Factors That Influence the Attractiveness of a Technical and Vocational Education and Training Centre: a Case Study of a Technical Institute in Kenya

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Factors influencing the attractiveness of a Technical and Vocational Education and Training Institution
A case study of a Technical Institute in Kenya

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Abstract

Enrolment in any academic institution is crucial in as far as that institution's existence and survival are concerned. The purpose of this study was to investigate the factors that influence the attractiveness of a Technical and Vocational Education and Training (TVET) Institution in Kenya. The instruments used to collect data were questionnaires, interviews and observation schedules. Data collected were analyzed both quantitatively and qualitatively. This study revealed several salient findings. The institution offered a variety of programmes that attracted prospective students from across the country. The programmes were widely advertised using various modes of media to the appropriate target group. The institution carried out an opinion survey before introducing the courses. The courses were taught by qualified and committed instructors to ensure an above average performance. Support services were efficiently provided. The Board of Governors played an important role in 'humanizing' the institution by putting in place various activities relevant to proper functioning of the institution. Machines and equipment were serviceable and materials were readily available for effective training. The Principal applied various managerial practices that had also proved successful elsewhere to effectively and efficiently run his institution. Discipline was instilled by the institution through mechanisms put in place by a team of professionals under the Dean of students. As a result, the institution recorded a remarkable upward trend in its achievement in a three-year period. Furthermore, the morale of the workers improved tremendously.

The major recommendations include having properly qualified principals who are ready to undertake corporate social responsibilities – principals who are able to shun bureaucracy in TVET institutions and apply modern approaches in human resource management. Bureaucracy should not be wholly embodied in the running of TVET institutions; people should be allowed to make suggestions in the process of solving problems. Principals should carry out their responsibilities in such a manner that the community under them perceives of things being done for them. Tangible targeted results should be recorded every time in order to encourage persons to work harder and produce more. This, in itself, is an incentive scheme whose results should be related to production; and for every result there must be a reason or an explanation. Principals should apply modern approaches in human resource management since these are critical in changing perceptions of moribund institutions.

Key words: Technical and Vocational Education and Training (TVET)

Introduction

The Kenya development plans have, over the years, consistently stated the one major educational objective as that of producing properly and effectively trained, disciplined and patriotic youth who can in turn make a positive contribution to the development of the nation. Over the past three decades, Technical and Vocational Education and Training (TVET) in Kenya has experienced both structural and curricular changes that have in turn impacted on its graduates.

Technical and vocational education is fundamental to the world of work. For most people, work is the desired outcome of their education and it is through their work that people achieve self-fulfillment. Lasonen and Burge (1991) note that one of the major issues relating to the world of work where TVET has played a major role in providing solutions is the question of what changes should be made to school curricula at all levels so that young people are more work-oriented and have the basic skills needed for productive work. Omulando and Shiundu (1992) assert that there has been evidence of negative attitudes towards technical and vocational education by a large section of the Kenyan community. It has been claimed that the negative attitude was bred and crystallized with the advent of colonial rule in Africa and the discriminative approach of colonial administration to the education of the African in relation to that of children of the white colonialists. These actions could have influenced negatively the smooth incorporation of technical and vocational programmes into the regular school system of education.

However, it has been argued that, because of certain economic realities, attitudes seem to be increasingly changing in a positive direction with regard to the acceptance of the need for technical and vocational education in school systems, especially at secondary level. Charner (1996) has observed that, over recent years and especially in developing countries, learners have begun to show more interest in technology. As a result, countries have infused this essential component of technology into their school curricula as technical and vocational education. More recently, in the year 2007, Kenya re-introduced technical subjects in secondary schools as examinable subjects, five years after they were dropped. The subjects had been taken out in 2003 soon after the Ministry of Education launched a revised syllabus for primary and secondary schools. In an article published in the *Daily Nation* on 4 July 2007 the Education Permanent Secretary said the ministry had re-thought its decision to scrap the subjects.

