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Empowerment of Vocational Training Centers' Trainees, in Bumula Sub-County, Kenya

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Abstract

The objectives of the study were to identify the challenges facing public VTCs in Bumula sub County and to establish possible solutions to the challenges facing public VTCs in Bumula Sub County. Therefore, the descriptive survey research design was adopted and it was guided by the theory of cost benefit analysis. To arrive at an appropriate sample sizes, the table of the research advisors (2006) was used basing on a confidence level of 95% and a margin error of 5.0%. Whereby, 16 VTCs out of 16, 260 VTC trainees out of 790 and 4 VTC managers and 24 instructors were selected for inclusion in the study. Data was collected using questionnaires, interview schedules and document analysis guide. Finally, the collected data was coded and entered into the computer for analysis using the statistical package for social sciences (SPSS). This data was then presented in frequency tables, bar graphs and pie charts. The findings of the study was important to the government, the tax payer and for future research in this area of study because it provided feedback about investment in the VTCs and also formed a basis for future research. The conclusions of the study were that some of the challenges facing VTCs which were hindering trainees' empowerment included lack of modern and adequate instruction materials, low academic qualification of the instructors, lack of gender balance, inadequate government support in terms of funding and inadequate instructors.

Introduction

Vision 2030 which aims at transforming Kenya into a modern globally competitive middle income economy offering a high quality of life for all citizens by the year 2030 (RoK, 2008), has centrally focused attention on youth polytechnics (YPs) basing on the assumption that YPs are its key driver (Muriithi, 2013). Consequently, since the year 2005, the government has been setting up new ones, equipping them, employing instructors and even subsidizing tuition fees in these institutions since the 2008/2009 financial year, with the aim of making them more accessible. Currently, these institutions are known as vocational training centers.

The implementation of vision 2030 is carried out through medium term plans beginning with the first medium term plan (MTP). This is the first in a series of successive 5 year medium term plans. The MTP takes over from the Economic Recovery Strategy (ERS) for Wealth and Employment Creation, 2003-2007. Today, the country is still confronted with major developmental challenges. These include the challenge of faster job creation that is required to address the high unemployment, the large number of people living in poverty and high inequality, (RoK, 2008).

The census statistics for Kenya indicates that there were 38,610,097 people who were enumerated, (RoK, 2010). The economic survey that was conducted in Kenya in 2014 indicates that, a total of 71,569 people were enrolled into the VTCs countrywide, (RoK, 2014). The African Development Bank estimates the shortage of engineers at 30,000; of technicians, 90,000; of artisans, 400,000 (www.weforum.org/agenda/2015/). This may imply that even though proper mechanisms have been put in place by the government to enhance the achievement of vision 2030 through the YPs – now VTCs- there are still a few areas that need to be reevaluated to minimize any potential wastages that may hinder the achievement of vision 2030 because as Kartik and Sinaceur, (as quoted on capital FM, 2016) have rightfully noted, at the core of attaining growth are two closely related issues; primarily, youth unemployment and the underlying shortcomings in the education system that is meant to prepare people for work.

It may have been on this basis that, Wakiaga (2016) suggested that, any solution to youth unemployment will necessitate addressing foundational problems in vocational education by applying 3 key principles thus, target employer demand, embed the correct mindsets into educational programs and offer the right support and coaching. A number of studies have been conducted on YPs/VTCs in a bid to identify some of the challenges facing the VTCs in terms of enrolment, socio economic orientation and entrepreneurial readiness. Kamau, (2013) study, "Challenges affecting the technical and vocational education training youth polytechnics in Kiambu County," found that although the polytechnics had tools and equipment's to be used by the students, the principals indicated that the major challenge with those tools and equipment's is that most of them were out-dated and the ones which were broken down were never repaired. The study also found that, the major financial constraint the polytechnics faced was the limited budget and that this was the core issue as to why those institutions were not able to employ trained trainers, instructors or teachers, support them in updating and upgrading their skills, purchase most appropriate training facilities, aid and technology for practical training and thus were not able to market themselves effectively.

