



TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING AUTHORITY

ASSESSMENT OF KENYAN NATIONAL POLYTECHNICS' READINESS TO AWARD NATIONAL QUALIFICATIONS

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ABSTRACT

The legal orders that establish National Polytechnics (NPs) allows them to award national qualifications up to higher National Diploma level. However, most NPs have been offering programmes developed and examined by other National Qualification Awarding Institutions (QAIs). This has hindered NPs from achieving flexibility in terms of programme provision as envisaged in their respective legal instruments. Training programmes development and award of national qualifications is a complex process that is guided by regulatory frameworks developed by both training and professions regulators. The process is supported by other stakeholders including industry players to best align training outcomes with industry expectations. In the recent past, most of the National Polytechnics have embarked on the process of developing their own curricula, with the aim of awarding National Qualifications. However, this process has been rather slow and erratic raising questions on NPs readiness to award National Qualifications. This study aims to assess the readiness of NPs to award National Qualifications based on several parameters; leadership and governance, staff competencies, implementation of regulatory standards, national and institutional policies, availability of dedicated financial resources and establishment of linkages and collaborations with industry. The study adopted census inquiry and targeted all the twenty-four institutions categorized as NPs in Kenya. Descriptive and inferential research design was used. A questionnaire was administered to one administrator in each institution. The data collected was analysed using Excel and SPSS and presented in form of bar graphs and tables. The results obtained from this study showed that most NPs had well established governance structures with qualified leadership (87.5%) and robust quality assurance systems (95.8%). However, there were some gaps in the NPs governance that included lack of integration of qualification awarding functions in strategic documents, allocation of insufficient resources and challenges with CBET assessor engagement. Most of the staff in National Polytechnics had the requisite competencies, even though, there were persistent gaps in CPD especially for technicians, non-engagement of verifiers from industry, and engagement of unregistered trainers which could potentially undermine institutional readiness to support the award of National Qualifications. Further 66.7% of NPs complied with TVET regulatory standards, staff sensitization (41.7%) and regulatory compliance issues such as mounting of unlicensed programmes persisted. Policies for qualification awards were in place (70.8%), but implementation and staff awareness were inconsistent. Results from the regression analysis model indicated that institutional leadership and governance was a highly significant factor, with a strong positive effect, indicating its critical role. Staff competence, regulatory standards, and Competence Based Assessment (CBA) standardized procedures were also statistically significant, positively contributing to institutional readiness to award national qualifications. The study recommends enhancing leadership, staff competence, and regulatory compliance in NPs, alongside strengthening systems for CBET assessments and certificate authenticity. It highlights the need for mandatory trainer registration, dedicated budgets for assessments and award of qualifications and improved industry collaboration to sustain and align CBET programs with labour market demands.

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ABBREVIATIONS AND ACRONYMS

BETA	Bottom-Up Economic Transformation Agenda
CBA	Competence Based Assessment
CBET	Competence Based Education and Training
CDACC	Curriculum Development, Assessment and Certification Council
CPD	Continuous Professional Development
KNQA	Kenya National Qualifications Authority
KNQF	Kenya National Qualifications Framework
KSTVET	Kenya School of TVET
MIS	Management Information System
NACOSTI	National Commission for Science, Technology and Innovation
NITA	National Industrial Training Authority
NP	National Polytechnic
OLS	Ordinary Least Squares
QAI	Qualifications Awarding Institution
SPSS	Statistical Package for the Social Sciences
STEM	Science, Technology, Engineering and Mathematics
TVC	Technical and Vocational Colleges
TVET	Technical and Vocational Education and Training
TVETA	Technical and Vocational Education and Training Authority
VTC	Vocational Training Centres

CHAPTER ONE

INTRODUCTION

1.1 Background Information

National Polytechnics (NPs) are institutions established by the Cabinet Secretary responsible for Technical and Vocational Education and Training (TVET) via legal orders to develop curricular, train, assess and award national qualifications in the accredited courses. The NPs play a crucial role in equipping trainees with requisite skills and knowledge to enhance employability and support the country's industrialization and economic development goals. The NPs offer a wide range of courses in both Science, Technology, Engineering and mathematics (STEM) and Non-STEM.

All the NPs are regulated by the Technical and Vocational Education and Training Authority (TVETA). Currently there are 24 National Polytechnics which are distributed across 23 Counties. There are ongoing efforts to strengthen industry linkages, enhance the curriculum, and improve the quality of training to ensure that it meets global standards. The NPs play a vital role in fostering technical skills development, promoting innovation, and supporting economic growth. Their role is increasingly recognized in national development strategies, making them central to the country's future. The establishment of the TVET Act Cap 210A marked an important step towards evolving the regulative regime of technical education, categorizing institutions into several categories, including Vocational Training Centres, Technical and Vocational Colleges, Teacher Training Colleges, and National Polytechnics (GoK, 2013).

Section 26 of the TVET Act Cap 210A mandates NPs to offer training up to Higher National Diploma level and may, in collaboration with universities, offer degree programs. This is expected to enhance the career prospects presented to trainees by ensuring a smooth transition from vocational training to higher education. Currently, NPs offer various courses at the following levels: Artisan Levels 3 and 4, Craft Level 5, Diploma Level 6, and Higher National Diploma, Kenya National Qualification Framework (KNQF) Level 7. The legal order also empowers NP to award qualifications, hence can register their courses or programmes with Kenya National Qualification Authority (KNQA) as a Qualification Awarding Institution (QAI).

The role of NPs in Kenya goes beyond education; it is also an economically beneficial establishment that reduces regional disparities in educational and employment opportunities. The institutions provide vocational training tailored to meet the demands of the local industries, greatly contributing to the development of the local economy (Ochieng, 2019). Their spread across many counties ensures that people in various regions receive quality training and employment opportunities, hence achieving even development in the country. In the context of continuous endeavours to enhance connections within the industry, NPs are progressively engaging in partnerships with regional businesses and industries. This collaboration is essential for maintaining a curriculum that is both pertinent and in alignment with market requirements. Such partnerships not only improve the calibre of training provided but also aid in securing employment opportunities for graduates, ultimately augmenting their employability.

The National Polytechnics, as institutions of higher learning, must adhere to stringent quality assurance standards. The KNQF Act Cap 214 No. 22 provides the legal framework for the accreditation of QAIs in Kenya. According to this act, QAIs must comply with the standards set by the KNQA to ensure the integrity and quality of the qualifications awarded (KNQA, 2021). According to KNQA (2021), the following categories of institutions can qualify as QAI in Kenya if accredited by KNQA; any institution established by the University Act Cap 210 no. 42, NP with a legal order to award qualifications, Institutions in Government Ministries with a legal order to award qualifications, Institutions established by an Act of Parliament to develop and award qualifications, foreign institutions accredited in their home countries as qualification awarding institutions. The NPs, registered as QAIs, are required to follow the established standards and guidelines and the Kenyan National TVET quality assurance framework put in place by TVETA. This includes regular audits, evaluations, and assessments to monitor the effectiveness of training programs and ensure continuous improvement (TVETA, 2021).

Despite their significant contributions, NPs face various challenges that hinder their effectiveness and readiness as QAIs. These include inadequate funding, outdated training equipment, and a need for more qualified trainers. Additionally, the rapid evolution of technology requires continuous updates to training programs and infrastructure, which can strain resources. However, there are also opportunities for growth and enhancement. The increasing recognition of the importance of technical and vocational education in national development strategies offers a favourable environment for the expansion and improvement of NPs. Government initiatives aimed at promoting vocational training, such as the Bottom-Up Economic Transformation Agenda (BETA) which represents a strategic shift in Kenya's approach to economic development, emphasizing grassroots participation and community empowerment. By prioritizing vocational training, the government aims to equip individuals with the skills needed to succeed in the job market, foster entrepreneurship, and stimulate local economies. This holistic approach is essential for achieving sustainable economic growth and addressing the challenges of unemployment and inequality in Kenya. It is therefore prudent to assess whether the TVET institutions (NPs) are ready to award national qualifications as it is essential for improving the quality and relevance of vocational education in Kenya. It provides critical insights into alignment with industry needs, quality assurance, institutional capacity, and regional disparities. Moreover, it supports national development goals and enhances stakeholder engagement, ultimately contributing to a more skilled and competitive workforce.

1.2 Problem Statement

Despite the pivotal role national polytechnics play in technical and vocational education and training (TVET), there is growing concern about their readiness to serve as qualifications awarding institutions. Currently, there are 24 National Polytechnics in the country, but majority had not developed CBET curricula, implemented, assessed and awarded qualifications as of 2023, highlighting their lack of readiness. Readiness involves NPs ability to meet the required standards in terms of infrastructure, staff competence, assessment processes, industry linkage, governance structures and adherence to relevant regulatory standards and policies necessary for awarding TVET national qualifications. The problem manifests in several dimensions, yet there has been no study conducted to assess existing NPs readiness to serve as qualification awarding institutions. While there is increasing interest from TVET institutions in Kenya to

be elevated to NP status and ultimately become QAI, their state of readiness in development of curricula, assessment and award of national TVET qualifications is uncertain. This study aims to assess the readiness of the NPs as QAIs as well as identify gaps, challenges and provide strategies to enhance readiness. The goal is to ensure that these institutions can provide high-quality, relevant, and recognized qualifications that meet the needs of students and the labour market.

