



RESEARCH ARTICLE

THE ROLE OF YOUTH POLYTECHNICS IN PREPARING YOUTHS TO JOIN SELF-EMPLOYMENT IN HOMA BAY COUNTY, KENYA

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ARTICLE INFO

Article History:

Received 14th August, 2017
Received in revised form
08th September, 2017
Accepted 25th October, 2017
Published online 30th November, 2017

Key words:

Study,
Homa,
Youth Polytechnics

ABSTRACT

The study examined the role of Youth Polytechnics in training the youth for self-employment in Homa Bay County. Unemployment among the youths renders them desperate and deprives them of basic means of life support which makes them vulnerable to exploitation, abuse and marginalization. The purpose of the study was to examine the role of Youth Polytechnics in preparing the youths to join self-employment in Homa Bay County. The study was guided by the following objective: To examine the skills taught in Youth Polytechnics in training youths for self-employment in Homa Bay County. The study was guided by human capital theory by Theodore W. Schultz. Descriptive survey design was used and purposive sampling technique was used to get the 18 managers and 1 county vocational officer in charge of TIVET while cluster sampling was used to select 380 students out of total population of 1265. A total of 320 students responded to the questionnaires. Pearson's product-moment correlation coefficient was used to arrive at the relationship between the two tests. Data was analyzed using descriptive statistics such as frequency counts, means, tables and graphs. Data was also analyzed using (SPSS Version 20) computer programme. The study found out that key skills like technical drawing (48.8%) and driving (30.9%) are missing from the course units in the youth polytechnics. Review of the courses was recommended to include the missing course units.

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Citation: Aiman Nazhmetdinova. 2017. "The role of Youth Polytechnics in Preparing Youths to join Self-Employment in Homa Bay County, Kenya", *International Journal of Current Research*, 9, (11), 60862-60868.

INTRODUCTION

Globally, the contribution of youth polytechnics as a tertiary or middle level college/technical institution has been appreciated. According to Lauglo and Maclean, (2005), in Asia, particularly in Malaysia, Indonesia and Pakistan, for the development of skilled workforce, another stream is technical and vocational education, which comprises of three (3) years of education after matriculation/10th class and vocational training certificate courses of six months, twelve months and eighteen months duration after 8th class or 10th class. That, the diploma and certificate courses are offered in almost all technologies for both girls and boys throughout the country with an aim of creating employment opportunities. They further postulate that one of the most important features of Technical, Industrial, Vocational Education and Training (TIVET) delivery systems are well placed to train the skilled and entrepreneurial work force that the country needs to create wealth in order to emerge out of poverty. According to Mwandikwa (2007) rehabilitation of facilities in public TIVET institutions will also be done to ensure quality training. Under the programme TIVET would be reviewed and made relevant to the economy.

Kerre (2003) argues that more priority should be given to scientific and technological education to produce the critical manpower needed for modern society. Technical and vocational training are critical to the production of qualified labour force for industrialization. Kenya's population is predominantly youth with the age group of 15-35 making up 38% of the total population. It is at this age that much of the human capital is found (GoK, 2012). The original idea of youth polytechnics was to provide the rural school leavers with informal training in skills for which there was demand in the local community. Training programmes were therefore to be determined on the basis of a survey or assessment of which skills were locally needed and were to be kept flexible to respond to the changing needs of the society

Statement of the Problem

The achievement of vision 2030 in Kenya relies heavily on development in technology and more so in rural areas. Youth polytechnics have an important role to play in producing necessary human resource especially for the rural areas where majority of them are located. The enormous amount of money that the government has pumped recently into these youth polytechnics was meant to revamp the institutions so as to absorb school leavers who are not able to continue with formal education.

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There is, however, scanty data that show the achievement in terms of skills that are acquired in these institutions for self-employment since the government gave them a new lease of life. The study therefore sought to examine the role of Youth Polytechnics in training the youth for self-employment in Homa Bay County.

The Purpose of the Study

The purpose of this study was to examine the role of Youth Polytechnics in preparing youths to join self-employment in Homa Bay County.