Muriithi, (2013) in his study, "Youth Polytechnic Education and Entrepreneurship in Kenya; (Are we Promoting Entrepreneurs?)" found that though the entrepreneurship curriculum was rich in content the delivery methods engaged did not add value to the graduates entrepreneurial readiness. Thus; below 70% of all the respondents rated the teaching methods used by the instructors as good while 10% and 20% of the respondents rated the methods as poor and best respectively. The majorities of the 20% had secondary level of education and were above thirty years of age. The study therefore suggested that: the government should employ instructors with entrepreneurship training background, that entrepreneurship should be taught as a course and not a support subject, that the entry level of the youth polytechnic should focus on the young people above 20 year old and that all the teaching should involve case studies, field attachments, field visits and all other methods that would give trainees hands on experience. These studies are different from this study that sought to establish the challenges that were facing VTC and which may have hindered the empowerment of its trainees in Bumula sub County.

Statement of the Problem

The number of public VTCs has risen quickly, in Bungoma County for instance, the number has risen from 54 in 2013, to 88 VTCs in 2017. However, enrolment into these institutions is still low. (The economic survey 2014) indicated that only 71,569 people were enrolled into VTC countrywide by 2014. Thus, the African Development Bank estimates the shortage of engineers at 30,000; of technicians, 90,000; of artisans, 400,000 (www.weforum.org/agenda/2015/). This means that, every year there are over 500,000 youths who must be given some "quick win" or "quick fix" programs to stop them from the temptation of engaging in crime and violence as was the case during the 2007 election (YERP 2011/2012).

The government has invested a lot of funds into VTCs in terms of development of infrastructure, employment of instructors and to subsidize tuition. (RoK, 2008) notes that Kenyan youth polytechnics are institutions that are aimed at equipping the youths with entrepreneurial and employable skills. Murithi (2013) notes that, despite the much investment by the government on the youth polytechnic the graduates from these institutions are still suffering unemployment and under employment. It is on this basis that this study sought to establish the challenges that were facing VTC and which may have hindered the empowerment of its trainees in Bumula sub County.

Research Objectives

The study was be guided by the following objectives:

- 1. To identify the challenges facing public VTCs in Bumula sub County which may hinder trainees' empowerment.
- 2. To establish possible solutions to the challenges facing public VTCs in Bumula Sub County.

Theoretical framework

The theoretical framework that guided this study was based on cost-benefit analysis (CBA). This is a systematic approach to estimating the strengths and weaknesses of alternatives. It is used to determine options that provide the best approach to achieve benefits while preserving savings, (Wikipedia, 2018). The idea of this economic accounting originated with Jules Dupuit, a French engineer. Alfred Marshall formulated some of the formal concepts that are at the foundation of CBA, (sjsu.edu). Marshall notes that, one of the problems of CBA is that the computation of many components of benefits and costs is intuitively obvious but that there are others for which intuition fails to suggest methods of measurement (sjsu.edu).

In order to produce a conducive environment for sustainable economic development to thrive in, the government will be required to invest more in improving the skills of artisans and technicians. However, just as Marshall has already cautioned that the computation of many components of benefits and costs is intuitively obvious but that there are others for which intuition fails to suggest methods of measurement. Basing on this argument, it would not be enough for the government to just invest in VTCs. The government as such, should be aware of which specific sectors of the VTCs are more beneficial and worthwhile of government support.

Conceptual Framework

A conceptual frame work shows how independent variables affect dependent variables in determining the challenges facing public VTCs which may hinder trainees' empowerment and the possible solutions to these challenges in Bumula sub County, Bungoma County, Kenya.



Figure 1.1: Conceptual framework

Methodology

This study used descriptive survey research design. According to (Koul as quote from Okwemba, 2014) descriptive research studies are designed to obtain pertinent information concerning current status of phenomenon. The sample sizes of public VTCs, VTC trainees, VTC managers and VTC instructors were determined using the table of the research advisors (2006) with a confidence level of 95 percent and a margin error of 5.0 percent. Using this table, a sample size of 16 VTCs and 260 VTC trainees was selected for inclusion in the study. The sample for VTC instructors was calculated using 25 percent of the population. Thus, 24 instructors were included in the study.

