

Technical Education, Vocational and Entrepreneurship Training Authority

# **Research Agenda**

# A Strategic Framework for Enhancing TEVET Sector Research

2025 - 2027

January 2025

Technical Education Vocational and Entrepreneurship Training Authority Private Bag RW 16X, Birdcage Walk, Longacres, Lusaka.

Published by the Technical Education Vocational and Entrepreneurship Training Authority (TEVETA).

www.teveta.org.zm

## © TEVETA, 2025

This publication may be used in part or as a whole, provided that TEVETA is acknowledged as the source of information.

This publication is available on the TEVETA's website: www.teveta.org.zm

Enquiries: Phone: +260211253331-4 /+260211253211 Email: <u>teveta@teveta.org.zm</u> or <u>enquiries@teveta.org.zm</u>

# Table of Contents

1.	Introduction5			
2.	Importance of Research			
3.	Purpose of the Research Agenda			
4.	Concept of Research			
5.	TEVETA's Engagement with Research Community6			
6.	Research Committee			
7.	Focus	Areas of Research	7	
	7.1	Curriculum and Labour Market Needs	7	
	7.2	Effectiveness of TEVET Curriculum Implementation	8	
	7.3	Access to TEVET Programs in Zambia	9	
	7.4	Industry Partnerships	11	
	7.5	Technological Integration	11	
	7.6	Quality Assurance	12	
	7.7	Entrepreneurship Education	12	
	7.8	Gender Inclusivity	13	
	7.9	Policy Analysis and Reform	14	
	7.10	Trainer Training and Professional Development	15	
	7.11	ICT Infrastructure and Access	16	
	7.12	Employment Outcomes and Alumni Success	17	
	7.13	Governance and Management of TEVET Institutions	17	
	7.14	Competence-Based Training (CBT)	18	
	7.15	Effectiveness of TEVET Assessments	20	
8.	Areas	of Priority	21	
	8.1	Competence-Based Training (CBT)	21	
	8.2	Effectiveness of TEVET Assessments	21	
	8.3	Curriculum and Alignment to Labour Market Needs	22	
	8.4	Employment Outcomes and Alumni Success	22	
	8.5	Access to TEVET	22	
	8.6	Quality Assurance	22	
	8.7	Technological Integration	22	
	8.8	Industry Partnerships	22	
9.	TEVE	TA Research and Innovation Implementation Plan	22	
	8.1	Triennial Graduate Tracer Studies	23	
	8.2	Triennial Research and Innovations Exhibition and Symposia	23	
	8.3	Skills Survey	23	

	8.4	Curriculum Review and Development	23		
	8.5	Performance Review	23		
	8.6	Compliance Report	24		
10.	Revi	sion of the Research Agenda	24		
11.	Conclusion24				
12.	Bibli	iography	24		
Appendix: Terms of Reference for the TEVET Research Committee					

## 1. Introduction

The Vision 2030 envisions Zambia as a middle-income country by 2030. To support the Vision 2030, the eight national development plan (8NDP) outlines Zambia's strategic direction for development from 2022 to 2026 with a focus on social economic transformation for improved livelihoods. The 2020 National Technical Education, Vocational and Entrepreneurship Training (TEVET) Policy of Zambia aims to enhance skills development, access, quality, equity, and entrepreneurship in technical education to support national socio-economic growth and development.

For Zambia to realize it's goals, there is need for skilled manpower to support industrial and economic growth. Entrepreneurial skills also play an important role in fostering small and medium scale businesses that can contribute to economic growth by creating employment and improving citizens livelihoods. TEVET sector plays a key role in providing the required skills and fostering an entrepreneurial mindset. To regulate this sector, the government of the republic of Zambia through an act of parliament set up the Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA). The main functions of the authority as stipulated in the TEVETA Act, include the following:

- Regulating, monitoring, and evaluating technical education and vocational training.
- Coordinating the development of a comprehensive TEVET system.
- Promoting quality assurance in TEVET institutions.
- Encouraging private sector participation in TEVET.
- Facilitating the development of skills and competencies.

In the 2021 to 2026 strategic plan, TEVETA envisions itself as a dynamic, credible, and reliable regulator for technical education, vocational, and entrepreneurship training, ensuring a sustainable supply of quality skilled labor. TEVETA hopes to achieve this through improved TEVET regulatory services, enhanced collaboration with stakeholders, and increased access to skills training through various innovative methods. This research agenda provides a road map for research that will generate insights the progress being made in the TEVET sector in Zambia. It identifies the areas of focus and outlines priority themes for the period 2025 to 2027. In so doing guidance is provided to all the players in the sector on the areas that require research.

# 2. Importance of Research

Research is key to the realization of the vision 2030, the 8NDP and the TEVETA strategic plan. It can provide insights into the TEVET system, the success or otherwise of policies and their implementation; and provide information and analyses about the experiences of other countries with similar challenges. It also enables practitioners to test and compare diverse theories and approaches to the provision of TEVET as well as the development of leading-edge information, services and applications for the system. Most importantly, research can make available the evidence on which TEVETA, the Ministry of Technology and Science and the Government of the Republic of Zambia (GRZ) is able to make decisions, review policy and improve upon the sector, both in policy and in practice.

The Authority will ensure that a significant volume of high quality research engages with and contributes to the government's goal of reducing TEVET occupational shortages in the country, especially in priority and scarce skills areas; improving low participation rates in the technical and vocational training system; correcting distortions in the shape, size and distribution of access to TEVET; providing exemplars of good practice and improving the quality and efficiency in the system, its sub-systems and its institutions.

## 3. Purpose of the Research Agenda

The Research Agenda sets out the research needs of the TEVET sector for the period 2025 to 2027. It has been developed to support research planning within the authority, and to signal to stakeholders the areas of research that have been identified as being important in line with the TEVETA mandate.

