



Quality Assurance as a Driver for Enhancing Quality Training Provision in TVET Schools, Rwanda

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Abstract

Quality assurance enhances quality training in TVET schools by ensuring adherence to industry standards, improving practical skills acquisition, modernizing workshops, fostering stakeholder engagement, and maintaining a conducive learning environment, thereby aligning training with labor market needs and educational best practices. The study assessed the role of quality assurance in enhancing training provision in TVET schools in Rwanda, Rwamagana district. It examined eleven key factors influencing quality training, including advice from quality assurance, oversight of training provision, improvements in workshops and learning environment, and among others. Data were collected from TVET trainers and analyzed using descriptive analysis and multiple linear regression model. Trainers agreed that advice from quality assurance significantly improves training practices ($M = 3.77$, $SD = 0.525$), and oversight of training provision ensures alignment with industry needs ($M = 3.51$, $SD = 0.499$). Quality assurance was also found to improve workshops ($M = 2.53$, $SD = 0.502$) and ameliorate learning environments ($M = 2.64$, $SD = 0.539$). Practical skill acquisition, curriculum implementation, labor market-oriented training, and stakeholder engagement were all positively influenced by quality assurance, with significant correlation. The regression analysis revealed that quality assurance factors collectively influenced at /accounted 17.9% of the variation in quality training provision. Specific factors, such as improved workshops and effective curriculum implementation, were statistically significant, indicating their strong positive correlation with quality training. The study concluded that quality assurance plays a crucial role in enhancing quality training in TVET schools. The study recommended establishing regular assessment frameworks, encouraging continuous feedback, collaborating with industry representatives, and fostering stakeholder engagement to align training with

labor market needs and educational best practices.

Subject Areas

Vocational Education

Keywords

Quality Assurance, Quality Training Provision, TVET Schools

1. Introduction

Globally, effective quality assurance policies help maintain high quality standards in teaching, learning, infrastructure, and overall student development, which are essential for producing competent graduates ready for the demands of the job market [1]. However, challenges such as inadequate resources, poor input quality, and scattered governance structures hinder the quality of training provision in TVET institutions, emphasizing the need for robust quality assurance frameworks, collaboration with industries, adequate budget allocation, and continuous monitoring and evaluation to enhance the quality of training in TVET schools globally [2]. Quality assurance plays a crucial role in influencing the provision of quality training in Technical and Vocational Education and Training (TVET) schools. Various studies highlight the significance of quality assurance mechanisms in ensuring the effectiveness of TVET programs. For instance, research in Pakistan emphasizes the positive association between quality assurance of TVET programs and the preparedness of teachers for the demands of the labor market in the era of Industrial Revolution 4.0 [2]. Similarly, studies in Uganda and Sudan underscore the importance of establishing regulatory frameworks and enhancing input resources to improve the quality of training delivery in TVET institutions [3] [4]. Furthermore, findings from the State of Amhara in Ethiopia reveal that inadequate allocation of necessary resources hampers the quality of training processes in TVET, necessitating immediate government intervention to enhance quality assurance efforts [5]. In Kenya, [6] highlights that TVET schools confronted with different challenges that have affected their growth. These include implementation of an official curriculum, which does not encompass the current needs of the labor market and, in curriculum design might not involve the key stakeholders, such as industries, curriculum implementers from the grass roots levels thus, leading to the unexpected mismatch between the provided training and labor market needs. Thus, this research intends to respond to the following research question: “To what extent the quality assurance influence quality training provision in TVET schools of Rwamagana District, Rwanda?”.

As the significance of the study, the paper entitled “*Quality Assurance as a Driver for Enhancing Quality Training Provision in TVET Schools, Rwanda*” is essential because it addresses the critical role that quality assurance plays in

elevating educational standards and ensuring alignment with the needs of the labor market. Rwanda's Technical and Vocational Education and Training (TVET) sector has grown significantly, driven by the government's efforts to enhance skills for socio-economic transformation (NESA, 2024) cited by [7]. However, challenges such as infrastructure gaps, reluctance in Competency-Based Training adoption, and inconsistency of teacher's qualifications. This study aimed to analyze how quality assurance mechanisms can mitigate and solve these challenges and drive improvements in TVET quality training provision, contributing to national development and global competitiveness (NESA, 2024) cited by [7].