Instruments of data collection included: document analysis guide, interview schedules and questionnaires on VTC trainees and the VTC instructors. The collected data was then analyzed using frequency counts and percentages and then coded and entered into the computer for analysis using the statistical package for social sciences (SPSS). This data was then presented in frequency tables, bar graphs and pie charts.

Findings and Discussions

On the question of the highest academic qualification of the instructors, the study's findings are as presented in table 1.1 and figure 1.2 respectively.

Table 1.1: Highest academic qualifications by gender of VTC instructors (n-24)

Highest academic qualifications	Male	Female	Total	Percentage (%)
Grade I	5	3	8	33.3
Grade II	1	0	1	4.2

Grade III	2	2	4	16.7
Certificate	3	1	4	16.7
Diploma	5	2	7	29.1
Degree+	0	0	0	0
Total	16	8	24	100

Figure 1.2 captures the representation of instructors' academic qualifications

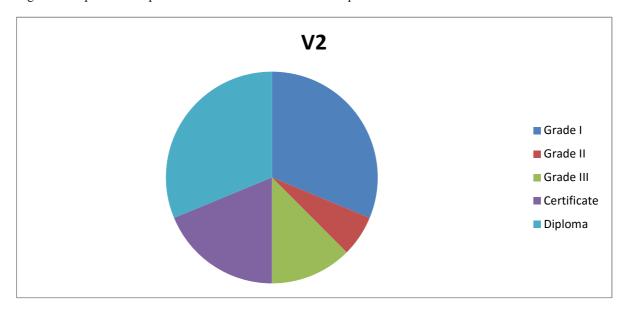


Figure 1.2 Respondents (instructors) highest academic qualifications.

It was paramount to investigate the academic qualifications of the instructors because high academic qualifications may serve to motivate trainees to not only gain skills but also to advance academically and achieve their dreams because currently, the government has made it possible for those studying in VTCs to transit to higher learning institutions through the same institutions without necessarily attending primary and secondary schools. The study reveals that highly qualified people (basing on the sample) are not employed to teach in vocational training centers. Highly qualified instructors are equally important for these institutions because they may act as role models to motivate the trainees to join those courses that have traditionally been termed gender oriented, especially if the instructors were of the same gender with that of the trainee in question. Table 1.2 and table 1.3 illustrates enrolment of trainees per course per gender in 7 VTCs in Bumula Sub County for the year 2017 and a sample of VTC instructors in Bumula Sub County per course per gender respectively.

Table 1.2 Enrolment of trainees per course per gender in 7 VTCs in Bumula Sub County for the year 2017

course	Male	Percentage	Female	Percentage	Total	Percentage (%)
		(%)		(%)		
Garment making	02	0.8	54	21.5	56	22.3
Electrical wiring	11	4.4	0	0	11	4.4
Hair dressing	0	0	51	20.3	51	20.3
Motor vehicle mechanics	43	17.1	0	0	43	17.1
Masonry	37	14.7	0	0	37	14.7
Plumbing	05	1.9	0	0	05	1.9

Welding	04	1.6	01	0.4	05	1.9
ICT	13	5.2	12	4.8	25	9.9
Carpentry and joinery	16	6.4	0	0	16	6.4
Food technology	0	0	02	0.8	2	0.8
Total	131	52.2	120	47.8	251	100

Table 1.2 bears a lot of resemblance to the sample of instructors who took part in filling the questionnaires in the current study as shown in table 1.3.

Table 1.3 Illustration of a sample of VTC instructors in Bumula Sub County per course per gender

Course	Male	Percentage (%)	Female	Percentage (%)	Total	Percentage (%)
Garment making	01	4.2	03	12.5	04	16.7
Electrical wiring	01	4.2	0	0	01	4.2
Hair dressing	0	0	03	12.5	03	12.5
Motor vehicle mechanics	02	8.3	0	0	02	8.3
Masonry	06	25	0	0	06	25
Plumbing	01	4.2	0	0	01	4.2
Welding	01	4.2	0	0	01	4.2
ICT	02	8.3	01	4.2	03	12.5
Carpentry and joinery	02	8.3	0	0	02	8.3
Food technology	0	0	01	4.2	01	4.2
Total	16	66.7	08	33.3	24	100

The information in tables 1.2 and 1.3 are capture in figure 1.3 and 1.4 respectively.

