

Human Capacity Challenges Facing the Development of Youth Polytechnics in Nyamira North Sub-county, Kenya

¹John Gekara, ²Dr. Kennedy N. Getange

^{1,2}Kisii University, Kenya

Abstract: The purpose of the study was to establish challenges facing the development of youth polytechnics in Kenya. The study covered selected polytechnics in Nyamira County, Kenya. Concerns had been raised over the development of the youth polytechnics and whether they could realize the stipulated goals in the sub-county. Therefore, the study sought to assess the capacity challenges of the instructors in the development of youth polytechnics in Nyamira Sub-County. This study used the descriptive survey research design. Simple random sampling was used to select the instructors and students of the youth polytechnics. Questionnaires and interview schedules were used to collect data for the study. Quantitative data were presented by use of frequency tables and analyzed by use of percentages in consideration of the research questions. It was found out that the instructors in the youth polytechnics in Nyamira sub-county do not acquire new technological skills to impart to the students. This posed a challenge as the instructors have inadequate capacity to deliver quality to the students. Based on the findings of this study, it was recommended that the Nyamira County Government should make provisions for training. The Nyamira County Government should ensure that the instructors in the youth polytechnics opt for industrial attachment to acquire extra skills. The instructors in the youth polytechnics should be assisted by the county government to acquire new technological skills to impart to the students.

Keywords: challenges, Nyamira, youth polytechnics, capacity challenges, students.

I. INTRODUCTION

The youth polytechnics play a major role in national institutions for technically skilled middle level human resource which offers programmes at National Diploma and Higher Diploma levels mainly for production of technicians, technologists and entrepreneurs to meet the needs of the world of work. Some of these programmes include technical education, agricultural technology, engineering, printing, food and hospitality studies, creative arts, business studies and environmental studies. With an increase in the number of primary and secondary school leavers who have requisite entry qualifications for career training at middle level grade in various occupations, the youth polytechnics lack the capacity to absorb them (Kerre, 2010). According to UNESCO (2011), in most African countries, primary enrolment has significantly increased, but general secondary education does not have enough space to accommodate all primary school graduates. Therefore, one of the ways to respond to the growing demand for relevant education is to device new TVET strategies for the youth to access the world of work as TVET is still underserved in most African countries. In this connection, one of the most challenging tasks is to change attitude towards TVET among stakeholders, including policy makers and service providers, as well as parents, teachers and the public.

Study has shown that in most parts of Africa, little attention has been given to the development and training of youth polytechnics trainers. Moreover, due to increased technological innovations and demand for higher education and skills in the modern workplace, much more is demanded of a youth polytechnic teacher today than ever before. National reviews of education and training reveal that almost 90 percent of vocational trainers and instructors working in the public vocational training system require continuous upgrading of training skills (Kerre, 2010).

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Jica (2010) observed that, in Ghana, as far as teacher training for TIVET is concerned, teachers in technical subjects such as metal smiting and carpentry receive a Higher National Diploma from Polytechnics. This enables them to qualify for non-professional work as instructors at technical institutions, or receive a master's degree at universities in order to qualify for work as professional instructors at Polytechnics. Jica (2010) further asserts that since the salary given to technical instructors and teachers is generally low across the board, many graduates tend to avoid taking up positions at TIVET Institutions. Moreover, because of difficulty in securing the necessary number of qualified teachers and instructors, qualification prerequisites are not strictly adhered to by the government, meaning that the career path for TIVET instructors/teachers is not firmly established (Ojiambo, 2014).

According to Nyamira District Development Plan (ROK, 2009), the youth population aged between 15 to 30 years is 32,248 (ROK, 2008) with dropout rate of 63.39% and youth unemployment of 35 percent. The report further indicated that most of the youths who dropout from both primary and secondary schools do not end up in the youth polytechnics as expected to acquire skills. The student population in four of the youth polytechnics by 2012 was 750 and 35 instructors as shown table 1.1.

Table 1.1: Enrolment of Students and number of Instructors in Nyamira Youth Polytechnics in 2012

Youth Polytechnics	Course	Students			Instructors
		Male	Female	Total	
BIGEGE	Building and Construction	4	-	4	1
	Production	5	-	5	1
	Motor vehicle	4	1	5	1
	Welding & Fabrication	5	-	5	1
	Electrical	10	5	15	1
	Tailoring	2	6	8	1
	Hair dressing	3	5	8	1
MISAMBI	Building and Construction	14	-	14	1
	M.V.M	27	3	30	1
	Welding & Fabrication	25	1	26	1
	Electrical	50	27	77	1
	Production	17	2	19	1
	Tailoring	12	30	42	1
	Secretarial	-	22	22	1
MATONGO	Building and Construction	14	-	14	1
	Masonry	15	-	15	1
	M.V.M	14	1	15	1
	Welding & Fabrication	23	1	24	1
	Electrical	20	9	29	1
	Production	10	-	10	1
	Secretarial	-	5	5	1
	Tailoring	3	32	35	1
ST. STEPHEN	Building and Construction	32	-	32	1
	M.V.M	35	8	43	1
	Production	36	-	36	1
	Welding & Fabrication	32	2	34	1
	Electrical	48	9	57	1
	Tailoring	8	74	82	1
	Secretarial	-	19	19	1
	Hair dressing	4	16	20	1
Grand Total		437	313	750	35

