

Strategies of Promoting Technical Skill Training in Technical Training Institutions in Kenya

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Abstract

Technical education and training provides necessary skill for individual and national development. Successful governments have emphasized on the role of technical training for industrial development. However, the quality of training in Technical Training institutions is an issue of concern. This study sought to determine the strategies that could be adopted to promote training in Technical Training Institutions. The study adopted the descriptive survey research design. A sample size of 384 respondents participated in the study. These included trainers, graduates and employers. Questionnaires and interview schedules were used to collect data. The study established that Technical Training institutions trained with inadequate and obsolete facilities. The study recommends that there is an urgent need to modernize the training equipment and review the curriculum in the light of the changing technology and market skill needs.

Keywords: Strategies, Promoting, Technical skill training.

1. Introduction

The history of Technical and Vocational Education and Training (T.V.E.T) in Kenya is as old as that of formal education. At independence in 1963, the Government inherited a T.V.E.T system which mostly comprised of two years training after primary education in Trade schools. The objective of technical secondary schools was to prepare its graduates for direct employment in industries and for technician training at the end of the secondary cycle (G.O.K, 1964).

The G.O.K (1981) recommended the 8-4-4 education system in an effort to promote technical education. Sifuna (1992) states that this recommendation had its basis on the previous government efforts to emphasis non-formal education, which were elaborated in various forums such as; A conference on Education Employment and Rural Development, the International Labour Organization Mission Report on employment, income and equality; a strategy for increasing productive employment of 1972, the recommendations of the National Committee on Educational Objectives and Policies of 1975.

The G.O.K (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. However it was observed that there was more theoretical teaching at the expense of practical skill training due to lack of tools, equipments and materials for practical training.

In the sessional paper No.2 of 1996 on industrial transformation by the year 2020, the government views industrialization as a means to accelerate the country's economic development (G.O.K, 1996). This is similar to other past and present major policy documents that reiterate the need for industrialization. However, this will remain elusive, as it requires enormous human resource support. It observes: -

Kenya cannot industrialize unless the country has a sufficient reservoir of trained Indigenous human

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resource at all levels and especially in the technical fields, G.O.K (1999, 43).

UNESCO (1995) 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 employment requirements. The Kenya government National Development Plan (1997-2002) emphasized the availability of well-educated and relevant trained work force as critical to industrialization. The Programme Regional Education Planning pointed out that it is important to develop education in the light of local skill demands (G.O.K, 1996). Concerns have been raised on the quality of technical education in technical Training Institutes which was a contention that the current. The current study sought to investigate on strategies that should be adopted by T.T.Is to boost training. The study sought to document strategies that should be implemented to promote training in T.T.Is in Kenya.

2. Methodology

This study was conducted using descriptive survey research design. The study was carried out in eight T.T.Is and industries where graduates of these T.T.I’s are employed. These are Kabete T.T.I, Thika, Machakos, and Nairobi T.T.I for the Nairobi region and Meru T.T.I, Nkabune, Nyeri and Kiirua T.T.I were studied from the Mount Kenya region. All the forty-eight H.O.D’s in the eight T.T.I’s were purposively sampled for the study. Snowball or multi-stage sampling technique was used to identify T.T.I graduates to be included in the study and their respective employers were purposively sampled. A sample size of 384 respondents was selected for the study. These consisted of 48 H.O.Ds, 168 graduates and 168 employers. Six H.O.Ds and twenty one graduates from each T.T.I together with the employers of respective graduates were selected.

The research instrument that were used for data collection included questionnaires and interview schedule. The content validity of the research instruments was ensured through expert judgment of members in the faculty of education and resources management of Chuka University. Spearman Brown prophecy formula was used to calculate a split half correlation co-efficient. A correlation coefficient of 0.849, 0.885 and 0.921 were realized for the graduates, employers and H.O.Ds questionnaires respectively. Data generated from the study was analyzed using descriptive statistics which included frequencies and percentages; it was presented by used tables.

3. Demographic Characteristics of the Respondents

A total of 384 respondents participated in the study. This information is presented on Table 1.

Table 1: Gender of the Respondents

Gender	H.O.D		Graduate		Employers	
	F	P	F	M	F	M
Male	30	62.5	93	55.4	135	80.4
Female	18	37.5	75	44.6	33	19.6

Majority of the respondents were of the male gender with 62.5% of H.O.Ds’, 55.4% graduates and 80.4% employers coming from the male gender while 37.5% H.O.Ds’, 44.6% graduates and 19.6% coming from the female gender. A similar conclusion was made by Ngware (2000) when he observed that the equity implication is that technical education programme resources are inequitably distributed in favour of males. Similar findings have been made in Northern Ireland and German where females comprised a third of enrolment in the youth training scheme in Northern Ireland (Whyte, Kilpatrick & McIlhenny, 1985) and 40% in the Germany’s dual system of training (Cantor, 1989). Thus technical training in many parts of the world is gender biased.