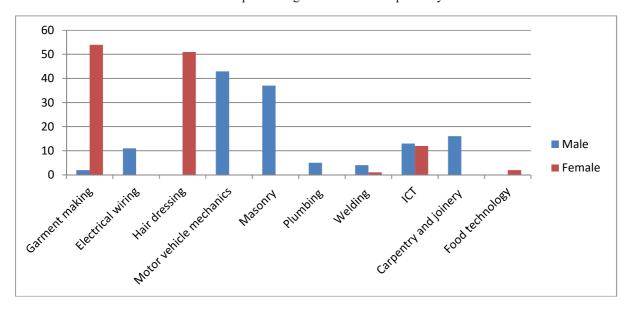


Figure 1.3 illustration of the enrolment per course per gender in 7 VTCs in Bumula Sub County for the year 2017

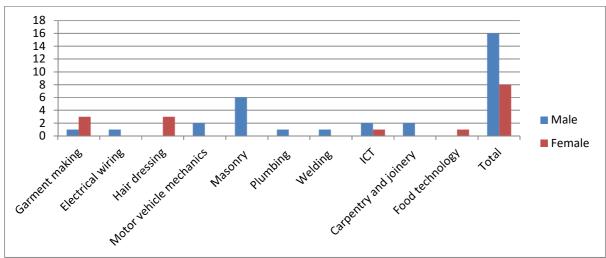


Figure 1.4 Illustration of a sample of VTC instructors in Bumula Sub County per course per gender

Kenyan youth polytechnics are institutions aimed at equipping the youths with entrepreneurial and employable skills (RoK, 2008). It would be important to note that, the first objective of the sustainable development goals aims at attaining zero poverty while the eighth objective aims at achieving decent jobs for economic growth. This can be achieved when the trainees are able to practice their talents and also be able to earn a living from it (thus reduce the problem of unemployment) if they have enough entrepreneurial role models. That is, people who are making it or are succeeding in life by using the skills they have acquired. The most immediate role model for this group of learners is the instructor. Table 1.4 illustrates the extent to which the respondents (instructors) were engaged in income generating projects that are in line with the courses they instruct in the vocational training centers.

Table 1.4 illustration of the skill related income generating projects (IGP) of the VTC instructors (n=24)

Income generating project (IGP)	Frequency	Percentage (%)
Those who have	18	75
Those who do not have	6	25
Total	24	100
- Relevance of the IGP to their arears of specialization	6	33.3
-IGP not relevant to their arears of specialization	12	66.7
Total	18	100

The fact that most of the instructors who took part in the study were engaged in income generating activities that have nothing to do with the skills they impart in the trainees could be a hindrance to creating an enterprising group of graduates because, the graduates of these institutions may not feel confident enough to take a risk in business like they would if their instructor had been a successful businessman in his area of expertise. From the table, it was also evident that 25 percent of the respondents were not engaged in any other form of income generating project meaning that they were solely dependent on the salary that they receive from their employer. Whereby, majority of the respondents were employees of the county government as is evident in table 1.5.

Table 1.5 Terms of employment for the respondents (instructors) (n=24)

Employer	Frequency	Percentage (%)
County government	17	70.8
Board of management (BOM)	7	29.2
volunteers	0	0
Total	24	100

An interview with the managers of the VTCs revealed that there were inadequate instructors and that due to poor payment of fees; the VTCs were not well placed to hire instructors on BOM. The VTCs (as revealed by the interviews with the mangers) offer approximately 6 to eight courses and the have an average of 6 to 8 instructors with approximately five being employees of the county government. This means that each course may be having a single instructor or none. The inability of the VTCs to pay instructors employed on BOM has seen some of those instructors

to go for up to three or more months without being paid thus demotivating them and even making some of the instructors on BOM to abscond duty. The inadequacy of instructors for some of the VTCs may cause the learners to: fail to sit all their exams, enroll into other courses that they do not like or drop out of the VTC.

Another challenge facing VTCs in Bumula Sub County that emerged from the interview with the VTC managers was that of lack of modern and adequate instruction materials. Some VTCs have outdated instructional materials whereas others lack the instructional materials completely.

