

TIVET TRAINEES ATTITUDES TOWARDS TECHNICAL TRAINING IN TIVET IN NYERI COUNTY, KENYA

By

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ABSTRACT

Technical, Industrial, Vocational and Entrepreneurship Training Institutions provide a major link in the Kenyan economy by providing technical skilled personnel who occupy the mid-level positions. The purpose of this study was to assess the effectiveness of graduates of technical training institutions in Nyeri County, Kenya. This study wanted to establish TIVET trainee's attitudes towards technical training in TIVET. The research was based on Context, Input, Process and Product Theory which holds that obtaining information about a situation to decide on educational needs and to establish programme objectives. The study adopted a descriptive study design and was located in Nyeri County. The target population comprised of 10 heads of applied sciences department, 45 supervisors from the companies where the trainees were attached and 275 trainees. The sample size used in the study comprised of 10 HODs, 55 trainees and 8 supervisors. The study employed the questionnaire as the primary data collection instrument. The research instruments were piloted to test for reliability and validity. The Reliability Coefficient for the TIVET Heads of Department Questionnaire was 0.767 and the TIVET Graduates Questionnaire at 0.748. All the above Reliability Coefficients were between 0.6 and 1.0 showing that the three questionnaires were reliable. Data analysis procedures employed were both quantitative and qualitative procedures using SPSS computer program. The Study showed that majority (62.5%) of the HODs and trainees (58.3%) noted that TIVET training was regarded as low class education by the public. The study found out that majority (62.5%) of the HODs noted that TIVET was theory based training and as such the trainees were less exposed to the practical aspects of their training a view that was supported by majority (77.1%) of the trainees. Based on the premises of discussions of the above findings, the study concludes that the public has a perception towards TIVET training as being a lower class education.

1.0 BACKGROUND TO THE STUDY

Throughout the world, and in particular the countries of Sub-Saharan Africa, governments are renewing efforts to promote Technical, Industrial, Vocational and Entrepreneurship Training Institutions (TIVET) with the belief that skill formation enhances productivity and sustains competitiveness in the global economy.

The American higher education has experienced massive expansion since Second World War. Bunning (2006) observed that by the year 2000 there were approximately 4,200 institutions of higher education in the United States that would have enrolled over 15.3 million trainees. They noted that by 2001, over 60% of the United States' high school graduates would have attended colleges. Bunning (2006) also noted that the American higher education is increasingly stratified. Hailu (2012) noted that during the period between 1940 to 1991, the between-college variation in student quality has been increased while the within-college variation in student quality has been decreased. Hailu (2012) indicated that the expansion and stratification of American higher education system encouraged finer differentiation among college graduates instead of the dichotomy of college graduates versus non-college graduates. As a result, institutional quality has been brought into the discussion of educational achievements. During the same period, knowledge growth and technological innovation have made college education increasingly inadequate for many occupations.

Indeed, Konayuma (2008) suggested that graduate education provided a fast track to the most powerful and prestigious positions in the available occupations. According to the 1989 General Social Survey conducted in Kenya, noted that the vast majority of the top ranked occupations require graduate or professional degrees (Nyaga, 2012). Nyaga holds that this could explain the credentialing aspect of this increasing importance of graduate education.

Some African countries have made TIVET a post-basic education in order to provide the much needed technical personnel needed to drive growth and expansion at mid-level management (Ayuba, 2000). They pointed out that the paradigm shift towards practical skills training with TIVET in Africa has increasingly been reshaped to make it more attractive, efficient and effective. He argued that one of the most important features of TIVET is its orientation towards the world of work with the curriculum emphasizing the acquisition of employable skills. Tilak (2002) also stressed the current vision of African countries in developing a new strategy to revitalize TIVET in Africa. The expectation is that TIVET will promote skills acquisition through competency-based training. If this vision should materialise, it will require proficiency testing for employment in order to promote sustainable livelihoods and responsible citizenship.

