



RESEARCH ARTICLE

PERCEPTIONS OF STAKEHOLDERS' ON FACTORS INFLUENCING STUDENTS' ENROLMENT IN TECHNICAL AND VOCATIONAL SUBJECTS IN PUBLIC SECONDARY SCHOOLS IN KISUMU EAST, CENTRAL, NORTH, WEST AND SEME SUB COUNTIES, KENYA: AN ANALYTICAL STUDY

George Odhiambo Ochwata, Olel, M. A. and *Enose M.W. Simatwa

Department of Educational Management and Foundations, Maseno University, Kenya

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ABSTRACT

Technical and Vocational subjects have remained an integral aspect of the educational sector and is seen as the pivot upon which economic growth and development lies. Owing to its importance, enrolment into these subjects is very crucial in measuring the pace at which skills, attitudes and knowledge are given to the students. However, in Kisumu East, Central, North, West and Seme Sub Counties, enrolment in these subjects has been low since they were introduced in large scale in secondary schools in 1985. This low enrolment may lead to underutilization of the available educational such as teachers, workshops, books and equipment. The purpose of this study was to investigate perceptions of Stakeholders' on factors influencing students' enrolment in Technical and Vocational subjects in Public Secondary schools in Kisumu East, Central, North, West and Seme Sub Counties in Kisumu County. The study was undertaken from the perspectives of three key stakeholders- the students who enrolled for Technical and Vocational subjects, Teachers teaching any of the Technical and Vocational subjects and Head Teachers from schools where the data was collected. Objectives of the study were to; establish students' perceptions on factors influencing their enrolment, establish their attitudes towards Technical and Vocational subjects and to establish the Head teachers and teachers' perception on factors influencing students' enrolment Technical and Vocational Subjects. The study established that; job prospect and Government policy were perceived by all the stake holders as factors that influence enrolment for Technical and Vocational subjects and were ranked first and second respectively. Contrary to previous studies, students had positive attitude towards Technical and Vocational subjects with mean of 3.008 on five point Likert type scale. Perception on parental influence as an enrolment factor was ranked low among all the stakeholders. The study concluded that Job prospect influence students' enrolment in Technical and Vocational subjects and that student have positive attitudes towards the Technical and Vocational subjects and this is not tied to enrolment. The study recommended that government should establish vocational centres attached to secondary schools to facilitate the professional orientation of students with a view of improving enrolment and focusing on both formal and informal employment. The findings of this research are of great importance to the Education Policy makers in the Government and Researchers.

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INTRODUCTION

Skill development and technical training are central to economic and technological development. Skill development improves output, quality, diversity and occupational safety and improves health, thereby increase income and livelihood of the poor (Hartl, 2009). The development of an effective Technical

*Corresponding author: Enose M.W. Simatwa,
Department of Educational Management and Foundations, Maseno University, Kenya.

and Vocational Education system is at the heart of global education reform efforts (UNESCO, 2004). According to UNESCO (2005), technical and vocational education system has fuelled phenomenal economic growth in some countries and fallen short of expectation in others. Important economic and educational reasons exist for the provision of vocational and technical education opportunities for individuals. These include helping them to develop market skills for the labour market in order to become contributing members of the society (Wircenski & Scott, 1995). This emphasis on technical and vocational education systems is in line with the Human Capital Theory, which suggests that education or training raises the

productivity of workers by imparting useful knowledge and skills which make them easily employable. The challenge of many nations has been how to integrate the technical and vocational elements into various educational levels. According to UNESCO (2005), the challenge for secondary educational level was to prepare unprecedented numbers of young people and adult for further learning and for sustainable livelihood. This secondary level education, with its focus on bringing young people into the mainstream of social and economic activity, will need to utilize the opportunities in Technical and Vocational Education in order to play an integral part in sustainable development. Kerre (1990) suggests that the framework for technical education in any nation must be drawn from within a widely recognized acceptable national conceptualization of the role of technical skills and national development, the need to compete favorably in an international market, a clearly defined and articulated technical and vocational training system that responds to the needs of the society, industry and individuals. Technical and Vocational Education prepares a competitive workforce in which workers are trained in technical skills which enables them to contribute positively towards overall economic growth of a country. For this reason, it has become a cornerstone of the World Bank lending programme. Many nations have therefore embarked on institutional arrangements for the delivery of technical and vocational education at various levels including secondary schools (World Bank, 1989).

Soon it was realized that a successful technical and vocational programme would depend on sound basis of general education at the lower levels. The greatest benefit of a sound general education base before entering a vocational course seemed to be the opportunity to focus on technical and vocational learning (Gray, 1993). This made most nations to give general education at early stage of schooling a priority and then introduce technical and vocational subjects in secondary schools as options. According to Ngumbao (2012), enrolment is a numerical count on the number of students accessing Education system. Students' perceptions are very crucial in making decision in enrollment for the optional subjects. Factors that may have influence on perception of individuals in their choice to pursue educational path include Parental influence, Peer influence, Job prospect, Government Policy and teaching methodology. In Kenya, since independence, the government policy has been to bring educational programmes into harmony with the nation's socio-economic needs and aspirations. In 1960, the National Christian Council of Kenya on experimental basis inaugurated village polytechnics to meet the problem of training young people to play constitutive roles in the task of Rural Development (Sifuna, 1980). In 1970, government in collaboration with the National Christians' Council of Kenya came out with a framework within which the village polytechnics were to operate. Subjects taught were carpentry, masonry, tailoring, domestic science, typing, book keeping, sign writing, tractor driving, poultry keeping, agriculture, animal husbandry and academic subjects. The outcome was measured in terms of grade tests (Sifuna, 2003). In the 70's the Government of Kenya introduced technical secondary schools, whose curriculum was structured to provide more of technical and vocational subjects.