Objectives of the Study

This study was guided by the following specific objective To examine the skills taught in Youth Polytechnics and their relationship to self-employment in Homa Bay County

Theoretical Framework

The theoretical framework applied to this study was that of human capital theory by Theodore W. Schultz of 1960 (Gary, 1993). Human capital is the stock of competencies, knowledge, social and personality attributes, including creativity, cognitive abilities, embodied in the ability to perform labor so as to produce economic value. Kuti (2006) supports this theory by adding that human capital is the ability or skills of any individual especially those acquired through investment in education and training that enhances income earning. Human capital theory suggests that education or training raises the productivity of workers by imparting useful knowledge and skills, hence raising workers' future income by increasing their life time earnings (Becker, 1962). Many theories explicitly connect investment in human capital development to education, and the role of human capital in economic development, productivity growth, and innovation has frequently been cited as a justification for government subsidies for education and job skills training.

LITERATURE REVIEW

Skills Taught in Youth Polytechnics

The relevance of youth polytechnics in provision of employment is a worldwide agenda. There is a growing concern to improve and increase the number of youth polytechnics. Geert, (2008) defines Technical, Industrial, Vocational, Entrepreneurship Training (TIVET) programme as a form of education which mainly leads participants into the acquisition of practical skills know-how and attitude necessary for employment in a particular occupation, group of occupations or self-employment. Its main role of providing skills that improve productivity, raise income levels and improve access to employability has been widely recognized. UNESCO (2013) in a regional meeting forum argued that, in order to increase youth employment and enhance skills development, emphasis should be laid on the need to ensuring that young people are equipped with social and market-related skills which will enable them to be well-integrated young adults as well as competitive at national, sub-regional and global levels. In the new global economy, young people need to acquire more than just basic education, and the current rate of globalization and regional integration should influence

curricula. The report further adds that investing in education and skills development for young people should go beyond increasing basic literacy rates to assure dynamic, multifaceted knowledge-building at higher and tertiary levels, including TVET. This will go a long way in preparing young people for the evolving labour market. There is a need to change Africa's approaches, attitudes and priorities concerning TVET. Africa must nurture a highly educated, healthy and skilled population that can imbibe the technology and build the infrastructure that is indispensable for progress. Africa must think outside the box as it wages an effective war on mass unemployment. Finally Africa should adopt a multi-sectoral approach, involving governments at all levels Kamau (2013) in his study on the challenges affecting the technical and vocational education training states that most youth polytechnic graduates are not employable as they lack both appropriate skills necessary for employment. Further to this, they lack resources and entrepreneurial skills to enable them start their own businesses. But the study did not highlight whether the lack of entrepreneurial skill was due to the absence of the unit in the youth polytechnics' curriculum or the students attitude towards entrepreneurship.

A study done by Omolo (2010) contended that, the Kenya government, for more than four and a half decades now, had realized the relevance youth polytechnics and TIVETs and therefore continuously spelt out clearly the need to create sufficient employment opportunities to absorb the country's growing labour force. Unemployment and underemployment have been identified as the country's most difficult and persistent problems. The causes of unemployment he adds had been identified as high labour force growth, use of modern capital-intensive technology and attendant increase in labour productivity, and high wages and salaries, which triggered adoption of labour saving techniques of production. A study by Hooker *et al.* (2011) postulated that the identified causes of Kenya's unemployment were linked to inadequate training and consequent lack of skills, shortage of land and other resources, rapid expansion in school enrolments, skills mismatch, and rural-urban migration. He continues to argue that youth polytechnics have been of high benefit in training of the Kenyan youths and therefore, ensuring that they get the necessary skills for employment in various places within the country. Furthermore, Omolo (2010) argues that one of the key challenges facing the Kenyan youth is lack of necessary education, relevant training and the knowledge and skills required to enhance their absorption into the labour market which he says is largely provided in the youth polytechnics in the various parts of the country.

According to Kuti (2006) and Serem and Chirchir (2016) , in their study on enrolment in youth polytechnics in Nandi county, VTE was meant to provide parallel skills especially in courses like metal processing, electrical and electronics technology, appropriate carpentry and joinery, ICT, fashion and design and garment technology, hair dressing and beauty therapy, general education subjects, communication skills, entrepreneurship education, life skills and technical drawing. Further, Murithi (2013) postulated that courses like electrical installation, hairdressing and beauty, are some of the courses where teachers engaged more hours in industrial attachment and students in these courses acquire more entrepreneurial acumen. Unlike other courses like motor vehicle technology where most teaching involved lectures and demonstrations using obsolete tools and equipment.