A study carried out in Ghana on challenges that face technical training noted that the major issues that affect the quality of trainees included inadequate equipping of technical training centers (Dasmani, 2011). In Ghana various ways of overcoming challenges in technical training called for

collaboration between the various agencies and government. In Uganda, Okello (2011) noted that the supervisors and mid-level managers who are charged with induction of newly employed graduates noted that the trainees of technical institutions were not as competent compared to mainstream graduates. This was attributed to ill-equipped facilities used to train the trainees and poor trainers.

In Nyeri County, Kenya, technical institutions play a pivotal role towards achievement of the Kenya's Vision 2030. Therefore the quality of graduates from these institutions must have the technical skills required to propel the local economy and general Kenyan economy. There is therefore need to interrogate the employers observations that graduates of technical institutions do not meet their basic level of technical skills. TIVET provide training for technical skilled personnel who provide a crucial link in middle level managerial positions as well as creating people with pre-requisite technical skills that are not available in other higher level of education A study conducted by Simiyu (2009) in Kenya noted that to start with the community had great regard to technical training centers competence to produce very competent graduates. However the study noted that in the new century the quality and competence level of graduates of technical trainees has been falling owing to technology and competence of trainers in the facilities. Therefore this study sought to investigate the effectiveness of graduates in technical training institutions in Nyeri County.

Technical training institutions were intended to train mid-level managers and practical skilled personnel to support the Kenyan independent economy. However, as the level of funding from the government plummeted, the quality of training offered in technical institutions became poor and the public lost confidence in the TIVET. The national and county government move under the new constitutional dispensation has put more emphasis on technical training. However the TIVET still attract some students while many keep away to join the universities. The managers of many companies have also complained on the effectiveness of the trainees from the TIVET. Despite these interventions to encourage Kenyans to join technical institutions and inform the Kenyans on the importance of technical institutions, the same has not translated into increased enrollment in these institutions. Most technical institutions have also been converted into constituent colleges of mainstream universities as the communities favour university education compared to technical training. This trend may suggest that training programmes offered by the technical institutes probably has failed to develop the skills required for the job market within the region and beyond. The technical institutions have also relied heavily on obsolete technology in their training programmes and hence affected the effectiveness of the trainees. Hence the need to assess the effectiveness of graduates of technical institutions in Nyeri County

2.0 Development of TIVET in Sub-Saharan Africa

Technical training was viewed as a strategy to bridge the gap that existed on exit of expatriates once the countries gained independence from the colonial masters. Lauglo (2005) in his study on TIVET in Sub-Saharan Africa noted that since 1970s, TIVET attracted increasing government had high expectations for the required technical skilled personnel needed by the emerging economies. Lauglo indicated that as a result of these developments African governments set up technical and vocational

education institutions based on colonial education model. The main aim of African governments was to raise individuals' job prospects and productivity. As a result, enterprises were expected to become more competitive and make a greater contribution to economic growth, on condition that those trained in these institutions actually matched the requirements of the labour market.

Nirmala, Karthikeyan, Appalabotla, and Patharaj (2012) argued that TIVET continued to attract a great deal of criticism due to the nature of the graduates from the TIVET. Nirmala et al. (2012) noted that TIVET were unable to train skilled workers to meet the requirements of enterprises and were unaware of the market needs. They also held that the TIVET were very costly and often their graduates joined the pool of unemployed graduates from the mainstream higher education an indication that the training provided did not match the jobs available. In many countries, including Ghana, public TIVET institutions have not been able to adapt to the new structure of the labour market and the new skill requirements of companies in both the formal and informal sectors.

Tilak (2002) posited that it was commonly accepted that all forms of education would help people to improve themselves and to get better jobs, but many parents shunned TIVET for university education which they deemed would offer their children the opportunity to acquire a good job. As a result, many countries found that the number of graduates from universities far exceeded the capacity of the labour market to provide appropriate employment. At the same time, these countries are unable to attract enough people to train for those positions of greater need, which might be 'blue collar' jobs that might appear to involve manual labour, be dangerous, dirty and difficult (Tilak, 2002). The researcher concurs with Tilak that vocational training plays a pivotal role since they offer alternative education to learners who failed to meet the university pass mark. The skills gained from technical institutions are well suited for mid-level management.