1.3 Objective of the Study

The main objective of this study was to assess the Kenyan National Polytechnics readiness to award national qualifications. The specific objectives of the study were to:

- i. Determine the role of institutional leadership and governance on NPs readiness to award TVET national qualifications
- ii. Determine the staff competencies in the National Polytechnics;
- iii. Determine the role of regulatory standards on NPs readiness to award TVET qualifications
- iv. Determine the availability and implementation of national and institutional policies;
- v. Determine the allocation of financial resources for awarding national qualifications
- vi. Identify the established linkages and collaborations between NPs and industries;
- vii. Determine the availability and utilization of competence Based Assessment (CBA) Standardised processes/procedures in NPs
- viii. Determine the effects of various factors on the readiness of NPs to award national qualifications;
- ix. Identify the challenges faced by national polytechnics in their role as qualifications awarding institutions, and their respective mitigation strategies.

1.4 Significance of the Study

The findings of this study provided the actual status on the readiness of NPs to award National Qualifications. Further, it identified the level of adherence of the institutions to the regulatory standards, staff competencies, state of their internal quality assurance and governance systems. The study also provided essential insights for various stakeholders in TVET on improvement that need to be undertaken especially in standard development, policy formulation and curriculum development/review to improve the readiness of NP to award National Qualifications.

1.5 Scope of the Study

The study considered all the 23 NPs in Kenya and determined their state of preparedness as qualifications awarding institutions. The study identified the current state of preparedness, including recent developments and changes within the last five years to capture both ongoing trends and recent improvements or challenges. The study employed a mixed methods approach to gather comprehensive reliable quantitative and qualitative data from the administrators.

CHAPTER TWO

LITERATURE REVIEW

2.1 Empirical Literature

Skills and knowledge are the engines of economic growth and social development of any nation (Goel, 2010), TVET holds the key to training the skilled and entrepreneurial workforce needed for the changing technological workforce (Afeti, 2010). According to Mclean and David (2009) TVET is concerned with the acquisition of knowledge and skills for the world of work to increase opportunities for productive empowerment and socio-economic development in knowledge economics and rapidly changing work environment. TVET thus equips people not only with technical and vocational skills, but with a broad range of knowledge, skills and attitudes that are now recognized as indispensable for meaningful participation in work and life. According to the Council of Europe and UNESCO (1997), each QAI shall recognize the qualifications issued by other recognized Institutions that meet the general requirements.

In Nigeria, TVET is incorporated in the formal education system in all the three levels of education (primary, secondary and tertiary) with a view of meeting the nation's need for skilled manpower and supporting the economic state of individuals and the nation in general. As qualitative TVET is increasingly recognized as the bedrock of every development, quality assurance therefore is an indispensable process for achieving the national goals in TVET which will in turn lead to the production of qualitative human capital for sustainable national development (National Board for Technical Education, 2024).

Quality assurance encompasses a broad range of processes and elements aimed at upholding qualifications to established global standards. In many countries and regions, quality assurance mechanisms prioritize several key objectives: harmonizing understanding and implementation of quality assurance, facilitating mobility of learners and labour, enhancing quality through reliable assessment and review processes, ensuring transparency and accountability, fostering a sustainable quality culture, and boosting the global competitiveness of qualifications across all levels of education. Key components of quality assurance include governance structures, regulatory compliance, curriculum development and implementation, accreditation of institutions and programs, infrastructure, assessment and certification, monitoring and reporting, human resource capacity, qualifications database, technological integration, stakeholder engagement, continuous improvement strategies, and financial resource mobilization. Together, these elements ensure a comprehensive approach to maintaining and enhancing the quality and relevance of education and training. (KNQA, 2024)

Compliance with regulatory standards is fundamental for ensuring the quality and recognition of qualifications awarded by TVET institutions. Effective governance frameworks should include mechanisms for regular monitoring and evaluation to ensure adherence to these standards. This ensures that institutions can maintain high quality and credible qualification awarding processes (UNESCO, 2019). In determining whether TVET institutions are ready to award qualifications, governance plays a critical role. Decentralized, multi-stakeholder participative decision-making is essential to effective to an institution. To enhance TVET performance and quality, governance frameworks should guarantee accountability, transparency, responsiveness, and inclusivity (TIRwanda, 2021).

The implementation of established processes for competence-based assessment (CBA) guarantees impartiality, consistency, and alignment of evaluations with industry standards. Sustaining the quality and relevance of the qualifications awarded requires frequent and consistent training for assessors and revisions to the assessment criteria. To facilitate reliable and consistent evaluations, CBA procedures must be incorporated into the institutional governance structure. (UNESCO, 2019).

Quality assurance of qualifications in Kenya involves a comprehensive system designed to ensure that educational standards are maintained and that qualifications are recognized both locally and internationally. This system includes national quality assurance agencies and National Qualifications Framework that adhere to regional and international standards. Qualifications framework refers to a system of defining the structure or classification of levels of qualifications (Coles and Werquin, 2009; Mackenzie and Polvere, 2009). The framework influences learning outcome achievements by giving structure, status and recognition to learning as well as by acting as a source of motivation and reward for learners (Coles and Werquin, 2009).

The Technical and Vocational Education and Training Authority (TVETA) oversees the accreditation and regulation of technical and vocational education and training institutions. The National Industrial Training Authority (NITA) promotes quality and efficiency of industrial training in Kenya. Additionally, professional regulatory bodies play a critical role in ensuring the quality assurance of qualifications, maintaining and enhancing the standards of education and training, and professional qualifications. The Authority has developed a trainers' qualification framework which ensures that an institution has well-qualified and continuously trained trainers to ensure that the institution can deliver high-quality education and training, thus improving the overall effectiveness of the qualification-awarding process.

TVET leadership and governance establish a sense of purpose, encourage innovation, and drive continuous improvement in teaching, learning, and program development by establishing a clear direction and vision aligned with industrial needs. Regulatory standards are essential for determining the ability of NPs to award qualifications. It is crucial to have these standards readily available, widely disseminated, and put into practice. Having institutional policies in place and executing them effectively is crucial for NPs to be ready to grant certifications. Policies should be easily accessible, shared with all employees, and actively put into practice. This guarantees that every party involved is informed of the operational guidelines for qualification awards, promoting a systematic approach to education and training that satisfies both regulatory demands and industry standards. Institutions need to make sure they adhere to set guidelines and frameworks to keep their accreditation and ensure quality assurance. This involves consistently updating curricula and assessment techniques to comply with both national and international standards, thus increasing the credibility of the qualifications granted (TVETA Standards, 2019).

2.2 Conceptual Framework

A conceptual framework is an analytical tool used to organize and structure research or ideas in a systematic manner. It provides a clear visualization of the key concepts, their relationships, and how they integrate within the broader context of the study or project.

Independent Variables

Dependent Variable

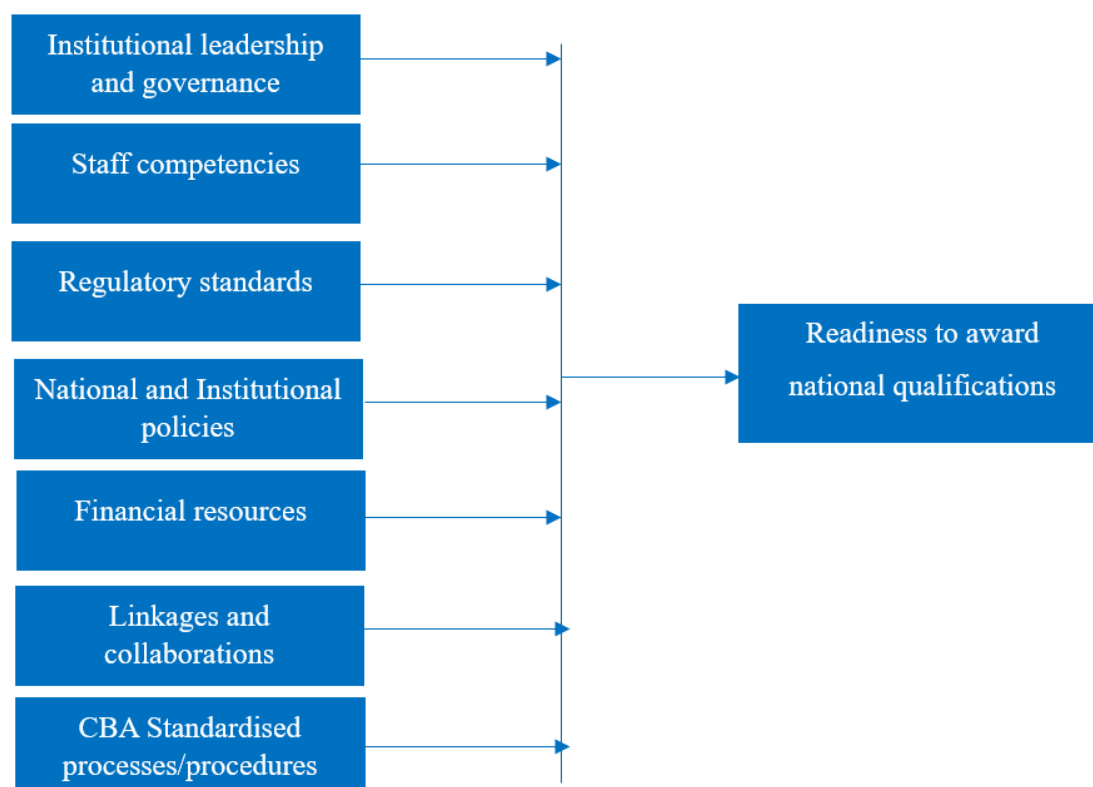


Figure 1 Conceptual Framework on readiness of institutions to award national qualifications