It is clear that the role of TVET as an effective means of empowering society to engage in productive and sustainable livelihood cannot be overemphasized. The diversity in provision of TVET in many countries is associated with disparities in historical, political, educational, cultural and economic contexts. Thus TVET has not been spared changes caused by the political, economic and social forces. Variations abound in terms of structures, operating conditions and outcomes.

Some studies have indicated that enrolments in TVET institutions have been declining (Dahl 2003; Simiyu 2007). The declining enrolment may result in a shortage of technology education teachers if it is not checked. Technology education policy makers and

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implementers need to investigate ways to increase enrolments in their programmes or the profession may fail in the future.

Today, TVET institutions in Kenya comprise the informal sectors (Jua Kali), some secondary schools, Ministries, National Industrial Vocational Training Centres (NIVTCs), Youth Polytechnics, Technical Training Institutions, Institutes of Technology, National Polytechnics and Universities. The curricula vary according to the level of training. NIVTCs are government owned and are charged with training and in-servicing personnel working in government and industries in technical fields. Youth polytechnics (formerly, village polytechnics) are responsible for training in artisan courses, popularly known as Government Trade Tests, for primary and secondary school leavers or drop outs. Technical training institutions and institutes of technology mainly train graduates of secondary school in craft and diploma courses. National polytechnics normally offer diploma courses. It is worth noting that diploma courses are prerequisite for most mature entry university admission criteria.

The problem

The study examines ways in which one TVET institution in Kenya, Kaiboi Technical Training Institute, has earned its increased innovativeness as well as attracting its clients in its provision of practical skills and attitudes. The purpose of the study was to investigate the factors influencing the attractiveness of a TVET institution. Kenya is among the countries that are geared towards Education for All (EFA), a process which has resulted in vastly increased members of young people who will be completing primary and secondary education in the forthcoming years. Technical institutions ought to determine ways of increasing the enrolments in their programmes. Exploring alternative methods to make TVET programmes attractive will make TVET reach out to many youth and adults by preparing them for the real possibilities of frequent career change including periods of employment and unemployment. The study should yield findings that can be used as good practices for improving attractiveness in TVET institutions. Thus, examining how an exemplary TVET institution is run may provide further insights into effective running of the institutions. Recommendations of the study are expected to contribute to the existing knowledge about exemplary TVET institutions and also to prepare the ground for further investigations into reasons for low or high enrolments in TVET institutions. Figure 1 denotes career paths for TVET graduates.
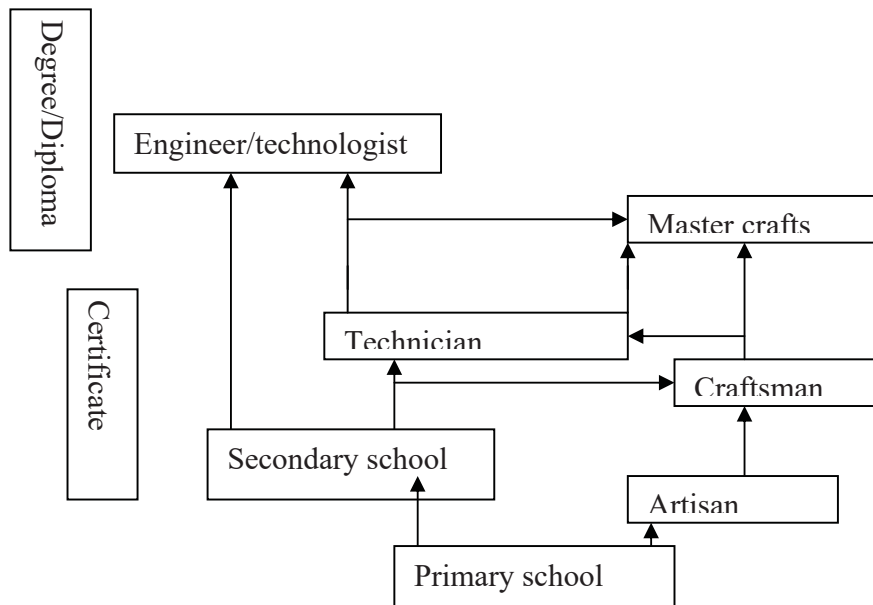
Figure 1   Career paths for TVET graduates

Research objectives

The objectives of the study were to determine

1. the type and variety of courses offered by the institution
2. the extent to which the institution has made the courses attractive to its clientele
3. the support services provided to the trainees and faculty in improving the attractiveness
4. the management skills exhibited by the principal in making the institution attractive.

