
Funding and Spending of TVET Curriculum for Sustainable Development: Policy Options Achievements and Constraints

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ABSTRACT

The study examined the status of Technical and Vocational Education and Training (TVET) in the County Government of Vihiga. The focus on TVET is premised on the fact that TVET education is a devolved function. A phenomenological research design was adopted for the study. Relevant policy documents were scrutinized, interviews were conducted, and a questionnaire was administered. The findings were analyzed thematically. A total of 25 managers from the registered and licensed TVET centers in the county were involved. The five TVET officers in the five sub-counties of Vihiga were also participants in the study.

Further, 50 instructors and 75 TVET students were involved in the study. The study participants agreed that the issue of funding, spending, curriculum, and policy options need to be addressed. Although the sector faces numerous constraints, the sector has made valuable progress in addressing youth unemployment in the county.

Keywords: Technical and Vocational Education and Training, Funding, Spending, Curriculum, and Policy.

Introduction

Technical and Vocational Education and Training (TVET) has been concerned with acquiring knowledge, skills, and attitudes for the world of work (Muchira *et al.*, 2022). According to UNESCO (2018), this is anchored on the premise that the world's economies need more people with practical skills than those with only high academic qualifications. Therefore, for Kenya to achieve its vision of 2030, there is a need for transformation in education and training that focuses more on practical skills that are flexible and relevant to the demands of a constantly evolving, globalized labor market.

A World Bank (2012) study indicated that middle-income countries in East Asia that have become industrial giants, such as China and Korea, have over 50% of tertiary students enrolled in TVET programs vis-a-vis those in universities. According to the report, this implies that TVET is a place where young people can learn knowledge and skills from basic to advanced levels across various institutional and work settings and in diverse socio-economic contexts.

UNESCO (2013), in agreement, reported that Strengthening Technical Vocational Education and Training (STVET) is aimed at supporting the governments' strategies to reduce poverty and achieve socio-economic development for everyone in diverse ways. Such an effort helps, first, through creating jobs in the formal and non-formal sectors, increase in agricultural productivity, creating jobs in rural areas, and assisting both men and women, especially the poor, disabled, and vulnerable, to respond to labor market needs.

Although TVET has been used by several developing countries as an instrument of sustainable development, in Kenya, it has been left to the periphery and its significance has yet to be embraced. This is because there has been a misguided notion that TVET is a place for academic failures who cannot pursue academic programs. It is usually considered a dead-end option for the least bright students who still need to advance in a regular institution. However, Ali (2019) in departure observed that the importance of TVET in meeting the multifaceted economic needs of the people, including employability, must be considered. This implies that TVET centers are well-placed to train Kenya's skilled and entrepreneurial workforce to create wealth and emerge from poverty.

Since there has been a rise in both primary and secondary school leavers whom the system cannot absorb, there is an urgent need for institutions that will absorb and transform these youth into valuable members of society by training them on different skills offered in TVET institutions. The Ministry of Education's Education Strategy Paper (2014 - 2018) indicated that in Kenya, there is an acute shortage of skilled laborers in the market because of the failure to embrace TVET education. The paper further notes that the shortage of technicians and artisans, which stands at a figure of between 90,000 to 400,000 respectively, is massive by any measure and alarming therefore recommending TVET as a necessity and not an option in Kenya.

REVIEW OF RELATED LITERATURE

Education is a fundamental human right and a vital tool for national development. It is also linked to human resource development, impacting economic growth and the broader development of individuals and societies. This implies that education should include not only the acquisition of knowledge but also skills aimed at achieving an all-around individual for the roles and challenges in society.

However, in Kenya, although there is a large, educated population, they cannot make significant progress in acquiring skills Mutebi and Kiplagat (2022).

Until the recent past, there has been competition for quality grades at the expense of the skills and attitudes of Kenyan learners. These, according to Weybright Caldwell Xie, Wegner, and Smith (2017), as well as Ganira and Odundo (2020), have led to the killing of creativity, dreams, and gifts of the learners who do not measure to the expected high grades in the examination eventually leading to an increase in the school dropouts and importation of common skills such as construction road networks.

