



INFLUENCE OF AVAILABILITY OF LEARNING RESOURCES IN YOUTH POLYTECHNICS ON YOUTH'S ECONOMIC EMPOWERMENT IN KAKAMEGA COUNTY

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**INFLUENCE OF AVAILABILITY OF LEARNING RESOURCES IN YOUTH'S POLYTECHNICS ON YOUTHS
ECONOMIC EMPOWERMENT IN KAKAMEGA COUNTY**

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ABSTRACT

The objective of this study was to examine the influence of availability of learning resources in Youth Polytechnics on youth's empowerment in Kakamega County. The study adopted the Human Capital Theory. Descriptive research design was used because it provided information on the characteristics of a given population or phenomenon. The study targeted 64 Vocational Training centers, 64 Instructors, 64 Principals, 13 Sub County Youth Officers, One County Youth Officer and One County Director of Education totaling to 143, from which a sample size of 105 respondents was drawn. This study used simple random sampling to randomly select the respondents. The Likert Scale questionnaire was used to gather quantitative data. Collected data responses was first coded, entered in SPSS 24 and checked for errors; then inferential and descriptive statistics such as frequencies, percentages, mean, standard deviations correlations and regressions were computed and presented in the form of tables and graphs. From a total of 105 questionnaires, 102 questionnaires were returned, 97 questionnaires were returned when completely filled depicting a response rate of 92.4% which was above 70% thus excellent for generalizability of results to a wider population. From the study results, the independent variable (availability of learning resources) was significant predictors of youth economic empowerment (dependent variable). The study concluded that availability of learning resources significantly influenced youth economic empowerment in Kakamega County since this enabled students get on hand skills that sharpen their practical skills in whatever course being undertaken. The study recommended that the county and national government plus willing donors should adequately fund youth polytechnics both materially and financially so as to ensure that youth polytechnics are fully equipped with both teaching and learning materials required for effective practical based curriculum implementation.

Key Words: Learning Resources, Youth Polytechnics, Youth Empowerment, Kakamega County

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INTRODUCTION

All over the world, vocational training is recognized as an instrument for economic and social development. (UNCEF, 2009). UNESCO convened the Third International Congress on TVET in Shanghai, China in 2012. The congress which was attended by more than 500 representatives from 107 member countries concluded that transforming TVET should be a top priority in the need to building greener societies and tackle global unemployment.

In United States of America (USA), vocational training programs became popular after 1880; courses in trade schools similar to YPs education that sprang were industrial training, book keeping, stenography (shorthand) and commercial work (Richardson & Van den Berg, 2012). The courses were offered both in private and public institutions. The Job Corps in the U.S. today is probably the best known of programs changing the institutional setting for skills development, and best evaluated trade schools similar to YPs. (Schochet, McConnell & Burghardt, 2003). Italy began vocational education in the 16th century. The Italian architects sought to make their vocational education professional. Earlier, youth had received training as builders and stone masons (Fluitman, 1999).

For developing countries, the World Bank first began supporting investments in Technical and Vocational Education (TVE) in 1963 (Luyali, 2015). The assumption was, that through learning vocational skills at school the students could more easily find work on leaving school, and become more productive and trainable once in the labor force (Lauglo & Maclean 2005). In general, program evaluations from developing countries show larger impacts than programs conducted in other regions. Based on 289 youth employment interventions in 84 countries, show higher impact in developing countries than in developed ones (Betcherman et al. 2007).

Technical and Vocational Training and Education has been a neglected area of education and training policy. The Medium Term Plan (MTP 2008–2012), for example, noted that the training being provided

by the Technical, Industrial, Vocational, Entrepreneurship Training institutions 'has been hindered by inadequate facilities and inappropriate curriculum, hence most graduates at this level lack appropriate skills' (Republic of Kenya, 2008).

Kenya Vision 2030: First medium term plan (2008–2012), Nairobi. Furthermore, it has also been acknowledged that there is a mismatch between level and type of skills imparted by training institutions and the requirements of the labour market, which need to be realigned in order to meet the demands of the economy and improve youth opportunities to participate effectively in the said economy (Republic of Kenya, 2008) In the recent past however, TVET has seen tremendous and dramatic increase both in number and status.