Table 1.6 Illustration of the perception of the trainees with regard to the challenge facing VTCs

Statements	My VTC has few instructors and equipment	Many people are aware that the government is giving bursaries to VTC students
Strongly agree	75	58
Percentage %	30.2%	23.4%
Agree	83	93
Percentage %	33.5%	37.5%
undecided	16	17
Percentage %	6.5%	6.6%
Disagree	48	44
Percentage %	19.4%	17.7%
Strongly disagree	26	36
Percentage %	10.5%	14.5%
Total	248	248

On the question of whether many people were aware that the government was offering bursaries to VTC trainees, majority of the respondents (37.5 percent) agreed whereas, 23.4 percent, 17.7 percent and 14.5 percent of the respondents strongly agreed, disagreed and strongly disagreed respectively. The remaining 6.6 percent were undecided.

Possible solutions to challenges facing VTC which may be hindering the empowerment in Bumula Sub County The VTC instructors (respondents) highlighted the following as the changes they would like to be made in the VTCs. The challenges are organised beginning with those that had the highest frequency. They suggested that:

- 1. VTCs be equipped with more instruction materials.
- 2. The government should employ more instructors.
- 3. Managers to be given in-service courses on financial management
- 4. The salaries for instructors working on BOM should be increased.
- 5. The syllabus should be reviewed.
- 6. The government to increase funding in VTCs.
- 7. Instructors to be given in service training.
- 8. Promotion of instructors to new job groups be automatic after three years.
- 9. The members of the county assembly should not be allowed to be members of the VTC board.
- 10. Students to be provided with attachments.
- 11. Students to be given capital to set up their businesses.
- 12. Bursaries should be disbursed on time to enable the VTC pay instructors who are working on BOM.
- 13. The selection process for instructors should be based on skill and not on purely on academic qualification.
- 14. The management of the VTCs to be taken back to the national government.
- 15. Admission to VTCs to be centralised.
- 16. Exhibitions to be organised for trainees.
- 17. The enrolment of trainees into VTCs should be increased.

When can one know that VTC trainees have been empowered?

- 1. When VTC trainees are able to practice the skills they have been training for on completion form the courses they were enrolled into.
- 2. When the trainees are able to set up their own business in line with the skills they trained for instead of being job seekers.
- 3. When trainees of both genders are able to get enrolled equally into all courses.
- 4. When the trainees can come up with new ways of practicing the skills that they have been taught in the VTCs.
- 5. When the government is able to provide support for this trainees both in the course of training and after training in terms of capital to set up business ventures, trainers, equipment and market for their produce.

Conclusion

In conclusion it was established that the challenges facing VTCs include: low academic qualification of the instructors which may make the trainees to develop negative attitude towards the VTCs and their capacity to bring about progressive change in the trainees, another challenge was that there was lack of gender balance in the VTCs in 2017 in Bumula sub county at course level where some courses were still skewed only towards one gender. Another challenge was that most of the courses were being taught by instructors who might have been lacking the passion to pursue their skills economically and as such, the trainees may have been lacking role models who could motivate them to take up entrepreneurial ventures. Other challenges included: inadequate instructors, lack of modern and adequate instruction materials, political interference, and inadequate government support in terms of funding and delayed disbursement of bursaries and the fact that most people were not aware of the bursary that the government was offering to VTC trainees.

Recommendations

The study recommends the following:

- 1. That a needs analysis for every VTC be conducted to establish the level of need of each VTC.
- 1. That, exhibition to be conducted for VTC trainees where they can showcase their products, compete for the top price and learn from one another about new and emerging innovations.
- 2. That the hiring process for the VTC trainees to be reviewed to bring on board renowned and experienced entrepreneurs and artisans as the instructors.
- 3. That the managers and instructors to receive in service training especially on financial management.
- 4. That no new VTC should be set up until all the existing ones have been fully equipped with the basic tools and instructional materials.
- 5. That the government should employ adequate instructors to meet the varied needs of the trainees.
- 6. That the government should put in place mechanisms that would encourage the best students to join VTCs and highly qualified instructors to work in the VTCs.

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