Therefore, to gain sustainable development through education, a report by UNESCO (2017) indicates that Kenya needs a well-diversified education system focusing on Technical, Vocational Education and Training (TVET). The education sector in Kenya is currently changing. This is because the number of youth locked out of tertiary institutions and universities has been on the increase in the recent past based on strict controls on national examinations. This means there is more youth in Kenya who did not qualify for admission to institutions of higher learning and had no placement in tertiary colleges. Due to expansion and increase in university enrolment, many graduates are unemployed in Kenya. Therefore we need a paradigm shift from the traditional emphasis on academic grades to the promotion of TVET education alongside the few quality university grades.

That is the only way to balance skills and academic grades in Kenya we want.

METHODOLOGY

The section outlines the research design adopted for the study. It presents the target population and the sample size. It also describes the instruments of data collection, data collection procedures, and data analysis procedures. A phenomenological research design was adopted for the study. This approach to qualitative research directly investigates and describes a phenomenon as consciously experienced by people living those experiences (Creswell, 2013). The focus is on the commonality of a lived experience within a particular group. Therefore, it seeks answers to research questions descriptively through interviews or observation of those closest to the phenomenon (Davison, 2013). Although phenomenological research is typically conducted through in-depth interviews of small sample participants, other forms of data such as documents, observations, and art may also be used (Cohen, 2011).

A total of 25 managers heading the registered and licensed TVET institutions in Vihiga County participated in the study. 5 TVET officers heading the sub-county offices were interviewed.

Further, 50 instructors benefiting from the county top-up salary responded to the questionnaire, and 75 students were included in the study. The students were purposively selected from second-year classes who were doing NAVCET level I and II, three from every institution.

A series of questions were developed for the semi-structured interview for the sub-county TVET officers and the managers of the institutions. The questions were divided into four significant categories premised on the dimensions of the study. Based on the interview results, a questionnaire was developed for other survey purposes for the TVET instructors and students. The questionnaire was used to determine the participants' views with a focus on TVET funding, spending, TVET curriculum, TVET policy options, and TVET achievements and constraints. The questionnaire included some Likert-type items and one open-ended one. It was composed of four parts: The first part included questions to collect information about TVET funding and spending.

The second section aimed to gain insights into the TVET curriculum. The third section sought to find the views on policy options. Finally, the fourth section asked questions to gain insights into the TVET achievements and constraints.

In the first, third, and fourth sections, students were asked to answer each question using a 5-point scale ranging from '*strongly disagree*' to '*strongly agree*.' In contrast, the second section had open-ended items where the participants were asked to write their answers. The contents of institutional documents were also analyzed.

The semi-structured interviews were conducted in the institutions and the sub-county offices. Interviewing TVET sub-county officers and TVET managers provided a source of validity through the triangulation of the thoughts and ideas of each group of interviewees. The interviews were recorded and transcribed. The transcribed data were analyzed for themes and used to develop a survey questionnaire which was administered to a sample of instructors and students. Documents were also scrutinized and analyzed concurrently. The questionnaires were distributed among the participants of the study for 30 minutes. All the collected data were transcribed and subsequently tabulated for analysis.

RESULTS AND DISCUSSION

In this study, TVET managers and sub-county officers were interviewed. Documents were scrutinized, and observations in the institutions were made. TVET instructors and students were then asked to respond to the questionnaires.