More specifically, the Research Agenda has been developed to: (a) inform planning and implementation processes within the sector; (b) inform stakeholders of TEVETA's research priorities; (c) signal to funders and development partners what research areas require investment, and (d) assist the Authority to guide resource allocation for research. It is hoped that the research agenda will be used by researchers and research organizations to inform their research planning.

## 4. Concept of Research

For the purposes of the Research Agenda, the term "research" is taken to mean rigorous and systematic enquiry and analysis. Such research may be empirical or theoretical, quantitative or qualitative, applied or basic. It may involve the critique of policy; in-depth analysis of regularly compiled data sets and explanations of trends; observations; case studies and other research investigations, or meta-reviews and analyses. Rigorous evaluation studies of educational and training programmes or interventions, including cost-benefit analyses and impact studies, fall under the research umbrella, as do high level analyses of statistical data.

# 5. TEVETA's Engagement with Research Community

Zambian researchers are part of local, regional and global research communities, contributing to new knowledge and advice, as well as participating critically in the Zambian, regional and international research conversation.

The Authority will engage professionally with the research community to convey its priority interests; improve its own knowledge base; support mutually productive research partnerships with local, regional and international research bodies; enhance its own capacity to manage, conduct, interpret, disseminate and apply research; and test and modify its policy ideas against appropriate research evidence.

The Authority expects researchers to engage robustly with its policies and programmes both as participants and as critics. Research partnerships between TEVETA and researchers create no obligations on either side since each must play its own role with integrity and respect for the other's autonomy.

# 6. Research Committee

Beyond the research projects outlined in Section 9 of this agenda, as well as those planned by the Authority's research unit and the ministry in charge of TEVET, all other research proposals must be reviewed by the Research Committee. The Committee will evaluate these proposals and provide recommendations to management for approval and implementation. The committee shall assess the alignment of each proposal to this research agenda and evaluate the cost versus the envisaged benefits of the proposal. The committee will have four sittings per year. The composition will be as follows:

- Chairperson Representative from a public research institution
- Vice Chairperson Representative from a public university
- Secretary Director Development and Research
- Secretariate All Managers in the Development and Research Division
- Members
  - o All Directors in TEVETA
  - Representatives from:
    - Ministry in charge of TEVET and the ministry in charge of labour
    - TEVET institutions
    - Industry and employer organizations
    - Development partners and NGOs supporting TEVET

## 7. Focus Areas of Research

The Research Agenda includes thirteen key focus areas related to TEVET, which are derived from the TEVETA 2021-2026 strategic plan and the main functions outlined in the act. The themes and topics under each focus area are intended to be complementary, but not exhaustive. They vary in scale and complexity and may require multiple studies. The descriptors for each theme or topic are suggestive rather than definitive. To become actionable, each theme or topic will need a detailed research proposal.

Each focus area has the potential to generate numerous themes and topics, with many possible cross-cutting themes. The following broad focus areas are particularly significant for the TEVET sector. Note that these focus areas are interrelated, not ranked by importance, and do not constitute an exclusive list.

## 7.1 Curriculum and Labour Market Needs

To ensure that the curriculum remains relevant and supports economic development, it must align with the evolving needs of the labor market. Given the rapid advancements and innovations within the labor market, it is crucial that the curriculum is responsive and adaptable to these changes. Therefore, continuous efforts are required to assess and ensure that the TEVET curriculum remains aligned with both labor market demands and technological advancements. The curriculum should also be able to provide for future needs and dynamics of labour. Furthermore, the curriculum should anticipate and address future workforce requirements and labor market dynamics. The theme on evaluating the effectiveness of curriculum alignment in the TEVET sector. This theme emphasizes the critical link between the curricula regulated by TEVETA and the dynamic needs of labour market and technological advancements.

The objective is to investigate how well the TEVET curricula reflect and respond to the evolving demands of the labour market. This includes assessing whether the skills and knowledge imparted to trainees adequately prepare them to meet industry standards, leverage emerging technologies, and adapt to innovative practices.

## Subthemes

- Identifying current and future skills required by the industry.
- Evaluating how curricula are developed and updated.
- Examining partnerships between TEVET institutions and industry stakeholders.
- Technological Advancements: Integrating emerging technologies and digital literacy.
- Assessing the impact of aligned curricula on student employability.
- Assessing the readiness of the TEVET sector to implement Competency-Based Training.

## **Key Research Questions**

- How effectively does the current TEVET curriculum meet the needs of various industries?
- What are the emerging skills and technologies required by the job market that should be integrated into the curriculum?
- What mechanisms does TEVETA use to update and align curricula with industry standards?

## **Suggested Methodology**

- Surveys and interviews with industry and employer stakeholders.
- Comparative analysis of TEVET curricula against labour market requirements.
- Case studies of successful curriculum updates aligned to labour market needs

## 7.2 Effectiveness of TEVET Curriculum Implementation

The theme focuses on evaluating the effectiveness of TEVET curriculum implementation in training institutions. It emphasizes understanding how the curriculum is delivered, the infrastructure and tools supporting its implementation, and the preparedness of trainers to facilitate meaningful learning experiences.

The theme also seeks to address critical aspects such as the adequacy and functionality of implementation support infrastructure, tools, and equipment. Additionally, it explores the technical and pedagogical competencies of trainers, identifying areas where further development or support may be needed to ensure the curriculum meets its intended goals.

This theme provides a foundation for examining the operational challenges and opportunities within TEVET institutions, offering a pathway to improving the quality of training and its alignment with industry standards and expectations.