Thompsons (1983) observes that Kenya Government and non-governmental organizations launched the youth polytechnics to cater for a massive body of primary school leavers who do not continue with their education at secondary school level. According to Eshiwani (1993), there have been attempts to re-direct education towards more technical and vocational skills especially at both primary and secondary levels. Eshiwani (1993) and Sifuna (2003) support earlier studies by Foster (1965) that vocational subjects lack attraction for students and their parents because white collar work carries more status while vocational subjects are not perceived to lead to good economic prospects. Technical and Vocational Education could be considered to have preceded formal education because early education for the indigenous population was purely vocational. The British government used Technical and Vocational Education to produce critical human resource needed to develop the then Kenya colony. The country needed construction workers, home and office furniture and agricultural workers. The education system placed emphasis on the development of masonry, carpentry, and agricultural skills. Clerical work on the other hand provided better wages and prestige. The policy of mandating vocational education only in segregated African schools did much damage to society's perception of vocational education. Africans noted that European and Indian schools did not offer such education and reached the conclusion that perhaps vocational education was not such a good thing (Republic of Kenya, 1999). The National Committee on Educational Objectives and Policies of 1976 recommended transforming technical secondary schools into national training institutes (Republic of Kenya, 1976). The report emphasized that vocational training should be left to specialized institutions outside general education. Due to the crucial role played by technical vocational education, most developing countries such as Kenya adopted policies that would use secondary school curriculums that combine vocational and technical subjects with academic education (Lauglo, 2004). By providing combinations of academic education and prevocational training, it was anticipated that students would attain a more accurate perception of the non-prestigious jobs available in the developing economies and develop more receptive and realistic attitudes and aspirations towards the world of work (Psacharopoulos & Loxley, 1985).

In 1985, technical and vocational subjects were introduced on a large scale in the 8-4-4 reforms (Republic of Kenya, 1981). The 8-4-4 system was to facilitate the transition of secondary school leavers into employment and further vocational training. Technical and vocational subjects introduced in the system were Agriculture, commerce, home science, and industrial education (building and construction, drawing and design, electricity, metal work, power mechanics and woodworks). Computer studies and business studies were introduced later after curriculum review. Table 1 shows subject groupings required by the Kenya National Examination Council.

From Table 1, it can be observed that selection of the seventh subject is done from the remaining subjects in group II, III, IV or V. The above requirement leaves group IV and V, which has technical and vocational subjects as highly optional. Since a student is required to do seven subjects to get a certificate, they are able to raise the seven subjects from other groups without

necessarily taking any technical and vocational subject. The optionality of the Technical and Vocational subjects has led to small classes due to the small number enrolling in the subjects as reflected in Table 2.

Table 2 shows that students' enrolment in Home Science, Agriculture and Commerce declined up to 2006 but picked from 2007. Reasons for this trend were still not clear. The same trend was depicted in Kisumu East, Central, North, West and Seme Sub Counties (Table 3).

Table 1. Kenya Certificate of Secondary Education examination Subject Groupings

Group	Subject	Subject Selection	Number Required
I	English	Compulsory	3
	Kiswahili	Compulsory	
	Mathematics	Compulsory	
II	Biology	At least two	2
	Physics		
	Chemistry		
III	History and government	At least one	1
	Geography		
IV	Religious education (CRE, IRE, HRE).	Optional	
	Home science		
	Art & design		
	Agriculture		
	Aviation technology		
V	Computer studies	Optional	
	French		
	German		
	Arabic		
	Music		
	Business studies		

Source: Kenya National Examination Council, 2010

Table 2. Students Enrolment in Technical and Vocational subjects at Kenya Certificate of Secondary Education examination between 2004–2008 (Figures in Percentage of the total enrolment)

KCSE/Year/Subject	2004 N=201,434	2005 N=218,439	2006 N=241,983	2007 N=273,066	2008 N=300,794
Home Science	6.00	5.00	5.00	5.00	4.00
Agriculture	49.00	46.00	46.00	44.00	41.00
Commerce	48.00	47.00	44.00	45.00	47.00
Computer Studies	0.01	0.01	0.01	0.01	0.01
Art and Design	0.01	0.01	0.01	0.01	0.01

Source: Kenya National Examination Council, 2009

Table 3. Students' enrolment in Technical and Vocational subjects in Kisumu East, Central, North, West and Seme Sub Counties between 2004-2008 (Figures in percentage of the total enrolment in the Sub Counties)

KCSE/Year/Subject	2004 N=2,743	2005 N=3,012	2006 N=3,431	2007 N=3,902	2008 N=4,723
Home Science	6.84	4.56	5.78	4.50	4.42
Agriculture	34.40	28.00	28.60	24.10	31.16
Commerce	49.20	46.80	44.50	41.50	34.50
Computer Studies	0.00	0.00	1.12	0.80	0.70
Art & Design	1.03	1.09	2.00	0.06	0.10

Source: District Education Office, Kisumu

NB: Business Studies is a combination of Economics, Commerce and Accounting.

Table 4. University joint admission board cluster subjects

Degree Programme	Cluster 1	Cluster 2	Cluster 3	Cluster 4
Bachelor of Business Management	Mathematics	English or Swahili	Any group III	Any group II, III, IV or V
Bachelor of Architectural studies	Mathematics	Physics	Any group III	2 nd group II or III or IV or V
Bachelor of science (Computer Studies)	Mathematics	physics	2 nd group II or III	Group II or III or IV or V
Bachelor of science (clothing textile and interior design)	Mathematics	Any group II	Any group III	2 nd group II or III or IV or V
Bachelor of science (agriculture)	Bio	chem.	Mathematics or physics	English or group II or III or IV or V
Bachelor of Arts (fine art)	Eng or Swahili	Mathematics or Group II	Any group III	Mathematics or group II or III or IV or V

Source: University Joint Admission Board, Kenya 2008/2009.

Table 3 provides enrolment trend from 2004 to 2008 in Technical Vocational subjects in East, Central, North, West and Seme Sub Counties. There are a specific number of learners per class which is recommended to be served by one teacher. This is known as Pupil Teacher Ratio. The recommended Pupil Teacher Ratio in Kenya is 1:40 for compulsory subjects and at least 1:20 in optional subjects (Republic of Kenya, 2005). Where the number of pupils fall below the required ratio, then it is assumed that the teacher, the classroom and other facilities are underutilized. This is an indication of inefficiency. According to World Bank (2005), the cost of staffing secondary schools is high because teacher assignment must take into account content expertise as well as pupil –teacher ratio. Teachers are specialized in particular subject areas, making teacher deployment more complex. Few Technical and Vocational subjects offered are optional and that they are offered in few schools. This implies that many teachers are underutilized and so are the classroom spaces. This entails wastage. Despite the sustained allocation of resources and notable achievements in overall student enrolment, the sector still faces major challenges. Some of these challenges are related to efficiency in access and teacher utilization in secondary school's optional subjects. Enrolment is a numerical count on the number of students accessing education in an education System. Knowledge of students' aspiration and perceptions play an important role in Education Planning process (Convoy, 1998). Students' perceptions are very crucial in making decision in enrolling for a particular Technical and Vocational subject. According to Ngumbao (2012), factors that may have influence on individuals to pursue a specific education path include government policy, parental influence, peer influence, job prospect and teaching method. Therefore it is vitally important that education leaders gain understanding on the causes of the trend with specific reference to Students', Teachers' and Head Teachers' perceptions of factors influencing enrollment in Technical and Vocational subjects in Public Secondary Schools.

