenge. Respondents suggested that stronger relationships between training institutions and employers could improve industrial attachments, curriculum development, internships and employment opportunities for graduates. Closer collaboration could also enable institutions to understand emerging skills requirements within the labour market.

Finally, respondents identified a shortage of qualified instructors as a challenge affecting training delivery. They suggested that inadequate numbers of appropriately qualified instructors can increase pressure on available trainers and may affect the quality of practical instruction. Continuous professional development was also viewed as important to ensure that instructors remain familiar with changing technologies and industry practices.

On the extent to which the identified challenges affect programme implementation, the findings indicate that the identified challenges have a considerable effect on the implementation and overall effectiveness of the vocational education and training programme. The challenges do not affect only one aspect of the programme, rather, they influence training delivery, practical skills development, learner participation, employability and the ability of graduates to transition into employment or self-employment.

Limited access to modern technology has a substantial effect on programme implementation because vocational training increasingly requires learners to work with current technologies and digital tools. Where modern technology is unavailable or inadequate, learners may acquire theoretical knowledge without sufficient exposure to the technologies used in contemporary workplaces. This can create a skills gap between training and actual labour-market requirements.

Limited training equipment similarly affects the practical component of the programme. Respondents indicated that inadequate equipment reduces opportunities for hands-on practice. Consequently, learners may not receive sufficient time to practise the competencies required in their respective trades. This can affect their confidence and readiness when they enter employment or attempt to establish their own businesses.

Limited entrepreneurship support also affects the programme's ability to translate skills into livelihoods. Although learners may complete training with technical skills, the absence of adequate entrepreneurship guidance, business mentorship, financial support and start-up opportunities can make it difficult for graduates to become self-employed. This limits the extent to which vocational training can contribute to employment creation.

Transport and access challenges affect programme implementation by making it more difficult for some learners to attend training consistently or access opportunities outside the institution. Such challenges can interfere with participation in practical activities, workplace exposure and other programme-related activities. In the long

term, this may contribute to unequal training experiences among learners.

Inadequate funding has a broad effect because financial resources are required for equipment acquisition, maintenance of facilities, procurement of training materials and other operational activities. When funding is insufficient, institutions may be unable to respond adequately to emerging training needs. This can consequently affect the quality and sustainability of programme implementation.

The high cost of training materials can directly limit practical learning. Where learners or institutions cannot afford sufficient materials, practical exercises may be reduced or shared among many learners. This means that learners may have fewer opportunities to repeatedly practise specific skills, potentially weakening their competence.

Limited industrial attachment opportunities affect the transition between institutional learning and the workplace. Industrial attachment provides an opportunity for learners to apply classroom knowledge in real working environments and understand workplace expectations. When such opportunities are limited, graduates may complete their programmes with less exposure to actual workplace conditions, which can affect their readiness for employment.

Weak employer-institution linkages further reduce the effectiveness of the programme because employers can provide valuable information about changing skills requirements, internship opportunities and employment prospects. Weak collaboration may therefore contribute to a mismatch between the skills taught by the institution and those demanded by employers. Stronger partnerships could also improve the transition of graduates from training into employment.

Finally, the shortage of qualified instructors affects the capacity of the institution to provide effective instruction. Where there are insufficient qualified trainers, existing instructors may face heavier workloads, potentially reducing the amount of individual attention available to learners. It may also limit the institution's ability to introduce new technical areas or respond to changing industry requirements.

4.4 Discussion of Results

This section discusses the findings presented in Chapter four in relation to the literature reviewed in Chapter Two. Under the background characteristics of the respondents who participated in the study the characteristics considered included gender, age, education level, employment status, programme of study and respondent category.

The first objective focused on the effectiveness of the VET curriculum in meeting labour-market demands. The findings indicate that the VET curriculum was generally responsive to labour-market requirements. A combined 64% of respondents agreed or strongly agreed that the curriculum was relevant to current workplace needs, compared with only 12% who disagreed or strongly disagreed. This suggests that the programme provides a reasonably strong foundation for skills development and workplace preparation. The finding is consistent with the literature reviewed in Chapter Two, which argues that effective VET systems should be based on demonstrable workplace competencies and should respond directly to employer needs (OECD, 2021 [20]; UNESCO & World Bank, 2022).

Practical skills were positively assessed by 58% of respondents, while 26% disagreed or strongly disagreed. Although the majority viewed practical training positively, the negative response indicates that the quality of practical skills development is not uniform. This finding is consistent with UNESCO and World Bank (2022), who emphasise competency-based education and work-based learning as mechanisms for improving workplace readiness. It also confirms the literature's argument that VET institutions need adequate equipment and strong employer participation to deliver authentic practical competencies.