Multiple linear regression (MLR) was used as the econometric model for its ability to quantify the relationships between multiple quality assurance factors, such as infrastructure adequacy, teacher qualifications, and curriculum implementation, and their collective impact on quality training provision. The model's capacity to account for quality assurance impact on quality training provision and its ability to isolate the effects of each measured variable makes it particularly useful in a complex system like TVET, where numerous interacting factors influence outcomes. By using this model, the study provides a robust empirical foundation on the contribution of each measured variable, and this is to understand the dynamics of quality assurance and its influence on training excellence in Rwanda's TVET schools.

1.1. Technical and Vocational Education and Training (TVET) in Rwanda

Technical and Vocational Education and Training (TVET) in Rwanda is a crucial component of the country's educational system. Studies highlight various aspects and necessities in TVET schools and graduates, and school managers generally appreciate the Industrial-Based Training (IBT) program, with graduates acknowledging its role in providing them with the necessary skills for self-employment [8]. Additionally, quality assurance is recognized as a pivotal root for the success of the TVET system, prompting initiatives to assess and improve their instructional competencies. Rwanda adopted a competence-based education approach reflecting a broader trend to align TVET with market demands, aiming to drive economic growth through a skilled workforce.

1.2. Quality Assurance for TVET Schools in Rwanda

Quality assurance plays a crucial role in influencing the provision of quality training in Rwanda TVET schools. The research conducted in Rwanda highlighted the significance of ensuring high-quality assurance to enhance the overall quality of the TVET system [3]. Additionally, the study on Industrial-Based Training (IBT) in Rwanda emphasized the positive perceptions of graduates and school managers towards the skills acquired through TVET institutions, indicating the importance of quality training provision [9]. Furthermore, the concept of quality assurance in TVET focuses on the effective quality assurance policies to deliver world-class

education and meet global standards for the positive impact of quality assurance on training provision [8].

1.3. Quality Assurance's Progress and Prospects in Bridging Gaps in Rwanda TVET Schools

According to NESAs (2024), Rwanda's Technical and Vocational Education and Training (TVET) sector has made substantial strides in quality assurance, driven by national strategies and rigorous evaluation frameworks. Enrollment in TVET schools has risen sharply, with the government targeting 60% of students attending TVET programs by 2024, a significant increase from 31.1% in 2017. This aligns with Rwanda's National Strategy for Transformation (NST1), emphasizing skills development as a cornerstone for economic transformation (NESAs, 2024) cited [7]. Key developments include the implementation of Competency-Based Training (CBT), which has significantly enhanced the employability of graduates. By 2024, over 86% of TVET graduates secured employment within six months, reflecting improvements in labor market alignment. Infrastructure enhancements have also been a priority, with 100% of TVET schools connected to electricity, water, and internet, and 70% equipped with at least two SMART classrooms. Teacher qualifications have improved, with 86% of trainers meeting competency standards, a notable rise from previous years (NESAs, 2024). Despite these advancements, challenges persist. Only 76% of TVET institutions meet comprehensive quality assurance standards, highlighting gaps in infrastructure, curriculum updates, and resource allocation. Additionally, NESAs as a quality assurance entity has undertaken initiatives such as quality audits across 563 institutions to address disparities and ensure continuous improvement in training delivery and outcomes (NESAs, 2024).

2. Methodology

2.1. Research Design

The study used a mixed research design and according to Creswell (2014), a mixed research design is a process for gathering, examining, and mixing both quantitative and qualitative data. Hence, mixed methods were used, and quantitative data were collected to statistically measure to what extent quality assurance influences quality training provision while qualitative data were collected to describe the qualities and characteristics of the respondents and gain a contextual understanding of their perception and opinions towards quality training provision in TVET schools.

2.2. Study Area

The research was conducted in the Rwamagana district. Rwamagana district is a second-order administrative division and is located in Eastern Province, Rwanda. The district counts urban and rural TVET schools and practical skills acquired as helping to change people's standards of living.