The following research questions guided the study.

1. Is there any relationship between the type or variety of courses and the attractiveness of a TVET institution to its clientele?
2. What mechanisms does a TVET institution use to make courses attractive to its clientele?
3. Do support services add any value to making a TVET institution attractive to its clientele?
4. Do the principal's management skills contribute to the attractiveness of a TVET institution?

Research design and methodology

The study adopted a survey research. Yin (1984) argues for the use of surveys in educational fact-finding because they provide a great deal of information which is accurate. The intention of a survey research is to gather data at a particular point in time and use it to

describe the nature of existing conditions. The descriptive nature of research was used in order to garner information as to how the institution has become attractive.

Study area

The study was carried out in Uasin Gishu district of the Rift Valley province in Kenya. The institution targeted for the study, Kaiboi Technical Training Institute, falls in this area. The institution reports directly to the Ministry of technical training. It offers its training by following the statutory obligations in training. The researcher sought permission from relevant authorities to carry out the study in the institution. The researcher made a reconnaissance trip to the institution to familiarize himself with what goes on in the institution.

Study population

The target population of the study was the principal, the deputy principal, the registrar, heads of departments, heads of sections, dean of students and students' council of the TVET institution.

Sampling procedure

The institution was purposively sampled due to its identification by the Ministry of science and technical training as one of the most reformed TVET institutions in Kenya in the year 2005/2006 in terms of increase in generation of revenue, student enrolment and a re-workable physical infrastructure, among others. The institution coincidentally comes from the nearest location to the researcher, a factor which made it more accessible and convenient in carrying out the study.

Research instruments

In collecting data, two major instruments were used: the questionnaire and the interview schedule. Both targeted the principal, the deputy principal, the registrar, the heads of departments and the heads of sections.

Administration

The researcher explained to the respondents the purpose of the study, and that the respondents were not compelled to participate in the study. Most items on the questionnaire were based on a five-point Likert scale. The statements were constructed in a positive form. The statements required the subjects to select any one of the options: Strongly Agree (SA) which was awarded five points, Agree (A) 4 points, Undecided (UD) 3 points, Disagree (DA) 2 points and Strongly Disagree (SDA) 1 point. Questionnaires were all easily administered at once by the researcher and his assistants followed by the interviews. Both activities were easily administered due to manageable number of participants. Accordingly, one of the more obvious ways of gathering data is by observing the culture or environment under study. The observation schedule was thus used in identifying, explaining and describing the physical facilities and infrastructure of the institution that would shed more light on how the institution was run. Observation within the social and physical environment allowed for the tapping of first-hand information on the aspects under study. Photographs were taken in the selected areas and sections to help in explaining, describing and verifying data.

Validity of the instruments

The research instruments were validated by the Technology Education experts at Moi University. They reviewed and analyzed the contents of the questionnaires, interviews and observation schedules to ascertain that the instruments were suitable for the purpose for which they were set. They offered suggestions which the researcher used in making the necessary corrections and improvements on the instruments.

Data analysis

Data were analyzed both quantitatively and qualitatively. Both types of data were collected to provide for a balanced assessment and interpretation of the past, current and developing practices. Data gathered involved a collection of specific information and a visit to the workshops, laboratories and general compound. The answered questionnaire copies were first grouped manually according to categories of the respondents. Based on the information gathered during data collection the coding was done. Frequency distributions and percentages were generated to facilitate comparisons and cross tabulations of various items. Further grouping and analyses were done. Using tabulated frequencies and percentages, the background of the questioned and interviewed respondents shed some light on their performance indicators.