The researcher sought information from the employers on the type of business that they were engaged in. this information is shown on Table 2.

Table 2: Type of Organization Headed

Nature of Business Organization/Industry	Frequency	Percentage
Extraction	5	3.0
Service Industry	99	58.9
Manufacturing	64	38.1

Table 2 shows the type of organization with the service category leading at 58.9%, manufacturing 38.1% and extraction 3%. This may probably explain the distribution of T.T.I graduates on employment in the various industries. The study established that majority of the T.T.I graduates are employed in the service industries and business organizations. Only a small a proportion of the T.T.I graduates are employed in the extraction industries.

Information was sought on organizations level of operation. Respondents were asked whether they rated their business engagement as local, national, regional or international. Local was taken to refer to the organization serving the district of its location, national referred to the country, regional referred to the east and central African region and international referred to the world at large. The responses are presented in Table 3.

Table 3: Level of Operation of the Organization

Level of business operation	Frequency	Percentage
Local	30	17.9
National	61	36.3
Regional	62	36.9
International	15	8.9

Respondents indicated that 17.9% of the sampled industries operated activities within their districts of location, 36.3%, 36.9% and 8.9% of industries sampled were national, regional and international respectively. This indicated that majority of the industrial and business organizations sampled for the study transacted business in the East African region. Only a small proportion of respondents indicated that their organizations had an international business orientation.

4. Challenges that Hinder Training in T.T.Is

An open-ended question was included in the questionnaires and interview schedule that sought information on the hindrances that T.T.Is faced in executing their mandate. This information is shown in Table 4.

Majority (24.6%) of the respondents indicated that training in T.T.Is was hindered by obsolete training equipment used in T.T.Is for training, 23% of the respondents identified obsolete curriculum to be an hindrance, 14% and 12.6% of the respondents indicated that T.T.I training was hindered by inadequate facilities and lack of refresher courses for teachers respectively, whereas 8.7% of the respondents identified inadequate personnel as an hindrance to T.T.I training. . This is similar to the observation by Ngware (2000) that, in Kenya technical education program respond slowly to technological changes. 8.3% of the respondents identified the absence of an attachment policy for T.T.I trainers and trainees as the hindrance to T.T.I skill training, 5.9% and 2.5% of the respondents identified inadequate funding and poor management of T.T.Is as an hindrance to T.T.I training. Only 0.3% of the respondents felt that poor motivation among teachers was a hindrance to T.T.I training. The study established that T.T.Is are hindered in the training Endeavour by a myriad of factors in the pursuance of

their training objectives. For the training institutions to realize their objectives, T.T.Is should urgently address the hindrances to training.

Table 4: Hindrances to T.T.I Training

Hindrances to T.T.I training	Frequency	Percentage
Obsolete Curriculum	211	23
Inadequate Facilities	129	14
Obsolete Equipments	225	24.6
Lack of Refresher/ Retraining Courses for Teachers	115	12.6
Inadequate Personnel	80	8.7
Poor Management of T.T.Is	23	2.5
Lack of Attachment Policy	76	8.3
Inadequate funding	54	5.9
Poor Motivation of Teachers	3	0.3

The findings are in agreement with ILO (1992) observation that young people coming out of the technical institutions lack employable skills. The T.T.Is need to review their training to ensure that graduates coming out of these institutions have adequate skills which are relevant to the employment demands. Education should continuously be reviewed to enhance relevance. G.O.K (1976) recommended that education should respond to the needs of the society in terms of skills and knowledge. If the technical training institutes have to remain relevant in skill development and training they will need to urgently review their curriculum in the light of the industrial and business organizations skill demands for effective task performance. This observation is in agreement with the argument by Omar, Sanjay and Saran (2008) that engineering education systems need to undergo a paradigm change to cope with the effects that globalization is having on industry and service providers. Omar, Sanjay and Saran (2008) further observes that new advances have to evolve at the earliest and action plans are needed to offer a fresh perspective allowing training institutions to remain viable, competitive and able to capture new opportunities and to develop a new set of competencies.

Wallenborn (2001) made a similar observation that the major problem that training institution in developing countries face is the failure to gear vocational training to the actual demands of those affected and the requirements of the business sector. Omar, Sanjay and Saran (2008) argued that regardless of how this is looked at, the outcome of technical education are graduates who are supplied to the market place and should be capable of applying their knowledge in the most efficient way to meet the needs of their employers, mainly industry and business organizations, in addition to the community at large.