Research Questions

- i) What are the students' perceptions on factors influencing their enrolment in Technical and Vocational subjects?
- ii) What is the attitude of students towards technical and vocational subjects?
- iii) What are the perceptions of Head teachers and Teachers on the factors influencing Students' enrolment in Technical and Vocational subjects?

Synthesis of Literature on Factors Influencing Students Enrolment in Technical and Vocational Subjects in Secondary Schools

The 1964 Ominde Commission in response to the challenges facing vocational education in Kenya recommended the conversion of the then Government trade schools to technical secondary schools to prepare graduates to enter Technical and Vocational Education and Training. In 1981 Presidential Working Party on Second University made crucial recommendations in favour of Technical and Vocational Education and Training. The first one was to establish a

technologically based University. This called for the need to have the school curriculum with technical subjects. This led to the inclusion of technical and vocational subjects in primary and secondary curriculum. Most schools offer technical and vocational subjects in line with the ministry of education's policies, which is based on the size of the school (number of streams). Schools with single streams may choose only a few options and this would limit the number of students enrolling for these subjects (Table 1). In 2003, the Government announced the scrapping of Technical and Vocational subjects from secondary schools to the tertiary institutions. This decision was later reversed but the status for the subjects were already lowered and students withdrew from the subjects. Davies, Telha, Hutton, Adnett and Coe (2004) found out the Government can affect the learners' choice directly when making a subject compulsory or indirectly by changing the context within which subject choices are made. This, they found out after conducting a study on the choice of optional subjects in English secondary schools. According to UNESCO (1987) a major drawback for technical and vocational education in certain countries is its low status and insufficient training facilities to produce middle level technical personnel. The low status and insufficient training facilities tend to restrict the enrolment of students in this area. According to Kenyan University Joint admission board requirement for degree programmes, there are four cluster groups of subjects. The fourth cluster is where the technical and vocational subjects fall. There are alternative subjects which go with the technical and vocational subjects and this means that a student can go for a degree programme without necessarily doing technical and vocational subjects (s) at secondary school level. Table 4 is an except for the Joint Admission Board cluster subjects. Africa Union observed in 2007 that poor public perceptions of technical and vocational subjects are sometimes created by Governments when they put emphasis that technical and vocational education is to keep dropouts from the streets, rather to train an effective skilled workers for employment Market.

Table 4 shows that groups four and five subjects fall under cluster four. In this cluster the subjects in group four and five have alternatives, meaning a student can proceed to university even if he does not take any of the technical and vocational subjects. For example, a student who plans to do Business Management at degree level does not necessarily need to take Business Studies as a subject (Table 4). Such students may not bother to enroll for the subject at Kenya Certificate of Secondary Education examinations level. This scenario also applies to the other Technical and Vocational subjects reducing their status to a level where they are not important. This position is supported by Mwiria's report of 2002 that the popularity of vocational in some schools has a lot of to do with the immediate post-secondary school opportunities especially in higher institutions of learning. The university admission policy may have negative impact on the enrolment in technical and vocational subjects in secondary schools.

A research survey by Werfhorst, Sullivan and Cheung (2003) on the impact of family background (social class, cultural and economic capital) on the choice of subjects in secondary and tertiary education in Britain found that, parental employment had a significant role on subject choice. This position was

supported by Osoro, Amundso and Borgen (2004) who conducted a study to identify factors that influence career decision making of high school students in Kenya. The study indicated that parents play a major role in the career decision making of students. This in turn guides the students on which subjects to choose at secondary school. Report of a Kenya case study on Vocationalized secondary schools by Mwiria (2002) and Lauglo (2004) found that there are many students who are genuinely interested in vocational subjects but who end up dropping them because of pressure from their parents. In 2007, Oketch and Mutisya (2007) conducted a study on parental aspiration for their children's education attainment in Kenya. Their findings established that the aspirations differ by area of residence. Those from non-slum areas aspire that their children reach at least tertiary level of Education while those from slums favored achievement of just primary level of Education. Kenya education system requires secondary school students to choose subjects that they will sit for in form four examinations at the end of the secondary cycle (Kenya National Examinations Council, 2000). This is often done at the end of form 2. Mwiria (2002) found that in most schools, vocational subjects are more common among average or below average students and more unpopular with top students. His further findings were that in other schools, students are tested before being allocated the vocational subjects. In Queensland, studies by Atwe (2005) show that students' selection of subjects depends on the overall performance rating of an individual. Students are rated according to their performance at junior secondary level and then are advised to make choices on the subjects based on their abilities, strengths and aspirations. The findings of this study are similar to the Kenyan situation where students may be required to choose subjects according how they perform in Form 2.

A previous report by UNESCO (2006) on investment in education indicates that there is a direct relationship between probability of employment and demand for education. If the probability of getting employed after completing education is low, demand for education is also likely to be very low. Students may make subject choices based on their aspirations that would provide them with opportunities to get employment in future (Atweh, 2005). Many secondary school students are faced with the reality that they are to enter the occupational world and have to name their choices on specific subjects. In Kenya, Technical and vocational training has been less preferred by many because the informal "Jua Kali" sector produces trained apprentices with same practical experience (Republic of Kenya, 2003). This has created a situation in which the learner believes that even if he does not choose Technical and Vocational subjects, he can still have opportunity of doing them after school. A case in point is where a student decides not to take computer studies because he can still do computer packages after school. Sunema (2002), while conducting a study on subject choice at senior secondary schools in Papua New Guinea, established that at times some students may influence their friends negatively or positively to enroll for a subject. In the study, it was found that there were some students who were quite influential to the point that they could convince others to take or leave some subjects. The same was established by Mwiria's case study on Technical and Vocational subjects in Kenya in 2002.

