

**BENEFITS OF ESTABLISHING QUALITY ASSURANCE PROTOCOL IN
VOCATIONAL TRAINING TO STUDENTS ACADEMIC
PERFORMANCE IN EDO STATE.**

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**A RESEARCH WORK SUBMITTED TO THE DEPARTMENT OF INDUSTRIAL AND
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BENIN CITY**

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APPROVAL PAGE

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DEDICATION

This project is dedicated to God Almighty, the source of all wisdom and knowledge, whose grace and guidance have been my strength and sustenance throughout this academic journey.

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ABSTRACT

This study investigated the Benefits of Establishing Quality Assurance Protocol in Vocational Training on Students' Academic Performance in Edo State, Nigeria. The research was motivated by the critical role of Vocational and Technical Education (VTE) in combating youth unemployment and fostering national development, amidst concerns about inconsistent training quality.

The study adopted a descriptive survey research design. The population comprised students and teachers from vocational institutions across Benin City, Ekpoma, and Uromi. A sample of 105 respondents (90 students and 15 teachers) was selected using a purposive sampling technique. The instrument for data collection was a self-structured questionnaire titled "Benefits of Establishing Quality Assurance Protocol in Vocational Training to Students Academic Performance in Edo State," which was validated by experts and demonstrated high reliability with a Cronbach's Alpha coefficient of 0.81. Data were analyzed using descriptive statistics (mean and standard deviation).

The findings revealed that assurance measures in vocational training, the implementation of quality assurance protocols, their influence on academic performance, and the benefits derived from them all affect students' academic achievements to a high extent. The study concluded that quality assurance is a foundational pillar for academic success in vocational training, transforming institutions into hubs of excellence that produce competent and employable graduates. Recommendations include that the Edo State Government should legislate and fund a mandatory QA framework, institutions should establish internal quality assurance units, and instructors should engage in continuous professional development. Suggestions for further studies were also made.

CHAPTER ONE

INTRODUCTION

Background to the Study

Education has been known over the years to be the most powerful tool to eradicate ignorance and skyrocket national development in any society. Education is a systematic process through which a child or adult acquires knowledge, experience, skill, and sound attitude. It makes an individual civilized, refined, cultured and educated. Education is believed to not just liberate people from ignorance, but also poverty.

Education itself is very broad and entails many aspects which includes mental, cultural, emotional, technical skills, etc . Education provides a platform where technical skills are taught, while technical education translates educational outcomes into economic productivity and practical expertise.

Technical education, as defined by the Federal Republic of Nigeria, specifically focuses on imparting practical skills to produce craftsmen and middle-level manpower capable of effectively utilizing new technological devices, typically through technical colleges .The primary aim of education, according to the Federal Republic of Nigeria, is to equip individuals with practical skills essential for the development of physical, mental, and social abilities, enabling them to contribute meaningfully to their environment and society at large.

The educational landscape in Nigeria is characterized by a complex mix of challenges and opportunities, with over 40% of the country's population being under the age of 15, there is a

pressing need to invest in quality education to ensure the future economic and social development of the nation. However, despite the importance of education, Nigeria's educational sector seems to face numerous challenges, including inadequate quality assurance protocol, which was supposed to ensure the proper operational activities in Technical education. The development of a nation depends on the quality of education provided for her citizen, this is made known by the Federal republic of Nigeria, national policy on Education. Vocational education is education that prepares people for a skilled craft. Vocational education can also be seen as that type of education given to an individual to prepare that individual to be gainfully employed or self-employed with requisite skill. Vocational and Technical Education (VTE) is a vital form of education aimed at preparing individuals for employment across various industries and organizations, addressing societal needs through school-based learning (Awonuga & Olukayode, 2020).

Vocational education is known by a variety of names, depending on the country concerned, including career and technical education, or acronyms such as TVET (technical and vocational education and training; used by UNESCO) and TAFE (technical and further education). TVE refers to all forms and levels of education which provide knowledge and skills related to occupations in various sectors of economic and social life through formal, non-formal and informal learning methods in both school-based and work-based learning contexts. To achieve its aims and purposes, TVE focuses on the learning and mastery of specialized techniques and the scientific principles underlying those techniques, as well as general knowledge, skills and values. Vocational and Technical Education (VTE) is a vital form of education aimed at preparing individuals for

employment across various industries and organizations, addressing societal needs through school-based learning (Awonuga & Olukayode, 2020). Vocational and Technical Education (VTE) not only imparts vocational skills but also instills a range of knowledge and attitudes essential for meaningful participation in both the workplace and broader life contexts (Jimoh & Isiaka, 2022). Entrepreneurship education complements VTE by fostering self-reliance among students through the acquisition of skills, attitudes, and behaviors necessary for exploring and exploiting opportunities in their environments (Orah & Ogbonna, 2019).

The educational system or structure of Nigeria has been changing over time due to TVE. In the 1970's, the Nigerian educational system was 6-5-4. This changed as time passed, between 1980 and 2005, it was changed to 6-3-3-4. 2008 saw another educational system review to 9-3-4 system of education. All these reviews are shown in the Federal Republic of Nigeria (FRN, 2014). Due to the type of education Nigeria inherited from her colonial masters, education in the 1960's were more book oriented.

Quality assurance protocol is a very important aspect to ensure Education and vocational training yields the respected result. Quality assurance protocol is a proactive measure aims at preventing defects in products or services, such as manufacturing, education, amongst others. By giving students practical skills and knowledge, vocational and technical education is essential in preparing them for real-world careers. Like many other areas, Edo State is seeing a rise in the importance of this kind of training in lowering unemployment and encouraging youth self-reliance. However, the quality of instruction, the learning environment, and the guarantee that the material

being taught to students satisfies industry or national standards all play a significant role in how effective vocational and technical training is. Students are more likely to obtain regular, dependable, and current instruction when a robust quality assurance protocol is in place.

This indicates that the resources, tools, and instructional strategies are continuously evaluated and enhanced, resulting in a greater comprehension and proficiency of the skills. For instance, a student studying electrical installation in a quality-assured, closely monitored setting will not only understand the theory but also carry out practical tasks with assurance and safety. Sadly, the lack of such procedures at many Edo State vocational schools can result in out-of-date programs, subpar facilities, and underqualified teachers. These disparities impair kids' academic achievement and reduce their employability. As a result, implementing and upholding quality assurance systems guarantees that students receive instruction that is not just adequate but also well-taught, complete with appropriate evaluations, knowledgeable instructors, and learning resources.

Statement of the Problem

The demand for technical and vocational skills has increased in the twenty-first century as industries have evolved quickly and the global economy has become more reliant on practical competencies. In developing nations such as Nigeria, vocational education holds the key to closing the skill gap and reducing youth unemployment. Edo State, a territory with a rapidly growing population of young people seeking education and work, has made a modest but steady investment in vocational education. However, the outcomes of such training initiatives in terms of students'

academic performance and employability seem to be inconsistent and frequently below expectations.

