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# Revitalizing a Technical Training Institute in Kenya

A Case Study of Kaiboi Technical Training Institute, Eldoret, Kenya

## UNESCO-UNEVOC CASE STUDIES OF TVET IN SELECTED COUNTRIES

No. 1 REVITALIZING A TECHNICAL TRAINING INSTITUTE IN KENYA. A CASE STUDY OF KAIBOI TECHNICAL TRAINING INSTITUTE

Published by:

**UNESCO-UNEVOC International Centre  
for Technical and Vocational Education and Training**

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Germany

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Website: [www.unevoc.unesco.org](http://www.unevoc.unesco.org)

Cover design: iPicardDesign

ISBN 978-92-95071-01-8

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## DEDICATION

To my wife and children for their encouragement and understanding.

## ACKNOWLEDGEMENTS

I wish to give special thanks to Dr L. Efison Munjanganja, Head of UNEVOC Networks, UNESCO-UNEVOC International Centre, Bonn, Germany. He was instrumental in facilitating this study. A large measure of credit is also due to the principal of Kaiboi Technical Training Institute, Mr Edwin Tarno, for providing a reason to carry out this research in the first place by making his institution so successful that it warranted attention, and for his co-operation with the researcher in ensuring that the environment to carry out the study was encouraging and corresponded to reality. I am equally grateful to all those from the institute who took part in the study—the deputy principal, the heads of department and sections, the registrar, the dean of students, the teaching staff, and, last but not least, the students—who found time to participate and shared their thoughts, feelings and experiences, thereby making the completion of this study possible.

## ABSTRACT

The purpose of this study was to investigate the factors that influenced the attractiveness of a technical and vocational education and training (TVET) institution in Kenya. A number of TVET institutions were reviewed, out of which one was selected for the study on the basis of—among other reasons—accessibility. The instruments used to collect data were mainly questionnaires, interviews and observation schedules. Data collected were analysed both quantitatively and qualitatively.

This study revealed several salient features:

- The institution offered a variety of programmes that attracted prospective students from across the country.
- The programmes were widely advertised to the appropriate target groups using various media.
- The institution carried out an opinion survey before introducing new courses.
- The courses were taught by qualified and committed instructors to ensure an above-average performance on the part of the students.
- Supporting services were efficiently provided by appropriate staff.
- The Board of Governors played an important role in 'humanizing' the institution, by putting in place various activities relevant to its proper functioning.
- Machines and equipment were serviceable and materials were readily available for the conduct of effective training.
- In order to run his institution effectively and efficiently, the principal had applied various managerial practices that had already proved successful elsewhere.
- Discipline was instilled in the institution through mechanisms put in place by a team of professionals under the guidance of the dean of students.

As a result of these measures, the institution recorded a remarkable upward trend in its enrolment and achievements over a three-year period. Furthermore, during the same time the morale of the staff improved tremendously.

In summary, the findings of this investigation seem to provide insights into the effects of how principals administer their institutions, what their influence is and the degree of loyalty they command from their subordinates. The findings are limited to the institution studied, but future replication may provide additional information and enhance what is already known about the relations between the variables examined.

The attractiveness of an institution begins with the principal's administration. Setting targets as well as relating them to the vision and mission of the institution are cornerstones in assisting principals to manage an institution so as to carry out its responsibilities. Furthermore, teamwork among all stakeholders—students, teachers, support staff, parents and the community—is a necessary ingredient for bringing about a successful institutional performance, because hierarchical influence and loyalty to the principal have both been cited as key factors for success and effectiveness in an institutional setting. It seems that the willingness of persons to co-operate makes them contribute tangible efforts to an organization, and this is indispensable.

In conclusion, the findings confirm that there are factors contributing to the attractiveness of a TVET institution, beginning with how a principal mobilizes his subordinates. A principal must be proactive enough to set some achievable goals and targets, and work towards realizing them through influencing and mobilizing his team to work with him or her. Increasing enrolments and motivated staff are among the dividends that result from a principal's good management. Among the major recommendations mentioned is the importance of having properly qualified principals who are ready to undertake corporate social responsibilities—principals who are able to minimize bureaucracy in TVET institutions and apply modern approaches to human-resource management. Bureaucracy should not be wholly responsible for the running of a TVET institution; individuals should be able to present suggestions designed to overcome problems—and they should be heard. Principals should be responsive to the needs of the employees and they should carry out their responsibilities in such a

way that the community is aware of what is being done in their favour. Tangible targeted results should be recorded in order to encourage persons to work harder and be more productive. 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 the perceptions of moribund institutions.

## CHAPTER I: Introduction

In this section, background information about the present situation of technical and vocational education and training (TVET) in Kenya is provided, as well as an examination of the purposes of the study, its significance, research questions, the theoretical framework and the assumptions. The limitations of the study are also discussed.

### Background to the study

The foundation of every nation is the education of its young people. The way the youth of any nation is brought up and educated in the family, in the school and in society determines the future prosperity of that nation. Kenya's development plans have, over the years, consistently stated one major educational objective: producing a properly and effectively trained, disciplined and patriotic youth that can in turn make a positive contribution to the development of the nation. Over the decades since gaining Independence (1963), TVET in Kenya has experienced both structural and curricular changes that have had an impact on graduates. TVET is fundamental to the world of work. For most people, finding a job is the anticipated outcome of their education and it is through their work that people achieve self-fulfilment. Lasonen and Burge (1991) note that one of the major issues relating to the world of work, where TVET must play 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 become more work-oriented and acquire the basic skills needed to perform productive work.

Omulando and Shiundu (1992) reported evidence of negative attitudes towards TVET among a large section of the Kenyan community. Indeed, according to their study:

There has been a claim that the negative attitude was bred and crystallized with the advent of colonial rule in Africa and the discriminative approach of the colonial administration to the education of the African in relation to that of children of the white colonialists.

This attitude could have had a negative influence on the incorporation of technical and vocational programmes into the regular school system. Omulando and Shiundu argue, however, that because of certain economic realities attitudes seem to be changing in a positive direction with regard to the acceptance of the need to include technical and vocational education in school systems, especially at the secondary level. Similarly, Charner (1996) observed that, over recent years and especially in developing countries, learners have begun to show more interest in technology. As a result, many countries have begun to infuse the essential components of technology into their school curricula in the form of technical and vocational education. Kenya has recently re-introduced technical studies in secondary schools as examinable subjects—five years after they were dropped. The subjects were struck out of the programme in 2003 soon after the Ministry of Education launched a revised syllabus for primary and secondary schools. Nevertheless, in 2007, the Permanent Secretary for Education said that the ministry had re-thought its decision to scrap these subjects (*Daily Nation*, 2007).

The role of TVET as an effective means of empowering society to engage in productive and sustainable livelihoods cannot be overemphasized. Comparing the diversity in the provision of TVET across and between countries, we can often draw conclusions about disparities in historical, political, educational, cultural and economic development. Thus, TVET has not escaped changes brought about as a result of political, economic and social pressures. Variations abound in terms of structures, operating conditions and outcomes.

Studies have indicated that enrolment in TVET institutions in some countries has been declining (Dahl, 2003; Simiyu, 2007). Falling enrolment, if not checked, may eventually result in a shortage of technology education teachers. Technology education policy-makers and implementers need to examine ways of increasing enrolment in their programmes in order to avoid future breakdowns.

Today, TVET institutions in Kenya comprise those providing training in the informal sector (*Jua Kali*), primary schools, secondary schools, ministries, national industrial vocational training centres (NIVTCs), youth polytechnics, technical training institutions, institutes of technology, national polytechnics and universities.

Curricula vary according to the level of training. NIVTCs are government-owned and are responsible for the pre-service and in-service training of personnel working in technical fields in government and industry. Youth polytechnics (formerly village polytechnics) are responsible for artisan training courses, popularly known as 'government trade tests' for primary and secondary school-leavers or dropouts. Technical training institutes and institutes of technology mainly prepare secondary school graduates in craft and diploma courses. National polytechnics normally offer diploma courses. It is worth noting that diploma courses are a prerequisite for most mature-entry university admission criteria.

This study aims to examine the ways in which one TVET institution in Kenya—the Kaiboi Technical Training Institute—has improved its innovativeness as well as its attractiveness for clients in the provision of practical skills and attitudes.

## Definition of TVET

Technical and vocational education and training (TVET) is a comprehensive term referring to the educational process. It involves, in addition to general education, the study of technologies and related sciences and the acquisition of practice, skills and knowledge relating to an occupation in various sectors of economic and social life (UNESCO, 1984). In the present study, the concept of vocational education implies the preparation of an individual for an occupation or career. This involves both the liberal and technical aspects of education. The liberal aspects include the philosophical, moral and cultural elements that an individual must possess to fit into a given society. Technical aspects include the knowledge and skills required to perform a job successfully.

TVET is the major connecting link between the school system and the employment market, which means that developments in TVET are intimately linked to general trends in the economy (UNESCO, 1990). Furthermore, the growing dissatisfaction with formal academic education, particularly its failure to provide the much-needed skill training for employment, self-reliance and so on, implies that Kenya should evolve some positive economic policy measures to be directed at reviving, reactivating, restructuring and reorganizing the informal sector of the economy to satisfy our needs for technological advancement. It is an indisputable fact that a large number of young men and women do not meet the entry requirements for public universities. Their only hope of continuing their education would be through middle-level colleges offering TVET programmes. This route is currently being developed into one of the ways through which learners may proceed to higher levels of technical training. Figure 1 shows the career paths for TVET graduates.