Attitude impels people to react to situations or prepositions in a way that can be called favorable or unfavorable (Guilford, 2004). For Students, the general sources of attitude are external and internal influence. External influences include teachers, parents, Peer, Job prospects. Internal influence may come as a result of students making choices from perceptions towards a career. Mwiria (2002) noted that in Kenya, the view that parents hold on Technical and Vocational Education greatly influence their attitude which gears them towards influencing their children. It is believed that this could be the reason why many students are not enrolling for the subjects at Secondary level. As noted by Osuala (1992), it is not surprising that students are not interested in Technical and Vocational Subjects. This, he noted after studying the students attitude towards vocational subjects in Nigerian schools. This view was shared by Foster, 1965, Eshiwani, 1993; Mwiria, 2002 and Sifuna, 2003 all who concurred that the Technical and Vocational subjects lack attraction due the societal negative attitude. This has influenced enrolment trends in various parts of the world as follows; In Finland, there exist vocational schools which provide basic vocational training to youths who cannot advance for formal education (UNESCO, 1985). This means that the vocational education is offered outside the formal education. This policy is similar to that of Canada where short vocational courses are offered to students who do not wish to prolong their formal education (UNESCO, 2000). In USA, by the end of secondary school level of education, most students shall have decided where they would follow a primarily academic programme leading to further formal education at college level or a vocational training leading to employment. The Technical And Vocational education policies in Finland, Canada and USA are in line with what Msiska (1994) suggested that vocational education should be left to specialized institutes outside general education and should be employment based as far as possible. UNESCO (2000) and Msiska (1994) studies mainly focused on the technical and vocational training meant for post-secondary institutions. An example is in Finland where the vocational and technical aspects are offered outside the formal education. In Africa, diversified secondary curriculum studies was seen as a means to a greater equality of opportunity because it would cater to wide range of talents and prepare for a wide range future activity, than do in purely academic curricular (Lauglo, 2004). Technical and Education Sector in most African countries has long been only a small part of general education with very few enrolment due to low attitude towards the subjects (UNESCO, 2001). Changes of policy with respect to technical and vocational education are the result of this sector's ineffectiveness in training skilled worker. Table 5 shows the percentage enrolments in Technical and Vocational Education.

Table 5. Technical and Vocational Education- Enrolments in some African Countries

Country	% Enrolment
Lesotho	1
Nigeria	Less than 1
Chad	2.2
Senegal	1.9
Botswana, Togo, Uganda	7
Cameroon, Mali, Gabon	Over 10

Source: Bennel (1999)

Table 5 shows that most of enrolments in Africa countries are less than 10%. In Tanzania, Secondary schools are highly selective and the aim of curriculum diversification is to prepare students for specific employment or training (Psacharopoulos & Woodhall, 1985). At the lower Secondary, students choose between academic stream and four vocational subjects; Commerce, Agriculture, Technical or Domestic Science. According to Bennel (1999), high cost of technical and vocational education is due to a smaller size of the classes and the need for expensive facilities and teaching materials. Ethiopia has renewed its interest in technical and vocational education and training where Technical and Vocational Education and Training is increasingly seen as the master key to poverty alleviation and social cohesion and chance for development (UNESCO, 2004). According to Black (1997), future strategies for Technical and Vocational Education and

Training development and delivery should involve introduction of Technical and Vocational Education and Training subjects integrated into primary and secondary curricula for all students. In 1990's, the World Bank shifted its priority away from school based Technical and Vocational Education citing high cost and mismatch between what is learned and labor market needs. However, there is a fresh awareness among policy makers in many African countries and donor community of the critical role that Technical and Vocational Education can play in National development (Afeti, 2007). The increasing importance that African governments now attach to Technical and Vocational Education is reflected in various poverty Reduction Strategy Papers. The African Union has a vision of 'an integrated peaceful, prosperous Africa, driven by its own people to take its rightful place in global community and the knowledge economy' (African Union, 2007).

This vision is predicted on development of the continents human resources. In its plan for Action for the Second Decade of Education 2006-2015, the African Union recognizes the importance of Technical and Vocational Education and Training as a means of empowering individuals to take control of their lives and recommend therefore the integration of vocational and training into general education system (Afeti, 2007). Thus, the African nations are re-emphasizing on the importance of Technical and Vocational Education, which had been previously abandoned by the World Bank due to budgetary constraint as well as low enrolments. Studies on secondary schools level with specific reference to Students', Head Teachers' and Teachers' perceptions of Technical and Vocational subjects have not so far been emphasized. Literature on attitudes towards Technical and Vocational issues focuses on students in tertiary institutions.

A study by Palmer (2006), on Technical and Vocational enrolment in secondary schools in Sub-Saharan Africa, Kenya's enrolment on Technical and Vocational Education subjects at secondary level was about zero point six percent. One of the major contributing factors being negative attitude of the students towards the Technical and Vocational subjects. Rwanda had the highest enrolment with 35 percent. Part of the reasons for this is due to the attitude the society have on the Subjects.

Table 6 indicates that Technical and Vocational subjects in secondary schools in the selected countries take a very small proportion except in Rwanda. If these countries are to realize significant contribution to the economy, then the enrolment levels need to be raised. In Kenya, the secondary schools use diversified curriculum where much content is overwhelmingly general in nature but include vocational subjects as minor portion of the students time table (Lauglo, 2004). Technical and Vocational Education is considered essential because a country cannot achieve economic and social development without a skilled productive force that can meet the changing requirement of its environment (Atchoarena and Caillods, 1999). According to the Education sector policy (World Bank, 1980), farm productivity increases on average 7.4 percent as a result of farmers having completed four years of school. Agriculture contributes 16.3 percent to Gross Domestic Product and absorbs 75% of the total workforce. Industry contributes 18.8 percent while that of trade and service is 65.1 percent (Woltjer, 2006). In this light, the Kenya government has been making efforts to ensure that the Education system it embraces integrates technical and vocational subjects in secondary schools. In an era characterized by the challenge of rapid technological change, globalization, economic uncertainty and diminishing resources, it is importance that all stakeholders work together to develop legislation and policies, establish the institutions structures and redesign curricular to ensure that Technical and Vocational Education caters adequately to the varied needs of all members of the society to enter or re-enter the World of Work (UNESCO, 1999). Despite all these benefits of Technical and Vocational Education, many people still do not perceive the importance of the subjects in Secondary school level.

The belief that Technical and Vocational subjects is for less academic and for the poor is enhanced by the view the society hold on informal sector activities. Many students associate Jua Kali informal sector with manual labour which they equate with Technical and Vocational subjects in schools. Due to this, the majority tend to avoid some of the Technical and Vocational subjects especially those with practical components. In Kenya, the Jua Kali as an informal sector was traditionally run in form of small industries which mainly dealt with blacksmithing activities (Maundu, 1992). Among the initial urban Jua Kali enterprises introduced were motor mechanics, carpentry, masonry, tin-smithing and blacksmithing. With time the sector gradually expanded to comprise of welding, electrical, painting, tailoring, small business like hawking and hotels, leather dealings, Barbers, saloons and boutiques, Bicycle operators, Taxi operations, carpentry, masonry, plumbing and constructions. Sessional Paper No. 1 of 1986 addressed this sector as a primary vehicle for social and economic development (Republic of Kenya, 1986). In 1992, the Sessional Paper No. 2 focused on specific means of promoting the sector and how to link it to the big industries (Republic of Kenya, 1992). Kenya's business environment is characterized by a large number of Micro and Small Scale Enterprise which account for roughly seventy five percent of total employment and an estimated eighteen percent of Gross Domestic Product. However, human recourse development in medium and small enterprises is also facing various constraint including inadequate technical and