- Evaluating the availability, adequacy, and functionality of infrastructure, tools, and equipment required for effective training delivery in TEVET institutions.
- Examining the technical and pedagogical competencies of trainers and identifying gaps in their ability to deliver the TEVET curriculum effectively.

# **Key Research Questions**

- Do TEVET institutions have the necessary infrastructure, tools, and equipment to support the effective delivery of training programs?
- What additional technical and pedagogical skills are needed by trainers to enhance their efficiency and effectiveness in delivering training?

# Suggested Methodology

- Surveys and interviews with industry trainers and institutional management.
- Document review
- Observation

# 7.3 Access to TEVET Programs in Zambia

The theme focuses on exploring the factors that influence enrollment and participation in Technical Education, Vocational, and Entrepreneurship Training (TEVET) programs. The objective is to investigate the barriers that hinder access and the facilitators that encourage participation, shedding light on the dynamics that shape access to these crucial programs.

This theme delves into various aspects, such as socioeconomic challenges, geographic disparities, institutional capacities, and policy frameworks that impact individuals' ability to enroll in and benefit from TEVET programs. By understanding these influences, the study aims to highlight the underlying causes of disparities in access and provide insights into how these challenges can be addressed.

At its core, this theme emphasizes the importance of creating equitable opportunities for all potential learners, ensuring that TEVET programs are inclusive and accessible. By identifying key barriers and facilitators, this focus seeks to inform strategies for improving participation rates, enhancing the reach and relevance of TEVET programs, and ultimately contributing to workforce development in Zambia.

- Urban vs. rural access to TEVET institutions; Transportation and infrastructure challenges
- Tuition fees and other costs associated with TEVET programs, Availability of scholarships and financial aid
- Public awareness of TEVET programs; Societal perceptions and stigmas related to vocational training
- Government policies supporting TEVET; Implementation and effectiveness of existing policies
- Availability of qualified instructors; Quality and relevance of curriculum
- Gender disparities in TEVET enrollment; Inclusivity for differently abled individuals

# **Key Research Questions**

- What are the main geographical barriers to accessing TEVET programs in Zambia?
- How do financial constraints affect the enrollment and retention of students in TEVET programs?
- What is the level of awareness and perception of TEVET programs among the Zambian population?
- How effective are the current government policies in promoting access to TEVET programs?
- What is the capacity of TEVET institutions in terms of infrastructure, qualified instructors, and curriculum relevance?
- How do gender and inclusivity issues impact access to TEVET programs?

# Suggested Methodology

- Reviewing existing studies, reports, and policy documents related to TEVET in Zambia and similar contexts.
- Surveys with current and potential TEVET students, educators, and policy makers to collect data on access barriers.
- Analyzing access trends and patterns.
- Interviews with key stakeholders, including students, educators, policy makers, and community leaders, to gain in-depth insights into access issues.
- Focus groups with diverse participants to explore perceptions and attitudes towards TEVET programs.
- Case studies of specific TEVET institutions to understand local challenges and best practices.
- Examining existing policies and their implementation to assess their impact on TEVET accessibility.
- Use Geographic Information System (GIS) tools to map the distribution of TEVET institutions and identify geographical disparities in access.

# 7.4 Industry Partnerships

The research theme centers on the role of the Technical Education, Vocational, and Entrepreneurship Training Authority (TEVETA) in encouraging and facilitating collaborations between TEVET institutions and industries. This theme aims to explore how TEVETA promotes partnerships that enhance the relevance of training programs, address industry skill demands, and improve graduate employability. By focusing on these collaborations, the theme seeks to provide a framework for strengthening industry-education linkages, ensuring that TEVET institutions effectively respond to the evolving needs of the labour market.

## Subthemes

- Types and structures of partnerships between TEVET and industry.
- Advantages of partnerships for students, institutions, and industry.
- Barriers and challenges faced in forming and maintaining partnerships.
- TEVETA's initiatives and support for industry partnerships.
- Effect of partnerships on skills development and job placement.

## **Key Research Questions**

- How effective are current partnerships between TEVET institutions and industry?
- What role does TEVETA play in fostering these partnerships?
- What are the benefits and challenges of these partnerships for stakeholders?

## **Suggested Methodology**

- Case studies of successful industry partnerships.
- Interviews with industry partners and TEVET administrators.
- Surveys to gauge the impact of partnerships on skills development and job placement.

# 7.5 Technological Integration

The theme centers on evaluating the effectiveness of incorporating emerging technologies into TEVET programs. It explores how the adoption of innovative tools and digital resources can enhance teaching and learning processes, improve skill acquisition, and better align graduate competencies with labour market requirements. This theme seeks to understand the opportunities, challenges, and outcomes associated with embedding technology in technical and vocational education and training.

## Subthemes

- Methods and initiatives to adopt new technologies.
- Programs for training educators and students in new technologies.
- Integration of technology in TEVET programs
- Availability and quality of technological infrastructure in TEVET institutions.
- Challenges faced in adopting and implementing new technologies.
- Effects of technological integration on student learning outcomes and employability.

## **Key Research Questions**

• How has TEVETA facilitated the adoption of emerging technologies in TEVET institutions?

- What impact does technological integration have on student learning outcomes and employability?
- What are the barriers to technological adoption in TEVET institutions?

# Suggested Methodology

- Field studies and evaluations of TEVET institutions.
- Surveys with students, instructors, and administrators.
- Analysis of technology adoption trends and outcomes.

# 7.6 Quality Assurance

The research theme seeks to explore the effectiveness of TEVETA's quality assurance systems in fostering compliance with ISO standards. The primary objective is to assess how well these systems align with the requirements for ISO Certification and to evaluate TEVETA's capabilities and progress toward accreditation as an ISO 2100 accrediting body. This theme will provide insights into the strengths and areas for improvement within TEVETA's quality assurance framework, ultimately supporting its goal of maintaining internationally recognized standards in technical and vocational education and training.

