Relevance of T.T.I Taught Skills to Current Job Skill Needs In Industries and Business Organizations

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Abstract

Technical education in Kenya is a necessary condition that enables members of society to productively function in technologically rapidly changing society. Technical training institutions have the responsibility to develop skilled Artisans, Craftsmen and Technicians for employment in business organizations and industries. The training in T.T.Is should therefore be market driven. The current study was designed to investigate the perception of employers towards skill training in T.T.Is to skill needs in industries and business organizations. Descriptive survey research design was used for the study. Snowball sampling technique was used to identify T.T.I graduates and their employers were purposively sampled. A sample size of one hundred and sixty eight respondents were used for the study. The study found out that T.T.Is rarely consults the employers (87.5%) on market skill needs. Majority of respondents felt that training facilities used by T.T.Is are inferior to facilities used in industries and business organizations, slightly relevant (39.9%) and obsolete (35.7%). T.T.I graduates were subjected to training 84.5% before commencing work mainly because T.T.I graduates lacked adequate skills (69.6%). Majority of respondents indicated that T.T.I graduates posses’ very irrelevant skills (42.3%) in relation to skill needs in industries and business organizations. This implies that there exists a miss-match between skills training in T.T.Is and skill needs in industries and business organizations. The training policies need to be urgently reviewed to ensure that training is market driven and employers are regularly consulted on market skill needs. The study recommends an urgent overhaul of the training curriculum to enhance adequacy of skill training and relevance to skill needs in industries and business organizations.

Key words: - Skills, Relevance and Adequacy.

Background Information

At independence in 1963, the government inherited a T.V.E.T system, which was mostly comprised of two years training after primary Education in trade schools. At this level, the students were prepared to enter various technical occupations in the private sector and Government departments (G.O.K, 1999). The students took Government trade tests during their training in order to define their level of competence and improve their job prospects. At post secondary level, the Royal Technical College, Kenya Polytechnic and Mombasa Institute of Muslim Education (MIOME) offered Limited opportunities for higher technical training (G.O.K, 1999).

Following the recommendations of the Ominde commission report of 1964, the government converted the then trade schools into technical secondary schools secondary schools was to prepare its graduates for technician training at the end of the secondary cycle that: -
Technical secondary schools did not serve the purpose for which they were established as the four years of technical training in secondary did not improve one's employability on competition of school and these schools were seen as an unwise investment.

This observation points out that the technical secondary schools did not realize the objectives for which they were established. There are however no studies done to explain this and especially with the employers.

The Mackay report of 1981 recommended the 8-4-4 education system in an effort to promote technical education (G.O.K, 1981). Sifuna (1990) states that this recommendation had its basis on the previous government efforts to emphasis non-formal education, elaborated in:

i) A conference on education and rural development.
ii) The International labour organization mission report on employment, income and equality, a strategy for increasing productive employment of 1972.
iii) The recommendations of the National Committee on Education objectives and policies of 1975.

The Mackey report of 1981 further recommended the establishment of Technical Training Institutes (T.T.Is) from former Technical secondary Schools as tertiary institutions for teaching of practical skills to facilitate direct employment, self employment and employment in the informal sector (G.O.K, 1981). However it was observed that there was more theoretical teaching at the expense of practical skill training due to lack of tools equipment and materials for practical training. These observations were not however founded on systematic research.

In spite of the emphasis placed on technical education by conferences and commissions an International Labour Organization (ILO) report of 1992 observed that young people coming out of the technical institutions lacked employable skills. This puts to question the quality of skill training in T.T.Is. Despite this revelations and the relative importance of the technical institutes as the corner stone of technical education the subject has not received any substantive attention from researchers and scholars (Kerre, 1991). This becomes a contention of the current study.

The Kenya education sector support programme 2005 – 2010 (G.O.K, 2005) observes that, despite the enormous gains made in the development of technical education it decried the quality of training in T.T.Is by referring to relevance of skills. UNESCO (1996) observes that Kenya’s main challenge in technical and vocational education is the improvement of the quality of training at all levels to ensure relevant knowledge and skills to the job requirements. The concept of quality and relevance can best be studied in the industries and business organizations where skills taught in T.T.Is are applied. This becomes the focus of the current study.