2.1 Development of TIVET in Kenya

The use of Technical, Industrial, Vocational and Entrepreneurship Training (TIVET) in Kenya encompasses technical training institutions, MoE training and demonstration centers, youth polytechnics and national youth service skills development centers. Innovations in the current Education and Training Organization have been proposed in the Sessional Paper No. 1 of 2005. This is intended to offer learners equal opportunities to advance to the highest level of learning either through the academic or TIVET channel. The TIVET's informal sector is still spearheaded mostly by NGOs such as Nairobi (Tilak, 2002).

Gachie (2013) argues that there are approximately 800 technical institutions with majority of them being registered by the Directorate of Technical Accreditation and Quality Assurance with the rest holding provisional registration (Gachie, 2013). No technical institute is allowed to operate in Kenya without being issued with a certificate from the Ministry of Basic and Higher Education. Currently there is a TIVET Authority that is charged with licensing, registering, accrediting, monitoring and evaluating training institutions to protect parents and trainees from fraudsters seeking profits (Herbling, 2012).

2.2 Trainees Attitude and Technical Training

The learner's attitudes play a critical role in determining the success in school. Maclean and Wilson (2009) asserted that it is a known fact that technical training has not gained acceptance by all in developing economies and conversely education managers point out that this type of education requires heavy capital investment compared to general education to develop curricula, train staff, and equip classrooms for these specialized subjects, which generally cost three times more than academic courses. They further pointed out that many parents and trainees view TIVET as a 'second-class' education. From the above assertion of Maclean and Wilson (2009), it's evident that the immediate source of the negative attitude of the policy makers towards TIVET has been the cost involved in running TIVET programs. This involves enormous costs that have not been easily affordable for the developing nations, especially when the World Bank withdrew its investment in this type of education in favor of the general education in the 1980s. The researcher agrees to the observations made by Maclean and Wilson that majority of trainees do not feel motivated under technical institutions. This perception has sidelined TIVET to the workplaces as the best training arena by most experts and policy-makers, especially after the radical policy shift by the World Bank, which was once considered TIVET's staunchest supporter.

However, Tilak (2002) observes that the attitude towards TIVET is not that all positive in the Asian countries low prestige attached to vocational education and its inherent inequities are somewhat a common phenomenon in many countries including, India, Indonesia, Philippines and Sri Lanka and, to some extent, Korea and Taiwan. TIVET is suspiciously perceived as "a second-class education meant for those of lower class or lower caste, racial minorities and women". It is not education that elicits a high status in terms of pay and social standing. The study is based in a developing world and therefore the study variables and environment and thus might produce divergent results.

Azondo (2014) carried out a cross-sectional study to analyse the influence of student attitude on performance in technical graduates. The study showed that majority of the trainees had positive attitudes towards technical skill involved in technical education. The study also noted that there was a positive relationship between trainees' attitude in technical skill acquisition and their performance. A Pearson correlation coefficient (r) of relationship between attitude and performance in technical skill involved in technical education gave an ' r ' value of 0.366 which was a positive correlation. However, the study also noted that good performance and knowledge of the usefulness of technical skills in life did not stimulate the learners to continue their careers in a related technical profession. The rate of employability of technical graduates in Kenya is higher and therefore might produce different findings. However since trainees are independent people, their career aspirations and capabilities play a role in their perception on technical training.

Lauglo's (2005) research on TIVET in Tanzania in the early 80s concludes that if vocational courses in secondary schools can appear to the trainees to be a means for hedging one's bets on further academic education, there is no shortage of applicants Dewey rejected the notion that 'what was good for industry was good for the people'. Instead, the study advocated that educators should use

industry to make schooling more active and more meaningful to trainees and that education should provide the skills and attitudes for living in an era of science and technology. Kenya is one of the developed countries hence the vocational training might be more advanced compared to Tanzania. Therefore the researcher agrees with the Lauglo's findings and holds the view that technical training might have a higher value in Kenya and trainees might be holding high preference in applied sciences.