2.3. Target Population

The target population of the study was all TVET school managers, trainers and trainees of the Rwamagana district with a sample size of 272 respondents including 10 school managers, 135 trainers, and 157 trainees. The district counts urban and rural TVET schools and the selection of key respondents in TVET; school managers, trainers and trainees; therefore, the random selection approach was effective.

2.4. Sample Size Determination

The sample size was determined based on groups of respondents from the target population. The sample size was determined by a mathematical formula given by Dhokhikah *et al.* (2015).

$$n = \frac{N}{1 + N(\alpha)^2} \quad (1)$$

$$n = \frac{847}{1 + 847(0.05)^2} = 272 \quad (2)$$

where N is the sample frame, n is the sample size and α is the margin of error.

2.5. Sampling Techniques and Sample Size

2.5.1. Sampling Techniques

The study adopted multistage sampling procedures, stratified sampling, purposive sampling, and simple random sampling. Stratified sampling was used to divide the respondents into three strata of trainees, trainers, and school managers; Purposive sampling also known as judgmental or selective sampling was used to select key respondents with key information school managers, and Simple random sampling was used to select the respondents and every trainee and trainer had an equal chance of being selected for the sample and the same, the Eastern Province, Rwamagana district and the Ten TVET schools were also randomly selected.

2.5.2. Sample Size

The size of the sample was 10 TVET managers, 135 TVET trainers and 157 TVET trainees and the full sample size was 272 respondents.

2.6. Data Analysis Methods

The researcher used descriptive statistics to analyze and display quantitative data. In the same line, frequencies, percentages, and means were used to describe the factors influencing quality training provision in TVET. In addition, multiple linear regression was used to evaluate the influence of quality assurance on quality training provision in TVET schools (See **Table 1**). The Statistical Package for Social Sciences (SPSS) version 26 was used to calculate the mean (M) and standard deviation (SD). To analyze quantitative data, the study applied multiple linear regression. The mathematical model of multiple linear regression appears as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \dots + \beta_n X_n$$

where Y stands for Quality Assurance effect, β_0 stands for constant or intercept, β_1 , β_2 , and β_3 stand for coefficients of independent variables of Quality assurance respectively. The X_1 , X_2 , and X_3 stand for the set of independent variables respectively.

Table 1. Explanatory variables of Quality Assurance (QA).

Variables	Variable description	Hypothesis
A. Dependent variable: Physical facilities		
B. Independent/explanatory variables (1 - 11)		
1.	Advice from quality assurance help in improving training practice	+/-
2.	Quality assurance oversees the quality of training provision	+/-
3.	Quality assurance helps in improving workshops	+/-
4.	Learning environment is ameliorated through quality assurance	+/-
5.	Acquisition of practical skills are improved through quality assurance	+/-
6.	Quality assurance ensures that curriculum is implemented effectively	+/-
7.	Quality assurance ensures that training provision is labor market - oriented	+/-
8.	Quality of learning facilities are improved through quality assurance	+/-
9.	Quality assurance ensures stakeholder engagement and participation	+/-
10.	Quality assurance ensures timely assessment and evaluation	+/-
11.	Quality assurance ensures standards and Guidelines	+/-

3. Results and Discussion

The main research question that guided the study: “To what extent the quality assurance influence quality training provision in TVET schools of Rwamagana District, Rwanda”? was about finding out how quality assurance influences quality training provision in TVET schools of Rwamagana district, and how it significantly impacts quality training provision in Rwanda TVET schools by ensuring that educational programs align with industry standards and labor market needs.

3.1. Descriptive Statistics for Quality Assurance Variables

Table 2 shows the findings from respondents on influence of quality assurance on quality training provision in TVET schools of Rwamagana district.

Based on the reviewed literature, on the past research findings, and considering the information from the informal survey; among a large number of factors that were expected to influence quality training provision in TVET schools; only eleven potential explanatory variables were considered for the mentioned research

question and were presented and examined for their effect on quality training provision as:

Table 2. Descriptive statistics of quality assurance for trainers.