Source: Department of Youth Affairs and Sports Nyamira County

This implied that the youth polytechnics in Nyamira Sub-County were under enrolled and understaffed. Therefore, this study sought to establish challenges facing the youth polytechnics in Nyamira Sub-County to address them to enable the youth polytechnics to provide quality training and development. This was in the light that little research has been carried out on challenges facing the development of youth polytechnics.

Statement of the Problem:

From the background it can be noted that youth polytechnics are key intervention strategy being used to train the increasing number of the youth who complete primary and secondary schools but fail to get admissions to tertiary institutions. By the time of the study, Nyamira County had 11 public youth polytechnics with youth unemployment of 35 percent (RoK, 2009). In an effort to enhance the development of youth polytechnics, the Government of Kenya through various commissions of education recommended that youth polytechnics management be strengthened and their facilities be improved. In addition, youth polytechnics instructors are trained in pedagogy to give quality training to trainees (Koech Report, 1999). Concerns had however been raised over the development of the youth polytechnics and whether they could realize the stipulated goals in the sub- county. With this scenario, this study sought to establish challenges facing the development of youth polytechnics in Nyamira Sub-County to come up with suggestions and recommendations on the way forward.

The Purpose of the Study:

The purpose of this study was to establish challenges facing the development of youth polytechnics in Nyamira Sub-County, Nyamira County, Kenya.

Objectives of the Study:

The objectives of the study was to:

Assess the capacity challenges of the instructors in the development of youth polytechnics in Nyamira Sub-County.

Research Questions:

The research question for the study was:

What are the capacity challenges of the instructors in the development of youth?

Conceptual Framework

The study used the conceptual framework in Figure 1.1. The independent variables (I.Vs) are: physical infrastructure, capacity of instructors and nature of equipment. These were important variables as the researcher hoped that through them he was to be able to look into the challenges facing the youth polytechnics and lead to finding possible solutions to them. According to Entwistle et al., (1990), a well-desired educational physical facility is one that effectively meets the present educational and social needs of its occupants. In addition, such a facility should meet statutory regulations and other agreed health and safety equipment as well as provide adequate security against unauthorized access. Due to increased technological innovations and demand for higher education and skills in the modern workplace, much more is demanded of capacity of instructors today than ever before. The youth polytechnics became the dependent variable (D.V). However, lack of clear government policy guidelines and sponsors were the intervening variables in the study were controlled for during construction of the research instruments.

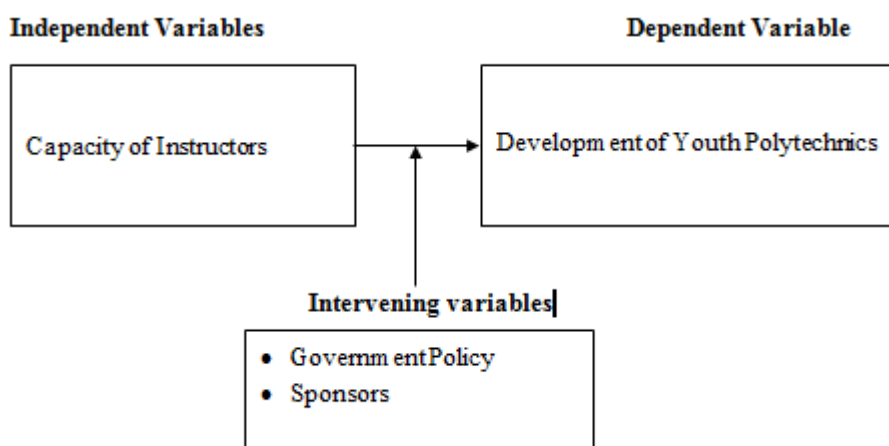


Figure 1.1: Conceptual Framework

II. LITERATURE REVIEW

Capacity Challenges of Instructors in Youth Polytechnics:

The Koech report (1999) asserts that the majority of the instructors of youth polytechnics is not trained in pedagogy and is also inadequately trained in technical trade areas. The instructors lack necessary industry-based technological skills updated through industrial attachment since KTTC has shifted from its original mandate as a producer of trainers and is now competing to offer programmes similar to national polytechnics compromising quality of education due to scarce resources (Nyerere, 2009). The delivery of courses or modules within youth polytechnics remains the most common activity for instructors. However, among the industry circles subject specialists with trade competences, rather than those with additional pedagogical skills are still regarded as effective trainers. Maclean & Wilson (2009) note that industrial attachment is not only critical for trainees, it is equally important for teachers or trainers and instructors. This involves an arrangement allowing trainers to update their skills. Gauld & Miller (2004) found that many employers continue to engage subject specialists for the provision of training in the work place. However, development and execution of a well-organized training plan is the indicator upon which the success of TIVET programmes depend (Moustafa, 2010).