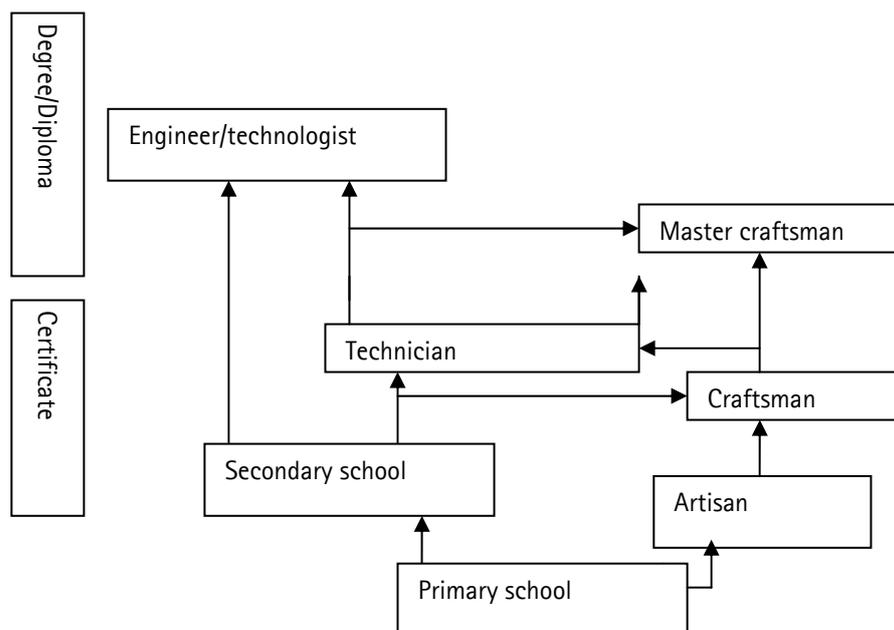


Figure 1: Career paths for TVET graduates

Some national polytechnics in Kenya offer courses up to first degree level. The implication is that planners and policy-makers should design a strategy for TVET programmes providing the necessary skills and attitudes that would assist, among other things, in making young people more productive and self-sufficient.

Following the current international trends in technology, there is a need for all countries to make adjustments to ensure that technological and vocational education is compatible with the contemporary economy.

## **The purpose of the study**

The purpose of the study is to investigate the factors that influence the attractiveness of a TVET institution.

## **Significance of the study**

Kenya is among the countries that are geared towards Education for All (EFA), a process that will lead to vastly increased numbers of young people completing primary and secondary education in the coming years. Correspondingly, technical institutions must determine ways of increasing enrolments in their programmes. Exploring alternative methods of making programmes attractive will allow TVET to reach out to many young people and adults by preparing them for the real possibilities of frequent career changes, including alternating periods of employment and unemployment.

The study should yield findings that can be used as examples of good practice for improving the attractiveness of TVET institutions. Thus, examining how an exemplary TVET institution is run may provide insights into the effective running of other institutions. The recommendations of the study are expected to contribute to existing knowledge about exemplary TVET institutions and also to prepare the ground for identifying the reasons for low or high enrolment rates in TVET institutions.

## **Research objectives**

The objectives of the study are 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 trainees and faculty members in order to uphold this attractiveness.
4. The management skills exhibited by the principal in making the institution attractive.

## **Research questions**

The following research questions guided the study:

1. What are the type and variety of courses that the institution offers to increase its attractiveness?
2. To what extent does the institution make its courses attractive to the clientele?
3. What support services are provided by the institution to uphold this attractiveness?
4. What management skills are exhibited by the principal when enhancing the attractiveness of an institution?

## **Theoretical framework**

The study was based on the goal-setting theory as postulated by Joyce, Weil and Calhoun (2003). The concept of learner characteristics is an important dimension of the social foundation of TVET. Thompson (1973) observed that this concept influences how we prepare, structure and execute programmes in technical and vocational education. He further explained that managers must have purposeful goals. In other words, people

with responsibilities must have goals towards which they direct their activities if their work is to be meaningful. It is on this basis that Thompson (1973) asserted:

There is rather general agreement today that the conditions for gaining knowledge are much more favourable when those concerned experience feelings of need for subject matter and when mystery of the subject matter results in personal satisfaction. Institutions should, therefore, endeavour to have trainees learn only things and processes which are of use and value in real-life situation.

Joyce, Weil and Calhoun's (2003) theory contends that goal-setting is an effective way of increasing motivation and performance. The intention of achieving a goal is a primary force for behaviour. Goals direct both mental and physical actions in individuals. They describe four goal mechanisms to explain the positive effects of goals in action:

1. Goals increase attention to the immediate task; that is, they help individuals focus on a specific issue. In administration, goals will help principals increase the amount of attention given to objectives they want to achieve at a given specific time. For example, if the purpose is to improve academic performance then most, if not all, activities in its programme should be directed to this end. It can be equated to the critical path method (CPM) in planning whereby resources can be marshalled to support the line of activities that are required to be completed early in a particular time period.
2. Goals increase the effort expended on activities; they help people take action on prioritized activities while ignoring or paying less attention to extraneous activities that may be deferred until later.
3. Goals increase persistence because there is less temptation to quit. Thus, persistence is maintained as long as the problem remains. However, there must be a time limit.
4. Goals increase motivation and performance by encouraging the development of specific task strategies—that is, ways of performing tasks. Task strategies are conscious and deliberate plans that individuals develop to achieve goals. The advantage here is that programmes can still run whether staff or individuals in charge are present or not. Additionally, a feedback loop is important in making goal-setting an effective motivating force. Feedback helps to evaluate the progress of a programme so that, if it has fallen short, effort can be increased or another strategy adopted. Likewise, when feedback highlights accomplishment, confidence, analytic thinking and performance are likely to improve. This study considered those aspects of this theory that are pertinent and relevant to how and what an exemplary TVET institution could possibly emulate.

## Assumptions of the study

The study was carried out on the assumption that:

1. There are some factors contributing to making a TVET institution attractive to students.
2. Enrolment in TVET institutions at the national level is at present too low.

## Limitations of the study

1. There are various factors that influence the attractiveness of a TVET institution. The factors considered in this study are those commonly cited in the literature of administration, as well as those cited by the subjects during interviews. The study was limited to these factors.
2. The sample size does not warrant the generalization of the results unless it is undertaken with caution.

## METHODOLOGY

### Study design

The study adopted a survey research technique. Yin (1984) argues in favour of the use of surveys in educational fact-finding because they provide a great deal of accurate information. The intention of survey research is to

gather data at a particular point in time and to use it to describe existing conditions. The descriptive nature of research was used in order to gain information on how the institution has become attractive.

## Study area

The study was carried out in the Uasin Gishu district in the Rift Valley Province of Kenya. This is where the institution targeted for the study, the Kaiboi Technical Training Institute, lies. This institution reports directly to the Ministry of Higher Education, Science and Technology.<sup>1</sup> It offers its training by following the statutory obligations. The researcher sought permission from the relevant authorities to carry out a study of the institution. A reconnaissance trip was made to the institution to familiarize the researcher with its operation.

## Study population

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

## Sampling procedure

The institution was deliberately chosen after its identification by the Ministry of Higher Education, Science and Technology as one of the most successfully reformed TVET institutions in Kenya (in 2005/2006) in terms of the increase in generation of revenue, student enrolment and a functioning physical infrastructure, among other factors. In addition, the institution was accessible to the researcher without difficulty.

## Research instruments

In collecting data, two major instruments were used: questionnaires and interviews. Both methods targeted the principal, the deputy principal, the registrar, the heads of departments and the heads of sections (see Appendices).

The researcher described the purpose of the study to the respondents, explaining that they were not compelled to participate in the study. Most items on the questionnaire were based on a five-point Likert scale. The statements were formulated 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), four points; undecided (UD), three points; disagree (DA), two points; and strongly disagree (SDA), one point. The questionnaires were all distributed at one time by the researcher and his assistants and were followed up by interviews. Both activities were easy to co-ordinate due to a manageable number of participants.

One of the more obvious ways of gathering data is by observing the culture or environment under study. The observation schedule was thus used to identify, explain and describe the physical facilities and infrastructure of the institution, which would shed more light on how the institution is run. Observations taken within the social and physical environment, such as in games and sports grounds, common rooms and open areas, allowed first-hand information to be obtained on particular aspects under study. Photographs were taken in selected laboratories and workshops to help in explaining, illustrating and verifying data.

## Validity of the instruments

The research instruments were validated beforehand by the technology education experts at Moi University. They reviewed and analysed the contents of the questionnaires, interviews and observation schedules in order

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<sup>1</sup> This is the name of the ministry as of April 2008.

to ascertain that the instruments were suitable for the purpose for which they were designed. They offered suggestions which the researcher used in introducing the necessary corrections and improvements to the instruments.