## Subthemes

- Examination of TEVET accreditation standards and procedures.
- Ongoing assessment and evaluation of institutional performance.
- Mechanisms for collecting feedback and implementing improvements.
- Ensuring adherence to quality standards and regulations.
- Evaluating the overall impact of quality assurance on education standards.
- To evaluate TEVETA's readiness toward ISO Certification, and accreditation of TEVETA as an accrediting body.

# **Key Research Questions**

- How effective are TEVETA's quality assurance processes in maintaining high standards in TEVET institutions?
- What are the strengths and weaknesses of the current quality assurance framework?
- How do TEVET institutions implement and comply with quality assurance standards?

## **Suggested Methodology**

- Audits and evaluations of TEVET institutions.
- Interviews with quality assurance personnel.
- Analysis of quality assurance reports and outcomes.

# 7.7 Entrepreneurship Education

Entrepreneurship education is increasingly recognized as a vital component of technical and vocational training. This research theme seeks to assess the effectiveness of the TEVET entrepreneurship training program in equipping learners with the knowledge, skills, and attitudes required to create and sustain business ventures. By examining the program's

structure, delivery methods, and outcomes, the study aims to determine its relevance to current market needs and its impact on graduate employability and self-reliance.

The evaluation will consider various factors, including the alignment of training content with entrepreneurial demands, the capacity of trainers, and the availability of resources that support entrepreneurial innovation. The goal is to identify strengths and areas for improvement within the program, providing evidence-based recommendations to enhance the development of entrepreneurial competencies among TEVET graduates. This research will contribute to shaping a more effective framework for fostering entrepreneurship, critical for driving economic growth and reducing unemployment in Zambia.

## Subthemes

- Incorporation of entrepreneurship education into TEVET curricula.
- Evaluating the outcomes of entrepreneurship training.
- Availability of support and resources for student startups.
- Use of innovative teaching methods in entrepreneurship education.
- Contribution of entrepreneurship education to self-employment and job creation.

## **Key Research Questions**

- How effective is the integration of entrepreneurship education into TEVET programs?
- What are the outcomes of entrepreneurship training for students?
- How can entrepreneurship education be improved to foster innovation and selfemployment?

## **Suggested Methodology**

- Surveys with students and graduates.
- Interviews with entrepreneurship educators.
- Analysis of entrepreneurship program outcomes.

# 7.8 Gender Inclusivity

The research on this theme focuses on assessing the impact of existing policies aimed at enhancing female participation in traditionally male-dominated fields within the TEVET sector. The studies under this theme will evaluate the effectiveness of these interventions in breaking down barriers and fostering gender inclusivity. Analysis of policy implementation, success stories, and persistent challenges will provide actionable recommendations for creating a more equitable and inclusive environment in TEVET institutions. This work aspires to not only improve gender balance but also empower women to thrive in technical and vocational careers, thereby contributing to broader socio-economic development.

- Policy Implementation: Analysis of gender inclusivity policies and their implementation.
- Female Enrollment Rates: Trends in female enrollment in TEVET programs.
- Support Programs: Programs and initiatives to support female students.
- Barriers to Participation: Identifying and addressing barriers to female participation.
- Impact of Inclusivity Efforts: Assessing the outcomes of gender inclusivity initiatives.

## **Key Research Questions**

- What initiatives has TEVETA implemented to promote gender inclusivity in TEVET?
- What are the barriers to female participation in technical and vocational training?
- How successful have gender inclusivity programs been in achieving their objectives?

## **Suggested Methodology**

- Surveys with female students and graduates.
- Interviews with TEVETA officials and educators.
- Case studies of gender inclusivity initiatives.

## 7.9 Policy Analysis and Reform

The Policy Analysis and Reform research theme is focused on critically evaluating the effectiveness of TEVETA's regulatory framework in guiding the TEVET sector in Zambia. This theme aims to identify strengths, weaknesses, and gaps within the current policies and regulations that govern the sector. Through a thorough analysis, the research on this theme will provide evidence-based recommendations for reforms that can enhance the operational efficiency, responsiveness, and overall impact of TEVETA's regulatory framework. This will contribute to a more robust policy environment that supports the growth and relevance of the TEVET sector in meeting Zambia's developmental needs.

- Evaluation of current regulatory policies and their impact.
- Identifying gaps and areas needing policy reform.
- Engagement of stakeholders in policy development and reform.
- Benchmarking TEVET policies against international best practices.
- Assessing the influence of policies on TEVET outcomes.

# **Key Research Questions**

- How effective are current TEVETA policies in promoting quality and relevance in TEVET?
- What policy gaps exist that need to be addressed?
- How can TEVETA's regulatory framework be improved to better support national development goals?

## Suggested Methodology

- Policy analysis and review.
- Stakeholder consultations and interviews.
- Comparative studies with other countries' TEVET policies.

# 7.10 Trainer Training and Professional Development

The theme emphasizes the importance of equipping TEVET trainers with the skills, knowledge, and competencies required to deliver high-quality instruction. It focuses on understanding how TEVETA-regulated training programs for trainers influence the overall effectiveness of teaching and learning within TEVET institutions.

The research on this theme will ensure that trainers are not only well-prepared but also continuously supported through professional development opportunities. This, in turn, contributes to the advancement of TEVET education standards, aligning training with industry demands and fostering improved learner outcomes.

- Evaluating the impact of current training programs.
- Identifying ongoing professional development needs of trainers.
- Best practices in designing effective training programs.
- Strategies for promoting continuous professional development.
- Assessing the effect of training on teaching practices and student outcomes.