entrepreneurial skills. A suitable support of human resource development in those sectors will be needed in order to drive competitiveness. The technical and vocational subjects in Secondary schools have been geared towards immediate or later entry into specific occupations as either self-employed or into a formal sector. About eighty percent of jobs in poor countries require some form of vocational skills (Lauglo, 2004). According to Hyslop (2000), Technical and Vocational subjects should aim at keeping students option open after secondary schools. They can go to college or engage in paid employment and farther education simultaneously. The Technical and Vocational subjects in schools therefore provide basic skills that are vital to production and commercial survival in both formal and informal sector to raise productivity and income. According to the World Bank (2004) analysis, Kenya's informal sector constitute 98% of all business in the country, absorbing annually up to 50% of new non-farm employment sector. The sector had a growth rate of 12-14%, contributing to 30% of total employment. From this contribution, it can be derived that the acquisitions of basic skills in form of Technical and Vocational subjects in schools equip the learners towards active participation in both formal and informal sector. By increasing the capacity of informal sector to absorb workers; the unemployment problem would be eased. Even though the Technical and Vocational sector plays a very important role to the economy, the crave for white collar jobs make students ignore the Technical and Vocational subjects at Secondary school level (Mwiria, 2002).

Teachers are the central point of learning in classroom. This is because he decides whether the subjects will be of interest to the student or not. According to Guilford (2004), two general sources of perceptions are external influence and internal influence. External influence entails the professional grounding on the Technical and Vocational subjects. The teaching profession particularly with reference to the Technical and Vocational Subjects often suffers from low standing due to the nature of the teacher training during In-service or Pre service. In Scotland, a study commissioned by the Scottish Government on Perceptions towards Vocational learning revealed that Teachers' and Managers' perceptions were likely to be influenced by the introduction of programmes such as skills of work within the Education System, their professional practice and work load. The national policy on students' progress to the higher levels tends to influence the teachers and administrators in advising the learners on which courses to go for. Dalton and Smith (2004) observed that a teachers' interest in creating a work place relationship is hindered by a workload and other restrictions such as wider curriculum demand. This make the teachers perceive Curriculum Based Establishment as one factor that may make them not effective in delivering the skills to the learners.

The success and enhancement of Technical and Vocational Subjects in a school may significantly depend on how the Head teachers view the subjects (Chakamba, Jumo, Edziwa & Misozi, 2013). Research done in Zimbabwe by Chakamba and others found out that School Head teacher attitudes were that a majority were not supportive of the Technical and Vocational subjects arguing that the subjects waste students' time which should be taken by the academic subjects. This tended to discourage many students from taking the subjects at the final level.

In Kenyan School set up, Head teacher and Teachers comprise the most important staff as they are perceived as the principal custodian of Knowledge, skills and attitudes (Onyango, 2001). Most of them felt that even though they hold such importance, the access of learners in some subjects is directly or indirectly influenced by the Government policy on registration. Coombs (1968) asserts that educational problems can be overcome if the people concerned candidly and systematically diagnose their educational problems and plan their educational future in the light of what they uncover in the diagnosis. This study is set to diagnose the perception of stakeholders of factors that influence the enrolment in technical and vocational subjects in public secondary schools in Kisumu East, West and North Sub Counties. Most studies in Kenya have concentrated on the relationship between skills acquired in youth polytechnics and employment of graduates, whether the graduates have been able to find work related to their training, socio economic contribution to the communities. Studies on status of Technical and vocational subjects in secondary schools have not been done. There was therefore a need to investigate stakeholders' perception of factors which influence enrolment in Technical and Vocational subjects in public secondary schools. This was the gap that this study sought to fill. There has been so far no study on stake holders' perceptions of factors influencing the enrolment trend in these subjects not only in Kisumu East, West and North Sub Counties but also in Kenya as a whole. A study report on technical and vocational training (Republic of Kenya, 1989) looked into national colleges. The study addressed the training capacity of each of these institutions in the light of demand for human capital formation. It never addressed enrolment status in secondary schools. This study addressed students' perception in relation to enrolment in technical and vocational subjects in secondary schools.

The Koech Commission (Republic of Kenya, 1999) established that enrolments in business oriented courses and applied sciences exceed technical disciplines in educational institutions but it never sought the reasons behind the phenomena. A key finding of World Bank (2002) study on development of vocational skills in secondary schools is that the Technical and Vocational Education and Training subjects were much more costly per student.

Table 6. Enrolment in Technical and Vocational Subjects in Secondary schools in selected countries in the Sub Saharan Africa in 2004

Country	Enrolment in Technical and Vocational Education Total in '000	Total secondary school enrolment('000)	Technical and Vocational Education Enrolment as Percentage of Total Secondary enrolment
Ethiopia	106	4506	2.4
Ghana	21	1350	1.6
Kenya	15	2420	0.6
Rwanda	72	204	35.3
South Africa	260	4447	5.8

Source: UNESCO, 2005

This is because of smaller classes and greater expense on facilities, equipment and consumables. Unless a subject can be taught to a full class of students, running costs will be more twice that of non-workshop academic subjects. This finding was clear on the fact that vocational schools were faced with the problems of small number of students in a class taking the Technical and Vocational subjects. However the factors responsible for the small numbers was not addressed. This study is set to address the stakeholders' perception of factors influencing the enrolment in technical and vocational subjects in public secondary schools in Kisumu East, Central, West, North and Seme Sub Counties. Mwiria (2002) conducted a case study in Kenya on vocationalization of secondary education and found out that the cost of offering technical and vocational subjects in secondary schools are very high. One of the reasons given for this was that most of the facilities are underutilized but he never gave the reasons why the facilities are underutilized. Sifuna (2003) conducted a survey report on the cost-effectiveness of diversifying the school curriculum in Kenyan Education system. He compared the purely academic curriculum and on the other hand the one which incorporated some minor aspects of Technical and vocational subjects (Diversified Curriculum). His findings established that diversified secondary educations are substantively more expensive with no demonstratable benefit. This study did not give possible reasons why the subjects were expensive and the enrolment trend was not addressed.