Kamau (2013) noted that the attitudes of learners towards TIVET are low compared to university education. Therefore the low attitude enslaves trainees undertaking studies in TIVET to be lower cadre compared to other trainees in universities and other colleges. The technical training in Kenya particularly in applied sciences seems to have more employability compared to technical training in business and art based subjects. Therefore the researcher holds that the trainee's attitudes particularly in applied sciences might be very positive. However this holds unless their learning environment as well as teachers' attitudes are in alignment with their perception

3.0 Research Methodology

This study adopted a descriptive survey design. This design is a characteristic process that lays focus on answering questions such as who, what, when, where and how of the subject under investigation, and usually describes the present situation or users of a group (Kombrail, 2005).

3.1 Location of the Study

The study was conducted in Nyeri County, Kenya. The region had four Technical institutions namely; Mathenge Technical, Nyeri Technical Training College, Michuki Technical and Othaya Technical. There were 45 companies that offered attachment positions for majority of the trainees from the four institutions, each with at least four departments (Applied Sciences, Health Sciences, Institutional Management and Mechanical or Automotive Engineering) where the trainees were attached.

3.2 Sample Size and Sampling Procedures

Kombo and Tromp (2006) defines sampling as the process of selecting a number of individuals or objects from a population such that the selected group contains elements representative of the characteristics found in the entire group. The study applied Gay (2003) principle in determining the sample size. Gay indicated that a sample of between 10% and 20% of the population is adequate for large and small populations respectively.

Table 3.1: Table Describing the Sample Size

Item	Population	Sample	Percent
Supervisors	45	8	17.8%
Learners	275	55	20%
Totals	328	64	19.5%

Source: Researcher (2015)

The study applied simple random sampling to select the respondents to the research instruments. A list of finalists was obtained from the heads of departments and the researcher randomly selected 14 learners from Michuki, Nyeri Technical and Mathenge Technical and 13 finalists from Othaya Technical to arrive at a total of 55. The researcher also sampled eight supervisors from the companies where most trainees were undergoing their attachment. The study applied purposive sampling to select all the ten heads of departments for this study.

4.0 Research Findings

4.1 TIVET Trainees Attitudes towards Technical Training

The first objective of this study was to establish the trainees' attitudes towards technical training in Kenya. The study used a series of statements to assist in collected the required using a Likert scale where Strongly Disagree (5), Disagree (4), Undecided (3), Agree (2) and Strongly Agree (1) was used. The summary of data findings are presented in Table 4.5 below.

Table 4.1: Trainees/Parental Attitudes towards as Low and Second Class Education

	TIVET as a low class education				TIVET Education is Second Class to University Education			
	HOD	Trainee	HOD	Trainee	HODs	Trainee	HODs	Trainee
	s	s	s	s	F	s	F	s
	F	%	F	%	F	%	F	%
Strongly Disagree	0	0.0%	0	0.0%	0	0.0%	14	29.2%
Disagree	0	0.0%	20	41.7%	3	37.5%	9	18.8%
Undecided	0	0.0%	0	0.0%	1	12.5%	1	2.1%
Agree	5	62.5%	5	10.4%	2	25.0%	2	4.2%
Strongly Agree	3	37.5%	23	47.9%	2	25.0%	22	45.8%
Total	8	100.0%	48	100.0%	8	100.0%	48	100.0%

Data in Table 4.1 shows that majority (62.5%) of the HODs agreed with the statement that the trainees view TIVET education as a second class education compared to university education. Data also shows that a minority (37.5%) of the HODs strongly agreed with the statement. Table 4.5 above shows that of the trainees who participated in the study a relatively less than half strongly agreed with the statement respectively. The HODs were asked their views on parents opinion on technical education as low class education compared to university education and shows that half (50%) agreed with the statement and a corresponding percentage disagreeing. The trainees' analysis showed that another half of the respondents strongly agreed and agreed respectively with the statement. The study thus established that the society has a low attitude towards technical training and thus would prefer university education.

This finding concur with Maclean and Wilson (2009) who noted that although technical training had gained acceptance in African countries, its value had been eroded and majority regarded it as a second class education compared to the university education. This he argues was largely contributed by the expansion of university education and deteriorating capacity in technical training institutions. They also noted that it was evident that the immediate source of the negative attitude of the policy makers towards TIVET has been the cost involved in running TIVET programs which led to lack of pre-requisite investment in infrastructure in technical institutions. The researcher agrees to the observations made by Maclean and Wilson (2009) that majority of trainees do not feel motivated under technical institutions.