The research clearly indicated that the trainees' age entry behavior contributed to choice of the teaching methods. The courses where majority of trainees were below 20 years, opted to adopt mostly lecture methods, projects and field trips. These methods denied the trainees the hands on access to the real enterprise management skills hence no morale for self-employment. However, Otuoma (2011) argues that youth polytechnics have developed a curriculum that addresses the youth in their respective circumstances, are affordable, promote and encourage skills development of the youth through vocational training and imparting life skills and encourage the private sector to get involved in technical education as their education involves a lot of practical work which are essential in employment. He also revealed that the government has built youth empowerment centres in every constituency for youth to access ICT infrastructure, recreation, fighting drug abuse, and providing guidance and counseling and health services, training in music and performing arts, providing basic literacy and continuing education for school leavers. Furthermore, he pointed out that entrepreneurship and ICT are mandatory in the Polytechnic curriculum so as to avail them with the current state and improvement of technology in the employment sector. A study done by Shingalaba (2013) found out that most institutions still lagged behind in embracing e-learning across all departments. E-learning can best be achieved by allowing students to access computers that are in the institutions. The study failed to fore the fact on students having access to computers.

Murithi (2013) asserts that introduction of entrepreneurship education is aimed at equipping the trainees with entrepreneurial skills that would enable them engage in self-employment based on the technical skills acquired hence earn their livelihood while they create jobs for their colleagues. She further adds that the informal aspects of entrepreneurship education focus on skills building, attitude development and behavioral change. Entrepreneurship programs can give students the knowledge, skills, and experience necessary to thrive financially in complex and dynamic economics challenges. Studies done by Hooker *et al.* (2011) have found out that one of the challenges to Africa's development is her lack of identity manifested in developing and nurturing technological culture. It also teems with abundance in scientific and technological illiteracy. In his findings, Kerre (2003) postulated that more priority should be given to scientific and technological education to produce the critical manpower needed for modern society. Technical and vocational education is critical to the production of qualified labour force for industrialization.

RESEARCH METHODOLOGY

Research Design

The study adopted the descriptive survey research design. This was because the study involved collection of data on more than one case and at a single point in time in order to collect a body of quantitative data in connection with two or more variables, which are then examined to detect the patterns of association (Brynan, 2004). According to Kombo and Tromp (2006), descriptive survey can be used to collect information by interviewing or administering questionnaires to a sample of respondents. In this study, this method was used to collect data

from respondents and analyze the data so as to detect their patterns of association.

Target Population

Homa Bay County has a total 18 public youth polytechnics. The total student population in the Youth Polytechnics is 1265 students; 627 are males while 638 are females. There are 18 managers in all the 18 institutions. There is also one Vocational Training Officer in the county (Ministry of Finance & Planning 2014).

Sampling Technique

Purposive sampling technique was employed in selecting sample size. According to Kombo and Tromp (2006) purposive sampling is adequate if the population contains few relevant cases. In this case, the total number of YPs is 18. The population is small which calls for the inclusion of all institutions. Similarly, 1 County vocational training officer in charge of TIVET was purposefully included. The managers were therefore selected by census. Cluster sampling is used when it is not possible to obtain a sampling frame because the population is either very large or scattered (Brynan, 2004). Cluster sampling involves selection of an intact group. All the members of such an intact group are then included in the sample and each member becomes a unit of observation (Borg & Gall, 2006). Cluster sampling therefore, was used to arrive at the right sample for trainees.

Target Population and Sample Size

Respondents	Target population	Sample Size	Percentage
Students	1256	380	30%
Managers	18	18	100%
Youth Training Officer	1	1	100%

Source: (Ministry of Finance & Planning 2014)

According to Kothari (2006) and Best and Khan (2006) sample size of 30% population is considered statistically significant. Simple random sampling will be used to select 380 students out of total population of 1265, 30%, to respond to the questionnaires. The students will be selected in equal measures from each of the participating Youth Polytechnics

Research Instruments

Data for this study was collected using questionnaires and interview guides. The managers and the county vocational training officer were asked to respond to structured interview schedules while students were asked to respond to questionnaires. With questionnaires, information can be collected from a large sample and diverse regions (Kombo & Tromp, 2006). response.

