

Article

Quality Assurance Agenda in Nepali Technical Vocational Education and Training System

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Abstract

Quality assurance in TVET is a concept that is concerned with high performance in entire academic process involving activities such as teaching, learning, infrastructure, students' behavior and so on. Good quality education is very necessary in the total development of the student, which ensures proper development, job prospects and the realization of academic goals and objectives. There are varied factors working against the realization of quality TVET. In a competitive labor market, the quality and relevancy of program offerings must be of paramount interest to all technical and vocational institutions. Accredited institutions, qualified teachers and practical partnerships between public and private actors will have an increasingly important role to play in the delivery of TVET programs so that the new graduates from institutions of TEVT must be world class and the education quality must be of global standards. Effective quality assurance policy helps to support the development and maintenance of a good TVET system. This paper attempts to clarify the concept of quality assurance in TVET by discussing the various approaches employed. It presents examples of best practices in quality assurance based on the secondary data, observation, study, and experiences outlines and discusses the relevancy, gap and need in Nepal's TEVT system to meet the requirements for preparing competent and competitive human resources for the world of work.

Keywords: TVET, quality assurance, accreditation, standards, qualifications

Background

Education is a powerful agent of change, and improves health and livelihoods, contributes to social stability, and drives long-term economic growth. Education is also essential to attain all the sustainable development goals (SDGs). Education is the main foundation of modern culture, science and technology spiritual and material production, as well as sustainable development of society. Improving educational quality requires a general theory

of education. The theory of productive education can be created only based on the data of "multi-story measurements" of the performance of subjects of creative activity in different spheres (Kuzmina, 2004). Quality of education is a pre-condition for attractiveness, mobility and trust and considered the way of transition the potential into the real, in which the nature of human life itself is implemented.

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Quality education helps people become better citizens, get a better-paid job, shows the difference between good and bad. Here is the couplet by 'Great Chanakya', which is always contextual.

विद्या ददाति विनयम् विनयाद् याति पात्रताम् । पात्रत्वात् धनमाप्नोति धनात् धर्मं ततः सुखम् ॥

(Education to strengthen skill, knowledge and accomplishing goal of humanity and acquiring real happiness in life)

Education shows us the importance of good work, hard work and, at the same time, helps us grow and develop. Quality education leads an individual toward betterment. Thus, we can shape a better individual, a better society to live in by knowing and respecting rights, laws, and regulations. In the education and training sector quality is important for securing client (employers and learners) and stakeholder (governments and industry) trust in the ability of the system to deliver relevant learning outcomes. This is especially critical as systems become more flexible in what and how educational program/training is delivered and accessed (Pepper, 2016). With learners obtaining qualifications for the knowledge, skills, and competencies they acquire in a range of formality. The effective and efficient regulation of education/training is central to the integrity of TVET systems and to the qualifications they offer and deliver.

At the turn off the 19th and 20th century Rudyard Kipling expressed the prophetic idea that education appears as the greatest creature comfort only if it is of the highest quality otherwise it is useless (Lyskon & Zharinova, 2021). In this regard such key concepts as "Quality of Life", Quality of a Person and Quality of Education are closely related.

Figure 1Relation of Quality of Education in Quality of Life



Source: Lyskon and Zharinova, 2021

Technical and Vocational Education and Training (TVET) is historically oriented towards social justice and employment. It has focused on poverty alleviation rather than contribution to the development of a productive workforce and to enterpriselevel and national productivity. In a wide sense, TVET is used as a comprehensive term referring to those aspects of the educational process involving in addition to general education, the study of technologies, practical skills, knowledge, and attitudes related to world of work (Maclean & Wilson, 2009). The skills associated with continuously learning and creativity dealing with ambiguity is increasingly becoming important. TVET is also a vital tool for achieving the agenda 2030 development Development Goal Sustainable (SDG) 4 emphasizes the need for inclusive, relevant, and quality education so that the young people should be equipped with skills, knowledge competences and values to break cycles of poverty contributing to socioeconomic development.

Ensuring Quality in TVET

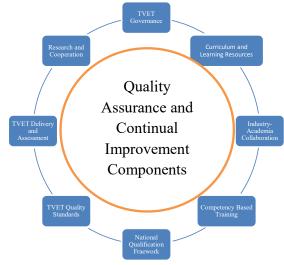
TVET sector requires systematic approaches to measure the quality of systems. In some countries traditional systems of inspection continue to be the mechanisms for ensuring that institutions deliver quality training. In

others the application of quality standards (developed by government regulators and commercial quality and accreditation organisations) are used as criteria or benchmarks against which organisations are formally audited, to gain, maintain or renew registration or accreditation. The effective and efficient regulation of education and training is central to the integrity of TVET systems and to the qualifications they offer and deliver.