Statement of the Problem

Technical Training Institutes have a critical role to play in producing necessary human resources for the industries and business organizations. The purpose of setting up these institutions was to impact relevant skill to graduates for employment in industries and business organizations; besides the vision 2030 will be feasible if the country has sufficient human resource to serve in these organizations. However, the issue of quality and relevance of skills offered in the institutes has been questioned by various consumers of graduates of these training institutions and re-affirmed by the government commissions and scholars alike. Despite these concerns, raised no systematic study has been conducted to assess the relevance and adequacy of T.T.I taught skills and especially with employers who are the consumers of the training outcomes. The current study sought to determine the perception of employers on the T.T.I taught skills to the current job market skill needs.

Research Objectives

The following research objectives were formulated to guide the study.

i) To establish the relevance of T.T.I taught skill to industrial and business organizations needs in Kenya.
ii) Determine the adequacy of T.T.I taught skills to industrial and business skill needs in Kenya.
Methodology of the Study
This study used the descriptive survey research design to investigate the perception of employers on T.T.I skill training. The study was carried out in the industries where T.T.I graduates have been employed. Snowball sampling technique was used to identify the T.T.I graduate and their employer became an automatic respondent. A sample size of one hundred and sixty eight respondents was realized. Employers for T.T.I graduates were targeted for the study. Employers questionnaires and interviews schedule were used for data collection. Research instruments were piloted with employers of Meru College of Technology graduates in Meru town. A correlation coefficient of 0.897 was realized for the questionnaire items. The instruments were personally administered by the researcher and analyzed by descriptive statistics.

Demographic Characteristics of respondents
A total of 168 respondents were involved in the study. The study sought information on the gender of the respondents. More males (80.4%) than females (19.6%) were involved in the study. This suggests that either more men than women are either owners of the factors of production or operate at senior management levels in industries and business organizations in Kenya.

The study established that majority of the T.T.I graduates (58.9%) are employed in the manufacturing sector, 38.1% are absorbed in the service sector while a small proportion (3%) of the T.T.I graduates are employed in the extraction sector. This may probably explain the distribution of employment opportunities for T.T.I graduates in the various industries and business organizations.

Information was sought on organizations level of operation. The responses were categorized into districts referring to as local in the study, National restricted to the country of location, Regional referring to the East African Community and International referring to countries outside the East African Community. 36.9% of the industries and business organizations that participated in the study transacted business in the east African region, 36.3% of the organization were limited to the country, 17.9% of the organizations were locally based whereas 8.9% of the industries were engaged in international businesses.

Skill Training in T.T.Is
T.T.Is are expected to train skilled personnel to serve the market skill demands in both formal and informal sectors (G.O.K, 2005). Consequently the study sought information on whether the T.T.Is consulted the industries and business organizations on skill needs. Majority of the respondents (87.5%) indicated that T.T.Is never consulted them on market skill needs, whereas 12.5% of respondents indicated that employers were consulted on market skill need by the T.T.Is. This implies that, though T.T.Is were engaged in human resource development critical to technological development the training institutions did this with little or no regard to skill needs of the industries and business organizations. Psacharopoulous and Woodhall (1986) observe that quality of education is a complex concept that cannot be judged on a single index of either internal or external efficiency. Psacharopoulous and Woodhall (1986) further indicated that, while internal and external efficiency concepts are closely linked it would be possible to have a school that is extremely efficient in developing skills and attitudes that are not valued in society. Consultation between training institutions and the society or consumers of the training outcomes is therefore of critical interest to the study.

Training equipments are necessary if T.T.Is have to impact skills relevant to the industrial skill needs. Employers’ opinion on the relevance of T.T.Is’ training facilities was sought. 39.9% of the respondents rated the training facilities as slightly relevant to facilities used in the industries and business organizations, while 35.7% of respondents felt that the training facilities were obsolete. 17.9% of the respondents felt that the training facilities were relevant, while 2.4% of the respondents rated the facilities to be very relevant. 4.2% of the respondents did not give their opinion on this. The finding of the study are in agreement with observations made by aduba (2002) that students in T.T.Is are trained using obsolete facilities and equipments, which puts them at a disadvantage when they join the industries where technology is the in-thing. The findings are also in agreement with the observation by the G.O.K (2005) that T.T.Is train with inadequate facilities coupled with lack of sufficient modern equipments. The study found out that the training facilities used by T.T.Is were inferior to facilities used in the industries and business organizations. The study established that this compromised the relevance of T.T.I graduate skills to the market skill needs.
Majority of the respondents (84.5%) indicated that T.T.I graduates were given further training before taking up responsibilities upon employment, while 15.5% of respondents felt that training of a T.T.I graduate on and before commencing work was not necessary. This implies that T.T.I graduates lack the necessary capacity to manage industrial tasks without the employer’s intervention. The findings of the current study are in agreement with the G.O.K (2005) observation on the KESSP document that there existed a mismatch between the skills learned in the T.T.Is and the skill needs in industries and business organizations.