Instrument Reliability

To establish the reliability of instruments, split-half reliability test was used; pilot study was also carried out in public Youth Polytechnics in the neighbouring Nyamira County. The instruments that were piloted were the questionnaires. The split-half technique requires only one testing session. In this approach, an instrument is designed in such a way that there are two parts.

Subject scores from one part are correlated with scores from the second part. This eliminates chances of error due to differing test conditions. In this study, it was done by administering the instrument to the total respondents in the pilot study. After the respondents had made their responses, the questionnaire responses were scored manually and then correlated using the Pearson product moment correlation coefficient to establish the extent to which the contents of the questionnaire were consistent in eliciting the same responses. According to Orodho (2005), a correlation coefficient of 0.8 is considered statistically significant. During the piloting, a correlation coefficient of 0.832 was realized. This enabled the researcher to familiarize with the research instruments as well as the data collection procedures and to make revision on the instruments as appropriate.

Instrument Validity

According to Borg & Gall (2006), validation of an instrument is improved through expert judgment. The instrument was presented to the department of Educational Administration Economics and Planning for scrutiny and verification. The results' piloting helped the researcher to familiarize with the data collection procedures. It also helped in further revising the instruments.

Data Analysis

After data collection, the responses to the questionnaire were coded, and then data entered into the computer for analysis. Data was entered according to respondents' identification number based on the locations. The data largely came from individual respondents. Frequencies and percentages were used for descriptive statistics. Data was analyzed using descriptive statistics such as frequency counts, means, tables and graphs. Graduation rate was calculated using the formula;

RESULTS AND DISCUSSION

The presentations were done based on the research question. The study was guided by the following research question; To what extent are the skills taught in Youth Polytechnics relevant for self-employment in Homa Bay County?

Desired Skills

The students were asked to indicate if there were skills that they desired but were not available in the institution. Their responses were as shown in table 4.1

Desired Skills

	Frequency	Percent	Valid Percent	Cumulative Percent
Driving	99	30.9	30.9	30.9
Catering	15	4.7	4.7	35.6
Pharmacy	6	1.9	1.9	37.5
Interior Design	6	1.9	1.9	39.4
Technical Drawing	156	48.8	48.8	88.1
Electronics	4	1.3	1.3	89.4
Welding	4	1.3	1.3	90.6
Plumbing	13	4.1	4.1	94.7
Telecommunications	1	.3	.3	95.0
ICT	1	.3	.3	95.3
Embroidery	1	.3	.3	95.6
Beauty therapy	3	.9	.9	96.6
Agriculture	11	3.4	3.4	100.0
Total	320	100.0	100.0	

Source: field data

Technical Drawing, according to the table, was the most desired skill that the respondents wished to be introduced alongside the available courses at 156 (48.8%). This was because the majority of the trainees were enrolled in the building and construction course and felt that they needed this skill to enable them become more relevant in the job market. Acquiring skilled man power has generally been a concern for every developing country. Studies done by Kamau (2013) prescribed that Youth polytechnics are basic training institutions intended to offer school leavers opportunity to acquire quality skills and knowledge to make them employable while at the same time providing avenues and paths for attaining higher education through technological and vocational education system. He further argued that they also equip the youth with technical and entrepreneurial skills based on appropriate technology enabling them to unleash their entrepreneurial capacity to fully exploit local community resources for employment creation. The students will demand for education that will assure them of employment thus economic needs are met. Youths in the county therefore desire these additional skills to enable them cope with the market demands.