The Youth Polytechnics (YP) provide technical, vocational, industrial, entrepreneurial and life skills training to young people in order to increase employment opportunities, reduce dependency levels and increase self-reliance among the youth (Mbokothe, 2012). YPs are educational institutions offering primary school leavers opportunities to acquire technical and vocational skills and relevant knowledge to increase their employability. The Youth Polytechnic Program of Kenya was initiated by the National Christian Council of Kenya (NCKK) in 1968 and originally known as the Village Polytechnic Program (Simiyu, 2009).

Youth bulges have become a global phenomenon and Kenya is no exception to this trend. A youth bulge occurs when more than 20% of a country's population is comprised of youth (Okello, 2013). In Kenya, the youth bulge presents a number of challenges for both the youth and the country. Youth represent the most abundant asset Kenya has or will have over the near future. Nonetheless, there have been a considerable number of surveys conducted and reports and studies published that invariably conclude there are persistent risks and challenges faced by Kenyan youth (Hailu, 2012).

County Government of Kakamega is one of the 47 counties in the Republic of Kenya. It borders Vihiga

County to the south, Siaya County to the West, Bungoma County to the North and Nandi County to the East. The county covers an area of 3050.3 Km² (Kakamega CDP, 2013). The altitude of the county is between 1,240 metres and 2,000 metres above sea level. The county government of Kakamega has 12 constituencies, 12 sub-counties, 24 divisions, 72 locations and 233 sub-locations. Among the devolved functions of the government is the Pre-primary education, village polytechnics, home craft centers and childcare facilities (Kakamega CDP, 2013).

Statement of the Problem

Vocational and Technical Education has been a fundamental part of national development of many developed nations because of its positive effect on national industrial productivity and economic growth (Bartel, Figas, & Hagel, 2015). The high rate of unemployment, poverty and poor Socio-Economic status of most Kenyan youth has generated an outcry of many, non-governmental organizations, parents, government bodies and international organizations. Though many nations are faced with the problem of youth unemployment as Kenya does but as a nation with diversified employment sectors and unexplored sectors of employment, this problem is expected to be reduced to the barest minimum (Kingombe, 2011). Despite the rationale for the introduction of YPs to equip the youth with vocational skills, it is evidenced that the youth polytechnic graduates are still suffering unemployment (Mbokothe, 2012). The national youth employment workshop report issued by the ministry of labour and human resource development and UNDP (2004) cited among others, lack of appropriate and relevant education and training as one of the causes of youth unemployment in Kenya. Most of the studies that have been conducted in Kenya on Technical and vocational education have looked at other aspects of TVET rather than the influence on youth empowerment. For example Simiyu (2007) looked at ICT-based solutions of e-learning in TVET institutions, Nyerere (2009) looked at TVET sector

mapping in Kenya, while Ngware (2002) looked at gender participation in TVET institutions. Despite these studies and their recommendations, youth empowerment through vocational training remains low, indicating that there is still more that needs to be done. Little empirical evidence exists on the Influence of availability of learning resources on youths' economic empowerment in Kenya as a whole and in Kakamega County. Specifically this study sought to fill this knowledge gap.

Research Objective

The objective of this study was to investigate the influence of availability of learning resources in Youth Polytechnics on youth empowerment in Kakamega County, Kenya.

Research Hypotheses

H₀₁ Availability of learning resources in the Youth Polytechnics does not significantly influence youth's economic empowerment in Kakamega County.

LITERATURE REVIEW

Theoretical Review

The Human Capital Theory

The Human Capital theory has roots in the works of classical authors such as Adams Smith (1776) and Alfred Marshall (1890). Much later authors like Mincer (1958), Schultz (1961) and Becker (1975) affirmed this. They said that time and money spent on education builds human capital hence one should be able to estimate the rate of return on such investment.

The Human Capital theory states that just as people invest in physical capital, they also make investments in themselves through a variety of education and training experiences in order to increase their productivity and efficiency in the labour market; thus increasing their probability of securing a more prestigious and better rewarding jobs (Langellet, 2002). According to human capital theory people make a deliberate and conscious decision on what to invest in after carefully analyzing the costs and the expected future returns of an educational investment (Langellet, 2002).

From the lens of human capital theory, investments in individuals are public investments, since the benefits accruing from such an investment goes beyond the individuals who have invested in education and training and benefit the entire society (Mincer, 1958). The theory assumes that formal education and training increases the productivity of workers by imparting useful, relevant, sustainable knowledge, skills, competencies and social values (Schultz, 1961). This theory relates directly to TVET because of its orientation towards the world of work plus its emphasis on acquisition of employable skills. Moreover, TVET train skilled and entrepreneurial workforce that nation may require to create wealth and emerge out of poverty.