According to Lauglo's (2004) study on vocationalization of secondary school in Kenya, commissioned by the World Bank to conduct a study on the pros and cons of secondary schools becoming more closely and explicitly related to preparing young people for the world of work. The study focused on the provision of vocational and technical subjects in secondary schools in Kenya, whether the introduced subjects are cost effective. Its findings were that the initial cost of establishing workshops for the practical subjects were high but after that the cost reduced. He further established that some of the workshops were underutilized. Lauglo's study did not address the factors that influenced the enrolment in the vocational and technical subject in secondary schools. This study was set to establish the stakeholders' perception of factors influencing enrolment. Mupinga, Busby and Ngatia (2006) conducted a study on needs and challenges facing technical and vocational education and training institutions in Kenya. The study was conducted in one training institute and one national polytechnic and they found that most of these technical institutes had obsolete machines and inadequate qualified human personnel. Although the study was on Technical and vocational training, it was based on post-secondary institution. This study focused on secondary school level.

In 2006, Nyaberi conducted a study on factors influencing enrolment in technical and vocational training in Kisii Central and focused on the technical training institutes, the trend of enrolment in various courses. The study focused on the post-secondary institutes. This study on the other hand focused on secondary school level. Ngatia (2006) did his on challenges facing technical and vocational education and training institutions in Kenya. This study on the other hand is on Technical and Vocational subjects in Public Secondary

schools, Perception of factors that determine the students enrolment. The findings could therefore provide a prerequisite information for the challenges facing the tertiary training institutions. Simiyu (2007) studied the factors influencing attractiveness of a Technical and Vocational Education and Training institute, a case study of Kaiboi Training Institute. His study was mainly on what reasons students consider to go Kaiboi Technical Institute. The study was based on post-secondary institution. Nyangara, Indoshi and Othun (2010) conducted a research on Home Science Education in Kenya-the need to review its pedagogical approach. The study evaluated the way in which Home science Education in Kenya had been previously reviewed and to document resultant changes. Even though Home Science is one of the Technical and Vocational subjects dealt with in this study, this study focused on enrolment dynamics through establishing the stakeholders' perception of factors influencing enrolment in it at Kenya Certificate of Secondary Education Examinations level.

Indoshi, Waga and Agak (2010) also conducted a research on factors determining students' and teachers' attitude towards art and design curriculum. The study was based determining factors that determine the teachers and students attitude towards art and design. Their study had attitude as a dependent variable while in this study the dependent variable is enrolment. In 2012, Ngumbao conducted a study on factors influencing Youth enrolment level in Public Youth Polytechnics in Mombasa County. The study's finding was that gender perception influences enrolment level. The study was based on Youth Polytechnic while this study focuses on public Secondary Schools. Ngige (2012), conducted a study on factors affecting acquisition of Vocational Skills among youth in Maranda Division but the study focused on youth polytechnics unlike this study that focuses on stakeholders' perception on Technical and Vocational enrolment in Public Secondary schools.

Theoretical framework

The theory that guided this study was the Rational Choice Theory. It was developed by George Homans (1961) and it was used to study; the growing sense of the importance of information in making rational choices and the process by which separate individual action are combined to produce social outcome. The theory indicates that complex social phenomena can be explained in terms of the elementary individual action of which they are composed, that individuals are seen as motivated by the wants or goals that express their preferences. Rational Choice Theory assumes that human beings choose lines of behavior to make rational calculations with respect to the utility and alternative lines of conduct, with reference to the preference hierarchy and cost of each alternative. In this study, Rational Choice Theory was used to guide in understanding the perception of factors that determine enrolments in Technical and Vocational subjects. Technical and Vocational subjects are optional and are subject to students' preferences in terms of choice. Job prospect, Government policy, Peer influence, Parental influence, performance in form one and two and Teacher methodology are the independent variables identified in this study that could possibly influence students' enrolment in Technical and Vocational subjects in public secondary schools. A student

may admire his parents' occupation or neighbours' and this perception may make him consider his choice on which subjects to enroll for. Rational Choice Theory asserts that individuals tend to choose lines which would make them maximize their satisfaction but at a lower cost. Peer influence may also make one to choose a particular subject. According to Mwiria (2002), Curriculum Based Establishment of a school dictates the number of Technical and Vocational subjects to be offered by a school. Those with few streams are limited to few numbers of optional subjects they would offer and this would in turn have a direct influence on enrolment. Some schools peg enrolment on the students' performance in Forms one and two. A combination of these factors may have a direct influence on enrolment. The theoretical underpinning of the study was that students make choices where there are options according to their perception or goals that express their preference hierarchy and cost of each alternative.

Research methodology

Descriptive survey design was adopted in this study. The study was based on Rational Choice Theory developed by George Homans in 1961. The study population consisted of 62 Head teachers, 150 teachers who teach any of the Technical and Vocational subjects and 5955 students who enrolled in the Technical And Vocational subjects at Form Four in 2009. Simple random sampling technique used was based on Educational and Psychological measurement formulae for estimating sample size. The sample consisted of 52 schools and their respective principals, 108 Technical and Vocational teachers and 361 form four students. Questionnaire and interview schedule were used to collect data. Face and content validity of the instruments was established by experts in Educational administration, whose input was incorporated. Reliability of the instrument was established through a pilot study in ten percent of the schools and the reliability coefficients were 8.0 for technical and vocational teachers, 7.8 for students and 8.2 for head teachers. Quantitative data were analyzed using descriptive statistics in form of frequency counts, percentages and means. Spearman's rank co-efficient was used to rank perception of various factors. Qualitative data were transcribed and analyzed in emergent themes and sub themes.

RESULTS

Return Rate

Out of 361 questionnaires issued to students, only 321(89%) were returned while out of 52 head teachers, only 47(90.4%) returned. One hundred and eight (100%) technical and vocational subject teachers returned the questionnaires.

Demographic Characteristics of Headteachers

The sample consisted of 52 schools drawn from a targeted sample of 62 public secondary schools. In each school, the respondents were the Head teacher, 2 Technical and Vocational Teachers and 7 Students who had enrolled for Technical and Vocational subjects at Form Four in 2009. Table 7 displays the characteristics of the sampled schools.

School Data

Table 7. Type of Schools by Gender

Type	Frequency	Percentage
Boys only	14	26.9
Girls only	26	50.0
Mixed	12	23.1
Total	52	100

From Table 7, out of 52 schools whose students responded, 26.9% were pure boys' schools only, 50 percent pure girls' schools and 23.1% mixed schools.

Table 8. Gender of Student Respondents

Gender	Frequency	Percent
Male	147	45.8
Female	174	54.2
Total	321	100

From Table 8, total of 321 students filled the questionnaires out of the 48 sampled public secondary schools that offered Technical and Vocational subjects in Kisumu East, Central, North, West and Seme Sub Counties in Kisumu County. 147 students that made 45.8 percent of the total student were males while 174 were females.