Findings

Descriptive statistics in the form of frequencies and percentages were used to analyze the quantitative data. The open-ended data were coded and organized based on the questionnaires and interview schedules. A narrative summary of the responses explains the data. Information not relevant to the study was omitted.

Nature of courses offered by the institution to add to its attractiveness

The institution offered technical craft and artisan courses during the early days when the institution was under the management of the missionary and even thereafter, until 1987 when it started offering diploma courses and some craft and artisan certificate courses. The departments in the institute are as shown in Table 1.

Table 1: Departments in the institute

Department	Number of students	Certification
Agricultural engineering	25	Diploma/craft/artisan
Automotive engineering	25	Diploma/craft/artisan
Mechanical engineering	25	Diploma/craft/artisan
Building and construction engineering	25	Diploma/craft/artisan
Electrical engineering	25	Diploma/craft/artisan
Information technology	25	Diploma/craft/artisan
Accounting and secretarial	25	Diploma/craft/artisan

Regarding market billing of the courses 10 (91%) of the heads of departments/heads of section affirmed the marketability of the courses. This agrees with the feedback the institution receives from industry. Over 100 students graduate from the institution every year. Graduates from the institution who have graduated with distinctions and strong credits have high employment prospects in prestigious companies or further studies. Feedback from industry where the graduates are employed gave the impression that all was well in the institution. The institution strived to improve and maintain the high performance of trainees. Although the teaching load in the departments was heavy, instructors were highly qualified and dedicated to their work and had high morale to counteract it. The administration saw to it that things were done to improve the competencies of faculty and all workers in the institution.

The extent to which the courses are made more attractive
Apart from marketing the courses in terms of employability, both in industry and self, the institution seemed to have gone out of its way to make a concerted effort to advertise the courses. The adverts were placed in the dailies, brochures and calendars. Radio and television were also used to announce the courses and times to apply. Graduates from the institution also told prospective students about the institution. Analysis of the data revealed that performance standards of the students were high. There were career and guidance and counseling personnel to advise students on academic and social life. The rural setting provided an environment conducive to learning.

Faculty was assigned duties by the heads of departments and heads of sections on the basis of their qualifications and experience. The student/staff relationship was good and 11 (100%) respondents (heads of sections and heads of department) alluded to this. There was ample workshop and laboratory space and machines were adequate for the number of students. There were four workshops [see Images 1, 2 and 3], two computer laboratories [Images 4 and 5] and one technical drawing laboratory. The maintenance programme of equipment, computers and machines was elaborate.

Image 1 Motor vehicle students in practical class. Girls are not left behind in men-dominated jobs

Image 2 Mechanical students doing filing

Image 3 Motor vehicle students at work

Image 4   First-year computer class in ICT lab

Image 5   Second-year computer class in ICT lab

The institution strives to maintain the existence of a well managed facility by introducing demand driven and viable programmes. The institute is currently carrying out an opinion survey to introduce the courses shown in Table 2.

Table 2: Courses subjected to opinion survey

S/N	DESCRIPTION
1	Business administration
2	Marketing and supplies management
3	Human resource management
4	Mechanical engineering (production option)
5	Electrical engineering (electronics options)
6	General agriculture
7	Certified information communication technology

Support services

The support services include internet systems, hostels, catering and sports and recreation. The institute had developed a website through wireless technology due to its rural location. Both staff and students are able to use the facility. Since the trainees come from all over the country, the institution has in place hostels and catering facilities. There are two hostels for female students and three for male students, each with a capacity of 120 students. Currently there are 550 students. There is one modern kitchen with boilers and gas cooking systems. The menu is varied. The dining hall has a seating capacity of 500. Some of the facilities are redundant because the institution is yet to reach its full capacity.

The Dean of students is in charge of the students' welfare and discipline. Discipline here refers to the steps taken to cause students to behave acceptably while in the institution or outside; doing the right thing at the right time. Discipline is intended to suppress, control and redirect behaviour. According to Charles (1992) discipline promotes peace, stability and common understanding which are prerequisite to a conducive learning environment in an institution. The interview with students' council and dean asserted that discipline among the student body was high; reducing the need for teachers' intervention. There is a students' council which works very closely with the Dean of students.

