

QUALITY ASSURANCE TOOL FOR ENHANCING TECHNICAL AND VOCATIONAL EDUCATION

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Abstract

Education in general is the door to human civilization and a means to development. The framework of this development rest on structure and principles which are meant for qualitative education to be assess using effective tools. In view of this, the paper will focus on ways to reorganize technical and vocational education to regain its lost glory through improving its quality by using assessment tools to assure the expected standard are achieved. At the end the paper sees the creation of private-partnership programme with industries. Similarly the involvement of the relevant industries together with alumni/old students in the accreditation of all technical and vocational education programmes.

The operational guidelines of anything are made to serve as parameters towards achieving desired goals. These goals are not beyond satisfying the targeted people, community, state, country and the entire world. In this respect education is the sector scheduled with providing the essential tools for remoulding human attitude towards development in the three domains i.e. cognitive, psychomotor, and effective. For each society, state or country the stated policies are guiding principles on what and how the educational system and how the operation structure should look like. The policies will give birth to curriculum based on certain standards. These standards are believed to be the bases upon which all plans, development, supervision/inspection, and accreditation and certification rest. This is what Center for the Development of Vocational Training

(CEDEFOP) (2009) believed *“while policy frameworks for quality are the driving forces behind VET improvement, with their roles to define the objectives, criteria and standards to be pursued, accreditation procedures must be determine whether vocational training programme are implemented in accordance with these objectives, criteria and standard...”*

Therefore, the said standards will always carry along with them developmental strategies and quality maintenance framework. These strategies and the framework are constantly serving as indicators for the policy review and necessary adjustment as given by Blom, (2003) in CEDEFOP (2006) that *“aiming for quality requires measurement and comparison before and after ascertain activity is carried out, based on a number of indicators”*.

Hence education is a developmental framework aimed at remoulding the behaviour of an individual and enriching him/her with skills to become productive to him/her and to his/her society he/she lives. This is the believed of Idialu (2011) in his conclusion *“education is important in the development of any country as it is through this education that people acquire the necessary knowledge and skill required to perform activities that are necessary in the employment sector”*.

The indicators are those aspects put in place that can ascertain at every point for the purpose of assuring quality. Indicators as defined by Encarta (2009) as *“something observed or calculated that is used to show the presence or state of a condition or trend.”* Therefore, educational indicators are those things that can be seen, measured, assessed, evaluated, and quantified. By applying these tools, it means the quality of education can be ascertained. To this respect it is believed that for the sustainability of quality in education, all concern must maintain the status core. In this respect these indicators must always be in place in a way that proper evaluation of education within specified period of time; to which assessment and evaluation can be carried out for the purpose of ascertaining the progress or the level reached. Therefore, the education indicators are the guiding principles as quality cannot be compromise so long the society needs concrete development.

Quality Assurance Tool in Vocational and Technical Education

Vocational and technical education i as given by designed to prepare one for training in any area for employment purpose. This is what Idialu (2011) pointed *“vocational education can be described as the aspect of education, which is concerned with the preparation of skilled man power.”* For the purpose of quality assurance in vocational and technical education there is need to ensure good quality in the teaching and evaluation of students (Idialu, 2011). To this point, what is quality assurance? In this respect, National Center for Technical and Vocational Education and Training Development, Romania defined quality assurance as *“the totality of characteristics of a*

learning programme and the provider through which the expectation of the beneficiaries and the quality standards are met.” This is to say the quality assurance is directly referring to the total acceptance of the beneficiaries of the products of vocational and technical training. This means that the quality is directly related to the achievement of the learning outcomes i.e. knowledge, skills and competence achieved at the end of the learning process. The expectation of these outcomes concerned key stakeholders which include:-

1. Students: they are the recipient of the knowledge and training. They have ambition or expectation regarding their own professional development which they want to achieve through the learning programmes. With this in mind, the students set their minds toward that goal.
2. Employer: this is a group of consumers of the training output. They are to employ the trained students. The performance of the students after school is a determining factor of the quality of training offered. Therefore, the employer must have confidence in the validity of the professional certificate.
3. Community: this is the general consumers of the entire programme and concerned with development of qualitative training. The community must be sure that the quality needed for which it is to develop in all respect must be assured.

The above mentioned position of the stakeholders is what the National Policy on Education (NPE, 2004) as part of the objectives of vocational and technical education in Nigeria encompassed which says *“to give training and impart the necessary skills to the production of craftsmen, technicians, and other skilled personnel who will be enterprising and self-reliant, and to enable young men and women to have an intelligent understanding of the increasing complexity of technology.”*

Industrial Participation in Quality Assurance in Vocational and Technical Education

In order to have and maintain quality in vocational and technical education as spelt out by the NPE, it has become necessary to involve industries in the activities of vocational and technical education and training. Since the NPE has categorically spelt out the objectives as shown above, industries must participate in the formulation, supervision, accreditation of technical and vocational programme. This is given in the National Quality Council Communiqué (NQC, 2006) by the committee of the Ministerial Council for Vocational and Technical Education, Australia in November, 2005. Among the outcome is *“the NQC is placing a high priority on building strong linking with industries skills Council (ISC). This will provide a direct connection between policy in relation to package and the development.”*

This belief is not different from what Romania has in maintaining quality assurance in Technical and Vocational education. That *“actively involving all stakeholders and particularly employers in the quality assurance process, the National Quality Frame work in Technical vocational training and education(TVTE) has a*

crucial role in achieving the major objectives regarding vocational Education Training (VET).”