To this end, it increases the productivity of workers just the same way machines increase productivity in entrepreneurship. This is why education is considered as a capital good responsible for developing human skills required for production of goods and services in the economy (Becker, 1975). Empirical studies show that there is a strong connection between access to TVET and rapid economic growth. Human capital theory shows how education increases the productivity and efficiency of workers by increasing the level of cognitive capability, given the fact that it is a product of innate abilities and investment in human beings (Lyngdoh, 2005).

At the micro level, the Human Capital Theory postulates that an individual bears the costs of education because he/she expect that the investment will create a future stream of benefits. More educated people tend to earn higher wages and have better jobs than the less educated ones (UNDP, 2010). According to the theory, other benefits of education may be realized in terms of greater productivity for example the greater labour market productivity of those with additional schooling (Vila, 2000). The Human capital theory also recognizes the non-monetary benefits that accrue to the individual as a result of the investment in education. (Vila, 2000).

Empirical Review

Availability of learning Resources and Youths' Economic Empowerment

A report on the Rapid Appraisal on the Status of vocational training in Kenya observed that the quality of vocational training graduates was fast declining at all levels due to outdated equipment, poor instruction, lack of work experience and meaningful supervision (Mbokothe, 2012). In addition, the lack of appropriate tools and equipment and the poor inflexible curricular in vocational training institutions, may be attributed again to the low level of investment by governments and organizations towards the vocational training sector.

There is evidence to show that the lack of funding is by far the biggest constraint, amongst other barriers, keeping youth out of further education and training (Hafner, 2007). Consequently, imparting of vocational skills in schools is mainly hindered by lack of funds to provide learning resources and lack of qualified personnel leading to poor quality of training (Okoye, 2010). The potential of vocational institutions in offering quality training is also greatly limited by the low government investment.

In most developing countries the ministries responsible for running and directing these centers are either not equipped to pay attention to this aspect or are pre-occupied with other sectors of education leaving the vocational training at the mercy of market forces (Konayuma, 2008). Dramatic budget cuts followed by structural adjustment programs adversely affected public vocational training systems to a large extent. For instance, in Sub-Saharan Africa, as a result of budget cuts, investments were curtailed in vocational training systems, and facilities and equipment's started to decay (Fluitman, 1999).

Recurrent budget reductions have also negatively affected the number, qualifications, pay, morale and motivation of teachers and administrators. Most of the vocational training institutions were

grossly underfunded resulting to poor service delivery and poor image (Okello, 2013) Majority of trainees enrolled in vocational training institutions are self- sponsored with very few receiving any financial support from donors, government (HELB) or other charitable organizations (Mbokothe, 2012).

After increasing the share of basic education in their development co-operation budgets following the resolutions of the Jomtien Conference, donors are facing the dilemma of how to prioritize between supporting basic education on the one hand and vocational and higher education on the other (Takala, 2007). Vocational trainings have been accorded less importance in donor financing. The Germany system of vocational training commonly referred to as directed and dual system has frequently been referred to as an example of excellent practice of technical vocational education and training (Beardwell, 2001). Employers fund two-third of the training and together with trade unions and the local government, they have a considerable influence on the control of the system (Pischke, 2001). Laws and guidelines of vocational training and education regulate the system so that employers are duty bound to provide funding and resources for training. Employers’ unions and the state administer the institutions and procedures that operate the system jointly. Firms pay for on-the-job training, youths accept relatively low wages, and the vocational colleges are paid for by public funds (Beardwell, 2001).

Youth Empowerment

The United Nations Human Settlements Program (UNCHS-Habitat) (2005) defines youth empowerment as “the circumstances and factors which enhance the development of citizenship and productiveness among young people as they move into adulthood. It is concerned with the adaptation of government structures and institutions to protect and deliver children’s, youths’ and human rights, including the right to participation” Youth empowerment “is based on the belief that young people are the best resource for promoting

development and they are agents of change in meeting their own challenges and solving their own problems” (MSYA, 2007).