## **Data analysis**

Data were analysed in terms of both quantity and quality. Both types of data were collected in order to provide a balanced assessment and interpretation of past, current and developing practices. Data gathering involved the collection of specific information and visits to the workshops, laboratories and general campus. The completed questionnaires were first grouped manually according to the categories of respondents. Based on the information gathered during data collection, they were then coded. Frequency distributions and percentages were generated to facilitate comparisons and cross-tabulations of various items. Further grouping and analyses were carried out. Using tabulated frequencies and percentages, the background of those respondents interviewed shed some light on their performance indicators.

In summary, the background of the study as well as the role of TVET both as an educational process and an effective means of empowering society to engage in productive and sustainable livelihoods have been presented. The chapter has also presented the significance of the study for Kenya and, by extension, for other countries with similar structures in education where good practices can be emulated. The objectives of the research and research questions guiding the study have been outlined in the chapter. The method (survey research technique) of the study and mention of study area, population, sampling and why the instruments were relevant as validated are given. Quantitative and qualitative data were collected to provide a balanced assessment and interpretation of the practices in the institution.

## CHAPTER II: THE HISTORICAL DEVELOPMENT OF TVET

This chapter reviews the literature related to the historical development of TVET and the significance of TVET in general, in particular its content and objectives. Other issues raised include the attitude of society towards TVET, the TVET curriculum, access and financing.

### The historical development of TVET in Kenya

TVET as an art and science began in Kenya long before the arrival of the Europeans. Kenyans knew how to build their own houses, make agricultural implements, spears, knives, hoes, axes, cooking utensils and pottery. Traditionally, these skills were passed on from parents to offspring within the family or clan through an apprenticeship system (Okaka, 2001).

The coming of the Europeans and the decision to build the Kenya-Uganda railway attracted Indian traders and labourers who, beginning in 1924, were instrumental in the training of artisans and craftsmen at the Kabete Industrial Training Depot. Christian missionaries brought in technicians and made an effort to train Kenyans in different skills to assist in the maintenance of tools, equipment and services for the railway.

The Second World War brought a greater influx of people, more sophisticated equipment and machinery, and a greater need for training. The army corps was established and recruitment on a very large scale began among Kenyans. There was a need for drivers, motor mechanics, builders, electricians, welders, carpenters and clerks.

The early 1950s saw industrial depots being upgraded to vocational schools and, by the early 1960s, they were further converted into secondary vocational schools. A major breakthrough for TVET in Kenya was the setting up of a Commission for Higher Education in 1954, whose main recommendation was the establishment of the Royal Technical College in Nairobi. This institution later became the Nairobi University College and, subsequently, the University of Nairobi. The Mombasa Institute of Muslim Education was already in existence, having been established in 1948 to provide technical and vocational education to Muslim students in East Africa. It was converted into the Mombasa Technical Institute and later became the Mombasa Polytechnic in 1972. In 1961, the Kenya Polytechnic was established to provide basic craft courses, which were phased out after 1966 following the introduction of similar courses in technical and vocational schools. Currently, there are four national polytechnics. Since independence, there has been a tremendous growth and development of TVET as a result of direct government intervention and involvement, as well as through community participation.

### Kaiboi Technical Training Institute

Kaiboi Technical Training Institute, initially called Kaiboi Vocational Trades School, was established in 1962 by the Roman Catholic Mission. It was among twenty other vocational institutions established in the 1960s. The Government of Kenya took over its management in 1969—at which time it was called Kaiboi National Technical School. With the advent of the 8:4:4 system of education in 1987, it assumed its present name. The names of technical institutions have thus evolved over the years reflecting various reviews of the education and training systems. The courses offered at the institute when it was managed by the Roman Catholic Mission were mainly in technical crafts: metalwork, plumbing, mechanical, electrical and motor-vehicle engineering. The courses became diversified when the government took over since there are now, in addition to craft courses, certificate, artisan and diploma courses in agricultural engineering, automotive engineering, mechanical engineering, building and construction, electrical engineering, information technology, accounting and secretarial training (see Figure 2). Other courses are planned.



Figure 2: A secretarial class in session—girls learning useful keyboard skills.

However, becoming a technical training institute marked the beginning of challenges for the institution. For example, staff began to seek transfers to other institutions. At that time, fees from students were the main source of income available for the running of the institution. This was set at Kshs.10,000 (US\$155) per student, including boarding—these fees are comparable to those operating in similar institutions. Profits from the institute's farm are used to subsidize them. Yet there were only seventy students enrolled, with ten or fewer students per class. Workers at the institute, consisting of twenty-six employees and twenty-four teachers, had not been paid for a year, and their morale was understandably low. In fact, the opinion of most of them, as well as that of the local community, was that the institute could not be salvaged in the short term. Sundry creditors were owed about Kshs.1 million (US\$15,385) for services and products provided to the institution. Some creditors had instituted legal proceedings in 2004 to have their debts paid. Retirees were owed Kshs.2.4 million (US\$36,923), most of which dated back to 1995. Equipment for training and domestic use was neither up to date nor serviceable. Despite the fact that it was not efficient, some 20% of the equipment still functioned properly.

## The content of TVET

The extent to which credibility is attributed to national policy on TVET in the school system depends on the type of subjects offered and the status they are given in the curriculum. If they are not introduced early enough or if they are merely optional, then both learners and society at large may not take them very seriously (Kerre, 1995). When the 8:4:4 system of education was introduced, the Government of Kenya had a policy that each secondary school must offer at least one technical and vocational subject alongside academic subjects (Republic of Kenya, 1984). Okaka (2001) listed these technical and vocational education subjects as: agriculture; woodwork; metalwork; power mechanics; electricity; drawing and design; building construction; home science; business education (accounts, commerce, typing and office practice); art and design; and music. These subjects, having been suppressed in an earlier review of the school syllabus, have now been included again, as was explained in Chapter 1.

## The objectives of TVET

The purpose and objectives put forward for technical and vocational education in a given country delineate the scope within which TVET is to be developed and implemented. According to Kerre (1995), most countries have stated, in one form or another, the general objectives of TVET as follows:

To provide, alongside general education, knowledge and skills in technical and vocational fields in order to meet national human resource requirements in agriculture, business, industry and other technical services.

According to Kamunge (1988), technical and vocational education in Kenya has been incorporated in the 8:4:4 system of education. Its specific objectives can be summarized as follows:

1. To lay the foundations for the vocational skills required for socio-economic development.
2. To expose students to scientific and technological trends, skills and ideas.
3. To develop vocational and entrepreneur skills as basis for further training and employment.
4. To develop appropriate vocational attitudes, initiative and creative thinking oriented to work.
5. To inculcate skills applicable to various trades, vocations and professions.
6. To develop an appreciation for the dignity of manual work.

On the same issue, Kerre (2001) suggests that there is an urgent need for Kenya to become scientifically and technologically literate if it is to become part of the emerging global economy. This implies that the teaching of science and technology has to be strengthened in order to prepare young Kenyans for the twenty-first century. In order to re-assess the goals, aims and objectives of the current system of education, there is a need to investigate the attitude of learners.

## The attitude of learners and society towards TVET

It is the focus of this study to take note of the learners' perceptions and use them as a basis for evaluation and suggesting a way forward. Students' values acquired through their respective communities still appear to be strong as far as influencing today's perception of TVET subjects is concerned. In the traditional African society, practical skills were imparted according to role and gender. Tasks that were perceived as not safe or appropriate for women were assigned to men. King and Hill (1993) noted that stereotypes found in textbooks portray women as weak and dependent. In Africa, the roles of men and women in all spheres of life are still heavily type-cast, a situation which is even more pronounced in rural areas. This is reflected in practices in the education system and in the work place. Girls and women are still marginalized as far as TVET is concerned. A closer examination of girls' enrolment in TVET reveals a heavy traditional bias in favour of agriculture and home science, with very few enrolments in the traditionally male-dominated technical areas, such as building construction, power mechanics, metalwork and woodwork. This bias could be influencing the enrolment and participation of women in TVET programmes.

It is worth noting that this bias may not be as strong today as it used to be. However, it still seems to be a factor to be considered. The job market for women engineers, women electricians and others may not be guaranteed at the moment in view of societal idiosyncrasies. This perception, a product of cultural values, is also responsible for shaping students' attitudes towards TVET subjects. Therefore, the tendency of females to shun courses such as engineering, construction and welding may be traced to Kenya's socio-cultural background.

Unfortunately, research has shown that people in society—politicians, educators, administrators, parents or learners—do not fully appreciate the value of TVET (Kerre, 1996; Tum, 1996). Some studies have suggested that the major reason for this negative attitude is the long-term low status of TVET compared to general education. This attitude can be a reaction to colonial times when Africans were expected to be manual workers and, therefore, were provided with technical and vocational education, while general academic education was reserved for Europeans who filled white-collar jobs.

Another explanation for the low status of TVET is that it is regarded as a second chance for those who have failed to find a place in academic education. This situation is further worsened by the low level of wages earned by vocationally trained graduates. Accordingly, in the recent years, many technical and vocational education students have ended up with limited opportunities for pursuing graduate or advanced technological education (Tum, 1996). This has resulted in low morale among those students taking TVET subjects.

A study by UNESCO-UNEVOC (2000) revealed that the community exerts a great deal of influence on one's choice of career. According to Kerre (2001), parents want their children to be either teachers or nurses and very few encourage their children to enter blue-collar jobs.