Research Question One: The research question responded to was: What are the students' perceptions on factors influencing their enrolment in Technical and Vocational subjects?

Spearman's rank co-efficient revealed the following results as shown in the Table 9.

Table 9. Students' Perception on factors influencing their enrolment in Technical and Vocational Subjects

Factor	Spearman Rank (rho)
Job prospect	0.157
Government policy	0.059
Performance in forms I and II	0.040
Peer influence	0.018
Teachers methodology	-0.053
Parental influence	-0.070

From Table 9, job prospect was ranked first with ranking co-efficient of 0.157. The results show that students' enrolment for Technical and Vocational subject is highest because of the perception of getting formal jobs. Parental influence has Spearman's rank co-efficient of -0.070, ranking last out of the six perceived factors. Performance in Forms one and two ranked third with ranking co-efficient of 0.040. Peer influence ranked fourth with Spearman's rank coefficient of 0.018. The result of the study show that teaching method have rank co-efficient of -0.053.

Government policy ranked second with 0.59.

Table 10 shows the frequency of career guidance by teachers in Public Secondary schools in Kisumu East, Central, North, West and Seme Sub Counties.

Table 10. Frequency of Career Guidance by Teachers

	Frequency	Percentage
Very Often	45	41.7
Often	31	28.7
Rarely	32	29.6
Total	108	100

From Table 10, the study established that 41.7 per cent of the teachers very often guide the students on career subjects. 28.7 percent often guide the students while 29.6 per cent rarely guide the students on which Technical and Vocational subject to enroll for

Research Question Two: The research question responded to was: What is the attitude of students towards Technical and Vocational subjects?

Eight statements were used to select the attitudes views held by the students. They were asked to indicate their level of agreement or disagreement with each statement on a five point Likert scale. Their responses were compiled and a mean rating for each statement computed (Table 11).

Table 11. Mean Rating of Attitude of Students towards Technical and Vocational Subjects

Item	Mean (n = 321)
Very important to students	3.360
Teaching methodology discourage enrolment	3.300
Technical and Vocational registration is high	3.30
Technical and Vocational subjects are expensive	3.210
Technical and Vocational subjects are good for budget students	3.110
Technical and Vocational teacher inadequate and limit enrolment	2.710
Technical and vocational facilities are inadequate	2.560
Technical and Vocational time allocation inadequate	2.470
Overall Mean Rating	3.008

From Table 11, the mean rating for each of these statements lies fairly above the 'undecided' position (3.000) on the Likert Scale. This indicate that the student have positive attitude towards the Technical and Vocational subjects. The finding in Table 11 shows that time allocation seem to have negatively affected enrolment in Technical and Vocational subjects more at 2.470, followed by availability of facilities at 2.560, then inadequate Technical and Vocational teacher at 2.710. Students who believed that Technical and Vocational subject were good for bright students are at 3.100. Technical And Vocational being expensive at mean rating of 3.210. Teaching method, high registration fee and students view Technical and Vocational subjects to be important were 3.30, 3.35 and 3.36 respectively.

Research Question Three: What are the perceptions of Head teachers and Teachers on the factors influencing Students' enrolment in Technical and Vocational subjects?

From Table 12, job prospect is highly perceived by both head teachers and teacher as an enrolment factor into technical and Vocational subjects. The rank coefficient for the Head teachers is 0.148 while that of teachers is 0.218. This perception is also held by the students who enrolled for the Technical and Vocational subjects. Education is an investment and the

students would like to invest their efforts in such subjects that they perceive would lead them to good employment. Majority of the Heads interviewed noted that the students who had positive attitude towards some Technical and Vocational subjects perceived that these subjects would enable them to get formal employment rather than being self-employed. Government policy has Spearman's rank co-efficient of 0.036 for Heads and 0.313 by teachers.

Table 12. Head teachers and Teacher's Perception on Factors influencing Students' Enrolment in Technical and Vocational Subjects

Perception factors	Spearman's rank coefficient (rho)	
	Head teachers (n=48)	Teachers (n =108)
Job prospect	0.148	0.218
Government policy	0.036	0.313
Peer influence	-0.315	-0.018
Parental influence	-0.112	-0.071
Performance in form 1 and 2	-0.027	-0.100
Teaching methodology	0.121	-0.129

Table 13 shows the enrolment proportion per Technical and Vocational Subjects in Public Secondary Schools in Kisumu East, North and West Sub Counties.

Table 13. Proportion of Technical and Vocational subjects Enrolment

Subject	No. Enrolled	Percentage
Aviation Technology	05	1.6
Art and Design	07	2.2
Business Studies	180	56.0
Agriculture	60	18.7
Home Science	50	15.6
Computer Studies	19	5.9
Total	321	100

From Table 13, it can be observed that Business Studies subject had the highest enrolment with 56 percent (N=180) followed by Agriculture 18.7percent (N= 60). 15.6 percent enrolled for Home Science and these were mainly in Girl's schools, 5.9 percent Computer Studies while 2.2 percent and 1.6 percent respectively for art and Design and aviation technology. During in-depth interviews with the head teachers, 46.2 percent noted that the general trend of enrolment in Technical and Vocational subject is on the decline but took exception with Agriculture and Business Studies. Twenty five point two percent reported that the trend is unpredictable. Seventeen percent noted that the trend is increasing while 11.5 percent thought it is steady.

Discussion

Students chose subjects that would give them high chances of being employed rather than self-employed. This is consistent with the findings of Atwe (2005) that students may make subject choices based on their aspirations that would provide them with opportunities to get employment in future. This explains why most students enroll for Business Studies anticipating better and highly paying jobs in future. Previous reports on investment in education (UNESCO, 2004) indicate that there is direct relationship between the probabilities of employment and demand for education. If the probability of

getting employment after completing education is low, the demand for education is also low. The students perceived that good performance in particular Technical and Vocational subjects at forms one and two would give them a chance to comfortably advance in them towards getting good jobs. This differs with Mwiria (2002) study that in Kenya, Technical and Vocational subjects are common among average or below average students and more unpopular with top students. In Queensland, Atwe (2005) showed that the selection of subjects depend on the performance ratio of an individual at the junior secondary schools. This study also established that in Kisumu East, Central, North, West and Seme Sub Counties, the selection of Technical and Vocational subjects for Kenya Certificate enrolment depend on how an individual performed in these subjects at Forms one and two. The students perceived that some of the rules and regulations pertaining to subjects' enrollment do influence their choices. In Kenya secondary schools, out of the seven subjects required, Technical and Vocational subjects are optional and one can avoid them at form four level and still further in them later. The registration policy in public universities where one can do a course without necessarily doing a related subject at secondary school. This has watered down the importance of Technical and Vocational subjects. This finding is in agreement with Mwiria's findings in 2002 that a government policy can influence the direction of access to the Technical and Vocational education.