Types of Technologies

The managers were asked to indicate the different types of technologies that the institution offers to the students. They responded as shown in figure4.1

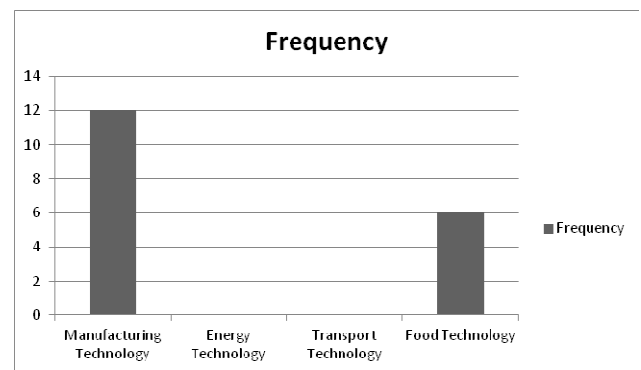


Figure 4.1 Types of Technology(s)

As can be seen from figure 4.1, technology is limited to two types. This is according to Hooker *et al* (2011), who identified one of the challenges to Africa's development as her lack of identity manifested in developing and nurturing appropriate technological culture. From figure 4.1, the county still teems with abundance in scientific and technological illiteracy. More priority should be given to scientific and technological education to produce the critical manpower needed for the modern society. Further, Vision 2030 places great emphasis on science, technology and innovation in general and TIVET in particular as the means for socio-economic and technological transformation. In his findings, Kerre (2003) postulated that more priority should be given to scientific and technological education to produce the critical manpower needed for modern society. The argument was that Technical and Vocational Education (TVE) is critical to the production of qualified labour force needed in the job market for industrialization. This role is best played by the youth polytechnics. Further to this, the managers were also asked to respond on the critical units that are taught in the institution that support the learners

in their pursuit for self-employment. Their responses were as in figure 4.2

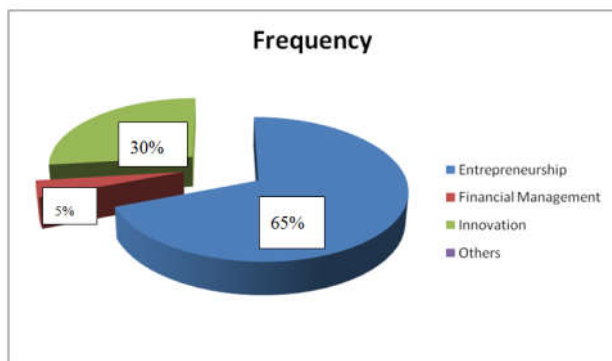


Figure 4.2. Critical units offered in the institutions to nurture self-employment

Figure 4.2 above shows that all the Youth Polytechnics put under the study offered courses in entrepreneurship. Entrepreneurship and ICT are mandatory in the Polytechnic curriculum so as to avail them with the current state and improvement of technology in the employment sector. However only few 6(30%) taught their learners innovation as a unit course while none of the institutions offered financial management. Many theories explicitly connect investment in human capital development to education, and the role of human capital in economic development, productivity growth, and innovation has frequently been cited as a justification for government subsidies for education and job skills training. This is in agreement with Muriithi (2013) who asserts that introduction of entrepreneurship education is aimed at equipping the trainees with entrepreneurial skills that would enable them engage in self-employment based on the technical skills acquired hence earn their livelihood while they create jobs for their colleagues. She further adds that the informal aspects of entrepreneurship education focus on skills building, attitude development and behavioral change. Entrepreneurship programs can give students the knowledge, skills, and experience necessary to thrive financially in complex and dynamic economics challenges. Educational systems must generate clear standards that lay out the knowledge, skills and attitudes that students should be acquiring at each level. But the findings are contrary to Kamau (2013) who stated that the graduates in the youth polytechnics lack entrepreneurial skill that may enable them start their own businesses. The managers were then asked to respond on to whether their learners interact with computers in the course of the study. Their responses were as shown in table 4.2

Access to Computers

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	10	55.6	55.6	55.6
No	8	44.4	44.4	100.0
Total	18	100.0	100.0	