Kapiyo and Otieno (1986) observed that in the recent past students heartily loathed manual labour; hence, agricultural and technical education were neglected. However, they also affirmed that recent developments have indicated that things are, at least, beginning to change. Technical education is now viewed in a more favourable light, although pupils may still have personal misgivings about manual work. It is possible that their attitude towards technology in relation to career expectations can be mingled with and confused by their parents' and social expectations. Further suggestions declare that, in order to comprehend pupils' attitudes towards technology in a country like Kenya, it is necessary to be aware of different circumstances, such as rural/urban settings and school types. In the design of this research study, this type of information was fully taken into consideration.

## The technical and vocational education curriculum

In his keynote address to the sub-regional workshop on the theme 'Promotion and Reform of Technical and Vocational Education and Training in Africa', Musaaazi (2001) notes that part of the problem that inhibits career choice in favour of technical and vocational education is the lack of a clearly conceptualized curriculum in the field. Shiundu and Omulando (1992) share the same sentiment. They express concern that the existing curriculum lacks a clearly articulated philosophy and balance, where educational training aspects are visible and can be understood by learners, teachers and parents.

Among the particular objectives of the 8:4:4 system of education was that more emphasis was to be laid on technical and vocational education. It was supposed to ensure that the students graduating at any level had some scientific and practical knowledge that could be utilized for their subsequent self-employment or in further training (Republic of Kenya, 1984). However, Tum (1996) notes that social, economic and political factors have greatly handicapped the implementation of the reform process.

'The Report of the National Committee on Educational Objectives and Policies' (Republic of Kenya, 1976) and 'The Report of the Presidential Working Party on the Second University' (Republic of Kenya, 1981) both clearly pointed out the issues of relevance and quality in the education system. To date, this problem has yet to be satisfactorily resolved and, indeed, 'The Report on the Rapid Appraisal on the Status of TVET in Kenya' (Republic of Kenya, 2003) notes that:

Wholly or in part, our education system has failed to inculcate a modern scientific culture, imbue learners with desirable social skills and a wholesome philosophy of life.

From the foregoing, it is clear that there is a mismatch between what is learnt in schools and the requirements of the economy and the world of work—and even real life in general.

## Access

Whilst the suitability of TVET programmes for different target groups and local needs affects access, emphasis should be on demand-driven training. In addressing the issue of access it is equally prudent to tackle the barriers of participation. Possible solutions include the innovative use of facilities, putting equal-opportunities policies in place and having a wide range of programmes that are flexible to suit all target groups (Swartland, 2000).

There are real problems for schools concerning the mismatch between the supply and demand sides of labour markets. These problems could be countered by a more flexible education system. This would allow greater curricular diversity and would build bridges between different types of education—formal and non-formal—as well as between working life and further training. The EFA Goal Number 3 requires that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programmes. It is possible to organize the various stages of TVET into a coherent and transparent framework that provides for entry and passage from one stage to another and opportunities to pursue diverse paths through the system. There must be room to change the contents of a particular programme as and when appropriate. Both users and teachers should be on the alert to ensure that only relevant programmes are offered.

## The financing of TVET

Whereas national and local governments assume the main financial responsibility for TVET, international partners are necessary for standard-setting, such as achieving internationally recognized practices in the field of TVET, among other responsibilities. UNESCO-UNEVOC (1996) classifies some of the better known financing mechanisms as follows:

1. Public financing through revenue;
2. Enterprise financing for training its own labour force;
3. Private and public sponsored financing;
4. International donor assistance.

Turning the Kaiboi premises into a technical training institute in 1987 marked the beginning of its problems, because the government withdrew its funding. As a result, the number of services and programmes declined—and so did student enrolment. The institution seems to have been well managed, despite the fact that the main source of funds was fees—together with farm produce (see Figure 3). According to Lauglo and Narman (1988), it costs more to run a technical and vocational institution per student than an academic one.

At the Kaiboi institute there is a farm manager who oversees all the activities on the farm. There are twenty milk-producing cattle grazing on part of sixty-four acres of arable land. These cows produce forty-two kilograms of milk per day. There is a fifteen-acre tea farm and a one-acre vegetable garden. Maize is grown on nine acres. There are plans to increase the acreage of each commodity. About 50% of farm produce is sufficient to satisfy the needs of the institution: milk, meat, maize and vegetables consumed by the trainees. These commodities are sold to the institution at subsidized rates. The surplus of commodities and all of the tea are sold and some of the money is used to pay the workers, to subsidize fees and to pay the institution's bills. Trainees taking agricultural courses perform their practical lessons on the farm, and they are also involved in the repair and maintenance of agricultural machinery and equipment which is carried out in mechanical workshops.



Figure 3: Cattle at the institute's farm

## Conclusion

This chapter has presented the development of TVET in Kenya and the establishment of Kaiboi Technical Training Institute in which the study was carried out. There is an urgent need for Kenya to become scientifically and technologically literate if it is to become part of the emerging global economy. Although the cost of running a TVET institution is higher than that of running an academic institution, the government of Kenya and society in general should appreciate the value of TVET and support it fully. This also concerns paying attention to the matter of gender. The future prospects of TVET in Kenya are good, given that the government recognizes it as the major connecting link between the school system and the employment market.

## CHAPTER III: FINDINGS

Descriptive statistics in the form of frequencies and percentages were used to analyse the quantitative data. The open-ended data were coded and organized in accordance with the questionnaires and interview schedules. A narrative summary of the responses explains the data. Information not relevant to the study has been omitted.

### The nature of courses adding to the institute's attractiveness

In the early days, when it was under the management of the Roman Catholic Mission, and even thereafter, the institute offered technical craft and artisan courses. However, since 1987 it has been offering courses at diploma level alongside some craft and artisan certificate courses. The present-day departments in the institute are shown in Table 1.

**Table 1: Departments in the institute**

Department	Number of students	Certification offered
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 the relevance of the courses, ten (91%) of the heads of departments/heads of section affirmed their marketability. This corresponds to the feedback that the institute receives from commerce. Over 100 students graduate from the institute every year. Those who graduate with distinctions and with a high number of credits have good chances of finding employment in prestigious companies or of going on to further studies. Feedback from industry where the graduates find employment suggests that all is well in the institute, which has striven 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, which has tended to counteract this burden. The administration ensures that the competencies of faculty and all workers in the institution have been improved on a continuous basis.

### How the courses are made more attractive

Apart from marketing the courses in terms of future employability for the benefit of both industry and the self, the institution makes a concerted effort to advertise its courses. Advertisements are placed in daily newspapers, in brochures and in calendars. A typical example of such an advertisement is shown in Figure 4. Radio and TV are also used to announce the courses and to give the deadline for applications. Graduates from the institution also share information about the institution and their experiences with prospective students.

The data analysed revealed that the performance standards of the students are high. Additionally, career guidance and counselling personnel regularly advise students on their academic and social life. The rural setting seems to provide a suitable ambient learning environment.



## Ministry of Science & Technology

# KAIBOI TECHNICAL TRAINING INSTITUTE



Tel 0733- 659780/ 0734-937937 Fax 0202029886 Email kaiboi@kaiboitech.ac.ke Website www.kaiboitech.ac.ke

DEPARTMENT	LEVEL	GRADE	DURATION	EXAM BODY
MECHANICAL ENGINEERING	Craft	D	2 YEARS	KNEC
AGRICULTURAL ENGINEERING	Craft	D	2 YEARS	KNEC
ELECTRICAL INSTALLATION	Craft	D	2 YEARS	KNEC
AUTOMOTIVE ENGINEERING	Craft	D	2 YEARS	KNEC
CARPENTRY & JOINERY	Craft	D	2 YEARS	KNEC
SECRETARIAL Single & Group	Certificate	D	2 YEARS	KNEC
INFORMATION TECHNOLOGY	Certificate	KCPE	6 MONTHS	KNEC
K.A.T.C. INTERMEDIATE	Certificate	D	6 MONTHS	KASNEB
K.A.T.C. FINAL	Certificate	KATC-I	6 MONTHS	KASNEB
C.P.A. I SEC. I	Certificate	KATC- F or C+ mean & C+ Eng & c+ Maths	6 MONTHS	KASNEB
C.P.A. I SEC. II	Certificate	CPAI SEC I	6 MONTHS	KASNEB
INFORMATION TECHNOLOGY (APRIL HOLIDAY)	Certificate (Part-time)	D- and above	20 hrs per Package	K.T.T.I
PERSONNEL MANAGEMENT (SCHOOL BASED - APRIL HOLIDAY)	Diploma	P1 Teachers with DIV. III or C- and above	9 HOLIDAYS	KNEC

Figure 4: A typical example of a press advertisement

Faculty members were assigned duties by the heads of departments and heads of sections on the basis of their qualifications and experience. Student/staff relationships were good and all eleven (100%) respondents (heads of sections and heads of department) alluded to this. There are sixteen classrooms, five workshops, three computer laboratories and one technical drawing room. Machines are adequate for the students to work on. More computers and additional machines and equipment have been purchased from the savings accrued, as is explained in the management section of this report. The institute's plan of entering into a partnership with a Dutch organization—Gered Gereedschap—so as to have access to modern tools and equipment was in an advanced stage. There was a continuous maintenance programme for equipment, computers and machines. Figures 5, 6 and 7 illustrate some practical sessions in workshops and laboratories.