Variables of quality assurance	Obs	Mean	SD
Advice from quality assurance help in improving training practice	135	3.77	0.525
Quality assurance oversees the quality of training provision	135	3.51	0.499
Quality assurance helps in improving workshops	135	2.53	0.502
Learning environment is ameliorated through quality assurance	135	2.64	0.539
Acquisition of practical skills are improved through quality assurance	135	2.61	0.660
Quality assurance ensure that curriculum is implemented effectively	135	2.88	0.700
Quality assurance ensure that training provision is labor market - oriented	135	2.65	0.684
Quality of learning facilities are improved through quality assurance	135	2.5	0.612
Quality assurance ensures stakeholder engagement and participation	135	2.81	0.821
Quality assurance ensures timely assessment and evaluation	135	2.39	0.609
Quality assurance ensures standards and Guidelines	135	2.52	0.584
Overall Scores		2.80	0.612

Advice from quality assurance helps in improving training practice ($M = 3.77$, $SD = 0.525$) and trainers strongly agreed on this variable that it influences quality assurance in TVET schools as advice from quality assurance contributes to the overall enhancement of training practices in TVET schools by promoting adherence to standards, continuous improvement, alignment with industry needs.

Quality assurance oversees the quality of training provision ($M = 3.51$, $SD = 0.499$) and trainers strongly agreed on this variable that it influences quality assurance in TVET schools as per it involves a comprehensive approach to ensure that training provision meets established standards and ensures that curriculum aligns with industry needs.

Quality assurance helps in improving workshops ($M = 2.53$, $SD = 0.502$) and trainers agreed on this variable that it influences quality assurance in TVET schools and trainers coincided that quality assurance plays a vital role in improving workshops in Technical and Vocational Education and Training schools as the oversight provided by quality assurance processes helps ensure that workshops meet established standards, align with industry needs, and provide effective learning environments.

Learning environment is ameliorated through quality assurance ($M = 2.64$, $SD = 0.539$) and trainers agreed on this variable that it influences quality assurance in TVET schools and highlighted that quality assurance in Technical and Vocational Education and Training schools plays a crucial role in ameliorating the learning

environment as it involves a systematic processes and measures to ensure that the educational experience provided to students is of high quality, effective and conducive to learning.

Acquisition of practical skills are improved through quality assurance ($M = 2.61$, $SD = 0.660$) and trainers agreed on this variable that it influences quality assurance in TVET schools as quality assurance in TVET schools ensures that practical skill acquisition is a central focus of the training process by aligning curriculum with industry needs and continuously improving teaching methods, to practically enhance skills among trainees.

Quality assurance ensures that curriculum is implemented effectively ($M = 2.88$, $SD = 0.700$) and trainers agreed on this variable that it influences quality assurance in TVET schools as quality assurance in TVET schools ensures the effective implementation of the curriculum by emphasizing alignment with industry standards, regular reviews, stakeholder involvement, instructor training, and ongoing monitoring and evaluation.

Quality assurance ensures that training provision is labor market-oriented ($M = 2.65$, $SD = 0.684$) and trainers agreed on this variable that it influences quality assurance in TVET schools as quality assurance in TVET schools ensures that training provision is labor market-oriented by actively involving stakeholders, conducting needs assessments, aligning with qualifications frameworks, and ensuring that graduates are well-prepared for successful entry into the workforce.

Quality of learning facilities are improved through quality assurance ($M = 2.5$, $SD = 0.612$) and trainers agreed on this variable that it influences quality training provision in TVET schools as quality assurance in TVET schools enhances the quality of learning facilities by focusing on safety, modernization, resource adequacy, accessibility, availability, continuous improvement and creating a conducive and effective learning environment.

Quality assurance ensures stakeholder engagement and participation ($M = 2.81$, $SD = 0.821$) and trainers agreed on this variable that it influences quality assurance in TVET schools as quality assurance ensures stakeholder engagement and participation by involving relevant individuals and groups in the decision-making, planning, and evaluation processes, by creating structures, communication channels, and collaborative opportunities that involve employers in the school, school representatives, community members, and other relevant groups in the educational process.