For young people to be empowered, certain processes and mechanisms have to be instituted. According to Narayan (2002), since youths’ lack of power, voice, and subsequent marginalization and exclusion underlies their status, the best strategy in their empowerment process demands a removal of both formal and informal institutional obstacles that void their attempts to solve their everyday challenges (Mbokothe, 2012). MSYA acknowledges that empowering young people requires “an economic and social base; political will; adequate resources and a supportive legal and administrative framework; a stable environment of equality, peace and democracy; access to knowledge, information and skills and a positive value system”. For MSYA, “youth are empowered when they acknowledge that they can make free choices in life, take action based on their decisions and accept responsibility for their action”. (Gachie, 2013).

Conceptual Framework

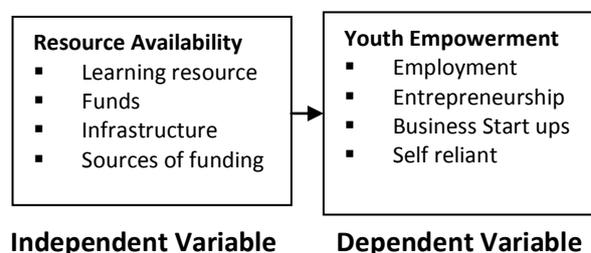


Figure 1: Conceptual framework
Source: Author (2019)

METHODOLOGY

The study adopted descriptive research design. According to Mugenda and Mugenda (2003), descriptive research is a process of collecting data in order to answer questions concerning the current status of the subjects in the study. The target population was Youth Polytechnics in Kakamega County. The county is divided into thirteen sub-counties. There were 64 Youth Polytechnics with a student population of 4786. There was a total of 320 Instructors, 64 Principals, 13 Sub County Youth

Officers, One County Youth Officer and One County Director of Education. This study used simple random sampling to randomly select the respondents and also purposive sampling technique to select key informant s from the selected sample. The Likert Scale questionnaire was the main instrument of the study that was administered to the respondents to gather quantitative data. Data was analysed using quantitative analysis through inferential and descriptive statistics which included frequencies and percentages. Analysis was done with the help of Statistical Package for Social Sciences (SPSS version 24). It was preferred because SPSS has an ability to cover a wide range of the most common statistical and graphical data analysis and is very systematic. The quantitative data was analysed using descriptive statistics for each variable which were calculated and tabulated using frequency distribution tables.

FINDINGS

Descriptive Statistics

Descriptive statistics in this study were summation of responses based on independent variable

(availability of learning resources) and the dependent variable (youth economic empowerment). Descriptive statistics thus showed the outcomes of responses to each of the statements on the study variables using Likert scale with values ranging from 5 to 1; that is; 5=Strongly Agree, 4=Agree, 3= Undecided, 2=Disagree and 1= Strongly Disagree. The results were presented in the table form showing frequencies of responses as per each statement and its corresponding percentage score in brackets.

Availability of Learning Resources and Youth Empowerment

This study assessed the influence of availability of learning resources in youth polytechnics on youths' economic empowerment in Kakamega County. Respondents were asked to respond to 5 statements namely; (i) Learning resources were available (ii) There was allocation of funds for enrollment in your institution by the County Government (iii) Sources of funding were available; (iv) Funds were available; (v) Infrastructure was available. The results were shown in Table 1.

Table 1: Descriptive Statistics; Availability of Learning Resources

Statement	Frequency and Percentage (%)					Mean	Std.Dev
	5	4	3	2	1		
1. Learning resources are available	9(9.3)	49(50.5)	3(3.1)	22(22.7)	14(14.4)	3.18	.991
2. There is allocation of funds for enrollment in the institution by the County Government	11(11.3)	38(39.3)	14(14.4)	27(27.8)	7(7.2)	3.20	.878
3. Sources of funding are available	16(16.5)	40(41.3)	13(13.4)	20(20.6)	8(8.2)	3.37	.819
4. There is adequate funding	11(11.3)	41(42.4)	4(4.1)	27(27.8)	14(14.4)	3.08	.920
5. Infrastructure is available	10(10.3)	40(41.2)	7(7.2)	25(25.8)	15(15.5)	3.05	.910
Valid N (listwise) 97							
Grand mean = 3.176							

From Table 1, most respondents agreed (50.5%) and strongly agreed (9.3%) that learning resources were available. This implied that most youth polytechnics in Kakamega County were fairly equipped by teaching and learning resources so as to ensure learners were fully equipped with hands on skills. Secondly, 39.3% and 11.3% agreed and strongly agreed respectively that there was

allocation of funds for enrollment in the institution by the County Government. This implied that the Kakamega County Government fairly allocated funds to youth polytechnics within its jurisdiction, but more funds were really required to enable these youth polytechnics meet their training capacity. Thirdly, 41.3% and 6.5% agreed and strongly agreed respectively that sources of funding

were available while 42.4% and 11.3% agreed and strongly agreed respectively that sources of funding were available. This implied that funding of youth polytechnics in Kakamega County were not really adequate, therefore, external funding must be sought by the youth polytechnics in Kakamega County to adequately implement their training programs.