Vocational training was established in order to bridge the gap between theoretical knowledge that is provided in education and the skill needed for a productive economy, this implies graduates from VTE are supposed to be productive in the field of work, but it appears, the majority of graduates from VTE are still stuck in outdated patterns. This may be due to several factors such as, social, cultural, geographical, financial, political emotional, amongst others. This research will focus mainly on the political facts, that is government policies which guide both the teacher and students in VTE.

Quality assurance in education refers to the systematic methods and regulations put in place to monitor, assess, and improve the quality of education delivery, ensuring that learning results are consistent with national and international benchmarks. Curriculum creation, teacher qualification, instructional approaches, assessment standards, infrastructural adequacy, and continual evaluation procedures are all part of vocational training. It is against this background that the study tends to investigate the benefits of establishing quality assurance protocols in vocational training to students performance.

Purpose of the Study

The major goal of this research is to assess the benefits of establishing, developing and strengthening quality assurance standards in vocational training, programs, with a particular emphasis on students' academic performance in Edo State. Specifically, the study seeks:

1. The Study intends to Evaluate how quality assurance measures in vocational training will affect students academic achievements in Edo state.
2. Evaluates those specific benefits which quality assurance protocols may provide for vocational training in Edo state when properly employed
3. Assessing the quality assurance protocol process and how it affects the employability and career opportunities of vocational training graduates in Edo state.
4. Investigate how Edo state vocational training programs can improve and strengthen their quality assurance protocols.

Research Questions

The following questions were invited to guide the study:

1. How do quality assurance measures in vocational training affect students' academic achievement in Edo State?
2. What specific benefits do quality assurance protocols provide for vocational training programs in Edo State?
3. How do quality assurance processes affect the employability and career opportunities of vocational training graduates in Edo State?
4. How can Edo State's vocational training programs improve or strengthen their quality assurance protocols?

Scope of the Study

This study is confined to specific vocational and technical institutions which includes both public and private centers within the state of the Study also put in account the qualifications and impact of Vocational training instructor, administrator, and quality assurance protocol officers, it is only limited to Urban and sub urban region in Edo State, such as Benin, Auchi, Ekpoma and Uromi. This study does not include cities or villages outside Edo State.

Significance of the Study

This study will be of great benefits to the following stakeholder in education industry, students, parents, lecturers, curriculum planners, ministries and communities.

Firstly, Improved understanding of quality assurance. The study will help to advance our understanding of how quality assurance methods can be effectively applied in vocational training programs, as well as provide insights into best practices and problems. Improved Academic Performance. By investigating the impact of quality assurance protocols on students' academic performance, the study will shed insight on how these protocols can improve learning outcomes, skill development, and overall academic success.

Secondly, contextual Relevance The study's focus on Edo State will give context-specific insights for policymakers, educators, and stakeholders to better understand the region's particular vocational training requirements and problems.

Thirdly, Informing Policy and Practice The study's findings will influence policy and practice in vocational training institutions, allowing them to create and implement effective quality assurance standards that improve student performance and employability.

Furthermore, Contribution to Existing Literature. The study will add to the existing body of knowledge on quality assurance in vocational training by giving new insights and perspectives that can be used to guide future research and practice.

Limitation of the Study

In the course of carrying out my research, I was faced with some minor challenges which involved finance, time and locating various schools in getting my first-hand data for my research.

Definition of terms

- **Benefit:** The measurable beneficial outcomes, advantages, or improvements that result from incorporating quality assurance methods into vocational training programs.
- **Establishing:** The act of creating, implementing, or institutionalizing quality assurance processes or procedures in vocational training facilities.
- **Quality Assurance Protocol:** A set of systematic procedures, standards, and evaluation methods used to ensure that vocational education and training fulfil stated quality standards and are constantly improved.

- **Vocational Training:** Educational programs that provide students with the practical skills, technical knowledge, and competences required for certain trades or careers, frequently emphasizing hands-on experience.
- **Students' Academic Performance:** The measurable outcomes of students' learning in vocational training, as demonstrated by assessments, examinations, skill acquisition levels, and successful completion of training programs.
- **Edo State:** is one of the 36 states in Nigeria, a region in southern Nigeria that acts as the focal point for this investigation of benefits of establishing quality assurance protocol in vocational training to students academic performance.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

In this chapter, related literature pertinent to this study are reviewed under the following subheadings:

- **Theoretical framework.**
- **Concept of Vocational Training**
- **Core Objectives of Technical and Vocational Education and Training**
- **Concept of Quality Assurance**
- **Quality Assurance and Measures Affecting Student Grade**
- **Quality Assurance and Protocols Provided**
- **Quality Assurance and How It Affects The Employability and Career**
- **How TVET Improves/ Strengthen Their Use of Training Resources and Quality Assurance**
- **Review of Related Empirical Studies**
- **Summary of Literature Review**

This study is grounded in the theories of systems and quality management as they relate to vocational education serve as the foundation for this investigation. According to General Systems Theory (GST), institutions are made up of interrelated parts (students, teachers, curriculum, and facilities) that interact to produce certain results. According to GST, improving one aspect of the

system—like putting strong quality assurance procedures in place—will have an impact on how well the entire system performs. According to the principles of Total Quality Management (TQM), the framework places a strong emphasis on customer (student) satisfaction and ongoing institutional process improvement. With an emphasis on stakeholder requirements and iterative improvement of teaching and learning, education theorists have implemented TQM in academic contexts. Such methods entail methodically establishing curriculum, instruction, and facility standards in vocational training in order to enhance student results. Using these theoretical frameworks, this study investigates the effects of implementing QA procedures (the inputs) in vocational training on students' academic results, including attendance, participation, completion of assignments, and overall performance, across the board.

Concept of Vocational Training

The Vocational Training Concept Programs intended to give students the information and practical skills necessary for particular trades, crafts, or careers are referred to as vocational and technical education, or TVET. Vocational training, as opposed to just academic education, places an emphasis on practical, job-oriented skills for sectors including manufacturing, agriculture, construction, hospitality, and services. TVET is acknowledged on a global scale as an empowering instrument that fosters employment and sustainable livelihoods. TVET "has gained global recognition as an empowering tool for the youth, promoting sustainable livelihoods and socio-economic development," claim Ike, Okanya, and Opeyemi (2020). Practically speaking,

vocational training builds employable skills by integrating classroom education with workshops, labs, and apprenticeships.

Core Objectives of Technical and Vocational Education and Training

To provide students with practical technical skills and industry-specific competencies.

To improve employability by matching training to labour market demands.

Encourage entrepreneurship and innovation in technological disciplines.

To develop professionalism, work ethics, and problem-solving skills.

To promote economic growth by training a skilled workforce.