5. Strategies to Boost T.T.I Training

To enable the study propose a way forward on skill training in T.T.Is an item was included in the questionnaires and interview schedule that sought the respondents suggestions on strategies that would help T.T.Is improve the quality of training. Table 5 presents data on the proposed strategies.

Majority of the respondents (23.7%) identified an update of training equipment as a viable option to boost skill training, 18.6% and 16.5% of the respondents proposed curriculum review and involvement of employers respectively in T.T.I training as viable options that would improve training in T.T.Is whereas 11.6% and 10.0% of the respondents indicated that attachment of trainees with reputable firms and refresher courses for teachers as strategies that T.T.Is should adapt to boost training. 7.4% of the respondents identified regular market survey and hiring of adequate and competent trainers each as a possible option to address training challenges in the T.T.Is whereas 3.2% of the respondents proposed increased funding for T.T.Is as method to improve skill training in the T.T.Is. Only 1.5% of the respondents suggested motivation of trainers in T.T.Is as a strategy that could help T.T.Is to achieve the

training objectives and meet the expectations of employers in industries and business organizations in Kenya.

Table 5: Proposed Strategies to Boost T.T.I Training

Strategies to boost T.T.I training	Frequency	Percentage
Regular market survey	80	7.4
Refresher courses for teachers	108	10.0
Curriculum review	201	18.6
Update training equipments	256	23.7
Involvement of employers in training	178	16.5
Hire adequate and competent trainers	80	7.4
Attachment of trainees with reputable firms	125	11.6
Increase funding	34	3.2
Motivate T.T.I trainers	16	1.5

6. Conclusions

i. Technical training institutes operate with inadequate training facilities. Majority of the respondents indicated that T.T.Is operated without adequate physical facilities, did not have adequate training tools and T.T.Is lacked adequate training materials. The lack of training facilities compromises the relevance of T.T.I taught skills to market skill needs in industries and business organizations. Most of the training equipments found in T.T.Is are not technologically in tandem with equipments found in industries and business organizations. The training equipments are inferior to the equipments used in industries and business organizations. This state of training equipments eroded the relevance of T.T.Is taught skills to market skill needs. It is therefore concluded that there is urgent need to modernize equipments and provided adequate facilities to ensure that graduates coming out of T.T.Is acquire skills relevant to the employment market skill needs in industries and business organizations.

ii. The participation of employers in T.T.I training could influence the relevance of T.T.I taught skills to the market skill needs. However, despite this observation employers are only involved to a small extent restricted mainly to the attachment of T.T.I trainees. This is done despite the fact that employers could as well participate in other aspects of training. T.T.Is rarely conducts market survey and rarely consults employers on market skills. It is therefore concluded that though T.T.Is train critical human resource necessary for industrialization, they do so with little or no respect to market skill needs.

7. Recommendations

i. The study found out that T.T.Is operated with inadequate training facilities, in addition the study established that T.T.Is train with inferior training equipments to those facilities used in industries and business organizations. This is despite findings of the study that the state of training equipments compromised the relevance of the T.T.I taught skills to skill needs in industries and business organizations. The study established that inadequate facilities and obsolete equipments were the main hindrance to quality training in T.T.Is. On the existing training equipments and facilities the study presents two recommendations. First all the stakeholders should participate in the provision of necessary facilities and equipments. A deliberate initiative should be undertaken to enhance T.T.I training equipment. The government should set a budgetary percentage out of the recurrent budget for facility and equipment upgrading in T.T.Is. Secondly, regular facility and equipment appraisal in T.T.Is should be undertaken. This will ensure that adequate facilities are available in training institutions for each course offered. Besides, this will help to ensure that obsolete equipments are not used in training. This will in effect enhance relevant skill training to market skill needs.

ii. The study found out that the curriculum taught in the T.T.Is did not give the graduates adequate practical skills. There exists a mismatch between skills taught in the T.T.Is and skill needs in industries and business organizations. Besides, the study established that market surveys are never conducted to identify employment skill needs in industries and business organizations. From the findings of the study two recommendations were made. First; T.T.Is should conduct regular market surveys to ensure that T.T.I taught skills are in tandem with the market skill needs. A national policy should be formulated and implemented to enhance regular market skill needs survey. Secondly, the current training curriculum should be reviewed to address the short-comings in skill training. This will ensure that the content and skills taught in the T.T.Is are tailored to the market skill needs. This will also reduce the cost that goes into training T.T.I graduates before they commence work upon employment in industries and business organizations.

iii. The study found out that T.T.Is is under-staffed. The study established that the current staffing in T.T.Is compromised the quality of training and consequently this affected the quality of graduates upon employment in industries and business organizations. The following recommendations were made on staffing based on the findings of the study. The T.T.Is should be adequately staffed with qualified trainers. A policy should be enacted to guide on the level of qualifications that a trainer should have to teach at each level of training.

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