Source: field data

From table 4.2, 10 (55.6%) of the Youth Polytechnics put under the study have computers which they allow the students to access. ICT is mandatory in the Polytechnic curriculum so as to avail them with the current state and improvement of technology in the employment sector. This is supported by Otuoma (2011) in his speech, where he revealed that the

government has built youth empowerment centres in every constituency for youth to access ICT infrastructure, recreation, fighting drug abuse, and providing guidance and counseling and health services, training in music and performing arts, providing basic literacy and continuing education for school leavers. Furthermore, he pointed out that entrepreneurship and ICT are mandatory in the Polytechnic curriculum so as to avail them with the current state and improvement of technology in the employment sector. However, the finding is not in agreement with Shingalaba (2013), who stated that the institutions have not embraced e-learning in all departments. It was also found out that 3(16.7%) of the institutions allowed their students to access computers once a week, 4(22.2%) allowed access twice a week while 4(22.2%) were not frequent in their access to computers. This is in support of studies done by Muriithi (2013), who found out that lecture method, which was applied in courses where the trainees ages were above 20 years of age, denied the trainees the hands on access to the real enterprise management skills hence no morale for self-employment. Computer literacy skills are imperative in work today as most things are done while supported by computers.

CONCLUSION AND RECOMMENDATION

Skills Acquired in Youth Polytechnics

Findings revealed that 8 major skills are being acquired in the Youth Polytechnics in the county. Of the eight, Building and Construction produced the greatest number of graduates 77(24%) while Food and Beverage produced the least number of graduates 9(2.8%). The students mostly join these courses so as to get into self-employment and majority of the students 193(60.3%) rate self-employment as very important. The study also found out that the students desire a number of skills that are not yet available in the Youth Polytechnics. These include Technical Drawing, Driving, Agricultural based courses, ICT, Catering and Hotel Management, Plumbing and Embroidery. Technical Drawing was the most preferred course at 60(20%). Findings from the study also revealed that the youth polytechnics in Homa Bay County concentrate on two major technologies; manufacturing technology and food technology. The other technologies have never been ventured into by majority of the youth polytechnics.

Critical course units that support graduates after leaving the institutions that were taught in the institution were entrepreneurial skills and innovation. None of the youth polytechnics included in the study gave the students the opportunity to acquire basic skills in financial management. The instructors attended in service courses 12(66.7%) frequently 10(55.6%). The workshops were inadequate in the institutions 12(66.7%) while 6(33.3%) indicated that the workshops were adequate. Students were allowed access to computers at 10(55.6%) while 8(44.4%) had no access to computers. For those who had access to computers 3(16.7%) used the computers once a week, 4(22.2%) accessed the computers twice a week while 4(22.2%) were not quite frequent in their access to computers.

Conclusion

Based on the research findings, it was concluded that the youth polytechnics play a major role in equipping the youths with the necessary skills for self-employment in Homa Bay County.

The skills acquired in youth polytechnics are geared towards self-employment such as building and construction. The study also concluded that majority of the students enroll in their various courses in order to be self-employed and majority rate self-employment as very important. The study also found out that there are a number of skills that the students desired to be introduced alongside the available courses if self-employment has to be put on spotlight. These courses included Technical Drawing, driving, agricultural based unit, ICT, catering and hotel management, plumbing and embroidery.

From the study, it was also concluded that there are major aspects of technology that are not included at the design stage. These are energy technology and transport technology. It is also concluded that critical course units that aid students in achieving their aspirations in self-employment are not included in the youth polytechnics. Financial management has not been included despite playing a major role in their endeavours. Based on the research findings, it was concluded that the trainers need to attend in service training as regularly as possible, in order to keep abreast with the changing trends in technology and pedagogy. The study concluded that the workshops in the youth polytechnics are not adequate and that the students do not get sufficient time with the computers. It was also concluded that most students who drop out of the institutions do so as a result of fee problems and that there is need to redesign the courses so as to cater for the Visually Impaired as well as the Hearing Impaired.

Recommendation

Based on the findings it was recommended that

- New skills that are desired by the students to help them achieve their goals be introduced in the youth polytechnics. These skills include Technical Drawing, driving, ICT, catering and hotel management, plumbing and embroidery. They can be introduced as course units or sub units in a course.
- Other than food technology and manufacturing technology, other technologies like transport technology and energy technology should be explored and incorporated in the youth polytechnics.
- Financial management as a critical unit should be taught to all students.
- More workshops should be put up in order to accommodate the demands
- The syllabus should be modified in order to accommodate learners with special needs like visually impaired and hearing impaired.

Recommendations for further study

Taking the limitations and delimitations of the study into consideration, the researcher makes the following suggestions for further research:

- Assessment of the implications of current policies on vocational education in youth polytechnics in Kenya.

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