# **Key Research Questions**

- How effective are current trainer training and professional development programs?
- What are the professional development needs of TEVET trainers?
- How can TEVETA improve trainer training and ongoing professional development?

# Suggested Methodology

- Surveys with TEVET instructors.
- Evaluation of training program outcomes.
- Interviews with teacher trainers and educational experts.

# 7.11 ICT Infrastructure and Access

The theme focuses on evaluating the role of the TEVETA in promoting the development and accessibility of Information and Communication Technology (ICT) infrastructure in TEVET institutions. This research aims to assess how TEVETA supports the integration of ICT into the education and training framework within these institutions. It will explore the extent to which TEVETA has facilitated the provision of essential ICT tools, resources, and connectivity, and how these contribute to enhancing teaching, learning, and overall institutional operations. Understanding the challenges and opportunities in ICT infrastructure, the research will provide insights into how TEVETA can further improve access to modern technologies, ensuring that TEVET institutions remain aligned with global advancements and effectively meet the needs of their students.

## Subthemes

- Current State of ICT: Evaluating the status of ICT infrastructure.
- Support and Funding: TEVETA's role in supporting ICT development.
- Barriers to ICT Access: Identifying challenges to effective ICT integration.
- Impact on Learning: Effect of ICT access on teaching and learning outcomes.
- Future Needs: Planning for future ICT needs and advancements.

# **Key Research Questions**

- What is the current state of ICT infrastructure in TEVET institutions?
- How has TEVETA supported ICT infrastructure development?
- What impact does ICT access have on teaching and learning outcomes?

## Suggested Methodology

- Surveys and field visits to TEVET institutions.
- Interviews with ICT coordinators and administrators.

• Analysis of ICT usage and outcomes.

# 7.12 Employment Outcomes and Alumni Success

The theme will provide a mechanism for tracking the career paths and employment outcomes of TEVET graduates. Its primary objective is to understand the long-term impact of TEVET education on graduates' professional journeys. It aims to explore the types of employment opportunities TEVET graduates secure, their levels of job satisfaction, and how their education aligns with the skills required in the labor market.

The focus is on gathering insights into the industries and sectors where alumni are employed, the relevance of their qualifications to their work, and the overall success they achieve in their careers. The findings from this theme will help in assessing the effectiveness of TEVET programs in preparing graduates for meaningful and sustainable employment, contributing to the continuous improvement of the education and training provided.

## Subthemes

- Systems for tracking graduate employment outcomes.
- TEVETA and training institutions' support for alumni in career development.
- Identifying factors contributing to alumni success.
- The role of alumni networks in supporting graduates.
- Long-term tracking of graduate career progression and success stories.

# **Key Research Questions**

- What are the employment outcomes of TEVET graduates?
- How effectively does TEVETA support alumni in their career development?
- What factors contribute to the success of TEVET graduates in the job market?

# Suggested Methodology

- Longitudinal Studies to track the career paths and employment outcomes of TEVET graduates.
- Surveys with alumni and employers to gather data on employment outcomes and success factors.
- Trend Analysis to identify patterns and best practices.

# 7.13 Governance and Management of TEVET Institutions

The theme evaluates the practices and structures that guide the leadership and operational functions of these institutions in Zambia. It seeks to explore how governance frameworks and management systems contribute to the effectiveness and efficiency of TEVET institutions in delivering quality education and training. This includes examining the roles of management boards, institutional leadership, decision-making processes, and accountability mechanisms that are in place.

The focus is on understanding the relationship between governance practices and the quality of education, the alignment of training programs with industry needs, and the overall impact of management on institutional performance. It also involves assessing how leadership ensures that TEVET institutions remain responsive to the evolving demands of the labor

market and contribute to the development of skilled, employable graduates. The aim is to shed light on the factors that influence the governance and management of TEVET institutions, identifying opportunities for improvement to enhance their role in the broader educational and economic landscape of Zambia.

# Subthemes

- Analysis of governance frameworks and their effectiveness.
- Role of leadership in the management of TEVET institutions.
- Engagement of stakeholders (students, staff, industry) in governance.
- Systems for ensuring accountability and transparency in management.
- Effectiveness of policy implementation and regulatory compliance.

## **Key Research Questions**

- What are the current governance structures and management practices of TEVET institutions in Zambia?
- How do these practices influence the performance and outcomes of these institutions?
- What are the best practices in governance and management that can be adopted by TEVET institutions in Zambia?

# Suggested Methodology

- Interviews with Management Board members, TEVETA, and Ministry of Technology and Science staff to understand current governance and management practices.
- Surveys of staff in TEVET institutions to gather data on governance and management practices.
- Analysis of governance and management structures to identify areas that need improvement

# 7.14 Competence-Based Training (CBT)

The global shift in skills development has increasingly emphasized the need for education and training systems to produce competent, job-ready graduates who meet the demands of modern labor markets. In response, the Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA) in Zambia is transitioning from traditional training models, which are largely theoretical and exam-focused, to Competence-Based Training (CBT). This transformative approach prioritizes the acquisition of practical skills and competencies, enabling graduates to perform specific tasks effectively in real-world settings.

The transition to CBT represents a significant paradigm shift in Zambia's Technical Education, Vocational, and Entrepreneurship Training (TEVET) sector. It seeks to bridge the gap between training outcomes and industry needs, ensuring that graduates possess the skills and competencies required to thrive in an increasingly competitive job market. However, the transition process is complex and requires a thorough understanding of various factors, including institutional readiness, stakeholder engagement, curriculum alignment, and the challenges and opportunities inherent in implementing such a system.