Quality assurance ensures timely assessment and evaluation ($M = 2.39$, $SD = 0.609$) and trainers agreed on this variable that it influences quality assurance in TVET schools as per quality assurance plays a crucial role in ensuring timely and effective assessment and evaluation processes with feedback mechanisms, continuous monitoring to measure the quality of education and the progress of students and ensures that assessment and evaluation processes in TVET schools are not only timely but also fair, reliable, and aligned with educational objectives and industry standards.

Quality assurance ensures standards and Guidelines ($M = 2.52$, $SD = 0.584$) and trainers agreed on this variable that it influences quality assurance in TVET schools and on one hand, quality assurance ensures that TVET schools consistently adhere to established standards and Guidelines, contributing to the delivery of high-quality education and training programs; and on the other hand, TVET authorities conduct a quality audit to assess the quality, the effectiveness of education, the training programs within a TVET institution and the primary objective of a TVET quality audit is to ensure that the institution is meeting established standards, guidelines, and best practices, ultimately contributing to the provision of high-quality technical and vocational education.

The overall mean scores ($M = 2.80$, $SD = 0.612$) indicate that the trainers of TVET schools in the Rwamagana district agreed that quality assurance positively influences the provision of quality training. During the guided interview, the school managers reiterated that quality assurance is important in influencing quality-training provision in TVET schools. A great number of school managers reported that they dedicate their time to quality assurance with the aim to improve quality training provision and, definitely SM_3 and SM_8 qualitatively reported that.

“In my school, I conduct classroom inspections to get insight on what happening in the teaching and learning environment. During the inspection, I take time to check students’ works and the processes implemented for quality training provision in the classrooms and even in the workshops”.

3.2. Econometric Findings for Quality Assurance Variables

Multiple linear regression analysis involves measuring relationships between one or more independent variables to assess whether there is a change in the predicted variable once the explanatory variables evolve. The research examined the influence of quality assurance on quality training provision in TVET schools; the results typically include several key components, as depicted in **Table 3**. The coefficient for each independent variable indicates the strength and direction of the relationship. Positive coefficients suggest a positive impact on the dependent variable, while negative coefficients suggest a negative impact. P-values associated with each coefficient help to determine the statistical significance of each variable. Lower p-values (typically < 0.05) indicate greater significance at a 95% confidence interval.

As mentioned in the summary of **Table 3**, the computed R-squared was 0.1795; and to respond to the research question, the study found that quality assurance positively impacts quality training provision in TVET schools and resulted in a moderate correlation between predicted and explanatory variables of $R^2 = 0.1795$, thus; quality assurance enhanced quality training provision in TVET schools by 17.95%. It implies that a 17.95% R-squared shows that quality assurance factors, such as new advice from quality assurance, implementation of curriculum, improved learning facilities, stakeholder engagement and participation, Timely assessment and evaluation, compliance to standards and Guidelines, etc., collectively

account 17.95% while the remaining 82.05% of the variation in quality training remain unexplained, which could be due to other factors not measured by the study.

Table 3. Quality assurance results by Regression model for trainers.

Variables	Coeff.	Std. Err.	T-values	p > t
Advice from quality assurance helps in improving training practice	0.223	0.154	1.45	0.009
Quality assurance oversees the quality training provision	0.159	0.134	1.19	0.014
Quality assurance helps in improving workshops	0.189	0.153	1.24	0.013
Learning environment is ameliorated through quality assurance	0.120	0.134	0.9	0.023
Acquisition of practical skills are improved through quality assurance	0.074	0.155	0.47	0.039
Quality assurance ensures that curriculum is implemented effectively	0.216	0.108	1.99	0.003
Quality assurance ensures that training provision is labor market – oriented	0.133	0.114	1.17	0.015
Quality of learning facilities are improved through quality assurance	0.009	0.096	0.09	0.056
Quality assurance ensures stakeholder engagement and participation	0.046	0.101	0.45	0.040
Quality assurance ensures timely assessment and evaluation	0.086	0.094	0.92	0.022
Quality assurance ensures standards and Guidelines	0.078	0.121	0.65	0.032
_cons	0.812	0.206	3.94	0.000

Number of Obs = 119, F (11, 107) = 2.13, Prob > F = 0.0241, R-squared (R²) = 0.1795, Adj R-squared (Adj. R²) = 0.0951 and Root MSE = 0.45396.

p < 10%: * and p < 5%: **.