In most parts of Africa, no meaningful attention has been given to the development and training of TIVET trainers. Besides, due to increased technological innovations and demand for higher education and skills in the modern workplace, much more is demanded of a TIVET teacher today than ever before. National reviews of education and training reveal that almost 90 percent of vocational trainers and instructors working in the public vocational training system require continuous upgrading of training skills (Kerre, 2010). Therefore, this study assessed the capacity of the instructors in youth polytechnics in Nyamira Sub-County to enable them be trained in pedagogy for quality training at Artisan level.

III. RESEARCH METHODOLOGY

Research Design:

Kombo and Tromp (2006) observe that a research design is the 'glue' that holds all the elements in the research design as the scheme, out-line or plan that is used to generate answers to the research problems. This study employed the descriptive survey research design. This design was used because according to Orodho (2004) descriptive survey design allows the researcher to gather information, summarize, present and interpret for the purpose of clarification. The central feature of this design is the systematic collection of data in standardized form from an identifiable population or representative sample. This design was also suitable in this study as it sought to describe and analyze the various aspects of the youth polytechnics to bring out the challenges they face. The study used both qualitative and quantitative data in order to obtain information on challenges facing youth polytechnics in Nyamira County.

Study Area:

This study was carried in youth polytechnics of Nyamira County in Nyanza Region of Western Kenya. The study was carried out in Nyamira sub-County because it was within reach by the researcher which made it easier to develop immediate rapport with respondents and easily locate the youth polytechnics, hence making data collection less cumbersome. According to Singleton (1993), an ideal setting for any study is one that is related to the researcher's interest, easily accessible and that which allows the development of immediate rapport with the informants.

Target Population of the study:

A population is the entire group of individuals, events or objects having common observable characteristics (Mugenda & Mugenda, 2003). The study targeted managers, instructors, students and sub-county coordinator of youth polytechnics in Nyamira County. Statistics in the Nyamira County by the time of the study indicated that there were 11 registered youth polytechnics with 11 managers, 35 instructors, 500 students and 1 sub-county coordinator (RoK, 2012). The target population was 547 respondents.

Sample and Sampling Techniques:

Sampling is the process of selecting a sub-set of cases in order to draw conclusions about the entire set. According to Mugenda & Mugenda (2003), 30% of the population comprised the sample size of the students. However, the researcher used all the 11 managers and all the 35 instructors due to their numbers. The calculated sample size was represented as in table 3.1.

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Table 3.1: Sample size Distribution

Respondents	Population	Sample size
Managers	11	11
Instructors	35	35
Students	500	150
Coordinator	1	1
Total	547	196

This study employed purposive sampling and simple random sampling techniques to select the sample. In purposive sampling, the researcher decided the respondent to include in the sample based on their typicality and it was used to collect focused information (Oso & Onen, 2009). Purposive sampling was used to sample key informants like the managers and the sub-county coordinator of the youth polytechnics in Nyamira Sub-County. Simple random sampling was used to select the instructors and students of the youth polytechnics and the researcher considered this to be representative sample of the population and an equal and independent chance was give

IV. RESULTS AND DISCUSSIONS

The Capacity of the Instructors in the Development of Youth Polytechnics

The second research question of the study aimed at assessing the capacity of the instructors in the development of youth polytechnics in Nyamira Sub-County. The responses from the instructors were presented in Table 4.1.

Table 4.1: The Capacity of the Instructors in the Development of Youth Polytechnics

Statement	Very often		Often		Sometimes		Rarely		Not at all		Total	
	F	%	F	%	F	%	F	%			F	%
How often do you opt for industrial attachment as a trainer?	01	9.1	01	9.1	02	18.2	03	27.3	04	36.4	11	100
How often do you go for in-service courses, re-fresher courses, seminars?	-	-	01	9.1	02	18.2	02	18.2	05	45.5	11	100
How often do you go for an education tours to outsource new skills?	-	-	01	9.1	01	9.1	04	36.3	05	45.5	11	100
How often are you exposed to technology demonstration?	-	-	-	-	04	36.4	03	27.3	04	36.3	11	100

Data from Table 4.1 shows that majority 63.6% (07) (Rarely 27.3% (03) Not at all 36.4% (04)) of the instructors in the youth polytechnics in Nyamira sub-county rarely opt for industrial attachment as trainers whereas 18.2% (02) (Very often 9.1% (01) often 9.1% (01)) of the often and while 18.2% (02) of them sometimes go. This implies that most of the instructors do not acquire extra skills which are meant to come from industrial attachment which poses a challenge to the youth polytechnics.