- Assessment of existing policies and guidelines supporting CBT implementation.
- Analysis of alignment between TEVETA's strategic objectives and CBT principles.
- Engagement of trainers, trainees, employers, and policymakers in the transition process.
- Perceptions and attitudes toward CBT adoption and implementation.
- Evaluation of infrastructure, resources, and capacity for delivering CBT.
- Training and professional development of trainers to align with CBT standards.
- Analysis of TEVET curricula to determine compatibility with CBT principles.
- Extent to which curricula address labour market demands, and future skills needs.
- Comparison of graduate outcomes.
- Employer satisfaction with the skills of CBT-trained graduates.
- Identification of barriers to successful CBT implementation.
- Exploration of opportunities to enhance CBT adoption and sustainability.
- Assessment of long-term viability and scalability of CBT in Zambia's TEVET sector.
- Role of partnerships with industry and other stakeholders in sustaining CBT initiatives.

# **Key Research Questions**

- What are the critical steps TEVETA has taken to transition from traditional training to competence-based training?
- What frameworks, policies, and guidelines are in place to support the transition?
- How are stakeholders involved in the transition process?
- What is the level of understanding and acceptance of CBT among key stakeholders?
- What is the current capacity of TEVET institutions to implement CBT?
- How well are trainers equipped to deliver competence-based training?
- Are TEVET curricula aligned with the principles of competence-based training and labour market demands?
- How does the shift to CBT impact the quality of training provided by TEVET institutions?
- What is the effect of CBT on the employability and skill levels of graduates compared to traditional training?
- What challenges are encountered during the transition to CBT?
- What opportunities exist to improve the adoption and implementation of CBT in the TEVET sector?

# Suggested Methodology

- Surveys targeting stakeholders to assess their experiences and perceptions of CBT.
- Analysis of graduate outcomes to compare the effectiveness of CBT versus traditional training.
- In-depth interviews with TEVET management, curriculum developers, and industry partners to understand challenges and opportunities.

- Focus group discussions with trainers and trainees to explore their experiences with CBT.
- Policy documents review to assess alignment with CBT principles.

# 7.15 Effectiveness of TEVET Assessments

Assessment and certification are fundamental components of the Technical Education, Vocational, and Entrepreneurship Training (TEVET) system, playing a pivotal role in ensuring the credibility and quality of training outcomes. With TEVETA's shift towards Competence-Based Training (CBT), the focus has moved from traditional, theoretical evaluations to assessments that reliably measure practical skills and workplace readiness.

This theme explores the effectiveness of the TEVET assessment system by examining its various elements, including continuous and summative assessments, test development processes, administration protocols, result processing mechanisms, and the enhancement of the Learner Data Management System (LDMS). The objective is to align assessment practices with CBT principles, ensuring they are robust, fair, and responsive to the evolving demands of industry and learners alike.

# Subthemes

- Evaluation of policies and practices for continuous assessment.
- Integration of formative assessments to support competency development.
- Analysis of the effectiveness of end-of-training evaluations in measuring overall competencies.
- Alignment of summative assessments with industry standards and CBT principles.
- Frameworks for designing valid, reliable, and competency-aligned assessment tools.
- Quality assurance mechanisms in test creation and review.
- Examination of operational procedures and logistical challenges in conducting assessments.
- Strategies to enhance fairness and accessibility during the administration process.
- Assessment of result processing accuracy, timeliness, and stakeholder satisfaction.
- Mechanisms for feedback delivery to learners and training institutions.
- Role of the LDMS in tracking assessment data and learner progress.
- Opportunities to improve the efficiency and integration of the LDMS with assessment processes.

# **Key Research Questions**

- How well do the existing guidelines for continuous assessment align with the principles of Competence-Based Training (CBT)?
- What challenges are faced in implementing continuous assessment in TEVET institutions?
- Are the summative assessment guidelines effective in measuring overall learner competence?

- What are the perceptions of stakeholders regarding the fairness and reliability of summative assessments?
- To what extent do test development processes ensure the validity and reliability of TEVET assessments?
- How effectively are test items aligned with industry-specific competencies?
- What logistical, operational, and procedural challenges exist in the administration of TEVET assessments?
- How can the administration process be improved to enhance efficiency and equity?
- How reliable and timely is the current system for processing TEVET assessment results?
- What gaps exist in result processing that may impact learner outcomes or institutional performance?
- How can the LDMS be enhanced to improve data accuracy, accessibility, and integration with assessment systems?
- What are the perceptions of stakeholders regarding the effectiveness of the LDMS in supporting assessments and certification?

# Suggested Methodology

- Surveys of assessors, trainers, and learners to gather data on the implementation and perception of continuous and summative assessment guidelines.
- Analysis of LDMS data to assess accuracy, timeliness, and alignment with assessment results.
- In-depth interviews with policymakers, curriculum developers, and institutional administrators to explore the challenges and opportunities in assessment processes.
- Discussion with trainers and learners on their experiences with assessment practices.
- Assessment policies review to identify strengths and gaps.

# 8. Areas of Priority

Considering the impact of each of the research themes on the TEVET programs, the potential for improvement, and the alignment with broader educational and economic goals, the following have been identified as priority areas:

# 8.1 Competence-Based Training (CBT)

The global demand for job-ready graduates has prompted TEVETA in Zambia to transition from theoretical, exam-focused training to Competence-Based Training (CBT), which emphasizes practical skills and real-world task performance. This shift aims to align training outcomes with industry needs, but its success depends on addressing challenges related to institutional readiness, stakeholder engagement, and curriculum alignment.

# 8.2 Effectiveness of TEVET Assessments

Assessment and certification are vital to maintaining the quality and credibility of TEVET training outcomes, especially as TEVETA transitions to Competence-Based Training (CBT). This theme examines the effectiveness of TEVET assessment practices, focusing

on their alignment with CBT principles to ensure they meet industry needs and enhance learner competency.