Effective regulation ensures that the providers of TVET have appropriate and adequate processes and physical and human resources in place to deliver the required and relevant skills and knowledge; it also promotes continuous improvement practices and provides confidence for industry in relation to the skills graduates possess. An efficient and streamlined regulatory system and one not overly burdensome encourages compliance and quality of provision. Efficient regulation is also underpinned by a riskbased approach to quality assurance, which encourages the pursuit of excellence and self-compliance (Misko, 2015). As practiced in different countries, there needs a strong quality assurance and management system which can preserve the integrity of nationally recognized qualifications. Well-recognized qualifications/accreditation and trusted system can support labour market efficiency by providing 'effective signals' to the labour market about the knowledge and skills an individual has acquired, which helps employers and graduates to have confidence in the quality of the qualifications.

Assuring the quality and relevance of TVET has become an increasingly challenging task, which must comply with changing labor market's requirements and needs. National

Figure 2
Key Quality Assurance Components



Source: Kenya TVET QAF-2019

framework. institutional curriculum accreditation system, qualified instructors and partnership with the stakeholders are some of the basic and important areas for quality assurance. TVET requires a national curriculum framework which must cover skills, learning areas based on the national and global community. The curriculum should provide guidance to being and becoming a whole person. A curriculum framework is a supportive structure to help schools to plan and develop their own curriculum. It comprises a set of interlocking components, including essential learning experiences, generic skills, values, attitudes, and keylearning areas. Curriculum framework is one of the most important tools in ensuring consistency and quality in a curriculum system. Institutional accreditation is viewed as both a process and a status. It is a process by which a TVET institution evaluates its operations and programs and seeks an independent judgment to confirm that it substantially achieves its objectives and is generally equal in quality to comparable institutions or programs. As a status, it is a formal recognition granted by an authorized accrediting agency to an institution or program as possessing certain standards of quality as defined by the accreditation agency (Asia Pacific Accrediation and Certification Commission [APACC], 2020).

An instructor possesses knowledge, skills, attitude, or behavior, which refers to quality. This word quality is regarded as "competence". An instructor's "competency" is a person's ability to possess adequate skill, knowledge, attitude, or behavior to perform certain tasks professionally at the schools. Thus quality, ability, and skills to do certain activity competently. Competencies of TVET instructors are exactly those skills, knowledge, attitudes, values, tasks, and appreciations that are related to teaching and training within the sphere of TVET. Globally, TVET teachers should be competent in managing classroom and workshop, handling teaching aids, assessing, and evaluating students' performance, applying various teaching methods, recognizing students' learning styles, meeting the needs of students in the classroom, and more importantly, imparting the necessary technical knowledge and vocational skills efficiently and effectively. Instructors' Competency Framework can be regarded as an instrument or tool that identifies the needed competencies to minimize the challenges that are currently existing in the TVET institutions. Thus, competency framework includes competency standards, entry requirements, career-path, credits transfer, capacity building provisions, and certification. The positive relation between quality TVET and socio-economic development is well established.

Assuring quality in education has indeed become a top priority for academic institutions and is currently one of the most critical elements in the development of an education system (Morris, 2013). Quality assurance for TVET is quite a prominent area all over the world because of the expansion of the global competitive marketplace. International practices towards greater quality focus served to maintain professionalism, enhance stakeholder confidence, and enable personnel in the sector to adapt to the ever-changing global environment. As an example, the Australian Quality Training Framework (AQTF) was established in 2001 as a body for providing minimum quality standards for the registration of training organizations in Australia. Since 2007, it has introduced criteria called additional "excellence criteria" in a new concept called continuous improvement or reflective practice which is outcome focused, nationally consistent, streamlined, and transparent (Agbola & Lambert, 2010). Multilateral and Bilateral organizations working in TVET sectors such as the Asian Development Bank (ADB), the World Bank (WB), the European Union (EU), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the International Labor Organization (ILO), the Swiss Development Co-operation (SDC) and others have strongly expressed interest in quality assurance in TVET system. UNESCO has focused and emphasized the need to improve the quality of education in its programs (UNESCO, 2012). International Network for Quality Assurance Agencies in Higher Education (INQAAHE) which collects and disseminates information on developing practices on the assessment and maintenance of quality in education providing uniformity of quality internationally (Morris, 2013).

In relation to TVET quality, quality assurance is a set of measures and activities to ensure that education and training services satisfy identified needs of industry, trainees, and society in a systematic and reliable way. Quality assurance and continual improvement components include TVET governance, industry-academia collaboration, national qualification framework, TVET delivery, competency-based training, and assessment, TVET quality standards and research and cooperation against which TVET quality can be assessed. If TVET does not lead to satisfactory outcomes, everyone loses. TVET quality, therefore, is of common interest and this is what motivates cooperation and collaborative efforts of all concerned in the field of quality assurance in TVET (Sharma, 2019b). In today's fast changing environment, new innovative approaches to performance monitoring, measurement of quality or output-based policies, such as Competency Based Education and Training (CBET) and assessment are applied to assure the required quality in terms of competency achievement. The aim of quality assurance in TVET is to support processes and procedures that ensure good TVET.