Further, it was revealed that majority 63.6% (07) (Rarely 18.2% (02) Not at all 45.4% (05)) of the instructors rarely go for in-service courses, re-fresher courses and seminars with only 18.2% (02) sometimes whereas 9.1% (01) often go. This implies that in-service courses, re-fresher courses and seminars for instructors in the youth polytechnics are not given much focus. This therefore means that most of the instructors do not have capacity to deliver quality training to students. This is in line with the findings of Moturi, Onderi & Mwebi (2015) who found out that most of the instructors have low qualifications and therefore lack capacity to impart quality skills to students.

Information from table 4.1 shows that majority 81.8% (09) (Rarely 36.3% (04) Not at all 45.5% (05)) of the instructors in the youth polytechnics rarely go for an education tours to outsource new skills whereas 9.1% (01) of them sometimes and often go respectively. This implies that without education tours, most of the instructors in the youth polytechnics lack new skills to deliver quality training to students.

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Finally, it was revealed that majority 63.6% (07) (Rarely 27.3% (03) Not at all 36.3% (04)) of the instructors are rarely exposed to technology demonstration while 36.4% (04) of them sometimes are exposed. Therefore, it implies that most of the instructors have not embraced the new technology and hence quality delivery to students is at stake.

Concerning whether instructors acquire additional skills to transmit to students, the instructors were required to indicate how often they acquired technological skills from learning experiences, their responses were presented as in table 4.2.

Table 4.2: Learning experiences for acquiring technological skills by instructors

Learning Experience	Always		Frequently		Occasionally		Seldom		Never		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Attending workshops	-	-	01	10.0	02	20.0	03	30.0	04	40.0	10	100.0
Briefings	02	20.0	05	50.0	02	20.0	-	-	01	10.0	10	100.0
Awareness building	-	-	01	10.0	02	20.0	01	10.0	06	60.0	10	100.0
Retraining	-	-	01	10.0	02	20.0	02	20	05	50.0	10	100.0

Information from table 4.2 shows that 10.0% (01) of the instructors frequently acquire technological skills by attending workshops while more than half 50.0% (05) of them occasionally and seldom attend. Those who never attend workshops comprised of 40.0% (04). This implies that most of the instructors in the youth polytechnics in the Nyamira sub-county do not acquire new technological skills to impart to the students. This poses a challenge as the instructor have inadequate capacity to deliver quality to the students.

The findings further showed that majority 70.0% (07) of the instructors always and frequently get briefs from the managers and the HODs whereas 20.0% (02) of them indicated that they occasionally get briefs. Only 10.0% (01) of the instructors indicated that they are never briefed at all. Briefing is the easiest mode of passing information to instructors, but however cannot enable them acquire technological skill adequately. This therefore implies that the instructors still do not have capacity of new technological skills.

Further, it was revealed that 10.0% (01) of the instructors frequently acquire new technological skills by awareness building while 30.0% (03) of them occasionally and seldom acquire the skills by awareness building. However, majority 60.0% (06) indicated that they never acquired the new skills through awareness building.

Finally, it was found out that 10.0% (01) of the instructors acquire new technological skills by retraining while 40.0% (04) of them occasionally and seldom acquire the skills by retraining. Half 50.0% (05) of the instructors indicated that they never acquired the new skills through retraining. This implies that retraining of instructors is never carried out in most of the youth polytechnics in Nyamira sub-county in as much as it is a useful learning for acquisition of technological skills.

V. CONCLUSION

It can also be concluded that most of the instructors in the youth polytechnics in Nyamira sub-county rarely opt for industrial attachment and this implies that most of the instructors do not acquire extra skills which are meant to come from industrial attachment which poses a challenge to the youth polytechnics. This therefore means that most of the instructors do not have capacity to deliver quality training to students as they lack new skills to deliver quality training to students. Most of the instructors in the youth polytechnics in the Nyamira sub-county do not acquire new technological skills to impart to the students. This poses a challenge as the instructor have inadequate capacity to deliver quality to the students.

VI. RECOMMENDATIONS

The Nyamira County Government should ensure that the instructors in the youth polytechnics opt for industrial attachment to acquire extra skills. The instructors in the youth polytechnics should be assisted by the county government to acquire new technological skills.

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