# 8.3 Curriculum and Alignment to Labour Market Needs

Aligning TEVET curricula with industry needs ensures that graduates are equipped with relevant skills. This directly impacts employability and the effectiveness of TEVET programs in meeting labor market demands. Close alignment with industry requirements can also foster stronger industry partnerships and better job placement outcomes.

# 8.4 Employment Outcomes and Alumni Success

Tracking career paths and employment outcomes provides valuable insights into how well the education and training received align with industry needs and job market demands. Evaluating support services and identifying success factors are essential for improving the quality of TEVET programs, ensuring they are effective in equipping students with the skills and resources needed for successful employment and career growth.

# 8.5 Access to TEVET

Ensuring equitable access to TEVET programs is foundational. Barriers such as geographical accessibility, financial constraints, and societal perceptions can prevent potential students from enrolling. Addressing these barriers is crucial for increasing participation rates and achieving broader educational and economic development goals.

## 8.6 Quality Assurance

High-quality education is essential for the effectiveness of TEVET programs. Effective quality assurance mechanisms help maintain educational standards and ensure continuous improvement. Evaluating accreditation processes, monitoring, and feedback mechanisms can significantly enhance the overall quality of TEVET institutions.

## 8.7 Technological Integration

Technology plays a critical role in modern education and vocational training. Effective integration of emerging technologies can improve teaching methods, learning outcomes, and employability. Ensuring that TEVET institutions are equipped with the necessary technological infrastructure and support is essential for keeping pace with technological advancements.

## 8.8 Industry Partnerships

Strong partnerships between TEVET institutions and industry can enhance curriculum relevance, provide practical training opportunities, and improve job placement rates. Understanding and strengthening these partnerships can lead to better alignment with industry needs and more successful career outcomes for graduates.

# 9. TEVETA Research and Innovation Implementation Plan

Mechanisms will be developed to actualize the research projects and to provide platforms for sharing research and innovation initiatives. These are not limited to the following:

## 8.1 Triennial Graduate Tracer Studies

Large-scale graduate tracer studies will be conducted triennially to continually assess employability and the alignment of curricula with industry requirements. Training institutions will receive support in establishing localized graduate tracing systems, which will eventually integrate into TEVETA's overarching tracing framework. This database will serve as the sampling pool, cross-referenced with data from the Zambia Revenue Authority and National Pensions Scheme Authority. Initial insights will be derived from this comparison and validated through surveys of selected graduates, yielding both quantitative and qualitative data for comprehensive analysis.

## 8.2 Triennial Research and Innovations Exhibition and Symposia

To recognize and promote innovations and research efforts in the TEVET sector, a triennial Skills and Innovations Exhibition followed by a Research Symposium will be organized. The exhibition will serve as a platform for showcasing skills and innovations from TEVET institutions and industry, as well as preparing participants for World Skills competitions. The symposium will provide an opportunity for academics to present their research findings and insights related to the TEVET sector. A call for papers, including a central theme and subthemes, will be issued six months prior to the symposium. This timeline allows for a thorough peer-review process and feedback to authors. Papers accepted and presented at the symposium will be published in a dedicated TEVET journal.

## 8.3 Skills Survey

A skills survey will be conducted every three years in collaboration with the Zambia Statistics Agency (ZAMSTAT), Ministry of labour and the International Labour Organization (ILO). These surveys will identify industry skill requirements, helping to realign training efforts accordingly. The results will also provide insights into scarce skills and sectors of the industry that are saturated.

## 8.4 Curriculum Review and Development

Action research will be conducted prior to the development or review of any curriculum. This research will complement job profiling by assessing both industry requirements and training needs. In cases of curriculum review, the research will evaluate the current curriculum's performance, identifying strengths and areas needing improvement to ensure alignment with industry standards and emerging trends.

#### 8.5 Performance Review

An annual performance review report highlighting the performance in the assessments will be produced in conjunction with the assessment and certification division to provide feedback to TEVETA, policy makers and training institutions. The highlights will focus on attendance and absenteeism, summary performance by program and problematic areas for students. It is hoped that this feedback will not only inform policy but will lead to improved teaching and learning.

## **8.6 Compliance Report**

A comprehensive compliance report outlining the levels of adherence by TEVET institutions to established standards will be produced annually in collaboration with the Training and Standards Division. This report will not only summarize findings from inspections but also evaluate the implementation and quality of continuous assessments conducted by the institutions. Additionally, it will assess the state and quality of open, distance, and flexible learning programs, providing critical insights into institutional compliance and areas requiring improvement to uphold the standards of the TEVET sector.

## 10. Revision of the Research Agenda

The agenda will be reviewed and updated every three years or as needed.

## **11.** Conclusion

The Research Agenda for 2025-2027 is a strategic initiative aimed at aligning the TEVET sector with Zambia's Vision 2030 and the 8NDP's goal of socio-economic transformation. By identifying key research areas such as employment outcomes, access to TEVET, curriculum alignment, quality assurance, technological integration, and industry partnerships, the agenda provides a roadmap for enhancing the quality and relevance of TEVET programs. It emphasizes the importance of evidence-based decision-making, continuous improvement, and stakeholder collaboration. The successful implementation of this agenda will not only contribute to the development of a skilled workforce but also foster innovation, entrepreneurship, and sustainable economic growth in Zambia. The commitment to rigorous research and innovation will ensure that the TEVET sector remains dynamic, responsive, and capable of meeting the evolving needs of industry and society.

## 12. Bibliography

Berge, Z. L., & Muilenburg, L. Y. (Eds.). (2013). Handbook of mobile learning. Routledge.