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The purpose of this study was to determine readiness of National Polytechnics as Qualifications Awarding Institutions. This study determined the readiness of National Polytechnics as Qualifications Awarding Institutions. It specifically outlined the research design, target population, sample size and sampling technique, data collection instruments, pilot testing, ethical consideration and data analysis.

3.2 Research Design

The study used descriptive and inferential research approach. Mixed-method research was used to systematically integrate both qualitative and quantitative data. The method permitted a more complete and synergistic utilization of data from open- and close-ended questions.

3.3 Target Population, Data Collection Instrument and Procedure

This study targeted all the 24 NPs. A questionnaire that was scripted using Kobo collect data collection software was used to collect data. A team of officers visited each of the target institutions to collect the data. The questionnaire was administered to an administrator in all the NPs.

3.4 Validity and Reliability of Research Instrument

Before the instrument was administered, they were pre-tested on a sample of respondents not included in the study to ensure their reliability. This enhanced the usability and clarity of items. Cronbach alpha coefficient was employed to establish the reliability of the questionnaire. The instrument was then reviewed to ensure alignment of data collected to the objectives of the study. This enhanced the validity of the instrument and ensured that all errors were eliminated.

3.5 Legal and Ethical Considerations

The researchers obtained a research permit from the National Commission for Science, Technology and Innovation (NACOSTI) which allowed them to collect data. To ensure dignity and respect for the respondents, the researchers conducted themselves with courtesy and respect. In addition, they ensured that the respondents felt free to respond to the questionnaires by ensuring that there were no questions that made them uncomfortable.

3.6 Data Analysis

Data collected was cleaned, coded and checked for quality, accuracy and completeness. The quantitative data was analysed using SPSS and Excel to derive descriptive statistics and produce visualizations. This study further employed a multiple linear regression model to investigate the relationship between various independent variables and the response variable, y. The regression equation is specified as:

$$y = \alpha_0 + \alpha_1x_1 + \alpha_2x_2 + \alpha_3x_3 + \alpha_4x_4 + \alpha_5x_5 + \alpha_6x_6 + \alpha_7x_7 + \varepsilon$$

where:

α_0 is the constant or autonomous variable, $\alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5, \alpha_6$ and α_7 are the coefficients

y=Dependent variable =Readiness as Awarding Institution (RAI)

x1=Institutional Leadership and Governance (IL)

x2= Staff Competence (SC)

x3=Regulatory Standards (RS)

x4=Institutional Policies (IP)

x5=Linkages and Collaborations (LC)

x6=CBA Standardized Processes/Procedures (CBA)

x7=FR

ε = Error term

The dataset used in the regression analysis comprised of multiple independent variables hypothesized to influence the dependent variable RAI. Each variable was standardized to ensure comparability across different scales. The model was estimated using Ordinary Least Squares (OLS) regression. The coefficients, standard errors, t-statistics, and p-values for each independent variable were calculated and are presented in the results table. A p-value threshold of 0.05 was used to determine the significance of each independent variable. The t-statistic provides insight into the contribution of each predictor to the model. Finally, content analysis was done on textual qualitative data related to the study objectives.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

This chapter provides detailed discussion on the information that was collected in all the National Polytechnics. The sections covered this chapter include response rate, demographic information, institutional leadership and governance, staff competencies, adherence to regulatory standards, establishment and/or implementation of national and institutional policies, availability of training resources, establishment of linkages and collaborations, availability and utilization of competence Based Assessment (CBA) Standardised processes/procedures and challenges faced by NPs in their role as qualifications awarding institutions(QAIs) and their respective mitigation strategies.

4.1 Response Rate

Data was collected from all the 24 targeted National Polytechnics in Kenya, representing 100% response rate. The high response rate indicated that the findings from this study were reliable and showed the true status of the institutions.

4.2 Demographic Characteristics of Respondents

This section outlines the basic demographic information provided by the respondents such as gender and training experience.

4.2.1 Gender of Respondents

Respondents for this study were institutional administrators. Figure 2 provides a summary of gender distribution of respondents.

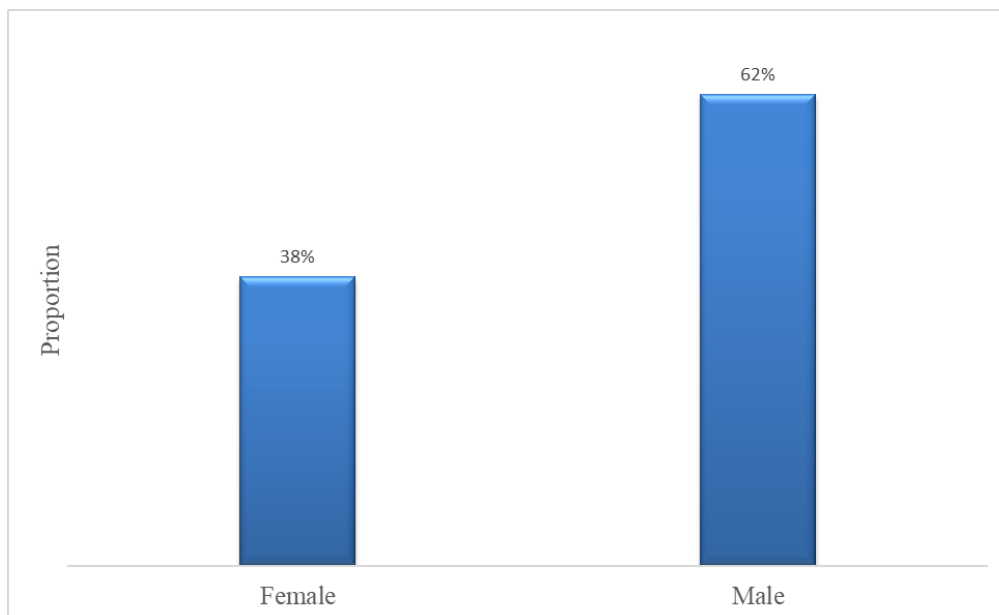


Figure 2: Gender Distribution of Respondents

Most administrators (62%) in the NPs were male, while female respondents were 38%. Although there were more male than female administrators, the gender distribution was aligned

with Kenya's constitutional one-third gender rule. However, there is need to continually provide more opportunities for female administrators.

4.2.2 Training Experience of Respondents

Experienced administrators play a critical role in the effective running of institutions and equipping the trainees with relevant skills required for a smooth transition to the job market or active engagement in communities. The experience of the respondents who participated in this study are shown in Figure 3.