It seems that the previous regime used machines and equipment until they broke down and then repaired them. The current principal developed a policy in which there is a maintenance programme for machines, computers, tools and equipment carried out by technicians. Thus, a policy of preventive maintenance has been adopted as opposed to breakdown maintenance. This type of maintenance reduces costs and maintains the optimal operation of machines, computers, tools and equipment, increasing their reliability. This process involves inspection whose frequency depends on the use, wear and tear and delicacy of the machine. Routine cleaning, dusting, and oiling and greasing of rotating parts of machines and equipment, as well as the grinding and sharpening of cutting edges of hand and machine tools are carried out. Worn parts are replaced.



Figure 5: Motor-vehicle students in a practical class. Girls are not left behind in male-dominated jobs



Figure 6: Mechanical students doing filing



Figure 7: Motor-vehicle students at work

The institute attempts to maintain its reputation as a well-managed facility by introducing demand-driven and viable programmes. Evidently, some courses attract more trainees than others. New courses have been launched according to market-driven demand. The institute carried out an opinion survey before introducing the courses shown in Table 2.

Table 2: Seven future courses subject to an opinion survey

	DESCRIPTION		DESCRIPTION
A	Business administration	E	Electrical engineering (electronics options)
B	Marketing and supplies management	F	General agriculture
C	Human-resource management	G	Certified information communication technology (CICT)
D	Mechanical engineering (production option)		

The opinion survey targeted prospective trainees—mainly high-school graduates who had failed to find places in university. This survey indicated that the courses shown in Table 2 would be introduced in the Kaiboi Technical Training Institute. Prospective trainees were asked to express their opinion about them as follows:

1. Please rank the courses according to their marketability.
2. Please rank the courses according to the ones you think will lead to more self-employable graduates.
3. Which course is most related to what you would pursue at university, if given the chance?
4. The following modes of carrying out the programme are suggested. Please rank them according to your priority: A: part time; B: distance learning; C: Full time.

The number of responses received is shown in Table 3.

**Table 3: The number of responses to the opinion survey**

Question number	Number of responses per course/question						
	A	B	C	D	E	F	G
1	230	52	22	85	240	15	120
2	126	52	22	85	254	15	120
3	240	42	55	180	300	20	85
4*	46	21	236	–	–	–	–

\* = Please note that the responses for question 4 are different to the responses for the other three questions due to the nature the question (see text).

The survey was carried out at random in major towns and in the community, especially in those places where the majority of current trainees come from. People's preferences seemed to have favoured disciplines that would provide opportunities for progression to jobs in wage employment in industry or self-employment or both. Furthermore, there may have been gender stereotyping in the choice of disciplines, since females chose subjects where the practical and manual components were less evident. For example, mechanical and electrical engineering and general agriculture have a relatively heavy component of practical labour, as opposed to business administration, marketing and supplies management, human-resource management and CICT. Even business administration, marketing and supplies management and human-resource management are still male dominated. In fact, compared to male trainees it is in information technology where female trainees excel at the institute. For example, in 2007 there were more credit passes obtained by females (eight credits) than males (three credits) and this trend has continued, with more females than males taking the course. More females than males are subsequently employed in businesses based on information technology, such as cyber-cafes. Future studies may be carried out to investigate this scenario. The action taken by the institute as a result of the survey was that all of the courses mentioned in Table 2 were started as planned, but it was understood that fewer trainees would enter those disciplines that were less marketable, such as general agriculture and human-resource management. In any case, it must be taken into consideration that equipment and machinery used for general agriculture are more expensive than those used in the other courses. It may be concluded that the survey gave a reliable picture of trends affecting enrolment in the institute's courses: i.e. it indicated courses that are viable and not redundant in the ever-changing job market and that can attract a suitable number of trainees for some time to come.

## Support services

The support services provided by the institute included an Internet system, five hostels, and catering, sports and recreational facilities. The institute had developed a website through wireless technology, a facility which both staff and students were able to enjoy, despite its rural location. Since the trainees come from all over the country, the institute is obliged to provide hostels and catering facilities. There were two hostels for female students and three for male students, each with a capacity for 120 beds. There were twenty-six staff members carrying out support and central services. Currently, there are 550 students. There is one modern kitchen with gas cooking systems offering a diverse menu. The dining hall has a seating capacity of 500. Some of the facilities are redundant because the institution has not yet reached its full capacity. For example, although the dining hall was designed to accommodate 500 students at full capacity, there are only 485 students who currently eat there. If there were more than 500 trainees using the dining hall, it would be necessary to eat in shifts. Classrooms have a seating capacity of twenty-five to thirty trainees, but at present some have less than this number. When the current principal took over, some classes had ten or less trainees, with a total of 120 for the whole institution.

The dean of students is in charge of the students' welfare and discipline, among other things. Discipline here refers to the steps taken to encourage students to behave responsibly while in or outside the institution. According to Charles (1992), discipline promotes harmony, stability and common understanding, which are prerequisites to creating a suitable learning environment in any institution. The interview with the dean of students, as well as with the students' council, which works very closely with the dean, seemed to indicate that discipline among the student body was good, hence reducing the need for teacher intervention.

The institution also boasts two football pitches, one rugby pitch, three volleyball courts, one basketball court, one netball court and a number of indoor games facilities. In addition, there is a colour TV and video deck for students' entertainment in the common room.

## Management skills

### THE CURRENT PRINCIPAL AND THE SITUATION SINCE HE TOOK OVER

The principal is male in his early 40s. He was appointed the principal of the Kaiboi Technical Training Institute in early 2004. He possesses cutting-edge experience and expertise in the area of TVET. He trained in technical disciplines from secondary school through to university. He obtained a master's degree in business administration after completing a technical undergraduate degree. He is outstanding in his achievements, having trained and mentored many students who are now playing important roles in the development of the country. His administrative experience began when he worked as a dean of students for seven years in a TVET institution, after which he was appointed principal of the present institute. He is committed to the job and seems to have made a prolific scholarly contribution. At the time of the study, he had been principal for over three years. He embraces the institute's vision and mission to achieve its objectives. He has taught in TVET institutions for over twenty years and had 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 Figure 8); not many principals in his position achieved the same prestige. The institute he heads was earmarked by the Ministry of Education, Science and Technology as the most improved one in Kenya in 2005 and 2006. He stresses the core values of the institute as shown in Table 4.

**Table 4: The ten core values of the institute**

	CORE VALUE		CORE VALUE
1	High quality	6	Impartiality
2	Transparency	7	Sustainability
3	Accountability	8	Discipline
4	Effectiveness	9	Team spirit
5	Efficiency	10	Dedication

In other words, the principal created a climate that permits students and staff to carry out their roles for the common good of the institution. The principal believes that the work carried out by the institute is the best way of advertising its services and allowing the community to perceive the graduates' reliability.

### OTHER POSITIVE ASPECTS

The Board of Governors carries out its functions with the purpose of 'humanizing' the institute. In other words, it gives the community a feeling of ownership of the institution, encouraging people to perform good works in its favour. The Board serves as the institute's agent in the outside community, educating the community about the importance of the programmes offered at the institute as well as soliciting local support. The Board also extends its public relations to the community as some local staff are employed in both skilled and unskilled roles, such as on the farm and in the central services. Unskilled people also receive on-the-job training. The Board co-ordinates and fosters parents' collaboration in the institution's activities, including such events as Open Days attended by parents, guardians, the community and other stakeholders, during which there are activities including displays of the trainees' projects.



Figure 8: The principal, Mr Edwin Tarno, making a presentation at a CAPA conference in Zambia

One of the core values of the institution is discipline. The principal believes that the institute's fraternity should conduct itself with dignity and integrity by obeying rules and regulations. The supervision of rules and regulations has been cited as a practical aspect of the principal's administrative role. As in any institution of learning, this establishment has rules and regulations, and part of the principal's administrative role is to ensure that they are followed. The principal's method of applying the rules will be perceived by all and sundry in the institute. For example, it may contribute to teacher productivity—or lack of it—in an institutional setting. The principal can observe how the staff, students and the community react to the way in which the rules are applied and he or she would then be able to select the appropriate administrative style for the institute. Johnston and Venable (1986) assert that the role of the principal has permeated educational literature through studies of 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.

From a perusal of documents in the registrar's office, it became clear that student enrolment had increased from 70 to 550 over a three-year period (an increase approaching 800%). This remarkable change seems to have occurred principally because there was potential for the institute to grow. The infrastructure existed; the only thing that seems to have been lacking was the institute's visibility and an affirmative attitude towards expansion. The principal instilled into staff and trainees positive thinking, accountability, goal setting, integrity, self-motivation, self-image and the ability to work in teams. Above all, he brought about prudent financial management. Accounts records indicate that debts (Kshs2.4 million or US\$36,923) owed by the institute to creditors and staff dating as far back as 1995 were cleared. Salary arrears and co-operative dues owed to workers dating back to the year 2000 have equally been paid. There has also been an increase in the generation of revenue by over 200%. Thus, over a three-year period enough revenue was generated—coupled with a modest government grant—to pay off debts (services, salaries and pensions) and to invest in new infrastructure. Fees were subsidized considerably. If this trend were to continue there could be excess revenue to be ploughed back into the development of the institute, although inflation and other economic factors may well undermine this trend. The institute's strategic plan 2005/2010 is already paying dividends. There has been a remarkable improvement in physical infrastructure, consisting of:

- renovation of all buildings;
- repair of workshop training equipment and machines (further to routine maintenance);
- on-going construction of a new 300-seat library (see Figure 9);
- construction and equipping of a new ICT laboratory with thirty-six workstations (see Figures 10 and 11);
- developing a scheme of service for employees, awarding a 14% salary increase (in 2006) and reviving a new co-operative society—the previous one having collapsed in 1995. A scheme of service comprises an established plan for the payment of salaries, involving annual salary increments, promotion, retirement and other benefits to which an employee is entitled. A co-operative society is an organization where employees voluntarily contribute a fraction of their salary to constitute a saving's fund from which they may then borrow money in the form of a loan. The loan is repaid over a certain period of time according to established rules and procedures.