- Bryman, A. (2016). Social research methods (5th ed.). Oxford University Press.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Drucker, P. F. (1985). *Innovation and entrepreneurship: Practice and principles*. Harper & Row.
- Gamble, J. (2013). Why improved formal teaching and learning are important in technical and vocational education and training (TVET). *Journal of Education and Work*, 26(3), 254-273. https://doi.org/10.1080/13639080.2011.620045
- Government of the Republic of Zambia. (2022). *Eighth National Development Plan (8NDP)* 2022–2026. Ministry of Finance and National Planning.
- International Labour Organization (ILO). (2021). *Global trends in TVET: A brief overview*. https://www.ilo.org/global/topics/skills-knowledge/tvet/lang--en/index.htm

- Majumdar, S. (2011). Emerging challenges and trends in TVET in the Asia-Pacific region. International Journal of Training Research, 9(1-2), 1-15. https://doi.org/10.5172/ijtr.9.1-2.9
- Mertens, D. M. (2014). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (4th ed.). SAGE Publications.
- Ministry of Technology and Science, Zambia. (2021). *National Science and Technology Policy*. https://www.mots.gov.zm/policies/national-science-and-technology-policy
- Nkonde, C. (2023, September). Assessing the effectiveness of TEVET curriculum alignment with industry needs in Zambia. In *Proceedings of the International Conference on Technical Education and Vocational Training* (pp. 67-80).
- Okolie, U. C., Nwajiuba, C. A., Binuomote, M. O., & Igwe, P. A. (2020). Enhancing graduate employability: Why do higher education institutions have problems with teaching generic skills? *Policy Futures in Education*, 18(2), 294-313. https://doi.org/10.1177/1478210318808030
- Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA). (2021). *Strategic Plan 2021–2026*. TEVETA.
- World Bank. (2019). Zambia Economic Brief: Wealth Beyond Mining: Leveraging Renewable Natural Capital (Issue 14). World Bank Group.
- Ministry of Higher Education. (2020). National Technical Education, Vocational and Entrepreneurship Training (TEVET) Policy. MoHE

# Appendix: Terms of Reference for the TEVET Research Committee

## 1. Background

The Technical Education, Vocational and Entrepreneurship Training (TEVET) sector in Zambia plays an important role in developing skills essential for national economic growth. To enhance the sector's efficiency, relevance, and impact, a Research Committee is required to guide, coordinate, and oversee research activities. This committee will ensure research initiatives align with national and TEVET sector priorities and meet the evolving needs of the labour market.

# 2. Purpose of the Research Committee

The TEVET Research Committee (hereafter referred to as "the Committee") is established to provide strategic oversight, technical expertise, and governance in research activities within the TEVET sector.

# 3. Objectives

The primary objectives of the Committee are to:

- 1. Foster a culture of evidence-based decision-making.
- 2. Conduct periodic reviews of the TEVET research agenda in consultation with stakeholders.
- 3. Oversee the design, implementation, and dissemination of TEVET-related research.
- 4. Ensure alignment of research activities with national development priorities and labour market demands.
- 5. Promote collaborative research among TEVET institutions, industry, government, and academia.
- 6. Monitor and evaluate the impact of research on TEVET policies, programs, and practices.

## 4. Scope of Work

The Committee will:

- Prioritize stakeholder identified research themes and topics relevant to the TEVET sector.
- Provide technical guidance on research methodologies and tools.
- Facilitate the mobilization of resources for research activities.
- Review research proposals for quality, relevance, and feasibility.
- Support capacity building in research for TEVET institutions.
- Coordinate dissemination of research findings to stakeholders.
- Advise on policies and strategies based on research findings.

# 5. Composition of the Committee

The Committee will comprise the following members:

• Chairperson – Representative from a public research institution

- Vice Chairperson Representative from a public university
- Secretary: Director Development and Research
- Secretariate: All Managers in the Development and Research Division
- Members:
  - All Directors in TEVETA
  - Representatives from:
    - Ministry in charge of TEVET and the ministry in charge of labour
    - TEVET institutions
    - Industry and employer organizations
    - Development partners and NGOs supporting TEVET

#### 6. Roles and Responsibilities

Role	Responsibilities
Chairperson	Provide leadership, convene meetings, and ensure
	adherence to objectives.
Vice Chairperson	Assist the Chairperson and act in their absence.
Secretary and Secretariate	Coordinate meetings, prepare agendas, and maintain
	documentation of Committee activities.
Members	Provide technical input, participate in decision-making,
	and promote implementation of research outputs.

## 7. Meeting Schedule

The Committee will meet quarterly or as needed, depending on the workload. Additional meetings may be convened to address urgent matters. A quorum will be formed by 8 members present who include the chairperson or co-chairperson and the secretary.

## 8. Reporting

The Committee will report to the Director-General of TEVETA. Reports will include:

- Progress on the implementation of the research agenda.
- Outcomes of research activities.
- Recommendations for policy and program adjustments.

#### 9. Tenure

Except TEVETA staff, members will serve on the Committee for a term of three years, renewable upon review of their performance and continued relevance of their role.

## **10. Deliverables**

- Reports on completed and disseminated research projects.
- Policy briefs and recommendations based on research findings.
- Capacity-building workshops for TEVET research personnel.

## **11. Resources and Budget**

TEVETA will provide financial and logistical support for the Committee's activities. Additional funding will be sought from development partners and other stakeholders.

# **12. Amendment and Review**

The terms of reference will be reviewed triennially to ensure its relevance and effectiveness in guiding the Committee's work.

# 13. Confidentiality

Committee members are required to maintain confidentiality of sensitive information and act with integrity and professionalism.