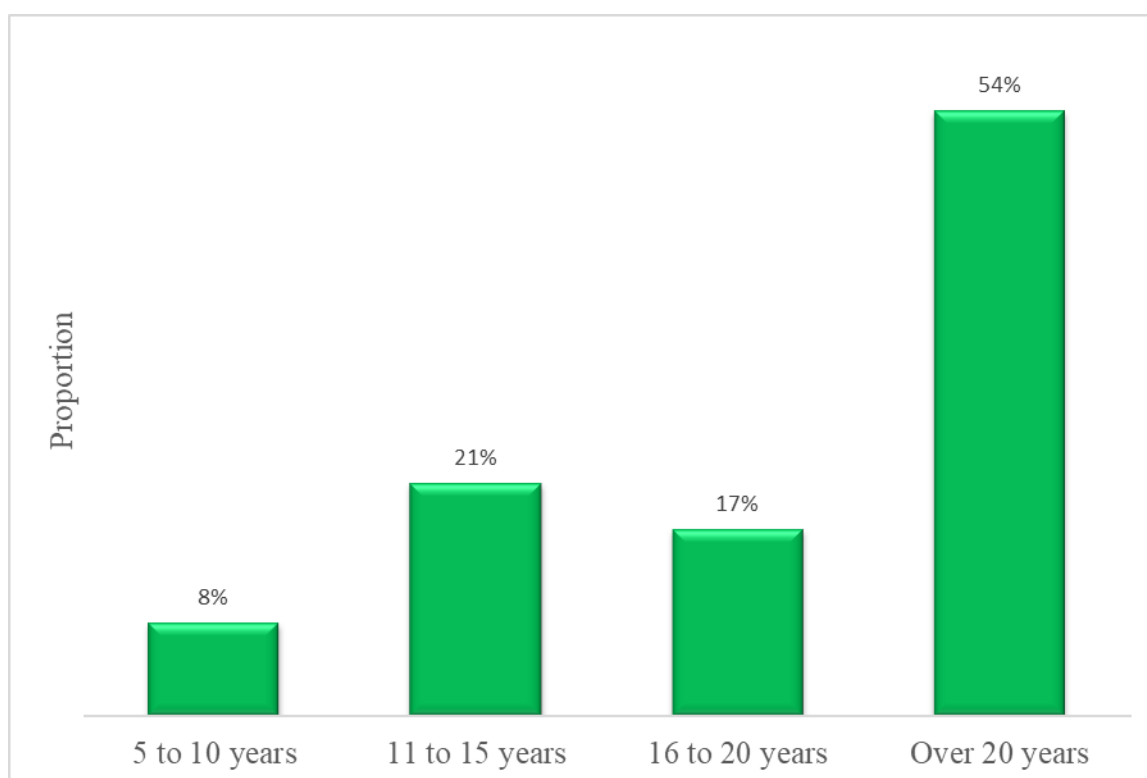


Figure 3 Respondents Training Experience

The majority (71%) of respondents had training experience of over 15 years while a smaller proportion (8%) had between 5 to 10 years of training experience. This implied that most of the National Polytechnics administrators had a great wealth of experience and therefore capable of effectively running the institutions.

4.3 Institutional Leadership and Governance

The study sought to establish the status of institutional leadership and governance structures in NPs and their effectiveness in the award of national qualifications. The respondents were asked to state their level of agreement with various statements on the status of leadership in the NPs. The findings provided insights on leadership qualifications, quality assurance mechanisms, institutional planning, availability of support structures for assessment and established award committees, as shown in Table 1.

Table 1:***Institutional Leadership and Governance***

Statement	SD	D	N	A	SA	Mean	Std
The leadership of the institution are well qualified and experienced	1(4.2%)	1(4.2%)	1(4.2%)	9(37.5%)	50.0%	4.3	1.0
Institution has an active internal quality assurance committee	-	-	1(4.2%)	12(50.0%)	11(45.8%)	4.4	0.6
Institution has incorporated assessment and award of qualifications in institutional planning	7(29.2%)	5(20.8%)	3(12.5%)	6(25.0%)	3(12.5%)	2.7	1.5
Institution has adequate supportive structures for assessment and award of qualification	4(16.7%)	4(16.7%)	3(12.5%)	8(33.3%)	5(20.8%)	3.3	1.4
Institution has established an award committee at the Council level	5(20.8%)	5(20.8%)	1(4.2%)	7(29.2%)	6(25%)	3.2	1.6
Overall mean	14.2%	12.5%	7.5%	35.0%	30.8%	3.6	1.2

A massive proportion of respondents (87.5%) agreed that the leadership within the NPs was adequately qualified and experienced. This result showed that the leadership at the institutions were well-prepared to develop and manage credible systems for training and awarding national qualifications. The availability of effective institutional leadership and governance are pivotal in the readiness of NPs to award national qualifications. Strong leadership, as indicated by the positive responses to leadership qualifications and experience, is foundational in ensuring that policies and procedures are properly implemented. The findings are consistent with Barber et al. (2019) who underscored that leadership quality is a critical factor in the successful integration of TVET systems.

The availability of Internal Quality Assurance (IQA) Committee had a mean score of 4.4, with a dominant 95.8% of respondents confirming the availability of the committee. This suggests that most NPs had established robust internal quality assurance mechanisms to support their preparedness to handle the requirements for award of national qualifications. This is in line with section 33 (2) of TVET Act Cap 210A that requires every institution to put in place internal systems to ensure the maintenance of standards, quality and relevance of training programmes. It is also consistent with best practices in education systems, where quality assurance is fundamental for maintaining credibility and trust in the qualifications awarded (Sampson, 2020).

Half of respondents noted that the institutions had not incorporated assessment and award of qualifications in their plans. However, a significant proportion (37.5%) stated that they had incorporated assessment and award of qualifications in their plans. These findings showed that most NPs still had challenges in integrating qualification assessment into strategic planning. The institutional readiness to award qualifications could be hampered by gaps in planning processes affecting the smooth implementation of TVET qualification frameworks. The

challenges observed in the incorporation of assessment and award processes into institutional planning indicate a significant gap. The failure to fully integrate these elements into strategic planning processes could hinder the institution's ability to implement a coherent TVET qualification system. This finding was consistent with the observations of Harris et al. (2021), who found that successful integration of qualification assessment into institutional planning is crucial for the scalability and sustainability of TVET systems.

On adequacy of supportive structures for assessment and award of qualifications the mean score of 3.3 (SD = 1.4) indicated that while 33.3% agreed and 20.8% strongly agreed, there were notable levels of disagreement (33.4% combined for disagree and strongly disagree). This mixed response highlighted that while some institutions were perceived as having adequate support structures for assessment, others may be struggling with resource allocation, infrastructure, or policy implementation that hinders readiness for awarding qualifications. While some institutions reported having adequate support structures, others appeared to face challenges in this area. The lack of consistent infrastructure and support mechanisms could negatively impact the readiness of institutions to manage the complexities of TVET qualification assessments. These findings echo concerns raised by UNESCO (2022), who highlighted that the absence of adequate resources and infrastructure could limit the effectiveness of TVET systems.

On the establishment of the award committee at the council level, there was a mean score of 3.2 (SD = 1.6). While 29.2% of respondents agreed and 25% strongly agreed, a substantial portion (41.6%) either disagreed or strongly disagreed. This result suggested that the establishment of award committees at the council level was still an emerging practice, and many institutions had not formalized this structure, which was essential for ensuring institutional accountability and transparency in awarding qualifications. The mixed responses regarding the establishment of award committees at the council level point to an area of governance that requires further attention. Award committees play a vital role in ensuring that qualifications are awarded fairly and in accordance with institutional and national standards. The absence of these committees in some institutions suggests that governance structures may still be under development in certain polytechnics, which could compromise the integrity of the qualification awarding process.

The overall mean of 3.6 (SD = 1.2) reflected a generally favorable view of the leadership and governance structures within the institutions, although with some variation in responses. While the leadership's qualifications and the quality assurance mechanisms were well regarded, there were concerns regarding the integration of assessment and qualification award processes into institutional planning, as well as the adequacy of supportive structures and formal award committees.

The responses to the open-ended questions indicated that a significant number of the NPs were still in the transition phase, having been recently elevated from TVCs. The elevation led to some challenges and gaps, particularly in curriculum development, as the institutions had not yet developed their own curricula due to a lack of funding. While their academic policies had been updated to include CBET and RPL, their strategic plans remained misaligned with their strategic objectives like curriculum development. Governance structures had been established as required by the TVET Act CAP 210A, with an academic board and education as well as training committee at the council level responsible for assessments and awards. The institutions were also focused on capacity building for the council and academic board members, with a

particular emphasis on resource mobilization to support assessment processes. Despite these efforts, the institution's systems were still being put in place, reflecting the complexities and challenges inherent in transitioning to National Polytechnic status.

4.4 Staff Competencies and Readiness to Award National Qualifications

The study aimed to provide insights into the staff competencies and readiness to award national qualifications. The TVET Act Cap 210A emphasizes the importance of engaging qualified and experienced trainers. The Authority has developed a trainers' qualification framework which ensures that institutions have well-qualified and continuously trained trainers to ensure high-quality education and training delivery, thus improving the overall effectiveness of the qualification-awarding process. Table 2 shows the responses that were obtained.

Table 2:

Staff Competencies and Readiness to Award National Qualifications

Statement	SD	D	N	A	SA	Mean	Std
All trainers are qualified and experienced	3(12.5%)	2(8.3%)	2(8.3%)	14(58.3%)	3(12.5%)	3.5	1.2
All technical staff/ technicians are qualified and experienced	2(8.3%)	1(4.2%)	1(4.2%)	15(62.5%)	5(20.8%)	3.8	1.1
Trainers have undergone CPD in assessment	-	3(12.5%)	3(12.5%)	9(37.5%)	9(37.5%)	4.0	1.0
Technicians have undergone CPD in assessment	6(25.0%)	1(4.2%)	3(12.5%)	7(29.2%)	7(29.2%)	3.3	1.6
Trainers are duly registered by professional bodies where necessary	3(12.5%)	6(25.0%)	4(16.7%)	6(25.0%)	5(20.8%)	3.2	1.4
Institution has engaged qualified and experienced verifiers to support CBET assessment	9(37.5%)	3(12.5%)	2(8.3%)	5(20.8%)	5(20.8%)	2.8	1.7
Trainers have capacity to develop and utilize curriculum support materials	3(12.5%)	4(16.7%)	-	8(33.3%)	9(37.5%)	3.7	1.5
Overall Mean	15.5%	11.9%	8.9%	38.1%	22.6%	3.5	1.4

The staff competencies and readiness to support the Award of National Qualifications varied across different dimensions, highlighting strengths and areas requiring improvement. Most respondents (70.8%) indicated that trainers were qualified and experienced, with a mean score of 3.5. This suggested that trainers generally possessed the expertise needed to deliver national qualifications. However, 20.8% of respondents who disagreed point to gaps in trainer readiness, necessitating targeted interventions. Similarly, 83.3% of respondents affirmed that technicians/technical staff were qualified and experienced, reflecting adequate competency. Despite this, ongoing professional development remains critical to keep pace with evolving institutional, technological changes and industry needs.