**Figure 9: The new library under construction**

The principal believes that any section of the institution that is not profitable or useful should be obliged to justify its existence within a given time limit, after which—and if it has not justified its existence—it may be done away with. This economic approach to the survival of departments and sections in TVET institutions is that of a business.

Although some staff members have been recruited to keep pace with the increase in enrolment, there has been rigorous in-house retraining and upgrading of the existing thirty-three highly trained teaching staff. This has been conducted through attachment to industry and by attending seminars and workshops. They have shared their experiences freely with other staff members.

In summary, this chapter has looked at the findings emanating from the research questions stipulated in Chapter 1. It has been shown that staff members now have a positive attitude towards the institute and, thanks to the principal's management, the entire community had a sense of belonging through embracing the institute's vision and mission towards a common goal.

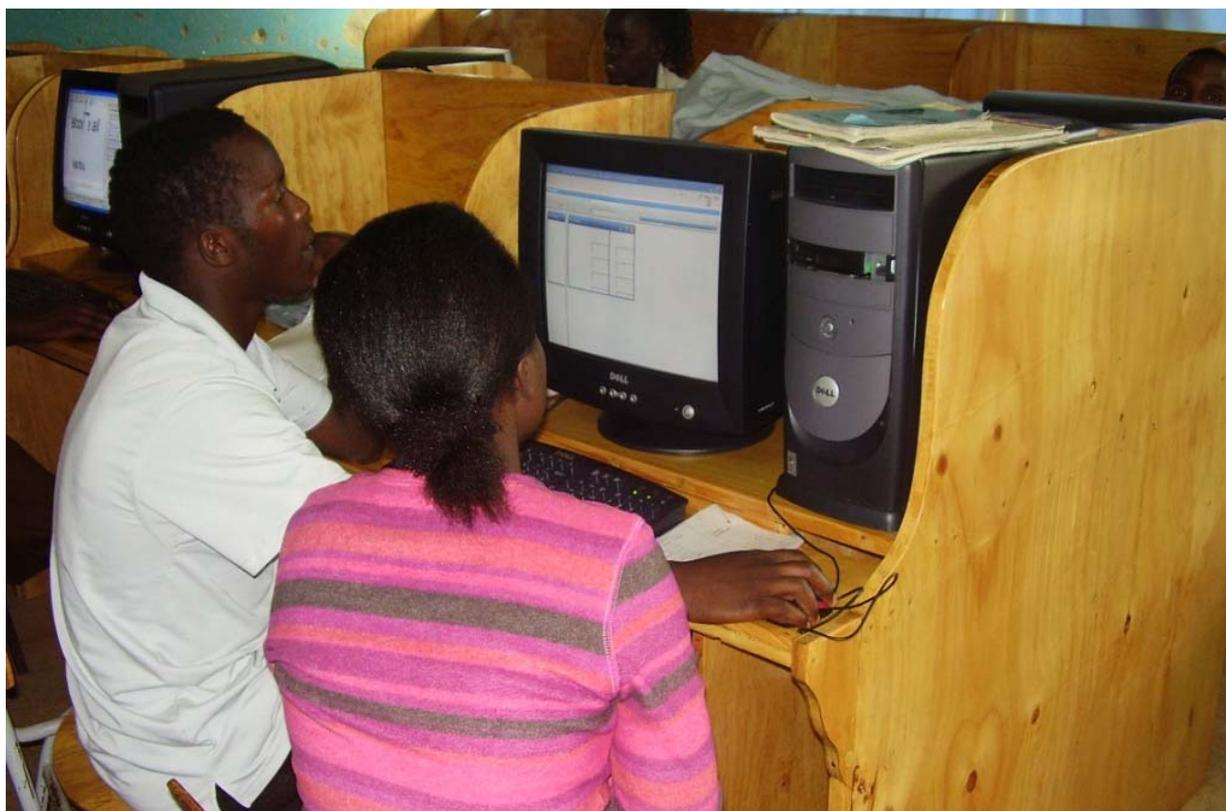


Figure 10: A first-year computer class in the ICT laboratory

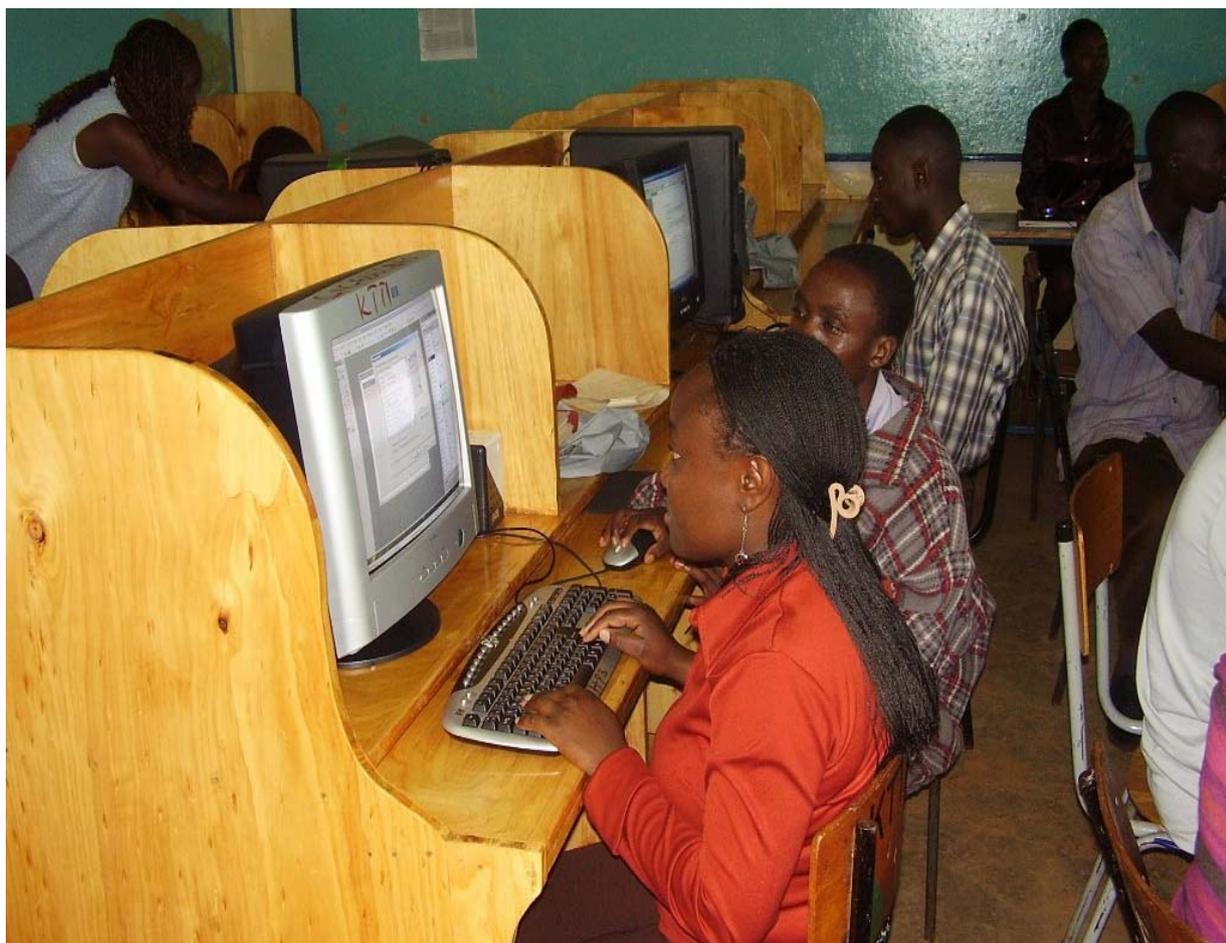


Figure 11: A second-year computer class in the ICT laboratory

## CHAPTER IV: DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to investigate factors that influence the attractiveness of a TVET institution. The findings and analyses give rise to the following discussion from which conclusions are drawn and recommendations made.

### Discussion of the findings

#### WHAT COURSES ARE OFFERED BY THE INSTITUTE THAT ADD TO ITS ATTRACTIVENESS?

The study revealed that the courses offered in the institute are marketable. With the inherent good performance, graduates had many employment prospects. This can be illustrated particularly by those students who had passed their examinations with distinction or credit and were subsequently offered jobs by prestigious firms. Some graduates even went on to further studies. Enterprising graduates entered self-employment. The institute lays emphasis on quality and seeks to improve and maintain the high performance of its trainees. The feedback mechanism from industry helps the institute evaluate its standards and to improve its programmes.