Lastly, only 41.2% and 10.3% of respondents agreed and strongly agreed that infrastructure was available. This was because infrastructural set up is key to access to youth polytechnics and implementation of training programs. Therefore inadequate funding and poor infrastructural set up really affects implementation of TVET programs in youth polytechnics in Kakamega County. This was supported by Gachira, (2009) assertion that most of the private training youth polytechnics are faced with almost same funding and infrastructure problems as those encountered by the public institutions. Thus, the quality of TIVET in the entrepreneurial education private training institutions is affected further by:-over concentration on light vocational skills, business, commercial and service courses because of the high investment associated with technology based courses. Employment of part-time instructors, paid less, burdened with large classes with less facilities and proliferation of unregistered institutions are likely to offer low quality youth training (Gachira, 2009).

Inferential Analysis

Direct influence of Learning Resources on Youth Economic Empowerment

This tested the direct linear influence of availability of learning resources in Youth Polytechnics on youth economic empowerment in Kakamega County. The results were shown in Table 2.

The above model summary in Table 2 showed that R squared was 0.602 which implied that 60.2% of variation in youth economic empowerment was explained by availability of learning resources in Youth Polytechnics while other factors not in the model accounts for 39.8% variation in youth economic empowerment. Further coefficient analysis revealed that there exists a positive and significant effect of availability of learning resources in Youth Polytechnics on youth economic empowerment ($\beta = 0.801$ (0.067); at $p < .01$). The results therefore implied that a single increase in availability of learning resources in Youth Polytechnics led to 0.801 unit progress in youth economic empowerment. Therefore, the linear regression equation model was;

$$(i) Y = 1.159 + 0.801X_4$$

Where:

Y = youth economic empowerment

X₄ = learning resources

Table 2: Direct Influence of learning Resources on Youth Economic Empowerment

Model Summary					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.776 ^a	.602	.598	.68217	.602	143.588	1	95	.000
ANOVA ^b									
Model	Sum of Squares		df	Mean Square	F	Sig.			
1	Regression	66.819	1	66.819	143.588	.000 ^a			
	Residual	44.209	95	.465					
	Total	111.028	96						
Coefficients ^a									

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.159	.204		5.670	.000
	Learning Resources	.801	.067	.776	11.983	.000

a. Dependent Variable: Youth economic empowerment

Hypothesis Testing

The research **Hypothesis** stated that availability of learning resources in the Youth Polytechnics does not significantly influence youth's economic empowerment in Kakamega County, Kenya. The study results indicated that there exists a positive but significant effect of availability of learning resources in the Youth Polytechnics on youth's economic empowerment in Kakamega County ($\beta = 0.424$ (0.095), at $p < .01$). **The null Hypothesis was thus rejected.** The study results therefore implied that a single increase in availability of learning resources in the Youth Polytechnics would lead to 0.424 unit improvements in youth's economic empowerment in Kakamega County. The study supported Mbokothe, (2012) report on the Rapid Appraisal on the Status of vocational training in Kenya observed that the quality of vocational training graduates was fast declining at all levels due to outdated equipment, poor instruction, lack of work experience and meaningful supervision. In addition the poor quality of training resulting from lack of appropriate tools and equipment and the poor inflexible curricular in vocational training institutions, may be attributed again to the low level of investment by governments and organizations towards the vocational training sector (Mbokothe, 2012).

Further, there was evidence to show that the lack of funding was by far the biggest constraint, amongst other barriers, keeping youth out of further education and training (Hafner, 2007). Consequently, imparting of vocational skills in schools is mainly hindered by lack of funds to provide learning resources and lack of qualified personnel leading to poor quality of training, plus the potential of vocational institutions in offering quality training is also greatly limited by the low

government investment. (Okoye, 2010). More so, most of the vocational training institutions were grossly underfunded resulting to poor service delivery and majority of trainees enrolled in vocational training institutions are also self-sponsored with very few receiving any financial support from donors, government (HELB) or other charitable organizations.