A higher proportion of trainers (75%) had undergone CPD than technicians (58.4%), reflecting the need to place more emphasis on technician CPD to ensure they are both competent. Furthermore, there were mixed responses regarding trainer registration with professional bodies with 45.8% of the respondents' indicating trainers were duly registered and 37.5% indicating otherwise.

The engagement of qualified verifiers for CBET assessments was identified as a significant challenge, recording the lowest mean score of 2.8, with 50% of respondents stating that they had not engaged verifiers. This reflects a substantial gap in institutional readiness to deliver credible CBET assessments. Most of the respondents (70.8%) indicated that trainers possessed the capacity to develop and effectively utilize curriculum support materials. However, 29.2% of respondents indicated a lack of capacity among trainers in this critical area.

Overall, the mean score of 3.5 (SD = 1.4) across all indicators suggests moderate staff competencies and readiness to support the Award of National Qualifications. While 60.7% of respondents agreed with the statements, significant disagreements (27.4%) highlight persistent gaps, particularly in technician CPD, verifier engagement, and trainer registration with professional bodies. To address these issues, institutions should implement targeted capacity-building programs for both trainers and technicians, focusing on assessment practices, curriculum development and quality assurance. Additionally, prioritizing the engagement of qualified verifiers and ensuring trainer registration with the TVET Authority will enhance institutional readiness and credibility in awarding National Qualifications effectively.

Further discussions with respondents revealed that inadequate funding hindered capacity building for trainers, while some trade areas lacked professional bodies. Verifiers were often sourced from neighboring institutions due to insufficiencies of verifiers from industry. Though efforts such as CBET training and establishment of industry advisory boards existed, technicians were overburdened and under-skilled. Enhanced capacity building, exposure to industry practices, and engagement of qualified verifiers are needed to improve staff competencies and institutional readiness for awarding National Qualifications.

4.5 Availability and Adherence to regulatory standards

Regulatory standards provide a clear framework for general compliance with quality standards. They consist of a set of principles, guidelines and tools to assist in continuous improvement of the quality of the TVET system in general and specifically at each point of service provision (TVETA, 2022). The TVET Authority has gazetted thirteen (13) regulatory standards and guidelines. Table 3 shows the responses on the possession of required regulatory standards, sensitization of staff on these standards, institutional registration and licensing status, and the existence of clear frameworks for implementing regulatory standards.

Table 3:

Availability and Adherence to regulatory standards

Statement	SD	D	N	A	SA	Mean	Std
Institution has all the required regulatory TVET standards and regulations for TVET	1(4.2%)	3(12.5%)	4(16.7%)	13(54.2%)	3(12.5%)	3.6	1.0

awarding and qualifications							
Institution has sensitized staff on TVET regulatory standards	6(25%)	4(16.7%)	1(4.2%)	9(37.5%)	4(16.7%)	3.0	1.5
Institution registration status is valid, and all programmes are licensed	1(4.2%)	2(8.3%)	-	10(41.7%)	11(45.8%)	4.3	0.9
Institution has clear framework for implementing regulatory standards	7(29.2%)	1(4.2%)	2(8.3%)	6(25.0%)	8(33.3%)	3.3	1.7
Overall Mean	15.7%	10.4%	7.3%	39.6%	27.1%	3.6	1.3

Most NPs (66.7%) had all the required TVET regulatory standards and regulations for awarding qualifications. According to TVETA (2022), 47% of the NPs possessed the regulatory standards, this implies the current trend is an improvement. Among those that had required regulatory standards, 54.2% had sensitized their staff on these standards.

Regarding institutional registration and licensing of programmes, 12.5% of NPs were offering unlicensed programmes in violation of Section 17 of the TVET Act, Cap 210A, hence the need for stricter enforcement measures. Additionally, more than half of the NPs (58.3%) had a clear framework for implementing regulatory standards. This is an improvement from the implementation of standards by NPs which was 39% in 2022 according to TVETA (2022). The overall mean score of 3.6 indicated moderate compliance, but variations in standard deviations of 1.3 reflected moderate disparities across institutions. Respondents suggested that the TVET Authority should sensitize institutions on the standards and make them easily available.

4.6 Availability and Implementation of Institutional and National Policies

National TVET policies provide a framework for developing a skilled workforce, improving employability and addressing national development goals. These policies guide the establishment of quality standards, certification systems and effective training mechanisms that enhance the relevance and credibility of training programmes (UNESCO, 2020). Institutional TVET policies on the other hand, play a crucial role in ensuring the efficient management and implementation of training programmes. This study sought to establish whether NPs had identified, developed/ acquired applicable policies, sensitized staff and developed a clear policy implementation framework. Findings are presented in Table 4

Table 4:

Availability and Implementation of Institutional and National Policies

Statement	SD	D	N	A	SA	Mean	Std
Institution has policies related to TVET qualification awarding	1(4.2%)	3(12.5%)	3(12.5%)	8(33.3%)	9(37.5%)	3.9	1.2
Institution has sensitized staff on the institutional policies	3(12.5%)	4(16.7%)	6(25.0%)	6(25.0%)	5(20.8%)	3.3	1.3

Institution has clear framework for implementing policies related to TVET qualification awarding	3(12.5%)	3(12.5%)	3(12.5%)	9(37.5%)	6(25.0%)	3.5	1.4
The TVET national periodic circulars provide clear direction in the awarding of TVET national qualifications	4(16.7%)	3(12.5%)	4(16.7%)	8(33.3%)	5(20.8%)	3.3	1.4
Overall Mean	11.5%	13.6%	16.7%	32.3%	26.0%	3.5	1.3

Most institutions (70.8%) had acquired policies related to the award of qualifications. Acquisition of relevant national policies and development of institutional policies are a prerequisite to their effective implementation. Discussions with the target institutions revealed that some institutions had policies that had not been reviewed to capture emerging trends. A comparatively lower proportion of the NPs (45.8%) had sensitized their staff on the available policies. Some respondents stated that only trainers were targeted with sensitizations on national and institutional policies. The NPs should therefore consider engaging all cadres of staff in sensitizations, especially technicians since they play a critical role in the training process. Sensitizing staff on national and institutional policies is crucial for ensuring the successful implementation of these policies and achieving their intended outcomes. Sensitization promotes consistency in training delivery, assessment methods and evaluation processes hence adhering to national regulatory requirements. It was further noted that 62.5% of NPs had developed a clear framework for implementing policies related to qualifications awarding. A significant proportion of respondents (28.2%) noted that some circulars issued to institutions periodically do not provide clear direction in the awarding of TVET national qualification. They observed that some circulars gave directions without clear guidelines on implementation. Some of the circulars that were cited for not being clear on implementation include the funding model and workload allocation. It was also observed that TVET loans are not sharia compliant and hence contradict religious teachings in some communities thus excluding trainees professing the affected faith from financial support. In general, 58.3% of the NPs had acquired policies related to qualifications award, sensitized staff and established an implementation framework. These findings are consistent with TVETA (2021) that showed that an almost similar proportion 54.3% of NPs were conversant with CBET implementation policy frameworks and recommended awareness creation to enable actors in the TVET space get conversant with existing policies.

4.7 Availability of a Budget for Assessment and Awarding of Qualifications

This section examines the availability of a dedicated vote head in institutions approved budget for the assessment and awarding of qualifications. The findings are as shown in Table 5.

Table 5:***Availability of Vote head for assessment and awarding of qualifications in budget***

Availability of Vote head budget	Proportion
No	42%
Yes	58%

Most institutions (58%) had made financial provisions (vote head in approved budget) for assessment and awarding of qualifications, a significant proportion (42%) still lacked dedicated budgetary allocations. This disparity underscored possible gaps in governance that could impact negatively on the institutional preparedness and integrity of National Qualifications. The institutions that had not allocated a vote head in their budget relied on related vote heads such as tuition, administration, and curriculum implementation budgets, while some were yet to begin conducting independent assessments, depending on external qualification bodies instead. This highlights the diverse funding approaches and the need for clearer budget allocation for assessment and qualification awarding activities.