Quality Principles of Technical and Vocational Education

To achieve setting quality assurance framework, there must be laid down principles which will serve as a guide towards achieving the standards. The Romanian framework identified seven (7) areas within the learning programme as their quality principles. These areas were grouped into four (4) sections adopted from the European Common Quality Assurance framework. These principles are:

1. **Quality management** – the management develops the mission, vision and values of the organization following consultative processes. The Commission for Evaluation and Quality Assurance develops the quality manual (the sum of all policies and procedures, strategic and operational plans and documentation regarding quality assurance) and monitors the implementation of the procedures.
2. **Management responsibilities** – the management gets actively involved in quality assurance of learning programmes. Partnerships with stakeholders are developed and maintained. Relevant information is collected, stored and analyzed regularly and communicated to stakeholders. There is an effective financial management.
3. **Resource management (physical and human)** – the organization provides students with a safe and supportive environment. The learning spaces are properly equipped and meet the collective and individual needs of students. The resources, teaching methods and the related premises allow the access and active participation of all students. Staff is employed according to clear criteria (minimum standards regarding qualifications and experience) of recruitment and selection, the organization defines job descriptions, evaluation of staff performance is transparent; there is a staff policy, that includes induction procedure and continuous training programmes.
4. **Design, development and revision of learning programmes** – the organization is permanently concerned with the improvement of learning programmes, to meet the needs of students and staff(internal stakeholders) and of employers and the community (external stakeholders). The learning programmes are centered on the student.
5. **Teaching, training and learning** – the organization provides equal access to learning programmes and supports all students, preventing any form of discrimination. Students receive complete information about the training provision and benefit from effective counseling and career guidance. Students’ rights and responsibilities are clearly defined. Student-centered teaching and training methods are mainly used. Students are encouraged to assume responsibility for their own learning process.

6. **Assessment and certification of learning** – the organization develops and uses effective processes of assessment and monitoring of learning, in order to support students' progress. Teachers participate regularly in activities of standardization of assessment. Assessment and certification meet national standards and legislation requirements.
7. **Evaluation and improvement of quality** – the performance of the organization is evaluated and monitored. Following the identification of weaknesses through the evaluation process, improvement measures are developed that are implemented and monitored, as part of a new cycle of quality assurance.

Strategies for Quality Assurance in Technical and Vocational Education

The type of education given to people has direct relation to the nature and how the society will look like. That is if education is qualitative, the society will develop and be productive and if on the other hand if the education programme is not functional or of poor quality, then the consequences will tell on the society. In this regard the quality of technical and vocational education given to our students is it producing or yielding the required result? Based on the objectives spelt out in the NPE, can we reach the dream land of competent skilled personnel who can understand the complexity of today's technology? People who are employable or be self-employed? If the answer is no, then we must look into the quality of education deliverance especially technical and vocational education. These are some of the basic questions we would have asked as we search for the best VTE system to serve our economy, society and the nation at large. The fact is that there is no nation that has personal education and training system, rather a borrowed system adopted to suit a peculiar environment. Many of us would have reflected on some of these unique challenges and opportunities. What, for example, *“makes an effective and responsive VTE system? What are the options available to accommodate the needs of different social, economic and cultural differences? Is the VTE system responding to the appropriate level and demand of skilled manpower in the economy? How is it positioned within the national education and training system? Is it meeting the training needs of school leavers and working adults? How well is VTE accepted by school leavers, parents, industry and society? What is its public image? What are the policy, funding and educational issues surrounding it? How can the goals and objectives be translated into reality? What tools do we use to measure the results?”* (Seng, 2007)

It is a must to accept that vocational technical education systems are dynamic in nature. The challenges and opportunities are unique. The key issue today is how to build a responsive VTE system in time for the future. We have no option than to rebuild quality framework which shall serve as a guiding principles towards the development of technical and vocational education in Nigeria.

As part of strategies for the development and quality assurance of technical and vocational education, Seng (2007) is of the opinion that *“the educational and training*

systems be reviewed, upgraded and remodeled to stay relevant and responsive to the needs of school leavers, industry and community.”

Also there is need to have a reflection back on how technical education started, though the take off was not that encouraging notwithstanding the institutions left by the colonial masters were in good shape unlike now. So there is need to over haul our schools by supplying 21st generation machine tools and to maintain the 70%-30% practical and theory learning processes.

Conclusion

Technical and vocational education is meant for industrial development by training and producing skilled personnel that can competently work in our industries or be self-employed; we cannot skip qualitative tools in assessing and maintaining quality assurance of VTE. Other countries see VTE as a mean for industrial purpose and believed that is the road to industrial development; reference from the Singapore experience. They achieved the level of quality in VTE today by maintaining the set goals.

Suggestions

To achieve the objectives of technical and vocational education as contained in the National policy on education, there is need to make necessary review and enhance the quality assurance indicators. Among them the followings can be included.

- ❖ There is need to redefine the accreditation criteria of our technical courses so that the programme should reflect industrial need.
- ❖ Industries should be part of accreditation exercise of technical colleges' programmes as they are expected to be employers of the graduates and this will give proper direction on what is obtainable in schools.
- ❖ Federal government should establish quality assurance body like that of Australian National Quality Council and be part of accreditation exercise.
- ❖ Assessment committee should be set at school/department level and tasked with in-house check on academic work.
- ❖ Students should be given chance to contribute in the curriculum development/review by giving them access to information about the expectations of the programme, like the Romanian practice.
- ❖ Accreditation team should include alumni/old student members of the school as in council membership. This will serve as a means to maintain certain level or standards and by doing so; the students will be encouraged working hard.
- ❖ Federal government should make a law that all industries must employ technical college leavers instead of unskilled cheap labour.

- ❖ Industries should be accepting students on industrial attachment since they participate in curriculum development.

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