Funding and spending in TVET institutions

In response to the first question concerning the funding and spending in TVET institutions, it was found that out of the 125 instructors and student respondents, 120(96%) agreed or strongly agreed that TVET institutions did not get adequate funding from the government. The documents, such as the cash book and the payment vouchers, confirmed that the government had only sent the subsidy once since 2013. The Ministry of Education sent a government subsidy of 50m in two installments of 38m in June and 12m in August 2018 to the TVET institutions. Most of the managers interviewed had indicated that the amount was a drop in the ocean since it was to be shared by all the 25 TVETs based on the data captured many years back, yet the enrolment had steadily increased. Therefore, most of the managers had a feeling that there was a need to revise the vote heads under which the money was to be spent, such as increasing the capitation from 15,000 shillings to 20,000 shillings and inclusion of vote-heads such as personal emoluments to be used for industrial attachment and national examination subsidy. Moreover, data transcriptions from the interviews revealed four distinct patterns: bursaries, individual and families contribution, Apprenticeship, and industrial-based training help share the financial

burden and TVET Funding and Spending through entrepreneurship.

Over 98 % (74 out of 75) of student respondents agreed or strongly agreed that they had benefited from bursary sponsorship from the county government to pay for their fees in the TVET institution. Further, 96 % (48 out of 50) instructors who responded strongly agreed that had it not been for the bursary, most of the TVET students would have dropped out of the institutions. When asked to give their views concerning the funding of bursaries in an interview, one manager stated:

I appreciate the county government for giving us bursaries. I wanted to know whether to close the institution because none of the students had paid fees. Although it was minimal, it has helped. But again, why did the Government capitation And Higher Education Loans Board loan for students who wished to enroll in (TVET) institutions only benefit those under the national government but not the TVET under the county governments?

The discussions show that the government gave a fee subsidy for students applying for courses in National Polytechnics and Technical Training Institutes through the Kenya Universities and Colleges Central Placement Service (KUCCPS).

The measure was meant to make TVET more accessible to Kenyan youths searching for employment or self-employment skills. However, the TVET students in institutions under the county governments did not benefit from the subsidy. This is in departure with the recommendations by UNESCO (2017) that providing quality and relevant education and training is critical in equipping all youth with skills necessary for industrialization. Therefore, to achieve these, it is crucial for the government to focus on improving and expanding technical and vocational education and training institutes to equip the youth with relevant skills through adequate funding.

Individuals and family contributions to the funding of TVET can ensure that all students are able to have equal access to quality and affordable TVET. Of the 75 respondents, 30 (40%) agreed they had paid TVET fees from individual or family contributions. Most of the managers indicated that the parents or guardians of the TVET students do not pay fees because they come from economically disadvantaged families. One manager commented:

Our parents have taken TVET institutions as a dumping ground for their children who are less talented academically. One time I sent a student a way for fees, and the parent turned up after two weeks. He told me that he could not pay fees because he had used all his money to pay fees for the brighter children in other serious colleges where they teach

essential professions. As a manager, I was left in a dilemma because the parent thought our courses could not produce serious professionals. Imagine that the student is the only one working in that family after the course. He took a course in beauty therapy and currently runs his barber shop here in town. The rest whose fee payment was prioritized are still seeking a white-collar jobs.

This confession indicates a need to mobilize individuals and families to fund TVET through tuition fees. Students can be asked to pay at least a small amount, even from a disadvantaged background. According to UNESCO (2017), this will help select the most motivated students, eventually giving them self-esteem and increasing the sustainability of the TVETs.

The introduction of industrial-based training is also a means to diversify funding. One of the participants, who had come from an exchange programme between the county government of Vihiga and an institution in China, mentioned the introduction of apprenticeship as a relevant approach to the financial dilemma in TVETs. This system helps mobilize companies in implementing training activities while improving training relevance. In such an approach, part of the training costs is transferred to companies who bear the direct training costs during attachment and practicum.

Therefore, specific recommendations for implementing apprenticeship systems should be put in place. In support, Mutebi and Kiplagat (2022) opine that there is a need for a strong link between vocational schools and the industry because it is possible to have an individual attachment of Vocational school trained program with industries where trainees are attached to industry according to their areas of specialization for a period ranging from 3months to 1year without payment for such This in the long-run reduces the cost of TVET funding.