4.8 Establishment of Linkages and Collaborations between NPs and Industries

Linkages between TVET institutions and industries can help in mitigating the mismatch between the skills acquired by graduates and those required by industries. The linkage between institutions and industries is therefore important in exposing trainees to the world of work before they are awarded National Qualifications. The collaborations highlight the critical role played by the partnerships in aligning training programs with industry standards and ensuring that the qualifications awarded are relevant, credible, and meet workforce demands. The study sought to establish the linkages and collaborations between training institutions and industries. The results were as shown in 6

Table 6:***Establishment of Linkages and Collaborations between NPs and Industries***

Statement	SD	D	N	A	SA	Mean	Std
Institution has established linkages and collaborations that support CBET assessment	5(20.8%)	4(16.7%)	9(37.5%)	6(25.0%)	-	3.3	1.6
Institution has Capacity build industry assessors and verifiers on CBA	8(33.3%)	5(20.8%)	2(8.3%)	7(29.2%)	2(8.3%)	2.6	1.4
Institution has identified and listed industry assessors and verifiers to support CBA	9(37.5%)	2(8.3%)	2(8.3%)	10(41.7%)	1(4.2%)	2.7	1.5
Institution has engaged industry assessors and verifiers to support CBA	11(45.8%)	2(8.3%)	3(12.5%)	6(25.0%)	2(8.3%)	2.4	1.5
Institution has clear framework for	3(12.5%)	2(8.3%)	1(4.2%)	15(62.5%)	3(12.5%)	3.5	1.2

implementing dual training
including award of
qualifications

Overall Mean	30.0%	12.5%	14.2%	36.7%	6.7%	2.9	1.4
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The study found that 62.5% of respondents agreed that institutions had established linkages and collaborations to support CBET assessment, while 37.5% reported no such collaborations. This indicates that most of the targeted institutions had formed some form of partnerships or collaborations with the industry. Similarly, 54.1% of respondents disagreed that institutions had built the capacity of industrial assessors and verifiers in competency-based assessment (CBA), while 37.5% agreed. This suggests that institutions need to prioritize building the capacity of industry assessors and verifiers, particularly in the principles of CBET and CBA. Additionally, 45.9% of respondents indicated that institutions had identified and listed industry assessors and verifiers to support competency-based assessment (CBA), while 45.8% reported that this had not been done. This highlights the need for institutions to prioritize the identification and listing of industry assessors and verifiers to enhance the credibility of assessments. The findings revealed that 54.1% of institutions had engaged industry assessors and verifiers to support competency-based assessment. However, a significant proportion (45.9%) reported a lack of active engagement. This underscores the need for broader and more consistent efforts to fully integrate industry expertise into the assessment process. Most institutions (75%) had established a framework for implementing dual training and awarding qualifications. However, the disagreement from 20.8% of respondents highlights the need for uniform adoption of this framework across all institutions

Generally, the findings revealed that while 42.5% of institutions have established linkages and collaborations with industries, 43.4% lack such partnerships. These collaborations are essential for ensuring the relevance and sustainability of CBET programs. The results underscore the need to foster stronger partnerships with industry. Strengthening these linkages is critical for bridging skills gaps, aligning training with labor market demands, and enhancing the overall effectiveness of CBET implementation

Further discussions with the respondents revealed the need for enhanced capacity building for both industry experts and institutional staff to improve collaboration. High transport costs, driven by the distance between industries and institutions, were cited as a logistical barrier. They also emphasized the importance of establishing stronger linkages and partnerships to ensure training programs remain relevant and sustainable. Addressing these challenges will foster stronger partnerships and better align training programs with industry needs.

4.9 Availability and Utilization of CBA Standardised Operating Procedures

The CBETA standards require all QAIs, to develop and implement CBA Standardised Operating Procedures. The standards also emphasize the development and validation of CBA tools to ensure quality and relevance in skills training. Table 7 shows a summary of compliance levels of NPs with CBA guidelines.

Table 7:***Availability and Utilization of CBA Standardised Operating Procedures***

Statement	SD	D	N	A	SA	Mean	Std
Institution has developed guidelines/ standardized procedures on assessment administration	4(16.7%)	1(4.2%)	1(4.2%)	13(54.2%)	5(20.8%)	3.6	1.4
Institution has developed and validated assessment tools	4(16.7%)	2(8.3%)	2(8.3%)	11(45.8%)	5(20.8%)	3.5	1.4
Institution has developed and is utilizing –implementing standardised assessment procedures	4(16.7%)	3(12.5%)	3(12.5%)	9(37.5%)	5(20.8%)	3.3	1.4
Institution has developed and is implementing a procedure for storage and review of POEs	5(20.8%)	3(12.5%)	5(20.8%)	6(25.0%)	5(20.8%)	3.1	1.5
Institution has developed and implemented system to guarantee authenticity and security of certificates	9(37.5%)	4(16.7%)	5(20.8%)	3(12.5%)	3(12.5%)	2.5	1.4
Overall Mean	21.7%	10.8%	13.3%	35.0%	19.1%	3.2	1.4

The findings revealed that 75% of National Polytechnics (NPs) had developed guidelines and standard procedures for assessment administration. Additionally, 66% had developed and validated assessment tools. However, only 19.2% of the NPs had developed and were implementing standardized assessment procedures highlighting concerns about overall readiness of Qualification Awarding Institutions (QAIs). Furthermore, 33.3% of NPs had developed and were implementing procedures for the storage and review of Portfolios of Evidence (POEs). Moreover, 44.2% of NPs had developed and implemented systems to guarantee the authenticity and security of certificates. Since the system for authenticity and security of certificates is a sensitive issue for any QAI, the lower number of NPs that had developed and implemented the system showed that most of them were not ready to serve as QAIs. The overall mean score of 3.2 indicated moderate compliance, but variations in standard deviations of 1.4 reflect disparities across institutions

Further discussions with the respondents showed that the absence of a dedicated assessment vote-head hampered the implementation of Competency-Based Assessment (CBA). This finding is consistent with the African Union (2021) report on Continental Education Strategy for Africa (CESA) which illustrated that financial constraints and institutional limitations hinders the full adoption of competency-based assessment in TVET systems.

4.10 Effects of Various Factors on the Readiness of NPs to Award National Qualifications

The study sought to determine the effects of Institutional Leadership and Governance (IL), Staff Competence (SC), Regulatory Standards (RS), National Institutional Policies (IP), Linkages and Collaborations (LC), CBA Standardized Processes/Procedures (ACBA), and Financial Resources (FR) on readiness to award national qualifications (RAI). This section

presents results of the Model Statistics such Goodness of fit model, ANOVA and the regression model itself.

Table 8:

Regression Analysis Statistics

<i>Regression Statistics</i>	
Multiple R	0.8705
R Square	0.7578
Adjusted R Square	0.6518
Standard Error	0.6956
Observations	24

The Multiple R (0.8705) indicates a strong positive correlation between the independent variables and the dependent variable. The model fits the data well. The R Square (0.7578), implies that 75.78% of the variability in readiness to award national qualifications (RAI) is explained by the independent variables in the model, indicating good explanatory power.

Table 9:

Analysis of Variance (ANOVA)

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>P-Value</i>
Regression	7	24.2175	3.4597	7.1510	0.00058
Residual	16	7.7408	0.4838		
Total	23	31.9583			

The F-test is highly significant ($p=0.00058 < 0.05$), indicating that the regression model is statistically significant and that at least one of the predictors is related to readiness to award national qualifications.

Table 10:

The Regression Model

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0.2880	0.8469	0.3400	0.7382
IL	1.2124	0.3061	3.9601	0.0011
SC	0.2493	0.3410	0.7308	0.0455
RS	0.4486	0.2697	1.6633	0.0157
IP	0.0215	0.2485	0.0866	0.0321
LC	0.1218	0.2210	0.5509	0.0893
CBA	0.4786	0.2919	1.6395	0.0206
FR	0.1308	0.1598	0.8182	0.0253

The regression model can be statistically simplified as;

$$RAI = 0.288 + 1.2124IL + 0.2493SC + 0.4486RS + 0.0215IP + 0.1218LC + 0.4786CBA + 0.1308FR + \varepsilon$$

The intercept (0.2880) represents the baseline readiness to award national qualifications when all other factors are zero. However, it is not statistically significant, indicating it does not meaningfully contribute to the model. Among the independent variables, Institutional Leadership and Governance (IL; 1.2124, $p = 0.0011$), stands out as the most significant factor, with a strong positive impact on readiness to award national qualifications. A one-unit increase in IL leads to a substantial increase in readiness to award national qualifications by 1.2124 units, underscoring its critical importance. Staff Competence (SC) also plays a meaningful role, showing that higher competence levels among staff positively influence readiness to award national qualifications. Similarly, Regulatory Standards (RS) and CBA Standardized Processes/Procedures (CBA) are statistically significant, demonstrating their positive contributions to institutional readiness. Although the contribution of National Institutional Policies (IP) is small, it remains statistically significant, suggesting its role, while limited, is still relevant.