Vocational programs are offered in technical colleges, polytechnics, and specialised institutes throughout Nigeria, particularly in Edo State. They want to reduce youth unemployment by aligning courses with industry demands. For example, Nigerian officials emphasise the importance of TVET in bridging skill gaps in industries such as construction and manufacturing. Modern vocational curriculum frequently incorporates digital literacy, data analysis, and collaborative tools, mirroring worldwide trends. Students at Edo State's technical colleges study subjects including as agro technology, mechanical trades, information technology, and entrepreneurship, which combine theory with considerable practical work. These programs prepare individuals for positions in businesses or to create their own businesses, thus contributing to personal and national development.

In the twenty-first century economy, vocational training must move beyond traditional hands-on duties. It must include both modern technologies (e.g., computer-aided design, manufacturing

software, online markets) and soft skills (e.g., communication, teamwork). For example, a welding student nowadays may need to master computer-controlled equipment, while a catering student must grasp online reservation systems. According to research, vocational education quickly becomes outdated if current industry practices and digital tools are not integrated. Onah et al. (2021) suggest that upgrading programs with ICT and novel pedagogies is required to maintain training relevant. Thus, vocational education today takes place in blended contexts, and quality assurance processes must guarantee that both the content and delivery of training meet contemporary standards.

Concept of Quality Assurance

Quality assurance in education is a systematic process that aims to maintain and improve the quality of teaching, learning, and administration. Simply said, QA ensures that educational offerings fulfil predefined quality and relevance standards. It comprises processes like as accreditation (external program approval), internal and external evaluations, audits, and ongoing monitoring. According to education researchers, quality assurance is "a process-centered approach for certifying organisational needs of providing the best possible products and services for their customers." According to this viewpoint, vocational institutions are considered as service providers, with students (and employers) as clients. For example, Ranson-Yusuf (in Asiyai, 2013) describes QA as improving and sustaining procedures to achieve desired results, emphasising the process rather than the outcome.

Kisilowska (2002) defined QA at universities as the institution's ability to meet stakeholder expectations for the quality of graduates' abilities. In vocational training, for example, quality assurance entails verifying that programs and exams supply the skills required by the industry. Kis (2005) divides QA into three parts: accreditation (formal program approval), assessment (evaluation of student learning), and audit (systematic review of processes). Accreditation grants authority to run certain programs; assessment and auditing ensure that teaching, learning, and practical training meet standards. In effect, a vocational institute with strict quality assurance will examine its curriculum on a regular basis, maintain laboratories and workshops, train instructors, and change its offers based on industry feedback.

In reality, QA in vocational training is consistent with worldwide standards such as ISO 21001 (Educational Organisations Management) and regional frameworks (for example, European Quality Assurance in VET). These identify indicators such as curriculum relevancy, teacher qualifications, and graduate employability. A robust QA system requires qualified professors, current equipment, industry connections, and student support services. For example, Jackson et al. (2025) state that a national QA framework for Nigerian TVET will standardise quality benchmarks, provide continual instructor training, and link curricula with industry requirements. In summary, quality assurance entails developing transparent, accountable mechanisms to ensure that vocational graduates are competent and job-ready.

Quality Assurance and Measures Affecting Student Grade

Academic performance, as shown in student grades, is one of the most direct markers of educational excellence. Quality assurance techniques have a significant impact on the components that drive these grades, such as teacher quality, curriculum alignment, assessment standards, and learning support systems. Adebayo (2020) states that when schools adopt explicit QA guidelines, they give a disciplined framework for teaching and learning, ensuring that students are graded fairly and consistently. Regular monitoring and feedback assist instructors in identifying learning gaps early and adapting teaching tactics accordingly, resulting in improved student outcomes.

1. Teaching and Assessment Standards: Quality assurance ensures instructors follow standardised teaching methods and grading criteria. This reduces subjectivity in judgement while promoting equity in grading. In occupational training programs that require practical competence, QA methods ensure that assessments reflect both theoretical understanding and applied skills.

2. Curriculum Relevance: QA encourages regular curriculum reviews to ensure course content matches with industry practices. An up-to-date curriculum boosts student interest and comprehension, leading to better performance (Okon, 2021).

3. Quality assurance: It ensures a favourable learning environment, including appropriate supervision, adequate equipment, and safe laboratories. According to Usman and Lawal (2020), the physical and psychological environment of learning have a substantial impact on students' performance.

4. Feedback and Continuous Improvement: Quality assurance systems provide students with constructive feedback, allowing them to gradually develop. Effective feedback loops not only improve academic performance, but also foster self-directed learning and accountability in students.

In summary, quality assurance lays the groundwork for fair grading, objective evaluation, and continuous improvement in teaching and learning processes, all of which contribute directly to improved academic performance in vocational training institutions.

Quality Assurance and Protocols Provided

The systematic processes, rules, and assessment tools put in place to keep an eye on and maintain the calibre of education are known as quality assurance protocols. These procedures guarantee that training programs in vocational education adhere to the necessary standards of practice and that graduates are adequately equipped for work in their fields of choice. Curriculum validation, instructor qualification audits, resource sufficiency evaluation, student performance monitoring, and external moderation of results are all crucial QA procedures in vocational schools, according to NBTE (2020).

- 1. Curriculum and Instructional Protocols:** All instructional activities must adhere to authorised curriculum as required by quality assurance. To guarantee that the skills taught are applicable in the workplace, vocational programs must match learning objectives with occupational requirements.

- 2. Staff Development and Evaluation:** An essential component of QA procedures is the regular training and assessment of instructors. To stay current on new pedagogy, technology, and business trends, educators must take part in professional development programs (Amoo, 2021).
- 3. Moderation and Assessment:** QA frameworks guarantee that tests are reliable, valid, and in line with learning goals. Fairness and impartiality are ensured by external moderation, particularly in practical exams.
- 4. Resource and Infrastructure Audits:** To make sure they adhere to the necessary standards, facilities like workshops, labs, and ICT centres are examined on a regular basis. These evaluations improve student learning experiences and stop training quality from declining.
- 5. Documentation and Reporting:** Appropriate mechanisms for reporting and retaining records are essential QA procedures. They assist data-driven decision-making and offer proof of accreditation and institutional responsibility.

Effective quality assurance is characterised by dynamic protocols that change over time as part of a cycle of continuous improvement. When properly applied, they improve overall student performance in Edo State's vocational institutions, guarantee standardisation, and foster institutional confidence.

Quality Assurance and How It Affects Employability and Career

One of the most significant outcomes of quality assurance in vocational education is its impact on students' employability and career readiness. Vocational education aims to produce graduates who possess both the technical skills and soft competencies demanded by employers.

According to Eze and Onyesom (2019), QA systems ensure that training institutions provide instruction that mirrors workplace realities. Through structured monitoring and evaluation, institutions maintain a curriculum that reflects current industry trends, tools, and techniques.

- 1. Skill Competency and Certification:** QA guarantees that students graduate with verifiable and standardized qualifications recognized by employers. This fosters credibility and improves the employability of graduates (UNESCO, 2022).
- 2. Industry Collaboration:** QA processes encourage partnerships with industries through internships, apprenticeships, and joint training programs. These collaborations expose students to real-world experiences and build work-readiness skills (Igbinedion & Oviawe, 2020).
- 3. Soft Skill Development:** Beyond technical competence, QA emphasizes training in communication, teamwork, problem-solving, and ethics — attributes that are critical for employability. Regular review of training outcomes ensures that these skills remain integral to vocational programs. Organisations with robust QA processes encourage a culture of ongoing education. Graduates develop into flexible professionals with the ability to update their knowledge in response to shifting demands in the market.