Table 4.2: TIVET Certification and the Market

Responses	HODs		Student	
	Frequency	Percent	Frequency	Percent
Strongly Disagree	2	25.0%	42	87.5%
Disagree	2	25.0%	2	4.2%
Agree	4	50.0%	4	8.3%
Total	8	100.0%	48	100.0%

Data presented in Table 4.2 above shows that of the HODs who participated in the study, 25% strongly disagreed with the statement that TIVET certification does not get recognition in the market whereas 25% disagreed with the statement. Analysis of the trainees' responses showed that majority (87.5%) strongly disagreed with the statement. Data also showed that 8.3% and 50% of the trainees and HODs agreed with the statement. The study established that the HODs were split whether the TIVET qualification did not get recognition in the market whereas the trainees.

These findings concur with Nirmala et al. (2012) who argued that TIVET were viewed as unable to train skilled workers to meet the requirements of enterprises and hence the certification was less deemed by the market. They also held that the TIVET were very costly and often their graduates joined the pool of unemployed graduates from the mainstream higher education an indication that the training provided did not match the jobs available.

4.2 TIVET Trainees' Attitudes

The Study showed that majority (62.5%) of the HODs and trainees (58.3%) noted that TIVET training was regarded as low class education by the public. However the study also found out that there was no agreement to the notion that TIVET training was second class training compared to university education. The findings thus found out that technical training value in the society had been eroded and been viewed as a second class education.

The study also established that TIVET training does not get recognition in the market as was reasoned out by majority of the HODs the notion that trainees rejected with around 90% of them indicating otherwise. However the study found out that TIVET curriculum had little linkage with the current job market requirements although the trainees agreed they found a link between their curriculum and the job market requirements.

5.0 Conclusions

Based on the premises of discussions of the above findings, the study concludes that the public has a perception towards TIVET training as being a lower class education. It therefore meant that it was viewed as second class training compared to university education. This means that the public perception of TIVET training has been eroded compared to inception years after independence when it was held in high esteem.

TIVET training has not been gotten good recognition in the job market since it has been viewed to lacks the required linkage with the current job market requirements although the trainees agreed they found a link between their curriculum and the job market requirements.

TIVET education has come out as a theory based training and its graduates lack the necessary practical skills required in the market. The TIVET graduates therefore acquired technical and practical skills during the periods they undergo practical attachment into the many factories and industries for a period of three to six months. This period equips them with practical oriented training in order to fit into the job market. Since TIVET training was not in line with the technological advancement in the market, the attachment period allowed for linkage of school training to technology in the job market which is necessary to give the graduates an edge in the job market

The study concludes that financial challenges were experienced by TIVET. This was due to expenditure cuts occasioned by dwindling financial support from the government and donor agencies. Lack of financial resources meant that TIVET were not well equipped for training in more practical based training.

5.1 Recommendations

Based on the conclusions, the study recommends;

- a) The management and the relevant ministry should carry out massive awareness campaigns to assist in the public appreciating the role of the technical training as envisioned under the Vision 2013. Through this appreciation, the technical training will be valued by the public and employers alike.
- b) The administration of technical training colleges should redraft their curriculum in order to align it with the social, economical and technological changes that have taken place in the job market. This will ensure technical training has the required linkages with the market and thus adequately equip their graduates for the market.
- c) The technical colleges should increase the periods of student attachment from the three months currently being undertaken to six months. Unlike theoretical based Areas of Further Research

5.2 Areas of Further Research

In the course of undertaking this study, the following areas were encountered and it is the researcher's view that they should be researched on.

- i. The merging of individual talents in vocational training programmes in Kenya.
- ii. The role of Technical and Vocational Training Authority in ensuring quality technical training.
- iii. The role of TIVET sponsorships in ensuring effective training of graduates.
- iv. The interlink between National and County Government in TIVET management.
- v. The role of technical training and realization of the Vision 2030.

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