#### HOW DOES THE INSTITUTE MAKE ITS COURSES ATTRACTIVE TO THE CLIENTELE?

Other than marketing the courses, the institution employs qualified and professional staff members who are committed to producing graduates who are competitive in the job market. Facilities are adequate and trainees gain hands-on experience, as well as being exposed to working practices during a three-month industrial attachment. Courses that are offered are popular and marketable. Advertisements for the programmes offered reach out to the target group in a timely manner, and an opinion survey is carried out before introducing new courses. The institute has earned a reputation as a professionally run entity.

It was, therefore, anticipated that this institute would provide the much-needed direction for the TVET system in Kenya.

#### WHAT SERVICES ARE PROVIDED TO IMPROVE THE INSTITUTE'S ATTRACTIVENESS?

Support services or activities are those that are not directly academic, yet affect the good running of the institute. Some are co-curricular in the sense that they assist in the improvement of the core business of the institution and the well-being of the entire community. These include games, sports and recreational facilities, students' welfare, the hostels and catering services. Committed support staff have the responsibility of overseeing these services. These people carry out their work effectively and efficiently. The Board of Governors humanizes the institution by serving as a moderator between the community and the institution. For example, the Board reaches out to the community by assisting and organizing tree planting in the community by the staff and trainees, especially along the river valleys, and having some people in the community employed in the institute and even receiving on-the-job training if they are unskilled. The Board also has a role to play during Open Days by mobilizing the community to turn up in large numbers to review the projects carried out by trainees. It is in this way that the positive image of the institute is reinforced through the corporate responsibility of the community.

#### 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 and is a forward-looking person able to motivate his team for the common good. Having developed a five-year strategic plan, he has been able to attain a number of quick objectives (low-lying fruits?) which do not imply any expense, such as instilling punctuality, working in teams and having a positive image towards work—among others. He practices a results-based form of management. Targets to be met are clearly stated and specific duties are allocated to particular officers who become accountable for their work. The principal has the ability to enlarge the established government policies by going the 'extra mile' to accomplish his work. For example, he uses his personal car and telephone in the interest of the institute without asking for reimbursement. He consults and liaises freely with other people to find out about the corporate image of the institute in general to help him put things in place. He has been able to instil discipline in the institute, and guidance and counselling personnel are also available to deal with order and the welfare of students.

## Conclusion

This study has established that there are various factors influencing the attractiveness of a TVET institution. The low-status of TVET institutions is slowly fading, although some misgivings persist regarding manual work, as well as parental expectations about their children's careers. The attractiveness of an institution begins with the principal's approach to administration. Setting goals for the institution to achieve, along with a vision and mission, are assets that would aid him or her to manage the institution's ability to carry out its responsibilities. Furthermore, teamwork and a positive attitude towards work on the part of all stakeholders—students, teachers, parents and the community—are necessary ingredients to bring about a successful institutional performance. Indeed, hierarchical influence and loyalty to the principal on the part of subordinates are central to the principal's success and his/her effectiveness in the institutional setting. It is clear that the willingness of persons to co-operate with each other makes them contribute extra efforts to the organization—and this is indispensable.

## Recommendations

The following recommendations are put forward:

1. Principals of TVET institutions should be highly qualified individuals in the relevant technical areas and should also have some administrative skills.
2. Goal-setting or some kind of (theoretical) framework that ties in with the vision and mission of the institution and its strategic plan are an asset in helping the institution to carry out its functions.
3. Principals should carry out their responsibilities in such a manner that their staff perceives that management is working in their favour and is responsive to their needs; one such example being to undertake corporate social responsibility.
4. Tangible targeted results should be recorded every time they occur in order to encourage persons to work harder and achieve more. This, in itself, is an incentive scheme. 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 the perceptions of moribund institutions.
6. Bureaucracy should be flexible and not the only agency responsible for the running of a TVET institution. People outside the administration must be allowed to give suggestions about what can be done to overcome a particular problem and should be permitted actually to perform some activities themselves.

My personal feelings about the institution are that, with the support of academic staff, workers, trainees, the community and other stakeholders, it has become a centre of excellence able to prepare trainees to meet the challenges of the job market. This requires dynamic leadership of the calibre demonstrated by the principal. Certainly this experience can be replicated in other institutions with similar characteristics. Moreover, the status of the institution can be maintained or improved because of the momentum that has been instilled by the current principal—should he be transferred.

## APPENDICES

### Appendix 1: the principal's questionnaire

*This document is part of the educational study being undertaken by UNEVOC Centre, Moi University, Eldoret, Kenya, on behalf of UNESCO-UNEVOC, Bonn, Germany, to investigate factors that influence the attractiveness of a technical and vocational education and training (TVET) institution. The purpose of this questionnaire is to seek your views on various aspects of this institution. The information gathered will generate some suggestions and recommendations towards the improvement of TVET institutions in general. You are requested to fill in the questionnaire as accurately as possible. All the responses will be handled confidentially, both during and after the study.*

*Thank you!*

*John W. Simiyu, Ph.D.*

*Date: \_\_\_\_\_ June, 2007*

#### SECTION A: PERSONAL INFORMATION

1. Gender:                    i) Male                    ()  
                                      ii) Female                ()
2. Age:                        25-30                    ()  
                                      31-35                    ()  
                                      36-40                    ()  
                                      41-45                    ()  
                                      46-49                    ()  
                                      Over 50                  ()
3. Marital status:        Single                    ()  
                                      Married                  ()  
                                      Divorced                ()  
                                      Widowed                ()  
                                      Other (please specify)
4. Professional qualification:  
                                      i) S1                      ()  
                                      ii) Dip.Tech. ed.        ()  
                                      iii) B.ed.                ()  
                                      iv) B.ed. Tech.        ()  
                                      v) Untrained            ()  
                                      vi) Other (please specify)
5. Experience in current position:  
                                      i) Less than 5 years    ()  
                                      ii) More than 5 years   ()

#### SECTION B: PROFESSIONAL INFORMATION

Please indicate with an X the extent of your agreement with the statement given in the appropriate space:

SA: Strongly agree

A: Agree

U: Undecided

D: Disagree

SD: Strongly disagree

STATEMENT	SA	A	U	D	SD
6. Student enrolment is on an upward trend.					
7. Courses are marketable.					
8. Physical infrastructure is remarkable.					
9. Workshop facilities are adequate.					
10. Maintenance of workshop training facilities is carried out routinely.					
11. A spacious and well-equipped library exists.					
12. ICT infrastructure is available.					
13. Income-generating activities are well established.					
14. Opportunities exist to expand financial resources.					
15. The institution does not have debts.					
16. A scheme of service for employees (non-teaching staff) is available.					
17. Non-teaching staff is highly motivated.					
18. I can integrate productivity concerns and employee needs.					
19. Teaching staff are highly motivated.					
20. I know about change strategies and can implement them.					

21. In your opinion, and in a few **KEY WORDS**, how have you managed to change the status of the institution from the previous ailing condition to the current improved status?

**END**

Thank you for your co-operation.

## Appendix 2: interview schedule for the principal

1. How long and in what capacity have you been in this institution?
2.
  - (a) What changes have taken place during your time in this institution?
  - (b) Why were the changes necessary?
  - (c) Why do you think these changes were not implemented before your arrival?
3. What were the student enrolment figures:
  - (a) when you took over?
  - (b) currently?
4. What is the trend of enrolment?
5. What development projects are envisaged in the institution?
6. What is the turnover of:
  - (a) non-teaching staff?
  - (b) teaching staff?
7. How would you describe:
  - (a) student discipline?
  - (b) the morale of the teaching staff?
  - (c) the morale of the non-teaching staff?
8.
  - (a) Is there a Parent/Teacher Association in the institution?
  - (b) If yes, what is its role in the institution?
  - (c) To what extent has the PTA played its role?
9.
  - (a) What challenges is the institution currently facing?
  - (b) How is the institution addressing these challenges?
10. Do you have any other comments or advice you wish to share?

**END**

Thank you for taking your time to share your views with me.

## Appendix 3: questionnaire for the registrar

*This document is part of the educational study being undertaken by UNEVOC Centre, Moi University, Eldoret, Kenya, on behalf of UNESCO-UNEVOC, Bonn, Germany, to investigate factors that influence the attractiveness of a technical and vocational education and training (TVET) institution. The purpose of this questionnaire is to seek your views on various aspects of this institution. The information gathered will generate some suggestions and recommendations towards the improvement of TVET institutions. You are requested to fill in the questionnaire as accurately as possible. All the responses will be handled confidentially, both during and after the study.*

*Thank you!*

*John W. Simiyu, Ph.D.*

### SECTION A: PERSONAL INFORMATION

1. Gender:                    i) Male                      
                                       ii) Female
2. Age:                        25–30                      
                                       31–35                      
                                       36–40                      
                                       41–45                      
                                       46–49                      
                                       Over 50
3. Marital status:           Single                      
                                       Married                     
                                       Divorced                  
                                       Widowed                  
                                       Other (please specify):
4. Professional qualification:  
                                       i) S1                          
                                       ii) Dip.Tech. ed.          
                                       iii) B.ed.                  
                                       iv) B.ed. Tech           
                                       v) Untrained              
                                       vi) Other (please specify)
5. Experience in current position:  
                                       i) Less than 5 years      
                                       ii) More than 5 years

### SECTION B: PROFESSIONAL INFORMATION

Please indicate with an X the extent of your agreement with the statement given in the appropriate space:

SA: Strongly agree

A: Agree

U: Undecided

D: Disagree

SD: Strongly disagree

STATEMENT	SA	A	U	D	SD
6. Admission criteria are accommodative enough.					
7. Programmes are of a sufficient variety.					
8. Programmes are popular.					
9. Fees charged for the programmes are affordable.					
10. The institution is successful in attracting qualified students.					
11. Students find out about the programmes and make decisions to apply and enrol.					
12. There is a good marketing programme in the institution.					
13. There is an upward enrolment trend.					
14. Performance standards are high.					
15. The drop-out rate is low.					