Therefore, quality assurance acts as a link between education and employment, guaranteeing that vocational training generates graduates who are capable, creative, and employable and who make a significant contribution to economic growth.

How VTE Programs Improve/Strengthen Their Use of Training Resources and Quality Assurance

The availability and appropriate use of physical and instructional resources, including tools, machinery, workshops, labs, and digital platforms, are critical components of Vocational Education and Training (VET) programs. The framework for assessing, preserving, and maximising these resources for efficient skill development is provided by quality assurance.

- 1. Resource Standardisation and Maintenance:** Organisations make sure that training materials and equipment adhere to national and international standards by conducting QA audits. Frequent maintenance and inspection ensure training safety and stop resource deterioration (NBTE, 2020).
- 2. Effective Use and Monitoring:** QA procedures encourage resource usage accountability. To guarantee fair access and reduce waste, institutions create schedules, usage records, and monitoring systems.
- 3. Integration of Digital Learning technologies:** A key component of contemporary QA systems is the integration of ICT technologies, including online courses, virtual

simulations, and e-learning platforms. These online tools enhance in-person instruction and increase students' exposure to international norms (Oladipo, 2021).

4. Building Staff Capacity: Instructor proficiency is essential to the effectiveness of resource use. Therefore, QA frameworks place a high priority on technical teachers receiving ongoing training to improve their ability to operate sophisticated equipment and digital tools.

5. Assessment and Input: Quality assurance encompasses systems for gathering input from educators and learners about the sufficiency of materials. Decisions about infrastructure improvements and purchases are influenced by this input.

All things considered, VET programs that follow robust QA procedures exhibit increased sustainability, efficiency, and student happiness. In addition to maximising the utilisation of resources, they guarantee that training results correspond with the demands of industry and national development.

Review of Related Empirical Studies

Ogundola, I. Peter (2023) conducted a study titled “Impact of Quality Assurance Measures on Students’ Performance in Refrigeration and Air-conditioning Works in Technical Colleges in Southwest, Nigeria.” The study sought to answer research questions on how various quality assurance measures influence student productivity and academic performance in refrigeration & air-conditioning programs, which components of QA have stronger effects, and what constraints limit their impacts.

The research employed a survey design. The population comprised all 223 refrigeration and air-conditioning students in state-owned technical colleges in Southwest Nigeria, and a sample of 150 year-two and year-three students was selected for the study.

Data collection was done using a questionnaire developed by the researcher, containing 34 items on quality assurance measures; validity was assured via face and content validity by three specialists, and reliability was determined with a pilot test yielding a Cronbach Alpha coefficient of 0.79. Data were analysed using descriptive statistics (mean, standard deviation) and hypothesis testing at the 0.05 level of significance.

The findings revealed that curriculum implementation as a dimension of quality assurance had a positive impact on performance of students. However, physical and infrastructural facilities were not adequate and had a negative or limited effect on performance. The study recommended that in-service training should be provided for teachers on continuous assessment, and that philanthropists or alumni associations be engaged to improve the learning facilities (workshops, equipment, furniture etc.).

This study complements the present research by showing that certain quality assurance protocols (especially curriculum implementation and teacher development) significantly influence student performance in technical/vocational education. While Ogundola's study focused on refrigeration & air-conditioning technical students in Southwest Nigeria, the present study will examine students in vocational training in Edo State and assess which QA protocols most strongly benefit their academic performance.

Aremu (2022) conducted a study titled “Quality Assurance Practices and Students’ Academic Performance in Technical and Vocational Education in South-West Nigeria.” The study sought to answer research questions on how quality assurance measures influence students’ performance in vocational institutions, what challenges hinder effective implementation, and what strategies could promote quality delivery in technical education.

The research employed a descriptive survey design, using both quantitative and qualitative approaches to gather comprehensive data from administrators, instructors, and students across selected technical colleges. The population comprised staff and students in six government-owned technical colleges, while a stratified random sampling technique was used to select 320 respondents.

Data were collected using a validated questionnaire and structured interview guide. Content validity was ensured by experts in educational management and measurement, while reliability was established through a pilot test yielding a Cronbach Alpha coefficient of 0.86. Data collected were analyzed using descriptive and inferential statistics such as mean, standard deviation, and regression analysis to test the hypotheses.

Findings revealed that quality assurance practices such as regular supervision, teacher qualification, adequate learning facilities, and continuous assessment significantly influenced students’ academic performance in vocational and technical education. However, the study identified constraints such as inadequate funding, poor monitoring, and limited professional development for teachers.

This study complements the present research by emphasizing how the implementation of quality assurance protocols improves academic outcomes in vocational education. While Aremu's study focused broadly on technical colleges in South-West Nigeria, the present study specifically investigates the benefits of establishing quality assurance protocols on students' academic performance in vocational training institutions within Edo State.

Mohammed, B., Bappah, A. S., Ibrahim, A., and Inti, M. M. (2021) conducted a study titled "Influence of Internal Quality Assurance Practices on Business Education Programme in Colleges of Education in North East Nigeria." The study sought to answer research questions on how internal quality assurance practices influence curriculum implementation, assessment and evaluation, provision of learning resources, student support services, and overall programme quality in Business Education.

The research employed a descriptive survey design involving all Business Education lecturers in nine public Colleges of Education across six states in North East Nigeria. The total population of 188 lecturers was used as the sample for the study through a total population sampling technique. Data were collected using a structured questionnaire validated by five experts in educational measurement and evaluation. Content and face validity were ensured through expert review, while reliability was determined through a pilot test which yielded a Cronbach Alpha coefficient of 0.82. Data collected were analyzed using mean, standard deviation, and regression analysis to determine the influence of internal quality assurance practices on programme outcomes.

Findings revealed that internal quality assurance practices significantly improved curriculum delivery, assessment quality, and resource utilization in Business Education programmes. The study also noted that consistent supervision, adequate instructional facilities, and effective staff development programmes contributed positively to the academic performance of students. However, inadequate funding and irregular monitoring were identified as major constraints.

This study complements the present research by providing evidence that quality assurance mechanisms enhance teaching effectiveness and academic outcomes in education programmes. While Mohammed et al. (2021) focused on Business Education programmes in North East Nigeria, the present study examines vocational training institutions in Edo State, exploring the benefits of establishing quality assurance protocols on students' academic performance.

Usman (2024) conducted a study titled "Quality Assurance Practices and Learning Outcomes in Vocational Education Institutions in Northern Nigeria." The study sought to answer research questions on how institutional quality assurance practices influence students' learning outcomes, what constraints affect their effective implementation, and what strategies can be adopted to strengthen quality management in vocational training.