Entrepreneurship preparation received a positive response from 54% of respondents, while 22% disagreed or strongly disagreed. This indicates that entrepreneurship is contributing to the programme's employment-creation role, although it is not yet as strongly perceived as some other components. The finding agrees with Zambian evidence that entrepreneurship education enables VET graduates to create their own employment, especially where formal-sector opportunities are limited (Mubanga, Chikweche & Kalumba, 2019; Mumba & Chanda, 2021).

ICT content was considered relevant to workplace requirements by 60% of respondents, while 20% disagreed or strongly disagreed. This is consistent with UNESCO (2025) [31], which calls for VET systems to respond to digitalisation and emerging labour-market demands. The Chapter Two literature also notes that rapid technological change requires institutions to continuously update curricula and equipment (World Bank, 2021; ILO, 2022) [37, 15]. Thus, the positive finding demonstrates progress, but the 20.0% negative response shows that digital competencies still require strengthening.

Industrial attachment emerged as a major strength, with 76% agreeing or strongly agreeing that it improves workplace readiness. This strongly supports the literature on work-based learning, which shows that internships, apprenticeships and industry attachments facilitate school-to-work transitions because learners acquire experience in authentic work environments (UNESCO & World Bank, 2022). It is also consistent with ILO (2021) [14], which associates workplace readiness and transferable skills with stronger labour-market absorption.

Training quality was rated good or excellent by 80% of respondents, practical training also by 80.0%, and equipment availability by 78%, and curriculum relevance by 70.0%, and instructor competence by 66%. These findings show a relatively strong training foundation, especially in practical learning. However, instructor competence recorded the lowest positive assessment. This is consistent with OECD (2020) [19] and UNESCO-UNEVOC (2021) [33], which identify shortages of instructors with current industry knowledge and limited professional development as persistent VET challenges.

In summary, the findings show that the VET curriculum was generally effective in meeting labour-market demands, with 64% confirming its relevance to current workplace needs. Practical skills were positively assessed by 58%, entrepreneurship preparation by 54%, and ICT content by 60%. Industrial attachment was the strongest area, with 76% indicating that it improves workplace readiness. Furthermore, 80% rated training quality as good or excellent, 80% rated practical training positively, 78% assessed equipment availability positively, 70% confirmed

curriculum relevance, and 66% rated instructor competence positively.

The second objective, focused on employment outcomes. This section presents a more complex picture. Only 20% secured employment within six months, 12% between six months and one year, and 18% after more than one year, while 50% had not yet secured employment. Current employment status showed that 24% were in formal employment, 30% were self-employed, 8% were in casual employment and 6% were in internship, while 32% were unemployed. The findings therefore suggest that VET supports labour-market participation, but formal employment remains limited and self-employment is a significant pathway.

The 30% self-employment rate is consistent with the Chapter Two literature. TEVETA (2021) [24] reports substantial self-employment among Zambian VET graduates because formal-sector vacancies are limited. Mumba and Chanda (2021) similarly found that vocational graduates in rural Zambia use acquired skills in construction, repair, manufacturing and other small enterprises. The present findings therefore confirm that VET contributes to employment creation through self-employment as well as formal employment.

Perceptions of employability were strongly positive. A combined 76% agreed or strongly agreed that training improved employability, 60% indicated that acquired skills helped them secure employment, 66% agreed that training created income-generating opportunities, 68% agreed that it prepared them for self-employment, and 72% agreed that employers value the skills acquired. These results are consistent with UNESCO (2025) [31], which emphasises competency-based training, employer engagement and lifelong learning as mechanisms for strengthening employability.

The difference between positive employability perceptions and actual employment is important. Although 76% perceived improved employability, half of respondents had not yet secured employment. This suggests that training alone does not determine employment outcomes. Access to capital, tools, local jobs, employer linkages and wider economic conditions also influence whether skills are converted into sustainable livelihoods. This interpretation is consistent with the literature, which identifies labour-market conditions, institutional support, finance and industry linkages as important intervening factors (African Union, 2024; World Bank, 2021) [1, 37].

The programme was also perceived to make a meaningful contribution to employment preparation, with 70% reporting that training prepared them for employment to a great or very great extent. In addition, 78% rated its contribution to improving employability as good or excellent, while 76% gave a good or excellent rating for employment preparation and income generation. These findings reinforce the literature's conclusion that practical and competency-based VET can strengthen workplace readiness, although stronger labour-market pathways are required to convert readiness into actual jobs.