The study sought information on the reason why employers subjected T.T.I graduates to training before they commenced duties upon employment. Majority of the respondents (69.6%) indicated that employers subjected T.T.I graduates to further training because they lacked adequate skills whereas 30.4% indicated that the adequacy of skill was not necessarily the reason for training before commencement of duties at employment. The study found out that majority of the employers mounted training programs for the T.T.I graduates due to inadequate skills acquired through T.T.I training.

Employers were asked to indicate the duration taken for the training. The duration was categorized in months. Majority of the respondents (52.1%) indicated that the training lasted for 3 months to 6 months. 16.9% of respondents indicated that the training lasted for only one month whereas 10.6% indicated that the training took between 6 months to one year. This implies additional cost on training, which could otherwise have been if the T.T.Is impacted adequate skill to satisfy the skill needs in industries and business organizations.

T.T.I Trained Graduates

The study sought information on the graduates’ competencies. Items were included in the questionnaire to assess the graduate’s skill competency, knowledge, time management and creativity. 42.3% of the respondents rated the T.T.I to be very incompetent in skills, 29.9% of the respondents indicated that the T.T.I trained were incompetent in skill demands whereas 22.6% of the respondents rated the T.T.I graduates as skill competent. Only 4.8% of the respondents indicated that the T.T.I graduates were competent to the industrial and business organizations’ skill needs. The study established that majority of the T.T.I graduate did not satisfy the market skill needs in the industries and business organizations.

The experience of the employers was sought on the knowledge competencies of the T.T.I graduates. 38.7% of the respondents rated T.T.I graduates incompetent and fairly competent each in knowledge, 13.7% of the respondents rated T.T.I graduates as competent, 7.1% felt that the T.T.I graduates were very incompetent whereas 1.8% felt that T.T.I graduates were very competent in knowledge relative to the task demands in industries and business organizations.

Employers were asked to rate the T.T.I graduates in terms of competency on time management. Majority of the respondents (56%) indicated that the T.T.I graduates were fairly competent in time management, 26.8% rated the graduates as incompetent, and 12.5% felt that T.T.I graduates were competent whereas 4.2% of the respondents indicated that the T.T.I graduates were very incompetent in time management. Only 0.6% felt that the graduates were very competent. The study established the majority of the T.T.I graduates were competent in time management.

Employers were asked to rate graduates creativity in terms of competency. Majority of the respondents (52.4%) indicated that T.T.I graduates were fairly competent or were of average ability in creativity or initiative when handling tasks in industries and business organizations, 20.8% of respondents felt T.T.I graduates were incompetent. 18.5% of the respondents rated T.T.I graduates as competent while 6.5% felt that T.T.I graduates were very competent. Only 1.8% of the respondents felt that T.T.I graduates were very competent. The study established that majority of the T.T.I graduates had the average capacity for creativity and initiative.

The study also sought information on other attributes that were considered pertinent for effective performance of duties in industries and business organizations. An item was included in the questionnaire that sought to evaluate T.T.I graduates in terms of attitude towards work, diligence, ability to learn, willingness to take extra duties, dependability, level of motivation and level of performance. 43.5% of the respondents rated T.T.I graduates attitude to work as average, 31.5% indicated that graduates attitude towards work was low, 19.6% felt that graduates held a high attitude towards work, 3% of the respondents indicated that graduates’ attitude towards work was very low whereas 2.4% of the respondents felt that the graduate’s attitude to work was very high.
The 31.5% of the respondents who rated the graduates’ attitude towards work as low was considered significant in the study. The study therefore established that the graduates’ attitude towards work is wanting. The training institution and general society should invest to improve the perception towards work among the T.T.I graduates. This will in effect improve their performance and enhance self satisfaction among T.T.I graduates.