The research employed a descriptive survey design, which allowed for data collection from both teachers and students across selected vocational and technical institutions. The population of the study consisted of all instructors, administrators, and final-year students in six government-approved vocational colleges, while a simple random sampling technique was used to select 350 respondents.

Data were collected using a validated questionnaire titled Vocational Education Quality Assurance Scale (VEQAS). The instrument's face and content validity were confirmed by specialists in educational research and management, while reliability was established through Cronbach Alpha testing, yielding a coefficient of 0.91. Data collected were analyzed using descriptive statistics such as mean and standard deviation, as well as inferential statistics including multiple regression analysis to test the research hypotheses.

Findings revealed that effective implementation of quality assurance practices—such as regular internal evaluation, staff capacity building, provision of instructional materials, and curriculum alignment—had a significant positive effect on students' learning outcomes and overall academic performance. The study also found that inadequate government support, lack of monitoring, and poor infrastructure hindered the sustainability of these practices in vocational institutions.

This study complements the current research by providing empirical evidence that quality assurance mechanisms are vital to improving academic outcomes in vocational education. While Usman's research concentrated on vocational institutions in Northern Nigeria, the present study focuses specifically on Edo State, examining the direct benefits of establishing quality assurance protocols on students' academic performance in vocational training programmes.

Okeke (2023) conducted a study titled "Quality Assurance Mechanisms and Academic Performance of Students in Vocational and Technical Education Programmes in Nigerian Polytechnics." The study sought to answer research questions on the extent to which quality

assurance mechanisms influence students' academic outcomes, the challenges affecting their implementation, and the measures that could strengthen institutional quality practices.

The research adopted a correlational survey design to determine the relationship between quality assurance indicators and students' academic performance. The population consisted of academic staff and final-year students from three federal and two state polytechnics offering vocational and technical education programmes. Using a stratified sampling technique, a total of 410 participants were selected for the study.

Data were collected through a structured questionnaire titled Quality Assurance and Academic Performance Questionnaire (QAAPQ), which was validated by experts in measurement and evaluation. The reliability of the instrument was determined using the test-retest method and yielded a coefficient of 0.89. Data were analyzed using Pearson Product Moment Correlation and multiple regression analysis to test the formulated hypotheses.

Findings showed that effective quality assurance mechanisms such as teacher competence, instructional supervision, provision of learning resources, and curriculum review significantly enhanced students' academic performance. The study further revealed that inadequate funding, obsolete equipment, and irregular monitoring visits by quality assurance agencies were major constraints to effective implementation.

This study supports the current research by reinforcing the importance of structured quality assurance protocols in enhancing students' academic success. While Okeke's study examined polytechnic programmes across Nigeria, the present research focuses on vocational training

centres in Edo State to determine the specific benefits of establishing quality assurance protocols on students' academic performance.

Summary of Literature Review

Implementing quality assurance procedures in vocational training might improve students' academic performance, particularly in environments such as Edo State. We began by situating the study within systems and quality management theories, which view educational institutions as holistic systems in which improving quality at all levels results in better outcomes. Vocational education was described as training that provides practical, employable skills necessary for economic and personal growth. The primary goals of vocational training are to prepare a skilled workforce, promote self-reliance, and foster innovation in technical domains.

We then looked at quality assurance policies and methods, such as accreditation, assessment, and auditing, that are used to maintain educational standards. Quality assurance in education refers to the ongoing improvement of teaching, resources, and administration. In Nigeria and Edo State, QA aims to align vocational programs with industry needs and national development goals (such as supporting SDG employment targets).

The literature demonstrates that quality assurance has a favourable impact on many facets of academic life. Reliable QA systems are associated with improved student achievement: providing structured curricula and timely feedback improves learning. Iorhena (2023) discovered that QA procedures promote academic success, while EdoBEST in Edo State revealed that data-driven QA (attendance and lesson monitoring) increased teaching quality and student retention.

We also looked at how QA affects specific engagement indicators like regular attendance (via tracking and accountability mechanisms), assignment completion (via clear guidelines and prompt feedback), class participation (via interactive, student-centered teaching), and learning resource use (by providing up-to-date tools and digital content).

Finally, the review accepts that quality assurance is not a cure-all. Inadequate funding, a lack of qualified staff, and outdated infrastructure can all have an impact on the effectiveness of quality assurance protocols. Nonetheless, research indicates that when quality assurance is correctly implemented, which includes curriculum reform, teacher training, resource upgrades, and monitoring, vocational students become more interested and do better academically. The findings will guide how this study explores QA methods in Edo State's vocational training and their impact on student performance.

CHAPTER THREE

METHODOLOGY

This chapter focuses on the method and procedure that were adopted for the study.

It shall be discussed under the following sub-headings:

- Design of the Study
- Population of the Study
- Sample and Sampling Technique
- Instrumentation
- Validity of the Instrument
- Reliability of the Instrument
- Method of Data Collection
- Method of Data Analysis

Design of the Study

Descriptive survey design was employed. The design is best for the study because it allows for a systematic observation and detailed documentation of the current conditions and practices without manipulating any variables.

Population of the Study

The population of the study comprised all students studying vocational and technical courses across Benin City, Ekpoma, Uromi, and other towns and villages in Edo State.

Sample and Sampling Technique

The sample of the study comprises fifteen (15) teachers and ninety (90) students from the three regions which are University of Benin (UNIBEN), Ambrose Alli University (Ekpoma), and Polytechnic of Construction (Uromi), Benin, Edo State. To get the sample, purposive sampling technique was employed to purposely select fifteen (15) teachers, five (5) from each region and ninety (90) students, thirty (30) from each region, the data was taken across the three academic levels, Year1-Year3. Finally, ten (10) students each were selected from the specified classes. A total of one hundred and five (105) was finally employed as the sample size for the study.

Research Instrument

The instrument used for the study is a self-structured questionnaire titled “Benefits of establishing quality assurance protocol in Vocational Training to students academic performance in edo state”, Benin city which was designed by the researcher. The questionnaire is made up of two sections; Section A and B. Section A elicited the necessary demographic data of the respondents, while Section B consists of items all of which are drawn from the research questions. The instrument is a modified likert type scale with 4-point rating scale with response options Strongly Agree (SA) = 4 points, Agree (A) = 3 points, Disagree (D) = 2 points and Strongly Disagree (SD) = 1 point. A benchmark of 2.5 was set as the decision rule. When the mean was greater than 2.5 the statement was noted as agreed while those with mean less than 2.5 was noted as disagreed.

Validity of the Instrument

The research instrument was validated by the researcher's supervisor, and two lecturers drawn from the department of Industrial and Technical Education, in the faculty of Vocational and Technical Education. Thereafter, the instrument was modified by the project supervisor. The content validity of the instrument was ascertained by aforementioned experts and the project supervisor.