16. In your opinion, and in a few **KEY WORDS**, how would you attract and maintain an upward trend in enrolments in an institution located in a rural setting nature as yours?

**END**

Thank you for your co-operation.

## Appendix 4: interview schedule for the registrar

1. How long and in what capacity have you been in this institution?

2. How has the student population grown?

Year	No. of students	% growth
2002		
2003		
2004		
2005		
2006		
2007		

3. What has contributed to the trend in 2) above?

4. How do potential students learn about the institution and make decisions to apply and enrol?

5. Which courses are popular? Why?

6. What is the target population of students?

7. What is the future of the institution in terms of popularity of programmes?

8. (a) Does the rural setting have any effect on enrolment?  
(b) What is the reason for your answer in 8 (a) above?

9. What problems does the department face?

10. Do you have any competitor in your programmes?  
Why?  
Why not?

**END**

Thank you for taking your time to share your views with me.

## APPENDIX 5: QUESTIONNAIRE FOR HoDs AND HEADS OF SECTIONS

*This document is part of the educational study being undertaken by UNEVOC Centre, Moi University, Eldoret, Kenya, on behalf of UNESCO-UNEVOC, Bonn, Germany, to investigate factors that influence the attractiveness of a technical and vocational education and training (TVET) institution. The purpose of this questionnaire is to seek your views on various aspects of this institution. The information gathered will generate some suggestions and recommendations towards the improvement of TVET institutions. You are requested to fill in the questionnaire as accurately as possible. All the responses will be handled confidentially, both during and after the study.*

*Thank you!*

*John W. Simiyu, Ph.D.*

*Date: \_\_\_\_\_ June, 2007*

### SECTION A: PERSONAL INFORMATION

1. Gender:                    i) Male                      
                                       ii) Female
2. Age:                        25–30                      
                                       31–35                      
                                       36–40                      
                                       41–45                      
                                       46–49                      
                                       Over 50
3. Marital status:        Single                      
                                       Married                     
                                       Divorced                  
                                       Widowed                  
                                       Other (please specify)
4. Professional qualification:
- i) S1                          
                                       ii) Dip.Tech ed.          
                                       iii) B.ed                     
                                       iv) B.ed Tech             
                                       v) Untrained              
                                       vi) Other (please specify)
5. Experience in current position:
- i) Less than 5 years      
                                       ii) More than 5 years

### SECTION B: PROFESSIONAL INFORMATION

Please indicate with an X the extent of your agreement with the statement given in the appropriate space:

SA: Strongly Agree

A: Agree

U: Undecided

D: Disagree

SD: Strongly Disagree

STATEMENT	SA	A	U	D	SD
6. All the courses are marketable.					
7. The teaching load in my department is too heavy.					
8. The department has an adequate number of teaching staff for each course.					
9. The department has qualified teachers in all the subjects.					
10. Workshop space is adequate.					
11. Equipment and machines in the workshops are functional.					
12. There is an effective maintenance programme for equipment and machines.					
13. Performance standards of students are high.					
14. Student/staff relationship is good.					
15. There are career guidance and counselling personnel to advise students on academic and social life.					
16. Everything possible is done by the administration to improve my competencies.					
17. I assign duties to teachers on the basis of their qualifications and experience.					
18. I assist teachers in preparing schemes of work.					

19. In your opinion, and in a few **KEY WORDS**, explain why the (popularity/unpopularity) of your department is likely to be persistent for a long time to come.

**END**

Thank you for your co-operation.

## APPENDIX 6: INTERVIEW SCHEDULE FOR HoDs AND HEADS OF SECTIONS

1.
  - (a) How many courses are offered in your department/section?
  - (b) Which courses are marketable in your department/section?  
Why?
  - (c) Which courses are not marketable?  
Why not?
  - (d) What marketing strategy do you use?
2.
  - (a) Do students in your department/section excel in their studies?
  - (b) Why/why not?
3. How adequate and serviceable are the teaching facilities?
4. Is the number of teaching staff per subject adequate?
5. How qualified is the teaching staff?
6. On average, how much time do you devote for departmental/sectional issues other than teaching?
  - one quarter
  - one half
  - three-quarters
7. Do you have a forum for meetings with teachers in your department/section?
8. How effective are channels of communication and dissemination of communication?
9. Which challenges do you face as head of department/section?
10. Do you have any comments or advice you wish to make?

**END**

Thank you for taking your time to share your views with me.

## APPENDIX 7: QUESTIONNAIRE FOR THE DEPUTY PRINCIPAL

*This document is an educational study being undertaken by UNEVOC Centre, Moi University, Eldoret, Kenya, on behalf of UNESCO-UNEVOC, Bonn, Germany, to establish factors that influence the attractiveness of a technical and vocational education and training (TVET) institution. The purpose of this questionnaire is to seek your views on various aspects of this institution. The information gathered will generate some suggestions and recommendations towards the improvement of TVET institutions. You are requested to fill in the questionnaire as accurately as possible. All the responses will be handled confidentially, both during and after the study.*

*Thank you!*

*John W. Simiyu, Ph.D.*

*Date: \_\_\_\_\_ June 2007*

### SECTION A: PERSONAL INFORMATION

1. Gender:                    i) Male                      
                                   ii) Female
2. Age:                        25–30                      
                                   31–35                      
                                   36–40                      
                                   41–45                      
                                   46–49                      
                                   Over 50
3. Marital status:        Single                      
                                   Married                     
                                   Divorced                  
                                   Widowed                  
                                   Other (please specify)
4. Professional qualification:
- i) S1                          
                                   ii) Dip.Tech. ed.          
                                   iii) B.ed.                  
                                   iv) B.ed. Tech.          
                                   v) Untrained              
                                   vi) Other (please specify)
5. Experience in current position:
- i) Less than 5 years      
                                   ii) More than 5 years

### SECTION B: PROFESSIONAL INFORMATION

Please indicate with an X the extent of your agreement with the statement given in the appropriate space:

SA: Strongly agree

A: Agree

U: Undecided

D: Disagree

SD: Strongly disagree

STATEMENT	SA	A	U	D	SD
6. My role is clearly defined.					
7. I am not overloaded in my work.					
8. Students disciplinary action is prompt and consistent.					
9. Teachers perform their work diligently.					
10. The programmes are popular.					

11. Please comment freely on the attractiveness/popularity of this institution

**END**

Thank you for your time and for sharing your views with me.

## APPENDIX 8: INTERVIEW SCHEDULE FOR THE DEPUTY PRINCIPAL

1. How long have you been in this institution as the deputy principal?
2. What is your role as the deputy principal of this institution?
3. What do you believe to have successfully achieved in your role as a deputy principal in this institution?
4. How do you rate the standard of discipline in the institution? (Give a statement for your answer)
5. Is disciplinary action implemented immediately and consistently?  
Why?  
Why not?
6. How do you rate this institution compared to others in terms of:  
(a) Academic standard\_\_\_\_\_ Higher ( ) Average ( ) Lower ( )  
(b) Enrolment\_\_\_\_\_ Higher ( ) Average ( ) Lower ( )
7. What has contributed to the results in:  
6(a) above?  
6(b) above?
8. (a) Which courses are/are not popular in this institution?  
(i) Why?  
(ii) Why not?  
(b) Have the popular courses maintained their status for long?  
(i) Why?  
(ii) Why not?
9. (a) How do you rate the adequacy of the teaching facilities?  
(b) How is the maintenance programme of facilities carried out?
10. How qualified is the teaching staff?  
(a) Why?  
(b) Why not?
11. How adequate is the number of teaching staff?  
(a) Why?  
(b) Why not?
12. Do you experience shortage of teaching staff in particular subjects at all?  
(a) Why?  
(b) Why not?
13. Comment freely about this institution
14. Please give any other comments

**END**

Thank you for sharing your views with me.

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## **UNESCO-UNEVOC Case Studies of Technical and Vocational Education and Training in Selected Countries**

Editor: L. Efison Munjanganja  
Published by UNESCO-UNEVOC  
English

This paper appears as the first volume in the series entitled UNESCO-UNEVOC Case Studies of Technical and Vocational Education and Training in Selected Countries, which is part of the UNEVOC International Library of TVET—an extensive publications programme prepared by the UNESCO-UNEVOC International Centre. The Case Studies of TVET in Selected Countries provide in-depth information on issues of specific importance in the TVET systems of selected countries and regions.

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Cover design: iPicardDesign

ISBN 978-92-95071-01-8  
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