The findings in **Table 3** showed that the variable “Advice from quality assurance helps in improving training practice” positively influenced the quality training provision in TVET schools and was significant at 5% level of significance. The implication of seeking advice from quality assurance on training practice is a holistic approach to ensure that training programs are of the highest quality, align with standards, meet learner needs, and undergo continuous improvement. In this case, the positive coefficient (0.2226) implies that, on average, an increase in the level of advice from quality assurance is associated with an increase in the quality of training provision and the p-value of 0.009 is less than the common significance level of 0.05, suggesting that the coefficient is statistically significant. Hence, the findings are in line with the research conducted by [10] argues that Quality assurance relies on outside auditors coming inside a business or organization to evaluate how well it is doing.

The study findings presented in **Table 3** showed that the variable “Quality assurance oversees the quality of training provision”, positively influenced the quality training provision in TVET schools and was significant at 5% level of signi-

ficance. Implications of quality assurance are particularly crucial due to the practical and skills-oriented nature of TVET programs for competent and employable graduates. In this case, the positive coefficient 0.1588 suggests that, on average, an increase in the level of advice from quality assurance is associated with an increase in the quality of training provision. The p-value of 0.014 is less than the common significance level of 0.05, suggesting that the coefficient is statistically significant. Hence, the findings are in line with the research conducted by [11] argues that quality assurance partly refers to monitoring performance and ensuring achievement of quality outputs or improved quality and on the other side, it is the systematic management and assessment procedures in TVET schools.

The study findings presented in **Table 3** showed that the variable “Quality assurance helps in improving workshops” positively influenced the quality training provision in TVET schools and was statistically significant at 5% level of significance. It signifies that quality assurance helps in the efficient use of workshop resources, including tools, equipment, and materials and it ensures that workshops are well equipped, and resources are utilized effectively for hands-on learning experiences. In this case, the positive coefficient 0.1892 suggests that, on average, an increase in the level of quality assurance in workshops is associated with an increase in the quality of training provision and the p-value of 0.013 is less than the common significance level of 0.05, suggesting that the coefficient is statistically significant. Thus, the results are coherent with the study conducted by [1] argues that an equipped workshop, adequate equipment and training materials as well as the time for practical exercise for trainees need to meet the standards besides the competence of teachers.

The results in **Table 3** indicate that the variable “Learning environment is ameliorated through quality assurance”, positively influenced the quality training provision in TVET schools and was positively significant at 5% level of significance. The implication is that quality assurance as an advisory board contributes to the creation of a positive and conducive learning environment, which includes well-designed classrooms, workshops, and laboratories that support effective teaching and learning. In this case, the positive coefficient 0.1201 suggests that, on average, an increase in the level of quality assurance in workshops is associated with an increase in the quality of training provision and the p-value of 0.013 is less than the common significance level of 0.05, suggesting that the coefficient is statistically significant. Hence, the findings are supported by the research conducted by [12] affirmed that a good school environment is where good working facilities exist, is a catalyst for effective teaching and learning and reinforces the efforts of the trainers by providing a good stimulus for effective teaching and learning to take place.

The results in **Table 3** indicate that the variable “Acquisition of practical skills is improved through quality assurance”, positively influenced the quality training provision in TVET schools and was positively significant at 5% level of significance. The implication is quality assurance contributes to the enhanced employability of TVET graduates, emphasizing hands-on acquisition and practical learning

experiences. In this case, the positive coefficient 0.0736 suggests that, on average, an increase in the level of acquisition of practical skills through quality assurance is associated with an increase in the quality of training provision and the p-value of 0.039 is less than the common significance level of 0.05, suggesting that the coefficient is statistically significant, hence the study correlates with the research findings of [13] argues that the ultimate key concern of quality assurance arrangement in technical vocational education and training is to enhance skills acquisition, promoting self-employment and technological development for employable and competent graduates.