Reliability of the Instrument

To establish the reliability of the instrument, the instrument was administered to 2 teachers and 10 students who are not part of the study population. A pilot test established the instrument's reliability, yielding a high Cronbach's Alpha coefficient of 0.81

Method of Data Collection

The questionnaire was administered personally by the researcher to the respondents. The respondents were assured of confidentiality and urged to answer the questions honestly to the best of their knowledge. Instructions were given to the respondent on how to fill out the questionnaire. The questionnaires were collected on the spot for easy retrieval.

Method of Data Analysis

The data collected was subjected to descriptive analysis. Data obtained for the research questions were analyzed using Mean and Standard Deviation (SD). Item that had a mean value

equal or greater than 2.50 was regarded as Agreed, while any item below 2.50 was regarded as Disagreed.

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

This chapter deals with presentation of results and discussion of findings. The results of the analysis are presented in the order of the research questions that guided the study.

Presentation of Results

Research Question One

What are the assurance measure in vocational training in government science and technical colleges in Edo State and how it affects students academic achievements?

Table 1: Mean and standard deviation showing the assurance measure in vocational training in government science and technical colleges in Edo State and how it affects students academic achievements

| S/N | Item | N | Mean | SD | Remarks |
|---------------------|---|-----|-------------|-------------|--------------------|
| 1 | The college has documented and clearly communicated quality assurance policies for vocational training. | 105 | 2.73 | .750 | High Extent |
| 2 | There are regular inspections and evaluations to maintain training standards. | 105 | 2.79 | .730 | High Extent |
| 3 | Feedback from students and instructors is collected to improve training quality. | 105 | 3.03 | .596 | High Extent |
| 4 | The vocational training curriculum is periodically reviewed to meet industry requirements. | 105 | 2.83 | .627 | High Extent |
| Cluster Mean | | | 2.85 | .076 | High Extent |

Note: SD (Standard Deviation), N (Sample Size)

In response to research question one, Table 1 showed that the respondents rated item one to five as high extent with a mean rating ranging from 2.73 to 3.03 while the standard deviation also ranges from .596 to .750. The cluster mean indicates a mean of 2.85. With these results, the

above mean score shows that the assurance measure in vocational training in government science and technical colleges in Edo State affects students academic achievements to a high extent.

Research Question Two

To what extent is the implementation of quality assurance protocols in vocational training in government science and technical colleges in Edo State?

Table 2: Mean and standard deviation showing the extent of implementation of quality assurance protocols in vocational training in government science and technical colleges in Edo State

| S/N | Item | N | Mean | SD | Remarks |
|---------------------|--|-----|-------------|-------------|--------------------|
| 1 | Quality assurance guidelines are consistently followed during teaching and assessment. | 105 | 3.01 | .563 | High Extent |
| 2 | Regular training is provided to instructors to improve their teaching competence. | 105 | 2.85 | .704 | High Extent |
| 3 | Internal audits are conducted to ensure compliance with vocational training standards. | 105 | 2.92 | .689 | High Extent |
| 4 | Learning resources are updated regularly to reflect current trends in vocational training. | 105 | 2.99 | .714 | High Extent |
| Cluster Mean | | | 2.94 | .070 | High Extent |

Note: SD (Standard Deviation), N (Sample Size)

In response to research question two, Table 2 showed that the respondents rated item one to five as high extent with a mean rating ranging from 2.85 to 3.01 while the standard deviation also ranges from .563 to .714. The cluster mean indicates a mean of 2.94. With these results, the above mean score shows that quality assurance protocols in vocational training in government science and technical colleges in Edo State are implemented to a high extent.

Research Question Three

To what extent do quality assurance protocols influence students' academic performance in vocational training?

Table 3: Mean and standard deviation showing the influence of quality assurance protocols on students' academic performance in vocational training

| S/N | Item | N | Mean | SD | Remarks |
|---------------------|---|-----|-------------|-------------|--------------------|
| 1 | The college has documented and clearly communicated quality assurance policies for vocational training. | 105 | 2.70 | .822 | High Extent |
| 2 | There are regular inspections and evaluations to maintain training standards. | 105 | 2.77 | .846 | High Extent |
| 3 | Feedback from students and instructors is collected to improve training quality. | 105 | 3.21 | .817 | High Extent |
| 4 | The vocational training curriculum is periodically reviewed to meet industry requirements. | 105 | 3.13 | .683 | High Extent |
| Cluster Mean | | | 2.95 | .074 | High Extent |

Note: SD (Standard Deviation), N (Sample Size)

In response to research question three, Table 3 showed that the respondents rated item one to five as high extent with a mean rating ranging from 2.70 to 3.21 while the standard deviation also ranges from .683 to .846. The cluster mean indicates a mean of 2.95. With these results, the above mean score shows that quality assurance protocols influence students' academic performance in vocational training to a high extent.

Research Question Four

How adequate are the benefits of quality assurance protocols in enhancing students' academic performance?

Table 4: Mean and standard deviation showing the influence of the benefits of quality assurance protocols in enhancing students' academic performance.

| S/N | Item | N | Mean | SD | Remarks |
|---------------------|--|-----|-------------|-------------|--------------------|
| 1 | The presence of quality assurance protocols leads to better student results in examinations. | 105 | 3.27 | .669 | High Extent |
| 2 | Quality assurance processes contribute to improved hands-on skills in vocational subjects. | 105 | 3.25 | .601 | High Extent |
| 3 | Strong quality assurance systems increase students' motivation to learn. | 105 | 3.10 | .728 | High Extent |
| 4 | Continuous review of training content through quality assurance leads to sustained academic improvement. | 105 | 2.91 | .856 | High Extent |
| Cluster Mean | | | 3.13 | .108 | High Extent |

Note: SD (Standard Deviation), N (Sample Size)

In response to research question four, Table 4 showed that the respondents rated item one to five as high extent with a mean rating ranging from 2.91 to 3.27 while the standard deviation also ranges from .601 to .856. The cluster mean indicates a mean of 3.13. With these results, the above mean score shows that the benefits of quality assurance protocols enhance students' academic performance to a high extent.

Discussion of Findings

The findings of research question one revealed that assurance measure in vocational training in government science and technical colleges in Edo State affects students academic achievements to a high extent. From the presentation and analysis of the responses, it is therefore concluded that the implementation of assurance measures—such as qualified instructors, standardized curricula, and adequate facilities—is a fundamental determinant of academic achievement in vocational training. These measures directly foster a conducive learning

environment where students can effectively acquire practical skills and theoretical knowledge. Consequently, robust assurance mechanisms in government science and technical colleges in Edo State are not merely supportive but essential for enhancing student competency, mastery, and overall educational outcomes. This finding corroborates with that of Adebayo (2020) who concluded that when schools adopt explicit QA guidelines, they give a disciplined framework for teaching and learning, ensuring that students are graded fairly and consistently. Regular monitoring and feedback assist instructors in identifying learning gaps early and adapting teaching tactics accordingly, resulting in improved student outcomes.