All the TVET sub-county officers interviewed expressed their disappointment in the manager's reluctance to entrepreneurship. It was agreed that if the managers made good use of their large farms, they would be self-sustaining. Agribusiness is an area that most officers mentioned; since TVET institutions offer trades in skills needed by the labour market, it was possible to have the public get those services in the institutions. One officer pointed out:....*"Why should managers cry for funds when they can profit from their institutions? They ought to think outside the box by beginning businesses in the trades they teach in the institutions. Why can't they start a hotel in an institution that trains food and beverages courses? These managers are sleeping on a treasure.*

Andiema and Dietz (2023) noted that an entrepreneur is an individual who creates something new with value by devoting the necessary time and effort, assuming the accompanying financial risks, and receiving the rewards of monetary and personal satisfaction and independence. Therefore, TVET managers need to apply their managerial efficiency to produce profit which can be divided into retained profit earned by entrepreneurs and interest earned by capitalists. According to Yeap et al. (2021), this is a significant source of employment, economic growth, and innovation, promoting product and service quality, competition, and economic flexibility in TVET institutions.

TVET curriculum

The technical and vocational education curriculum offers a variety of trades.

In Vihiga, for instance, the documents analysis and interviews revealed that TVET institutions offer courses in Dressmaking, Tailoring, Electrical wireman, Masonry, Plumbing, Motor vehicle mechanics, Carpentry and Joinery Arc Welder, Hairdressing Beauty Therapy as NTA courses, and Agribusiness Development, Food and Beverage, Electrical Electronics Technology, Fashion Design, Building and construction, Plumbing, Hairdressing, and Beauty Therapy, Welding at NAVCET level

1 and 11 courses. It also offers Crafts KNEC and Artisan KNEC courses together with general courses. This implies that TVET cuts across all areas of the labour market and can be seen as the master key to poverty alleviation, social cohesion, and a chance for development and globalization. Otho, Sika, Ojuok, and Opiyo (2022) noted that the lack of a conceptualized curriculum is part of the problem that inhibits career choice in favor of technical and vocational education. Therefore, it is evidence that the existing curriculum has an articulated philosophy and balance, where educational training aspects are visible and can be understood by learners, teachers, and parents.

POLICY OPTIONS

According to the research participants and document analysis, it was found that the government had rolled out new technical and vocational courses in all technical institutions. Dr. Kevit Desai begins implementing the Competence-Based Education and Training (CBET) policy framework to deliver industry-responsive skills. The new system is aimed at playing a pivotal role in achieving the big four Government agenda and Vision 2030. The CBET concept entails the involvement of industry in all aspects of training. This will include the development of occupational standards, training programmes, facilitation of training as well as assessment.

TVET achievements and constraints

Data from interview transcriptions revealed that the TVET institutions had made some achievements irrespective of their many challenges. All the open-ended questions had many constraints facing the TVET sector which were classified into three distinct patterns negative image, infrastructure, keeping pace with technological advancement, and quality of instructors.

According to the participants, the major obstacle facing TVET in Kenya is the parents, the community, and teachers' negative mindset at the primary and secondary levels. Many people view TVET negatively, as education and training meant for those who have failed in society and therefore as a second choice to academic education. In an interview, a manager pointed out: *“Most parents (even the ones with TVET background) want to see their children becoming engineers, doctors, lawyers, etc. just because they believe this will give them better job opportunities .”* In the open-ended questions, a student indicated: *“...our teachers in primary and secondary schools frequently warned us that if we did not work hard in class, we would fail and end up joining village polytechnics”*. Another opposing view is social class. A TVET officer lamented: *“...A dressmaker can make as much money as a teacher, but at the end of the day, he is still a dressmaker with a*

lower social status. Based on these observations, it is clear that money does not always equal higher social status. Apparently, in some circles, a university degree is still the ticket to social mobility, even if it does not lead to employment or more money. Therefore, there is a need to change this perception and perhaps use a different yardstick to measure success in life if TVET has to benefit society. Unfortunately, research has shown that people in society, including politicians, educators, administrators, parents, or learners, do not fully appreciate the value of TVET. (The Asia Foundation. (2022). Some studies have suggested that the primary reason for this negative attitude is the long-term low status of TVET compared to general education. This attitude can be a reaction to colonial times when Africans were expected to be manual workers and, therefore, was provided with technical and vocational education, while general academic education was reserved for Europeans who filled white-collar jobs.