The institution boasts two football pitches, three volleyball pitches, one basketball pitch, one rugby pitch, one netball pitch and a number of indoor games facilities. There is a colour television and video deck for students' entertainment in the common room.

Management skills

The principal is male and in his early forties. He has cutting-edge experience and expertise in the area of TVET. He trained in technical area from secondary school through university. He holds a Masters degree in Business Administration after a technical undergraduate degree. He is quite outstanding in his achievements. He has trained and mentored many students who are now playing important roles in the development of the country. His administrative position began when he worked as Dean of students for seven years in a previous TVET institution from where he was appointed the principal of the institution under study. The appointment came as a result of his commitment to work and prolific scholarly contribution. He has been principal for three and a half years. Based on the responses, the data indicated that the principal embraces the institute's vision and mission to help achieve its objectives. He has taught in TVET institutions for over 20 years and has been a head of department for four years. He has attended and presented papers at several national and international conferences, notably the Commonwealth Association of Polytechnics in Africa (CAPA) (See Image 6). Not many people of his status have managed to do the same. The institution he heads was noted by Ministry of Education Science and Technology as one most improved in Kenya in 2005 and 2006. He stresses the core values of the institution denoted in Table 3 below while going about his duties.

Table 3: Core values of the institution

S/N	Core value
1	High quality
2	Transparency
3	Accountability
4	Effectiveness
5	Efficiency
6	Impartiality
7	Sustainability
8	Discipline
9	Team spirit
10	Dedication

In other words, the principal created an atmosphere whereby students and staff carried out their roles to achieve the goals of the institution. The head of the institution believed that the good work carried out by the institution was a way of marketing the institution outside whereby the community would perceive the graduates' reliability. The institution's Board of Governors was in place and its purpose was to 'humanize' the institution. It served as the institution's eye in the outside community. It educated the community about the importance of programmes offered at the institution including soliciting local support. The institution extended its public relations to the community by employing a number of support staff. The Board coordinated and fostered parents' collaboration in the institution's activities including *Harambee* (self-help) drives and Open Days. During Open Days, activities including displays of projects undertaken by trainees were carried out.

One of the core values of the institution is discipline. The principal believes that the institution as a community conducts itself with dignity and integrity by obeying rules and regulations. The administration of rules and regulations has been cited as a practical aspect of the principal's administrative role. As in any institution of learning, institutions have rules and regulations, and part of the principal's administrative role is to ensure that these rules are implemented. The principal's method of implementation may affect the way in which it is perceived by all and sundry in the institution. For example, it may contribute to teacher productivity – or the lack of it – in the institution setting. The principal knew how staff, students and the community would react to each pattern of rule administration and was better able to select the appropriate administrative style for the institution. Venable and Johnston (1986) assert that the role of the principal as a recurring theme has permeated educational literature with studies of principal leadership styles and behaviour. The unifying thread of all these studies, past and present, has been in finding ways to improve the principal's ability to carry out responsibilities.

Resulting from documents perused in the registrar's office it was revealed that student enrolment had increased from 70 to 550 over the three-year period (over 700% increase). Accounts records indicated that debts (Kshs 2.4 million or USD 36,923) owed by the institution to the creditors and the retrenched staff dating as far back as the year 1995 have been cleared. Salary arrears and cooperative dues owed to workers dating back to the year

2000 have been paid. There is also an increase in the generation of revenue by over 200 per cent. The institute's strategic plan 2005/2010 is already paying dividends: achievements have been recorded such as remarkable improvement in physical infrastructure, for example, renovation of all buildings, repair of workshop training machines (there is routine maintenance), repair of workshop training equipment and machines, ongoing construction of a new 300 seat library (Image 7), construction and equipping of a new ICT laboratory with 36 workstations, developing a scheme of service for employees, awarding a 14 per cent salary increase (in 2006) and reviving a new cooperative society which operationally went under in the year 1995. Economic sense is what sustains the existence of the departments and sections. The approach is that of business orientation in TVET institutions.