The results in **Table 3** show that the variable “Quality assurance ensures that curriculum is implemented effectively” positively influenced the quality training provision in TVET schools and was significant at 5% level of significance. The implication is that quality assurance ensures a consistent and standardized delivery of the curriculum across different TVET institutions. This consistency ensures that trainees receive similar educational experiences regardless of the institution they attend. The findings from regression analysis show that, the positive coefficient 0.2157 suggests that, on average, an increase in the level of curriculum implementation through quality assurance is associated with an increase in the quality of training provision and the p-value of 0.003 is less than the common significance level of 0.05, suggesting that the coefficient is statistically significant, hence the study correlates with the research findings of [14] argues that the ultimate affirmed that the core function of the directorate of quality assurance and standards is ensuring quality education that entails monitoring of curriculum implementation in schools.

The results depicted in **Table 3** reveal that the variable “Quality assurance ensures that training provision is labor market-oriented” positively influenced the quality training provision in TVET schools and was significant at 5% level of significance. The implication is that labor market-oriented training increases the employability of TVET graduates. Students are equipped with practical skills and competencies that directly match the requirements of industries. In this case, the positive coefficient 0.1329 suggests that, on average, an increase in the level of labor market-oriented training provision through quality assurance is associated with an increase in the quality of training provision and the p-value of 0.015 is less than the common significance level of 0.05, suggesting that the coefficient is statistically significant. Thus, the findings are in line with the research conducted by [15] found that labor market gap exhibits the main ideas of practice-oriented educational requirements, as education is oriented not on processes but on measurable educational outcomes, reflecting not only economic, but much broader labor market needs.

The results depicted in **Table 3** reveal that the variable “Quality of learning facilities are improved through quality assurance” positively influenced the quality training provision in TVET schools and was significant at 5% level of significance. On this, the implication is quality assurance insists on the creation of a conducive,

and up-to-date learning environment that supports effective teaching and enhances the overall educational experience for students in TVET schools; well-maintained classrooms, laboratories, and workshops positively affect the overall atmosphere of the institution. In this regard, the positive coefficient 0.0086 suggests that, on average, an increase in the level of improved quality of learning facilities through quality assurance is associated with an increase in the quality of training provision and the p-value of 0.056 is above the common significance level of 0.05, suggesting a marginally significant relationship. Thus, the findings are in line with the research conducted by [16] affirms that a quality school physical facility invariably affects students, teachers and the learning environment in varying ways and the management and maintenance of learning facilities are ladders for climbing and achieving quality training provision.

The results depicted in **Table 3** show that the variable “Quality assurance ensures stakeholder engagement and participation” positively influenced the quality training provision in TVET schools and was significant at 5% level of significance. On this, the implication is that the variable “Quality assurance ensures stakeholder engagement and participation” refers to the creation of a collaborative and responsive educational environment that considers the key educational partners and the diverse needs of the school stakeholders, ultimately contributing to the overall quality and effectiveness of TVET programs. In this case, the positive coefficient 0.0455 suggests that, on average, an increase in the level of stakeholder engagement through quality assurance is associated with an increase in the quality of training provision and the p-value of 0.040 is less than the common significance level of 0.05, suggesting that the coefficient is statistically significant. Thus, the findings are in line with the research conducted by [1] provides a set of success criteria among others; competence and morale value of teachers, adequate supply and application of material resources, required technology, strong partnership among stakeholders, strong concern for aspiration of students, standardized and relevant occupational standards, duly curriculum implementation, appropriate monitoring and evaluation scheme and strong purposeful leadership is the major criteria of success in TVET schools.