The employers were asked to rate T.T.I graduates in terms of diligence at the work place. Diligence referred to the willingness of the graduates to put effort in their tasks. Majority of the respondents (53.6%) indicated that T.T.I graduates were average, 29.2% rated T.T.I graduates’ level of diligence to be low, 13.1% felt that T.T.I graduates exhibited high level of diligence at work whereas 4.2% of the respondents felt that T.T.I graduates had a very high level of diligence in under taking their responsibilities in industries and business organizations.

Respondents were asked to rate graduates in reference to the graduate’s ability to learn. 43.5% of the respondents rated T.T.I graduates as average in their ability to learn, 39.3% indicated that T.T.I graduates had a high ability to learn, 8.3% of the respondents rated the graduates ability to learn as very high and low each whereas 0.6% of the respondents felt that the graduates had a very low ability to learn. The study found out that the T.T.I graduates had an high ability to learn. This implies that if the T.T.I graduates had the capacity to excel in their areas of specialization give the necessary requirements to skill acquisition.

Employers were asked to rate graduates on their willingness to take extra duties. 35.7% of the respondents rated the graduates’ willingness to take extra duties as average, 28% of the respondents felt that graduates exhibited low levels of willingness for extra duties, 23.2% of the respondents rated graduates willingness to take extra duties as high whereas 6.5% of the respondents rated graduates very low and very high in each case in reference to their willingness in taking extra duties. The study established that more than a quarter of the respondents perceived the T.T.I graduates to have low attitude to extra duties.

Employers were asked to rate T.T.I graduates in terms of dependability at work. 47% of the respondents indicated that T.T.I graduates were average in their level of dependability at work, 22.6% rated graduates level of dependability at work to be low and high each. 6.5% of the respondents felt that graduates level of dependability was very low whereas 1.2% of the respondents felt that graduates level of dependability was very high. The study sought information on the graduates level of motivation at work. Employers were asked to rate graduates in terms of their motivation at work. 50% of the respondents rated graduates level of motivation as average, 27.4% of respondents felt that T.T.I graduates had a high level of motivation, 17.9% felt the motivation of graduates was low; 3.6% rated graduates very highly whereas 1.2% rated graduates motivation level to be very low.

The study sought information on the graduates’ level of performance at work. Employers were asked to rate graduates in terms of their performance at work. 49.4% of the respondents rated the graduates level of performance as average, 26.2% of the respondents rated the graduates level of performance as low, 22.6% rated the graduates performance level to be high whereas 1.2% and 0.6% of the respondents rated T.T.I graduates’ level of performance as low and high respectively.

Conclusions

The study found out that training facilities used by T.T.Is are inferior to facilities used in industries and business organizations. Majority of the employers felt that the training facilities used in T.T.Is were either slightly relevant or obsolete. The finding are in agreement to the observation by the KESSP 2005- 2010 which asserted that T.T.Is operated with inadequate physical facilities for training, coupled with lack of sufficient modern equipments.

The study found out that there existed minimal collaboration between the training institutions and the industries or business organizations in skill training. Majority of the respondents indicated that they were never consulted on skill needs in the industries; T.T.Is rarely conducted market needs survey. This means that though T.T.Is were engaged in useful activity it is possible to have the training which does not address the skill needs in industries and business organizations. The currents observation is in agreement with the observation by Psacharopoulos and Woodhall (1986) that it is possible a school that is extremely efficient in developing skills and attitudes that are not valued in society. A similar observation had been made by the G.O.K (2005) that there was no collaboration between training institutions and the industries and business organizations.
The study established that T.T.I graduates relevant skills to the industrial skill needs in industries and business organizations; lacked adequate skills in their areas of training. Upon employment therefore T.T.I graduate employers subjected T.T.I graduates to training before they commenced their duties. The findings of the current study are in harmony with the G.O.K (2005) observation that there existed a mismatch between the skills learned in TIVET organizations and the skills demanded in industries.

**Recommendations**

- The study established that T.T.Is operated with facilities that were inferior to facilities used in industries and business organizations. Training facilities used by T.T.Is should be urgently upgraded to at least measure up to the facilities used in the industries and business organizations.
- The study established that there was minimal collaboration between training T.T.Is, industries and business organizations on skill training in Kenya. The industries and business organizations should be involved in training through regular consultations with the training institutions.
- The study established that there existed a mismatch between skill training in T.T.Is and skill needs in industries and business organizations. Skill training by T.T.Is should be reviewed to make the skills market oriented and relevant to skill needs in industries and business organizations.

**References**