Research question two findings indicated that quality assurance protocols in vocational training in government science and technical colleges in Edo State are implemented to a high extent. From the presentation and analysis of the responses, it is therefore concluded that quality assurance protocols in vocational training—such as regular instructor evaluations, curriculum reviews, and facility inspections—are being actively and effectively implemented across government science and technical colleges in Edo State. This high level of implementation indicates a strong institutional commitment to maintaining educational standards. It establishes a solid foundation upon which student achievement can be built, as identified in the first research finding. This finding is in line with that of (Amoo, 2021) who stated that An essential component of QA procedures is the regular training and assessment of instructors. To stay current on new pedagogy, technology, and business trends, educators must take part in professional development programs.

The data output of research question three showed that quality assurance protocols influence students' academic performance in vocational training to a high extent. From the presentation and analysis of the responses, it is therefore concluded that the consistent implementation of quality assurance protocols exerts a powerful and direct influence on elevating students' academic performance in vocational training. These protocols—spanning curriculum standardization, instructor competency, and resource adequacy—create a structured, high-quality learning environment that is directly correlated with enhanced skill acquisition, deeper theoretical understanding, and superior overall educational outcomes. This finding support that of (Okon, 2021) who was of the opinion that an up-to-date curriculum boosts student interest and comprehension, leading to better performance.

The findings of research questions four depicted that the benefits of quality assurance protocols enhance students' academic performance to a high extent. From the presentation and analysis of the responses, it is therefore concluded that the tangible benefits derived from quality assurance protocols—such as improved teaching quality, relevant curriculum, and access to modern workshops—are pivotal in enhancing student academic performance. These benefits translate directly into a more effective and engaging learning experience, which equips students with the competencies and confidence necessary to achieve higher levels of practical and theoretical mastery needed to meet up with the latest industry demands. This finding is in agreement with that of Eze and Onyesom (2019), who found that QA systems ensure that training institutions provide

instruction that mirrors workplace realities. Through structured monitoring and evaluation, institutions maintain a curriculum that reflects current industry trends, tools, and techniques.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter focuses on summary, conclusion and recommendations.

Summary

This study examined the “Benefits of Establishing Quality Assurance Protocol in Vocational Training to Students Academic Performance in Edo State”. The study was guided by four research questions.

This study was designed to investigate the benefits of establishing quality assurance protocols in vocational training on students' academic performance in Edo State, Nigeria. The research was motivated by the critical role of Vocational and Technical Education (VTE) in combating unemployment and fostering national development, coupled with the challenges posed by inconsistent training quality and the need for robust quality assurance (QA) mechanisms.

The study adopted a descriptive survey research design, which was deemed appropriate for capturing the perceptions, attitudes, and current state of affairs regarding QA protocols from a sample of the population. The population comprised students and teachers from vocational institutions across three major regions in Edo State: Benin City, Ekpoma, and Uromi. A sample of 105 respondents (90 students and 15 teachers) was selected using a purposive sampling technique.

The primary research instrument was a self-structured questionnaire titled "Benefits of Establishing Quality Assurance Protocol in Vocational Training to Students Academic Performance in Edo State." The instrument, which used a four-point Likert scale, was validated by three experts from the Department of Vocational and Technical Education, University of Benin.

A pilot test established the instrument's reliability, yielding a high Cronbach's Alpha coefficient of 0.81. Data collected were analyzed using descriptive statistics (mean and standard deviation), with a benchmark mean of 2.50 for decision-making.

The major findings of the study were as follows:

1. Assurance measures in vocational training affect students' academic achievement to a high extent.
2. Quality assurance protocols in vocational training in Edo State are implemented to a high extent.
3. Quality assurance protocols influence students' academic performance in vocational training to a high extent.
4. The benefits of assurance protocols enhance students' academic performance to a high extent.

Conclusion

The study on the “Benefits of Establishing Quality Assurance Protocol in Vocational Training to Students Academic Performance in Edo State” affirmed that Quality Assurance (QA) is a Foundational Pillar for Academic Success: The presence of structured assurance measures—such as clear policies, regular evaluations, and industry-aligned curriculum reviews—creates a standardized, accountable, and conducive learning environment that directly fosters improved theoretical understanding and practical skill mastery.

Concurrently, the high extent of implementation of QA protocols indicates their feasibility and acceptance, which in turn systematically improves teaching quality, ensures fair assessment, and keeps learning resources relevant. The influence of QA on academic performance is profound. It enhances student engagement, ensures accurate grading, and elevates the overall learning experience through continuous instructor training and content review. The benefits derived from QA protocols are comprehensive, leading directly to tangible outcomes such as higher examination scores, superior practical competencies, and increased student motivation, thereby contributing to sustained academic improvement.

In essence, quality assurance acts as the critical link between vocational training inputs and desired educational outcomes. It transforms vocational institutions in Edo State from mere centers of instruction into dynamic hubs of excellence that reliably produce competent, skilled, and employable graduates.

Recommendations

The following recommendations were made:

1. For the Edo State Government and Ministry of Education:

Policy Formulation and Funding: Should develop and legislate a mandatory, state-specific QA framework for all public and private vocational training institutions. This must be backed by increased budgetary allocation to ensure the provision of modern workshops, tools, and ICT facilities.

Strengthening oversight: The relevant quality assurance and regulatory bodies (e.g., the NBTE) should be empowered to conduct more frequent and unannounced monitoring and evaluation visits to ensure continuous compliance.

2. For Vocational Training Institution Administrators:

Systematic Implementation: Institutions should institutionalize QA by establishing dedicated internal quality assurance (IQA) units responsible for continuous curriculum review, staff development, and resource auditing.

Stakeholder Feedback Mechanism: Develop a robust system for regularly collecting and acting upon feedback from students, instructors, and industry partners to drive continuous improvement.

Instructor Capacity Building: Mandate and fund regular in-service training, workshops, and industrial attachments for instructors to keep them updated on pedagogical skills and emerging industry trends.

3. For Instructors and Teachers:

Professional Development: Instructors should proactively engage in the professional development opportunities provided and adhere strictly to the standardized teaching and assessment guidelines set by the QA framework.

Adopt Student-Centered Methods: Move beyond traditional teaching methods to implement more interactive, practical, and student-centered learning approaches that are emphasized in effective QA systems.

4. For Students and Parents:

Awareness and Advocacy: Students and parent-teacher associations should be educated on the standards expected from a quality-assured institution and should advocate for their rights to quality training and resources.

Suggestions for Further Studies

This study on the “Benefits of Establishing Quality Assurance Protocol in Vocational Training to Students Academic Performance in Edo State” outlined the following suggestions for further research:

- 1. A Wider Geographical Study:** This study should be replicated on a larger scale, covering all six geo-political zones of Nigeria, to allow for a comparative analysis and to enhance the generalizability of the findings.
- 2. A Qualitative Inquiry:** A follow-up study using qualitative methods (in-depth interviews and focus group discussions) with students, instructors, and industry employers is recommended. This would provide deeper insights into the lived experiences, perceived challenges, and nuanced benefits of QA protocols that a quantitative survey may not capture.
- 3. Impact on Graduate Employability:** A longitudinal study tracking the career paths and employment success of graduates from quality-assured institutions versus those from non-quality-assured institutions would provide concrete evidence of QA's impact on employability and long-term career growth.