The results depicted in **Table 3** show that the variable “Quality assurance ensures timely assessment and evaluation” positively influenced the quality training provision in TVET schools and was significant at 5% level of significance. The implication is that the variable refers to a systematic and efficient assessment process that contributes to enhanced learning outcomes, trainees’ skills recapitulation, and the overall improvement of training programs in TVET schools. In this case, the positive coefficient 0.0863 suggests that, on average, an increase in the level of timely assessment and evaluation through quality assurance is associated with an increase in the quality of training provision and the p-value of 0.022 is less than the common significance level of 0.05, suggesting that the coefficient is statistically significant. Hence, the findings are in line with the research conducted by [17] argues that, while the purpose of an evaluation is primarily a summative

activity to judge the quality of a performance or work product against a standard at specific points while the fundamental nature of assessment is both formative and summative processes where the mentor values helping a mentee and is willing to expend the effort to timely provide quality feedback that will enhance the mentee's future performance.

The results depicted in **Table 3** show that the variable "Quality assurance ensures standards and Guidelines" positively influenced the quality training provision in TVET schools and was significant at 5% level of significance. On this, the implication is that quality assurance ensures that TVET schools adhere to established standards and guidelines, which are often set by accrediting bodies and compliance with these standards is mandatory for obtaining and maintaining school accreditation. In this case, the positive coefficient (0.0784) suggests that, on average, an increase in the level of adherence to standards and guidelines through quality assurance is associated with an increase in the quality of training provision and the p-value of 0.032 is less than the common significance level of 0.05, suggesting that the coefficient is statistically significant. Hence, the findings are in line with the research conducted by [18] argues that standards and guidelines are measured through Internal Quality Assurance and External Quality Assurance where Internal Quality Assurance refers to the processes and systems implemented within an educational institution to monitor, evaluate, and enhance the quality of its programs and services and involves a self-assessment and self-regulation by the institution itself; while External Quality Assurance involves external entities or agencies that come to assess and verify the quality of educational institutions and programs and these are external entities independent of the institution being evaluated.

4. Conclusions and Recommendations

4.1. Conclusions

To sum up the influence of independent variables on quality training provision in TVET schools, the study measured to what extent quality assurance influences quality training provision in TVET schools, and the study summed up the R^2 values for quality assurance as 17.95% related to trainers' views on quality assurance. This means that quality assurance contributed approximately 17.95% with positive variation on the quality of training provided in TVET schools of Rwamagana district, leaving approximately 82.05% of the variation unexplained, which could be due to other factors not measured by the study. The results of the study confirmed that the key factors influencing quality training provision are advice from quality assurance helps in improving training practice, quality assurance oversees the quality of training provision, quality assurance helps in improving workshops, learning environment is ameliorated through quality assurance, acquisition of practical skills are improved through quality assurance, quality assurance ensures that curriculum is implemented effectively, quality assurance ensures that training provision is labor market-oriented, quality of learning facilities are improved

through quality assurance, quality assurance ensures stakeholder engagement and participation, quality assurance ensures timely assessment and evaluation and quality assurance ensures standards and Guidelines.

The study, therefore, concluded that on the influence of independent variables on quality training provision in TVET schools, the R^2 values for each of the measured factors; indicated 17.95% increase in quality training, hence quality assurance contributing at 17.95% on quality training provision in TVET schools in Rwamagana district; leaving approximately 82.05% of the variation remain unexplained, which could be due to other factors not measured by the study.

4.2. Recommendations

The study recommends that quality assurance and inspectorate entities establish an assessment and evaluation framework that includes regular audits, assessments, and evaluations of training provisions; it also encourages continuous feedback involving trainers, students, and TVET stakeholders to inform improvement initiatives.

The study recommends regular collaboration with quality assurance teams to monitor the effective implementation of the curriculum on a quarterly, semester and annual basis.

The study recommends regular review course content, instructional materials, and teaching methodologies to align with industry standards and educational best practices.

Furthermore, the study recommends that quality assurance entities work closely with industry representatives and employers to ensure that training provision is aligned with the current needs of the labor market. Streamline assessment and evaluation processes through quality assurance to ensure that they are conducted in a timely and efficient manner. It is further recommended to quality assurance entities; to foster a culture of stakeholder engagement by involving industry representatives, employers, students, and community members in quality assurance processes.

Conflicts of Interest

The authors declare no conflicts of interest.

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