Therefore, according to a UNESCO report (2017), there is a need to demystify this notion. Thus, in an attempt to give TVET a new face, there has been a change of names; from village polytechnic to vocational centers then lastly to TVET institutions.

From the study, it was evident that the TVETs' infrastructure, systems, and skills delivered were static. In most of the institutions, the infrastructure needed to be updated and updated. A case in point is that students taking motor-vehicle courses were still using old engines. Since the market requirements are changing at such an incredible pace, there is a need for TVET Institutions to be constantly in reconstruction. This is especially true with training curricula, infrastructure, trainers' skills, market linkages, etc. This will ensure that TVET Institutions build their credibility by effectively training the candidates and contributing to the career development of the students rather than acting as an institution for rolling training programmes.

Most participants pointed out that there were many challenges in establishing appropriate infrastructures and upgrading existing material and training resources available. From the observations, there is a need for proper tools and equipment to be used in vocational training and by instructors/trainers/teachers to keep up with the skills with changing times. The teaching and learning materials needed should also be availed in all the centers. This necessitated the county government of Vihiga to purchase branded TVET textbooks at a cost of 19m to alleviate the situation. TVET institutions in Kenya need to spend as much on

transformative critical pedagogy as possible to keep pace with technological advancements.

Another major challenge facing the TVET sector, according to the participants, was the quality of the instructors for the courses offered. The Institutions hire people with specific skills in the courses and trades they offer irrespective of the ability to transfer the knowledge. It is common knowledge that by virtue of one being a carpenter, it does not guarantee the ability to transfer similar knowledge to the trainees. Therefore, the instructors need to undergo a course on pedagogy to effectiveness in their duty.

Despite the numerous challenges facing the TVET sector in Kenya, the issues of youth unemployment are being addressed through the TVET sector. Most importantly, according to the participants, there is improved access, equity, quality, relevance, and sector management. This is in agreement with, Godia (2012), who pointed out that the overall goal of the vocational education policy of the government of Kenya was intended to provide relevant and adequate skills for industrial and economic development, along with equity, social justice, inclusiveness, equality, human rights, non-discrimination and the protection of marginalised groups, good governance, integrity, transparency and accountability

and sustainable development. Therefore TVET has provided appropriate skilled Artisans, Craftsmen, Technicians, and Technologists at all levels of practical training and work experience, even though it is inadequate. TVET promotes dignity and decency of labour, mainly manual work, which implies increased training opportunities for the increasing school leavers and other trainees to increase employability.

CONCLUSION AND RECOMMENDATIONS

Kenya must embrace TVET as a necessity and precondition for socio-economic transformation if we have to achieve sustainable development. The challenges facing the TVET sector can be addressed. If that is done, Kenya will stop importing skills from other countries and instead will start exporting the same skill to other developing countries.

There is a need to demystify the notion that TVET is a place for failures through public awareness. There is a need to have a flagship project for each institution to avoid duplication of courses offered in TVET centers. There is a need to re-train TVET instructors if we have to achieve quality trainees. Since TVET is a devolved function, there is a need for the county governments in liaison with the national governments to allocate adequate resources for modernizing infrastructure in TVET institutions.

Private sector participation should be embraced, as well as the revamping of TVET institutions. This will ensure that TVET centers have the preferred machinery and equipment for training skilled workers who can produce quality goods with higher efficiency. The teaching staff, on the other hand, will be familiar with the industry needs and the labour market. Finally, there is a need for value addition to the skills acquired from TVET centers to make the students self-reliant in completing their courses.

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