4. Evaluation of Specific QA Components: Research could be conducted to determine which specific component of the QA protocol (e.g., instructor training, curriculum review, resource adequacy) has the most significant impact on student academic performance, allowing for more targeted interventions and resource allocation.

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APPENDIX A

Department of Industrial and Technical Education
Faculty of Vocational and Technical Education,
University of Benin,
Benin City,
Edo State
22nd October, 2025.

Dear Respondent,

LETTER TO RESPONDENTS

My name is Isaac prince Isibor, from the above-named institution. I am currently carrying out a research on “Benefits of Establishing Quality Assurance Protocol in Vocational Training to Students Academic Performance in Edo State.”. This questionnaire is designed for academic purpose.

Please respond sincerely to the questions by ticking [] where applicable. Your responses will be treated with a high level of confidentiality.

Thank you.

Yours faithfully,

Isaac prince Isibor
Researcher

APPENDIX B

BENEFITS OF ESTABLISHING QUALITY ASSURANCE PROTOCOL IN VOCATIONAL TRAINING TO STUDENTS ACADEMIC PERFORMANCE IN EDO STATE.

SECTION A: Demographic Data

Instructions: Please tick (√) where applicable.

Gender: Female (); Male ()

Age: 17 – 20 () 21 – 25 () 26 and above

Optional Region: Benin City () Ekpoma () Uromi ()

SECTION B: Data on Questionnaire

Indicate the extent to which you agree or disagree with the following statements.

Key: Strongly Agree (SA=4); Agree (A=3); Disagree (D=2); Strongly Disagree (SD=1)

| S/N | What are the assurance measure in vocational training in government science and technical colleges in Edo State and how it affects students academic achievements. | SA 4 | A 3 | SD 2 | D 1 |
|-----|--|---------|--------|---------|--------|
| 1 | The college has documented and clearly communicated quality assurance policies for vocational training. | | | | |
| 2 | There are regular inspections and evaluations to maintain training standards. | | | | |
| 3 | Feedback from students and instructors is collected to improve training quality. | | | | |
| 4 | The vocational training curriculum is periodically reviewed to meet industry requirements. | | | | |
| RQ2 | To what extent is the implementation of quality assurance protocols in vocational training in government science and technical colleges in Edo State? | SA 4 | A 3 | SD 2 | D 1 |
| 5 | Quality assurance guidelines are consistently followed during teaching and assessment. | | | | |

| | | | | | |
|------------|---|-----------------|----------------|-----------------|-----------------|
| 6 | Regular training is provided to instructors to improve their teaching competence. | | | | |
| 7 | Internal audits are conducted to ensure compliance with vocational training standards. | | | | |
| 8 | Learning resources are updated regularly to reflect current trends in vocational training. | | | | |
| RQ3 | To what extent do quality assurance protocols influence students' academic performance in vocational training? | SA 4 | A 3 | D 2 | SD 1 |
| 9 | Quality assurance protocols improve students' understanding of both theoretical and practical lessons. | | | | |
| 10 | Regular monitoring of teaching enhances students' engagement in class. | | | | |
| 11 | Standardized assessments ensure fairness and accuracy in grading students. | | | | |
| 12 | Instructor training through quality assurance processes improves students' learning experience. | | | | |
| RQ4 | How adequate are the benefits of quality assurance protocols in enhancing students' academic performance? | SA 4 | A 3 | SD 2 | D 1 |
| 13 | The presence of quality assurance protocols leads to better student results in examinations. | | | | |
| 14 | Quality assurance processes contribute to improved hands-on skills in vocational subjects. | | | | |
| 15 | Strong quality assurance systems increase students' motivation to learn. | | | | |
| 16 | Continuous review of training content through quality assurance leads to sustained academic improvement. | | | | |

APPENDIX C

OUTPUT OF RELIABILITY OF THE STUDY

Scale: ALL VARIABLES

Case Processing Summary

| | | N | % |
|-------|-----------------------|----|-------|
| Cases | Valid | 10 | 100.0 |
| | Excluded ^a | 0 | .0 |
| | Total | 10 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .813 | 10 |

APPENDIX D

OUTPUT OF RESEARCH QUESTIONS

Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|-----|---------|---------|------|----------------|
| Q1 | 105 | 1 | 4 | 2.73 | .750 |
| Q2 | 105 | 1 | 4 | 2.79 | .730 |
| Q3 | 105 | 2 | 4 | 3.03 | .596 |
| Q4 | 105 | 2 | 4 | 2.83 | .627 |
| Valid N (listwise) | 105 | | | | |
| | | | | | |

Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|---|---------|---------|--------|----------------|
| VAR00001 | 4 | 2.73 | 3.03 | 2.8450 | .13000 |
| VAR00002 | 4 | .60 | .75 | .6758 | .07570 |
| Valid N (listwise) | 4 | | | | |

Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|-----|---------|---------|------|----------------|
| Q5 | 105 | 2 | 4 | 3.01 | .563 |
| Q6 | 105 | 2 | 4 | 2.85 | .704 |
| Q7 | 105 | 2 | 4 | 2.92 | .689 |
| Q8 | 105 | 2 | 5 | 2.99 | .714 |
| Valid N (listwise) | 105 | | | | |
| | | | | | |

Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|---|---------|---------|--------|----------------|
| VAR00003 | 4 | 2.85 | 3.01 | 2.9425 | .07274 |
| VAR00004 | 4 | .56 | .71 | .6675 | .07042 |
| Valid N (listwise) | 4 | | | | |

Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|-----|---------|---------|------|----------------|
| Q9 | 105 | 1 | 4 | 2.70 | .822 |
| Q10 | 105 | 1 | 5 | 2.77 | .846 |
| Q11 | 105 | 2 | 4 | 3.21 | .817 |
| Q12 | 104 | 2 | 5 | 3.13 | .683 |
| Valid N (listwise) | 104 | | | | |
| | | | | | |

Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|---|---------|---------|--------|----------------|
| VAR00005 | 4 | 2.70 | 3.21 | 2.9525 | .25487 |
| VAR00006 | 4 | .68 | .85 | .7920 | .07376 |
| Valid N (listwise) | 4 | | | | |

Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|-----|---------|---------|------|----------------|
| Q13 | 105 | 2 | 4 | 3.27 | .669 |
| Q14 | 105 | 2 | 4 | 3.25 | .601 |
| Q15 | 105 | 2 | 4 | 3.10 | .728 |
| Q16 | 105 | 1 | 4 | 2.91 | .856 |
| Valid N (listwise) | 105 | | | | |
| | | | | | |

Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|---|---------|---------|--------|----------------|
| VAR00007 | 4 | 2.91 | 3.27 | 3.1325 | .16661 |
| VAR00008 | 4 | .60 | .86 | .7135 | .10825 |
| Valid N (listwise) | 4 | | | | |