Quality assurance is fundamental to qualifications because trust and transparency qualifications are a requisite the comparability and recognition qualifications at both the national and international levels. To ensure the validity and trustworthiness of qualifications and certificates, the qualifying and certification process needs to be underpinned by reliable and standardized quality assurance arrangements and mechanisms. Quality in TVET requires its attendant's employability and meeting both students and employer's

demand. Responsibility that increased clarity, collaboration between school and working life, and workplace learning will lead to an emerged quality should be shared between the student, the school, and the industry (Jayalatha, 2017).

Technical and Vocational Education and Training (TVET) is gaining popularity in Nepal in recent years. It is recognized as a key pillar of Nepal's education sector in the constitution and development plans. There has been massive expansion of TEVT institutions and provisions along with the diversification of programs. Expansion of TVET programs intensified after introduction of TVET in community schools as a technical stream. Growing expansion of TVET institutions and programs in recent years also raised the concerns of quality. There is focus and investment of both materials and human resources from both internal and external sources. However, the attempts in the development of TVET relevancy, efficiency and quality have remained low. Mismatch between demand and supply of the labor market have prevented TVET from meaningfully contributing to the national economy. So far, very limited resources have been allocated to enhance and assure the quality and relevance of the numerous TVET programs delivered across the country. Service delivery is not linked to funding based on quality-therefore TVET schools have had limited incentives to 'do better' and improve the learning environment for their students. Low efficiency and effectiveness of the programs are not only preventing to address well employment outcomes they are also heavily reducing the enrollment rate in TVET programs. The table below shows the status of student enrollment in the CTEVT

run pre-diploma and diploma level programs in last two academic years.

The data above indicates that TVET institutions are not able to enroll adequate students against their enrollment capacity.

Table 1 *Student Enrollment Status in TVET programs.*

Programs	Academic Year 2076/077		%	Academic Year 2077/078		%
	Enrollment Capacity	Total Enrollment		Enrollment Capacity	Total Enrollment	
Pre-Diploma	37,905	21,499	56.71	28,555	12,123	42.45
Diploma	45,384	25,987	57.26	46,072	32,559	70.66
Total	83,289	47,486	57.01	74,627	44,682	59.87

Source: Annual Report of CTEVT (2022)

One of the major reasons for that could be poor quality of TVET institutes. In prediploma programs run by CTEVT there is only about 43 percent enrollment. Institutes which have been conducting the programs based on the students' fee have difficulty in fulfilling the minimum requirements. Some of the schools have less than 20 percent of students against their enrolment capacity. Such schools have very poor resources such as classroom, lab, tools and equipment, library, instructors. To attain the objectives mentioned in the 15th national development plan, TVET will require investment in quality improvement of the institutions, i.e. investment in quality instructors, curriculum, physical infrastructure and equipment, incentives to the schools and development of mechanism to effectively participate the private sector in developing productive workforce. Strengthening quality assurance system through establishing accreditation in TVET to ensure the TVET institutions meet minimum quality standards (Sharma, defined nationally Considering those facts that the world is becoming more quality focused, inclusive, and interdependent, it is evident that a clear

provision of quality assurance in Nepal's TVET system is a critical necessity to meet the demands of learners and the world marketplace.

The issue of quality technical and vocational education and training (TVET) as tool for self-reliance is a fact that cannot be discarded or over emphasized. The revelation from the study shows the quality of students admitted to technical colleges. The quality of students and their background is a determinant factor of how well the students will perform. Technical schools as an institution that provides craftsmen and women for the general society has some inadequacies. As revealed from the study, problems relating to diversifying instructional methods to creating enough practical periods for necessary skill acquisition as a strong base for quality training are against the requirement of UNESCO that special efforts should be made to ensure that national technical and vocational education seeks to meet international standards. The TVET institutes should have fulfilled the quality standards adequacy and well managed physical and human resources. Again, to meet the twenty-first century demand,

UNESCO (2018) advocates for learnercentered innovative and flexible approaches to all programs including curriculum re-orientation. Low performance of the instructors/trainers, insufficient facilities and inadequate availability instructional material will make the training institution laboratory different from expected industrial setting. Quality assurance whether external or internal and irrespective of how quality is defined requires established benchmarks against which qualifications, courses and providers can be assessed. In TVET this includes several activities, starting from the self-assessment of the institution and finishing with the use of the outputs of the assessment.

Conclusion

Quality TVET is supported by three key pillars: ensuring access to quality teachers; providing use of quality learning tools and professional development; and the establishment of safe and supportive quality learning environments. Through the analysis of the students, school, instructional materials, and government have been identified as necessity for attaining quality TVET program that can cater for economic growth of the nation and the wellbeing of the country through self-reliance. All TVET institutions and programs are to be brought under the quality assurance mechanism through accreditations to ensure all are operated maintaining quality standards. CTEVT as a policy making agency should more concentrate in quality control and quality assurance rather than implementation of the TVET programs. With the increasing realization that TVET programs are of paramount importance in the social, educational, and economic scene, more and more emphasis is being placed in quality control and quality assurance. In addition, investment from government or from people in TVET is significantly higher. Utility and return on investment would be higher if TVET institutes prepare students of superior quality capable enough to compete for the job in the labor market. The time has come when national responsible body authorized for quality assurance takes a public stand for integrity of action.

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