Previous studies (Sunema, 2002) on friends influence on what subjects to enroll for found out that peer can have either positive or negative effect on subject choices. In this study, it is found out that friends have little influence on choice probably due to strong and active guidance and counseling department in schools. The result of the study of teaching method may have a negative impact on Technical and Vocational enrolment. A teacher is the central point of learning because he decides whether the subject will be of interest or not. A student may like a particular subject very well but because of poor teaching method, such a student may lose interest on the subject. The majority of the student did not perceive parental influence as a factor of encouraging enrolment for Technical and Vocational subjects. This is contrary to Okeke (2000) and Osoro (2004) research finding that parental influence is significant in choosing subjects. The contrary findings could be as a result of the fact that most secondary school students tend to rely on career guidance in schools. There is career guidance in most of the schools under study. Most teachers interviewed said that they start guiding the students on careers at the end of form two when they are to choose eight or seven subjects they are to do in form four. The guidance entails both verbal and study of career guidance booklets. Majority of the students choose the Technical and Vocational subjects after consulting their teachers on future career. This factor was evident in most schools implying that career guidance was active. 70% of the Technical and Vocational teachers interviewed agreed that they often do career guidance and this could have probably influenced the students' choice towards Technical and Vocational subjects. The majority of the Head teachers said that every year they do organize consultative meeting between teachers, parents and student to discuss subject choices. This is often done in either second term or in the third term. This finding concurs with Patton and McCrindle (2001) who

investigated the role of career information and Vocational Guidance in students post-school planning in Australia. He reported that students who got information on career jobs would go for subjects related to such jobs. According Atweh (2005), some subjects are seen as pre-requisite for certain careers and hence this guides students towards these subjects. This has also been found by this study to be applying to students in the Sub Counties under study. Most of the students enrolled for Business studies because of the job prospects as reflected in the career guidance booklets. Asked if they are planning to pursue the subjects after school, 55 percent said yes, 30 percent said No, while 15 percent were undecided. Out of those who said yes, the majority of them gave job aspiration as the reasons why they want to pursue the subjects further. The thirty percent of the respondents who responded No noted they enrolled for the subjects as a means of boosting their grades. The study established Career Guidance as very important in a school system, enabling the learners make informed decision on their future career.

The positive attitude at 3.008 revealed by the study is contrary to what was expressed by Foster (1965) and confirmed by Sifuna (2003). This contrary finding could be as a result of students' exposure on the importance of the subjects now than it was decades ago. It has been argued that, because of certain economic realities, attitude seems to be increasingly changing in a positive direction with regard to the acceptance of the need for Technical and Vocational education in the school system, especially at secondary level (Simiyu, 2007). From this study, even though most students view these Technical and Vocational subjects as important, it established that Government Policies do limit the overall enrolment in Technical and Vocational Subjects in Kisumu East, Central, North, West and Seme Sub Counties. This is especially true in cases where the schools with few streams would offer limited number of optional subjects. Most studies previously done concentrated on Technical and Vocational Education in tertiary institutions and beyond whereas perceptions of Technical and Vocational subjects in Public Secondary schools are also very important for firm foundation in the tertiary institutions. This study has established that students have positive attitudes towards the Technical and Vocational subjects. However, the negative effect by time allocation towards enrolment in these Technical and Vocational subjects could be a reflection of the wide syllabus coverage. Due to much content covered within a specified time, it sometimes forces students who have opted for these subjects to work extra time. Students who take Agriculture, for example, do work in the field for the practical components as are those who take Home science and Computer studies during extra time. This discouraged some of the students from going for the Technical and Vocational subjects, viewing them as either wide or difficult. Davies et al (2004), findings that government can affect the learner's choice directly when making a subject compulsory or indirectly by changing the content with subject choices. Some regulations that guide enrolment especially where a subject is optional affect the overall access into these optional subjects. A government also may influence the access to the Technical and Vocational subject by limiting the number of teachers into the subjects. Many head teachers interviewed confirmed this by stating that there are some subjects they could have offered but

because of lack of teachers they don't offer them. the majority of the heads responded that most students are influenced by the government policy as reflected in the Joint Admission board's selection policy. The Technical and Vocational subjects fall under groups four and five which the students can leave out yet still register for the required number of subjects. Subject like Business studies is famous because of the perception that it could lead to a highly paying professions.

Conclusion

Perception of Job prospect as an enrolment factor was very significance from the students' point of view. Students enrolled in large quantity in those Technical and Vocational Subjects perceived as providing good job prospects and this explains why Business studies is popular among the students. Contrary to findings of other studies, the study established that most students have positive attitude towards the Technical and Vocational subjects. The majority views the subject as good but due to curriculum burden they can leave them for now but pursue them after school. Some enrolled for the subject as boosters for good result. The study also established that some of the students opted not to enroll for the subjects believing that they can still pursue the subjects after school. These findings imply that enrolment may not be the best measure to conclude the level of Students attitude towards the Technical and Vocational Subjects at Secondary school level. Head teachers and teachers also perceive job prospect as an important factor for enrolment. Contrary to previous studies, parental influence is less significant, probably due to the existence of strong carrier guidance in the schools.

Recommendation

Enrolment policy

Since Technical and Vocational Subjects involve development of skills, knowledge, ability and behavior necessary for entry into, or advancement to a specific occupation, students should be properly integrated into the subjects to enable them acquire the basic knowledge. The Government should restructure its policy on Technical and Vocational Subjects' enrolment so as to encourage more students into these subjects. This is because students had positive attitudes towards the subjects and government policy on enrolment was found to be an important factor influencing enrolment.

Career Guidance and Counseling

Guidance and counseling in Public Secondary schools should be strengthened so that students can access information on the importance of importance of Technical and Vocational subjects after school. Vocational centres attached to secondary schools should be established to facilitate the professional orientation of students and to contribute to the transition from school to work. This would boost enrolment in these subjects since the students would be aware of opportunities existing for various Technical and Vocational subjects. The Vocational centres established should provide vocational guidance to students' information on various employment requirements in relation to Technical and Vocational subject. This should be in view of

both formal and non-formal employment opportunities. Such centres would also provide parents with various information on the value of Technical and Vocational Education. A comparative study should be done on the university courses offered and the ones offered at school level. This would be with the view of helping students to understand the relationship between the Technical and Vocational subjects and the courses offered at the University.

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