CONCLUSIONS

The study concluded that availability of learning resources significantly influences youth economic empowerment in Kakamega County since this enables students get on hand skills that sharpen their practical skills in whatever course being undertaken.

RECOMMENDATIONS

The county and national government plus willing donors should adequately fund youth polytechnics both materially and financially so as to ensure that youth polytechnics are fully equipped with both teaching and learning materials required for effective practical based curriculum implementation.

Areas for Further Research

First, a similar study can be done but targeting graduates of youth polytechnics so as to assess whether they have really acquired purported practical skills from the vocational training programs.

Secondly, a study based on tracer reports from youth polytechnics can be done to assess the number of graduates from youth polytechnics in Kakamega County that are actually engaged in substantial self-employment.

REFERENCES

- Abuel-Ealer, S. (2012). Closing the Trained Teacher Gap; Global Campaigns for Education South Africa
- Achieng, R. (2012). Factors Affecting Acquisition of Vocational Skills among Youth Learners in Maranda, District; *Unpublished Thesis*, UON.
- Aedo, C., & Pizarro, M. (2004). Economic profitability of the youth training program for young Chileans. *INACAP and Mideplan. Santiago of Chile. Processed*.
- Afeti, G. (2006). Strategy to revitalize technical and vocational education and training (TVET) in Africa, background document for the African Union's TVET Expert's meeting, 13-14 December 2006. *Addis Ababa*.
- Aghion, P., Howitt, P., & Levine, R. (2018). 1. Financial development and innovation-led growth. *Handbook of Finance and Development*, 1.
- Alzúa, M. L., Cruces, G., & Ripani, L. (2013). Welfare programs and labor supply in developing countries: experimental evidence from Latin America. *Journal of Population Economics*, 26(4), 1255-1284.
- Amin, M. (2005). *Social science research: conception, methodology and analysis*. Makerere University Printers: Kampala Uganda.
- Arrow, K. J. (1962). The economic implications of learning by doing. *The review of economic studies*, 29(3), 155-173
- Attanasio, O., Kugler, A., & Meghir, C. (2008). *Training disadvantaged youth in Latin America: evidence from a randomized trial* (No. w13931). National Bureau of Economic Research
- Bartel, A., Figas, P., & Hagel, G. (2015, October). Towards a competency-based education with gamification design elements. In *Proceedings of the 2015 Annual Symposium on Computer-Human Interaction in Play* (pp. 457-462). ACM.
- Beardwell, I. (2001). An introduction to human resource management: strategy, style or outcome. *Human Resource Management: A Contemporary Approach, 3rd edition*. Harlow: Prentice Hall.
- Becker, G. S. (1975). Front matter, human capital: a theoretical and empirical analysis, with special reference to education. In *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education, Second Edition* (pp. 22-0). NBER.
- Belsley, D. A., & Kuh, E. (1980). Welsch, RE-1980. "Regression Diagnostics. Identifying Influential Data and Sources of Collinearity". *Uiley Ser. Probab. Math. S*
- Bennell, P. (1999). *Learning to change: Skills development among the economically vulnerable and socially excluded in developing countries*. Geneva, Switzerland: ILO.
- Betcherman, G., Dar, A., & Olivas, K. (2004). Impacts of active labor market programs: New evidence from evaluations with particular attention to developing and transition countries.
- Black, S., & Yasukawa, K. (2013). Beyond deficit models for integrating language, literacy and numeracy in Australian VET. *Journal of Further and higher Education*, 37(4), 574-590.
- Bleicher, M. (2013). Can Endogenous Growth Theories Explain Growth in South Tyrol and Luxembourg?