In contrast, Linkages and Collaborations (LC), while positively associated with RAI, is not statistically significant. This implies it has a limited impact under current conditions and may require further exploration to understand its role better. The overall model is statistically significant and explains a considerable portion of the variation in readiness to award national qualifications, with key predictors such as Institutional leadership and governance, Staff competence, Regulatory Standards, CBA Standardized Processes/Procedures, and financial resources driving this result.

4.11 Challenges Faced by National Polytechnics in their role as QAIs and Mitigation Measures

This study sought to establish the different challenges affecting National Polytechnics in their quest to function as qualification awarding institutions. Respondents were also required to suggest mitigation measures to the cited challenges.

4.11.1 Challenges faced by NPs in their role as National QAIs

National Polytechnics, in their role as Qualification Awarding Institutions (QAIs), encountered numerous challenges that hindered their effectiveness in awarding qualifications. The main challenges that were highlighted by the administrators are briefly discussed below:

- i. **Financial Constraints:** Inadequate financial resources were the major challenge, hindering curriculum development, staff capacity building, and CBET implementation. There was insufficient funding for retooling trainers, developing assessment tools, and financing the harmonization of occupational standards (OS). The high costs of curriculum development, qualifications awarding, and CBET assessments further exacerbated these financial constraints.
- ii. **Curriculum and Assessment** The development of CBET occupational standards has been haphazard and marred with overlaps due to lack of dedicated sector skills advisory councils. Integrity in marking and grading was a concern, with some institutions

struggling to ensure reliable assessments. Maintaining portfolios of evidence and documenting processes was challenging due to unclear guidelines and inconsistent qualification awarding procedures.

- iii. **Human Resource and Capacity Building:** Many trainers, especially new recruits, lacked CBET implementation skills. Most NPs had inadequate human resources to implement CBET particularly in key roles like assessors, trainers, and verifiers. Many trainers lacked the specialized skills needed for curriculum development.
- iv. **Policy and Regulatory Challenges:** Most of the NPs encountered delays in approval of the CBET curricula by both training and profession regulators. Inadequate sensitizations on the applicable legal, policy and regulatory frameworks.
- v. **Industry Engagement and Market Acceptance:** The lack of industry collaboration and an engagement framework restricted industry involvement in training and qualification processes.
- vi. **Infrastructure Shortages:** Many institutions struggled with inadequate infrastructure which impacted on the quality and scope of training.
- vii. **Stakeholder Attitudes and Perceptions:** Some respondents cited poor attitude towards CBET among some stakeholders.

4.11.2 Mitigation Measures for Challenges Faced by NPs in Awarding National Qualifications

The mitigation measures that were proposed by the respondents to address the challenges faced by National Polytechnics in the award of National Qualifications included:

- i. Standardization of assessment processes;
- ii. Enhance funding;
- iii. Review/develop framework to guide and strengthen engagement between institutions and stakeholders for effective practical training and assessment;
- iv. Review and harmonize applicable national and institutional policies to incorporate CBET, RPL and other emerging trends in TVET;
- v. Employment of adequate personnel, especially trainers and technicians;
- vi. TVETA to expedite curriculum approval process and accreditation trainers, assessors and verifiers;
- vii. Capacity building of trainers and institutional managers on CBA, regulatory and policy frameworks;
- viii. Strengthening institutional internal quality assurance systems to monitor assessment structures in the institutions.

A proactive approach to mitigating the possible challenges could promote quality in curriculum development, training delivery, assessment and award of national qualifications processes whose outcome are graduates that meet both national and international standards.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

All the NPs had well established governance structures with qualified and experienced management staff and internal quality assurance systems. The study found that while 87.5% of respondents agreed that the leadership in National Polytechnics (NPs) was well-qualified, indicating effective governance, there were challenges in fully integrating qualification award function into strategic planning, with 50% of respondents noting it was not included. Most NPs had robust Internal Quality Assurance (IQA) mechanisms (95.8%), but only a portion had adequate supportive structures for assessments, reflecting gaps in resources and infrastructure. Additionally, the establishment of award committees at the council level was still in progress, with mixed responses. Despite strong leadership and quality assurance practices, many NPs transitioning from Technical and Vocational Colleges, faced difficulties in curriculum development, strategic planning, and aligning their governance structures with their national qualification goals.

Although most trainers and technical staff were qualified and experienced, some gaps remain, as reflected by 20.8% and 12.5% of respondents who expressed concerns about trainers and technical staff respectively. Despite this, CPDs remained crucial to keep pace with evolving institutional and technological changes as well as industry needs. While 75% of respondents agreed that trainers had undergone substantial CPD in assessment, only 58.4% indicated the same for technicians. There were mixed responses regarding trainer registration with professional bodies with 45.8% of the respondents' indicating trainers were duly registered and 37.5% indicating otherwise. This showed a lack of uniformity regarding trainer registration with professional bodies and exposed inconsistencies in compliance, potentially undermining the credibility of staff to support the Award of National Qualifications. The engagement of qualified verifiers for CBET assessments was identified as a significant challenge (50%). This reflected a substantial gap in institutional readiness to deliver credible CBET assessments. On the other hand, 70.8% of respondents agreed that trainers had the capacity to develop and utilize curriculum support materials. However, concerns from 29.2% of respondents indicated lack of capacity across trainers in this critical area. While staff competencies in National Polytechnics are generally adequate, persistent gaps in CPD for technicians, the engagement of verifiers, and trainer registration could potentially undermine institutional readiness to support the Award of National Qualifications effectively. Addressing these deficiencies is critical to achieving consistent quality and credibility in assessments and qualifications.

Most National Polytechnics complied with TVET regulatory standards (66.7%). This was a significant improvement from 2022 when a relatively smaller proportion (47%) complied with the TVET regulatory standards. However, gaps such as lack of staff sensitization on regulatory standards (only 41.7%) and non-compliance with Section 17 of the TVET Act (12.5%) on registration and licensing of courses. In general, 58.3% of the National Polytechnics had acquired policies related to qualifications award, sensitized staff and established an implementation framework. Additionally, a significant proportion of respondents (28.2%) noted that some circulars issued to institutions periodically do not provide clear direction in the awarding of TVET national qualification.

Most institutions (70.8%) had acquired policies related to the award of qualifications. A comparatively lower proportion of the NPs (45.8%) had sensitized their staff on the available policies. Some respondents stated that only trainers were targeted with sensitizations on national and institutional policies. It was further noted that 62.5% of NPs had developed a clear framework for implementing policies related to qualifications awarding. A significant proportion of respondents (28.2%) noted that some circulars issued to institutions periodically do not provide clear direction in the awarding of TVET national qualification. In general, 58.3% of the NPs had acquired policies related to qualifications award, sensitized staff and established an implementation framework.

A slight majority of the institutions (58%) had made financial provisions (vote head in approved budget) for assessment and awarding of qualifications. The institutions that had not allocated a vote head in their budget relied on related vote heads such as tuition, administration, and curriculum implementation budgets, while some were yet to begin conducting independent assessments, depending on external qualification bodies instead.

Many of the NPs had established linkages and collaborations with industry to support the CBET assessment. However, significant gaps were observed in the capacity building and active engagement with industry assessors. A notable proportion of institutions (45.8%) had not identified and listed assessors, which is vital for enhancing the credibility of assessments. Furthermore, while most institutions (75%) had frameworks for dual training and awarding qualifications, there is a need for uniform adoption across all institutions. The findings generally emphasize the importance of strengthening industry partnerships to ensure the relevance, sustainability, and effectiveness of CBET programs in meeting labor market demands and bridging skills gaps.

Although a large proportion of NPs had developed guidelines for assessment administration and validated assessment tools, only a small proportion were implementing standardized assessment procedures. A relatively small proportion had established procedures for managing Portfolios of Evidence (POEs) and systems for ensuring certificate authenticity, which are critical areas for QAIs.

The regression analysis model indicated that Institutional Leadership and Governance was a highly significant factor, with a strong positive effect, indicating its critical role. Staff Competence, Regulatory Standards, and CBA Standardized Processes/Procedures were also statistically significant, positively contributing to institutional readiness. Although National Institutional Policies have a smaller effect, they remain relevant. Linkages and Collaborations, while positive, are not statistically significant, suggesting a limited current impact. The model was statistically significant, identifying key predictors driving readiness to award national qualifications. Therefore, it could be concluded that Institutional readiness to award national qualifications is primarily influenced by robust leadership and governance, competent staff, adherence to regulatory standards, and well-structured CBA processes. While National Institutional Policies play a supportive role, Linkages and Collaborations currently lack substantial impact. These findings highlighted the importance of prioritizing leadership, competence, and regulatory adherence to enhance institutional capacity.

5.2 Conclusions

The findings highlight the progress and challenges faced by National Polytechnics (NPs) in Kenya as qualification awarding institutions. While National Polytechnics (NPs) exhibit strong leadership, governance, and internal quality assurance mechanisms, several areas require attention to enhance their readiness to award national qualifications effectively. Key challenges include the integration of qualification award into strategic planning, financial constraints and lack of infrastructure for assessments. National Polytechnics had also not established award committees at the council level. Staff competence and professional development efforts are advancing but there are notable gaps in Continuous Professional Development (CPD) and trainer registration with professional bodies.