Image 6   Principal, Mr Edwin Tarnoat a CAPA conference in Zambia

Image 7   New library under construction

Discussions, conclusions and recommendations

The purpose of this study was to investigate those factors influencing the attractiveness of a TVET institution. The findings and analyses led to the following discussions from which conclusions are drawn and recommendations made.

What nature of courses are offered by the institution to add to its attractiveness?

The study revealed that the courses offered in the institution are marketable. Graduates had many employment prospects whereby those who had passed their examinations with distinctions or strong credits were offered jobs by prestigious firms and some opted for further studies. Enterprising graduates procured self employment. The institute lays emphasis on quality and it strives to improve and maintain high performance of its trainees. The feedback mechanism from industry helps the institution evaluate its standards and the progress of the programme.

To what extent does the institution make the courses attractive to its clientele?

Other than marketing the courses, the institution employs qualified and professional staff who are committed in their work to produce graduates that are competitive in the job market. Facilities are adequate and trainees gain hands-on experience as well as exposure to industry through a three-month industrial attachment. Courses that are offered are popular and marketable. The institution has carved a niche for itself as a professionally run entity. It is, therefore, expected that the institution will provide the much needed direction in TVET system in Kenya.

What support services are provided to improve the institution's attractiveness?

Support services or activities are those that are not directly academic. Yet, they affect the running of the institutions. Some are co-curricula in the sense that they assist in the improvement of the core business of the institution and the well-being of the entire community in the institution. These include sports and recreation, students' welfare and hostels and catering. Support staff is charged with the responsibility of overseeing these services. They carry out their work effectively and efficiently. The Board of Governors humanizes the institution in serving as a moderator between the community and the institution.

What management skills are exhibited by the principal?

The principal is highly qualified both in administration and pedagogy. He is well versed in the technical area. He is a forward-looking person who is able to work with his motivated team for the common good. Having developed a five-year strategic plan, he has been able to achieve a number of quick wins (low lying fruits). He practices results-based management. Targets to meet are well stipulated. He allocates specific duties to specific officers who become accountable in their work. The principal has had the ability to extend beyond the conformed government policies, going the extra mile to accomplish his work; for example, he uses his personal car and telephone without asking for anything in return. He consults and liaises freely with other people to find out about the corporate image of the institution in general to help him put things in place. He has been able to instill discipline in

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the institution and guidance and counseling personnel is available to deal with discipline and welfare of students in general.

Conclusion

This study has established that there are various factors influencing the attractiveness of a TVET institution. The low status syndrome of the institutions is slowly fading away. Some misgivings with regard to working by hand as well as parental expectations about careers do persist. Attractiveness of the institutions begins with the principal's way of administration. The setting of goals by the principal for the institution to achieve, along with the vision and mission, are assets in assisting him or her to manage the institution's ability to carry out responsibilities. Furthermore, teamwork of all stakeholders – students, teachers, parents and the community – is a necessary ingredient to bring about a successful institutional performance; hierarchical influence and loyalty to the principal by subordinates are key to that principal's success and effectiveness in the institutional setting. It is clear that the willingness of persons to cooperate in an organization makes them contribute efforts to that organization, and this is indispensable.

Recommendations

The following recommendations are suggested.

1. Principals of TVET institutions should be highly qualified individuals in the relevant areas including some administrative professionalism.
2. Goal setting or some kind of (theoretical) framework that ties in with the vision and mission of the institution and strategic plan are an asset in having the institution to realize its function.
3. Principals should carry out their responsibilities in such a manner that the community under them perceive of things being done for them; one such example being to undertake corporate social responsibility.
4. Tangible targeted results should be recorded every time in order to encourage persons to work harder and produce more. This, in itself, is an incentive scheme whose payments should be related to production; for every result there must be a reason or an explanation.
5. Principals should apply modern approaches in human resource management since these are critical in changing perceptions of moribund institutions.
6. Bureaucracy should not be wholly embodied in the running of TVET institutions; allow people to give suggestions to what can be done and what they can do under the circumstances.

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