The third objective focused on the implementation challenges. The leading implementation challenge was limited access to modern technology, reported by 56% of respondents. Limited entrepreneurship support and inadequate training equipment were each reported by 44%, transport or access challenges by 42%, and inadequate funding by 40%. Limited industrial attachment opportunities and high training-material costs were each reported by 30%, weak employer-institution linkages by 28%, and shortage of qualified instructors by 24%. These findings demonstrate that VET effectiveness is affected by technological, financial, institutional and labour-market constraints.

The 56% reporting limited access to modern technology strongly supports the Chapter Two literature. World Bank (2021) [37] and ILO (2022) [15] argue that VET institutions often struggle to update equipment and curricula in response to digitalisation, automation and emerging technologies. The present finding therefore provides empirical support for the argument that technological readiness is essential to modern VET provision.

Inadequate funding, reported by 40%, is also consistent with UNESCO-UNEVOC (2021) [33] and AfDB (2020) [3], who identify inadequate financing as a cause of outdated equipment, insufficient materials and weak infrastructure. The present study similarly found that 16% specifically recommended increased funding for consumables, modern machinery and maintenance. This indicates that financing is directly linked to the quality and sustainability of practical training.

Weak employer-institution linkages were reported by 28%, while 30% identified limited industrial attachment opportunities. These findings are consistent with UNESCO and World Bank (2022), which emphasise employer participation and work-based learning as essential for labour-market alignment. They also support SADC (2023) [22], which associates weak employer engagement with poor graduate absorption. Strengthening partnerships with businesses and workshops is therefore central to improving employment outcomes.

The shortage of qualified instructors, reported by 24%, corresponds with the literature identifying instructor shortages and limited professional development as continuing constraints in VET systems. This is reinforced by the fact that instructor competence received a 66.0% positive rating, below the 80% recorded for overall training quality and practical training. The implication is that investment in equipment should be matched by investment in instructor development.

Respondents' proposed improvements closely reflect the literature. Entrepreneurship and business start-up support and increased ICT/digital skills were each prioritised by 24%; 20% recommended updated equipment and expanded industrial attachments; and 16% each called for stronger business partnerships and increased funding for consumables, machinery and maintenance. These priorities correspond with the literature's emphasis on competency-based curricula, digital transformation, work-based learning, employer engagement and sustainable financing (UNESCO, 2025 [31]; UNESCO & World Bank, 2022; TEVETA, 2021 [24]).

Overall, the findings demonstrate that the VET programme has a positive foundation, but its contribution to employment is moderated by conditions beyond the classroom. The strongest evidence of effectiveness is found in industrial attachment, where 76% agreed or strongly agreed that it improves workplace readiness, and in training quality and practical training, each of which achieved 80% good or excellent ratings. Employability perceptions were

also favourable, with 76% reporting improved employability and 68% indicating improved preparedness for self-employment.

5. Conclusion

The study concludes that the VET curriculum was generally effective in responding to labour-market demands**,** with an overall average positive assessment of approximately 69%. The curriculum was considered relevant to workplace needs, while practical training, training quality, equipment availability and industrial attachment were identified as important strengths. In particular, industrial attachment recorded 76%**,** while training quality and practical training each recorded 80%, demonstrating that the programme provides learners with valuable practical and workplace-oriented competencies. However, areas such as instructor competence accounting for 66%**,** ICT content 60% and entrepreneurship preparation 54% require further strengthening to ensure that the curriculum remains responsive to changing labour-market requirements.

The study further concludes that VET contributes positively to employability and employment creation, but there is a significant gap between skills acquisition and actual employment outcomes. Although 76% of respondents indicated that training improved their employability and 70% reported strong employment preparation, only 24% were in formal employment, while 30% were self-employed and 32% remained unemployed. Furthermore, 50% had not secured employment, indicating that completion of VET training does not automatically guarantee employment. Self-employment nevertheless represents an important pathway through which VET contributes to livelihoods. The findings therefore suggest that VET provides a foundation for employment, but stronger job-placement systems, employer linkages, entrepreneurship support and access to finance are required to translate skills into sustainable employment.

Finally, the study concludes that implementation challenges substantially limit the full effectiveness of the VET programme. The challenges recorded an average rating of approximately 38%, with limited access to modern technology being the most prominent challenge at 56%, followed by limited entrepreneurship support and inadequate training equipment at 44% each, transport/access challenges at 42%, and inadequate funding at 40%. These constraints affect the quality of practical training, digital skills development, industry exposure and graduates' ability to establish businesses.

6. Acknowledgement

Firstly, I begin by giving all thanks and glory to Almighty God for granting me the strength, wisdom, and perseverance to reach this stage. Secondly, I'm deeply grateful to my supervisors, Banabas Mulenga for his patience, encouragement, and invaluable guidance. Special thanks goes to my family for understanding during the time of my absence as I attend school.

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