Compliance with TVET regulatory standards has improved, yet issues such as lack of staff sensitization and non-compliance with specific sections of the TVET Act CAP 210A persist. Despite majority of the institutions having acquired policies on qualification awarding, they were yet to be disseminated or consistently implemented. Several national polytechnics faced a lack of financial provisions, specifically for assessment and qualification awarding, forcing them to depend on external bodies, which undermined their sustainability.

While majority of institutions have made commendable progress in establishing industry linkages and adopting frameworks for dual training and qualification awarding, critical gaps remain in engagement of industry assessors. The lack of identified and listed assessors in a significant number of institutions highlights the need for a more structured approach to enhance assessment credibility. Uniform adoption of dual training frameworks across all institutions and stronger industry partnerships are essential to ensure the relevance, sustainability, and effectiveness of CBET programs in addressing labor market demands and closing skills gaps. While many NPs have made strides in developing assessment guidelines and tools, the limited implementation of standardized procedures, along with gaps in managing Portfolios of Evidence and ensuring certificate authenticity, highlights critical areas for strengthening quality assurance initiatives.

Regression analysis underscores the critical role of leadership, governance, staff competence, and regulatory compliance in determining institutional readiness. These factors, along with well-structured assessment procedures, must be prioritized. To achieve consistent quality, credibility, and sustainability in awarding qualifications, a holistic and integrated approach is required, emphasizing governance, regulatory compliance, professional development, and stakeholder engagement.

5.3 Recommendations

Based on the findings from this study, the following recommendations were made:

- i. National Polytechnics to strengthen institutional leadership and governance structures recognizing their significant impact on institutional readiness as QAI;
- ii. National Polytechnics to develop mechanisms to regularly assess staff competencies and readiness, ensuring alignment with institutional and industry standards;
- iii. National Polytechnics to ensure all trainers engaged are registered and licensed by TVETA to enhance professionalism and institutional credibility;
- iv. National Polytechnics to recruit and train qualified verifiers to strengthen the quality and reliability of CBET assessments;
- v. The Authority to intensify sensitization on regulatory standards, make them easily accessible and put strict measures on implementation to enhance awareness and compliance;
- vi. National Polytechnics to acquire and sensitize staff involved in the instructional process on policies governing qualifications award;
- vii. Periodic circulars issued to NPs be accompanied by clear implementation guidelines;
- viii. The state department of TVET to establish policies mandating dedicated budget allocations for assessment and qualification awarding activities within all institutions;
- ix. National Polytechnics should strengthen their systems by prioritizing the development and utilization of systems to ensure certificate authenticity and security, fully adopting and implementing procedures for the storage and review of POEs and utilize validated assessment tools and standardized procedures for CBA;
- x. National Polytechnics to develop collaboration framework to strengthen collaborations and ensure the relevance and sustainability of competency-based education and training (CBET) programs

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APPENDICES

Appendix 1: Questionnaire

Technical and Vocational Education and Training Authority (TVETA) is conducting a study on Assessment of Kenyan National Polytechnics' Readiness to Award National Qualifications. The findings from this study will help in making informed decision-making and policy formulation to support the National Polytechnics to effectively handle their legal mandate as Qualification awarding institutions in the country. You have been identified as one of the respondents. Your honest response to the items of this questionnaire will remain confidential and the data will be used entirely for the intended purpose.

Part 1: Preliminary Information

101 Respondent

- ☐ Administrator
- ☐ Trainer/HoD from an academic department

102 Gender of the Respondent

- ☐ Male
- ☐ Female

103 Training experience

- ☐ 1 to 5 years
- ☐ 5 to 10 years
- ☐ 10 to 15 years
- ☐ 15 to 20 years
- ☐ Over 20 years

104 Name of TVET provider:

105 County (Please select)

106 Category of institution/ provider

- ☐ National Polytechnic
- ☐ KSTVET

200 To what extent do you agree or disagree with the following statement;

Statement	SD	D	N	A	SA
Your Institution is ready to award TVET National Qualifications					

201 Effects of Institutional leadership and Governance on NPs Readiness to Award TVET National Qualifications

Statement	SD	D	N	A	SA
201a All members of management are well qualified and experienced (Check Qualifications of Council members)					
201b Institution has an active internal quality assurance committee (check appointment, minutes, reports, QMS)					

201c Institution has incorporated assessment and award of qualifications in institutional planning (Check SP, AWP and monitoring plan and reports)					
201d Institution has adequate supportive structures for assessment and award of qualification (Check Established Offices, supportive technology (MIS), assessment management system,					
201e Institution has established an award committee at the Council level (check for availability of committee, Minutes, reports, committee charter)					

202 Effect of Staff Competencies on NPs Readiness to Award TVET Qualifications

Statement	SD	D	N	A	SA
202a All trainers are qualified and experienced (Check for percentages of licensed teaching staff)					
202b All technical staff/ technicians are qualified and experienced (Check for valid certificates)					
202c Trainers have undergone CPD in assessment (check for capacity building trainings (from TVETA, CDACC, KSTVET etc) undertaken by trainers in the past 3 years)					
202d Technicians have undergone CPD in assessment (check for capacity building trainings (from TVETA, CDACC, KSTVET etc) undertaken by technicians in the past 3 years)					
202e Trainers are duly registered by professional bodies where necessary (Check for numbers of trainers registered by professional bodies)					
202f Institution has engaged qualified and experienced verifiers to support CBET assessment (check for availability of verifier engagement guidelines/ standard, engagement contracts, licenses)					
202g Trainers have capacity to develop and utilize curriculum support materials (inquire about trainers' ability to develop mentoring tools, PoEs, assessment plans, performance criteria weighting tool, assessment tools)					

203 Effect of regulatory standards on NPs readiness to award TVET qualifications

Statement	SD	D	N	A	SA
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203a Institution has all the required regulatory TVET standards and regulations for TVET awarding and qualifications (TVET Act 2013, TVET regulations 2015, NP standard, CBETA standard, CBET Assessment centers Standard, RPL, Industrial Attachment requirements and guidelines, TQF, Competency-Based Assessment (CBA) Tools, National Qualification Framework)					
203b Institution has sensitized staff on TVET regulatory standards (Check for either memo, program or report)					
203c Institution registration status is valid, and all programmes are licensed					
203d Institution has clear framework for implementing regulatory standards (Check the monitoring reports)					

204 Effect of institutional and national policies on NPs readiness to award TVET qualifications

Statement	SD	D	N	A	SA
204a Institution has policies related to TVET qualification awarding (Check for availability of Academic/assessment policy, quality assurance policy, attachment policy)					
204b Institution has sensitized staff on the institutional policies (Memos, program or report)					
204c Institution has clear framework for implementing policies related to TVET qualification awarding (Check for monitoring reports)					
204d The TVET national periodic circulars provide clear direction in the awarding of TVET national qualifications (Engage on TVET national circulars on workload allocation, CBET implementation, dual training, departmental reorganization and maybe TVET New funding model)					

205 Effect of financial resources on NPs readiness to award TVET qualifications

205a Institution has a vote head for assessment and awarding of qualifications in their current budget (Check institution budget)

[Yes, No]

206 Effect of linkages and collaborations to NPs readiness to award National Qualifications

Statement	SD	D	N	A	SA
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206a Institution has established linkages and collaborations that support CBET assessment (Check for MoUs- specific to CBET assessment, trade areas where partnerships exist)					
206b Institution has Capacity build industry assessors and verifiers on CBA (Check for capacity building attendance records, programmes and memos)					
206c Institution has identified and listed industry assessors and verifiers to support CBA (Check for list of identified assessors and verifiers from industry)					
206d Institution has engaged industry assessors and verifiers to support CBA (check for engagement letters)					
206e Institution has clear framework for implementing dual training including award of qualifications. (Check for Program and design structure, MoUs, monitoring reports)					

207 Availability and utilization of competence Based Assessment (CBA) Standardised operating procedures in NPs

Statement	SD	D	N	A	SA
207a Institution has developed guidelines/ standardized procedures on assessment administration (check for guidelines)					
207b Institution has developed and validated assessment tools (check for validated tools, minutes, validation reports)					
207c Institution has developed and is utilizing –implementing standardised assessment procedures					
207d Institution has developed and is implementing a procedure for storage and review of PoEs					
207e Institution has developed and implemented system to guarantee authenticity and security of certificates (Check for a database of issued qualifications, sample certificates with security features- security number, barcodes, watermark, holograms, microtext, UV features)					

208 Challenges faced by NPs in their role as National QAIs, and respective mitigation strategies.

208a State the main challenges faced by your institution in playing its role as a National QAI

207b What mitigation measures would you propose for the challenges mentioned in 208a?

Appendix 2: Work Plan

Activity	September	October	November
Development of proposal and data collection tools			
Identification of target population and sampling			
Piloting			
Briefing of data collection teams			
Data collection			
Analysis, report writing and dissemination			