- Bolin, J. H. (2014). Hayes, Andrew F. (2013). Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach. New York, NY: The Guilford Press. *Journal of Educational Measurement*, 51(3), 335-337.
- Bryman, A., & Cramer, D. (2004). *Quantitative data analysis with SPSS 12 and 13: a guide for social scientists*. Routledge.
- Bunning, F., & Zhao, Z. Q. (2006). TVET Teacher Education on the Threshold of Internationalisation. *UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training*.
- Card, D., Ibararán, P., Regalia, F., Rosas-Shady, D., & Soares, Y. (2011). The labor market impacts of youth training in the Dominican Republic. *Journal of Labor Economics*, 29(2), 267-300.
- Castro-Paniagua, F. (2000). *English-Spanish translation, through a cross-cultural interpretation approach*. Univ Pr of Amer.
- Conti, G. (2005). Training, productivity and wages in Italy. *Labour economics*, 12(4), 557-576.
- Cooper, D. R., & Schindler, P. S. (2001). *Business Research Methods*. New York: McGraw Hill International Edition.
- Dasgupta, U., Gangadharan, L., Maitra, P., Mani, S., & Subramanian, S. (2015). Choosing to be trained: Do behavioral traits matter? *Journal of Economic Behavior & Organization*, 110, 145-159.
- Diwakar, N., & Ahamad, T. (2015). Skills development of women through vocational training. *International Message of Applied Research*, 1, 79-83.
- Dussel, I., Tiramonti, G., & Birgin, A. (2000). Decentralization and recentralization in the Argentine educational reform. *Educational knowledge: Changing relationships between the state, civil society, and the educational community*.
- Eyben, R., Kabeer, N., & Cornwall, A. (2008). Conceptualising empowerment and the implications for pro-poor growth: a paper for the DAC Poverty Network.
- Fluitman, F. (1999). The Roots and Nature of Reforms in Vocational Education and Training: an analytical Framework and some examples. *Prospects*, 29(1), 55-65.
- Fraenkel, J. R., & Wallen, N. E. (2000). *How to design and evaluate research in education* New York: McGraw.
- Gachie. (2013). Technical Education in Kenya. Retrieved April 2, 2013, from Soft kenya: <http://softkenya.com/technical-education-in-kenya/>
- Gachira, R. (2002). Ensuring Relevance and Quality in TVET and Entrepreneurship Education. Nairobi Kenya.
- Grossman, G. M., & Lai, E. L. C. (2004). International protection of intellectual property. *American Economic Review*, 94(5), 1635-1653.
- Hailu, E.T. (2012). Implementing of challenges and opportunities in productive self-employment of TVET graduates.
- Hailu, E. T. (2012). *Analysing the labour outcomes of TVET in Ethiopia: implication of challenges and opportunities in productive self-employment of TVET graduates*. Erasmus University.

- Harnish, D., & Lynch, R. (2005). Secondary to postsecondary technical education transitions: An exploratory study of dual enrollment in Georgia. *Career and Technical Education Research*, 30(3), 169-188.
- Herbling, D. (2012). Middle level colleges set for fresh audit. Nairobi: Daily Nation.
- Heti, M. m. (2013). *Factors influencing demand for technical and vocational education and training in nyeri county, kenya* (doctoral dissertation, university of nairobi).
- Hirshleifer, S., McKenzie, D., Almeida, R., & Ridao-Cano, C. (2014). *The impact of vocational training for the unemployed: experimental evidence from Turkey*. The World Bank.
- Jespersen, S. T., Munch, J. R., & Skipper, L. (2008). Costs and benefits of Danish active labour market programmes. *Labour economics*, 15(5), 859-884.
- Kariithi, P. (2013). *New bill for varsities and technical institutions*. Nairobi: Wordpress.
- Kerlinger, F. N. (1973). *Foundations of behavioral research: Educational, psychological and sociological inquiry*. Holt Rinehart and Winston.
- Khatete, D. (2010). Innovative pedagogy in science education. In *A paper presented at workshop "Towards Effective Pedagogy in Science Education" 17th to 19th June 2010, CEMASTEAM Nairobi, Kenya*.
- Khiteya, M. (1996). The Youth Polytechnic Programme in the Context of the 8-4-4 System Education. A Case of Kakamega District. Kenyatta University *MED Thesis*.
- Kingombe, C. (2012). Lessons for developing countries from experience with technical and vocational education and training. *Economic Challenges and Policy Issues in Early Twenty-First-Century Sierra Leone*, 278-365.
- Kluve, J., & Rani, U. (2016). *A review of the effectiveness of Active Labour Market Programmes with a focus on Latin America and the Caribbean*. Geneva: ILO.
- Konayuma, G. S. (2008). Achieving poverty reduction through quality vocational education and training in partnership with industry. Livingstone: *IVETA*.
- Konayuma, G. (2008). Policy Frameworks: Major Policy Issues in TVET in Africa. In *All Africa IVET A Conference*.
- Kothari C.R (1999), *Research Methodology, Methods and Techniques*, 2nd Ed New Age International Limited Publishers, New Delhi
- Koul, L. (2009). *Methodology of Educational Research*, 4th Ed. Vikas publishing house PVT Ltd.
- Kumar, S., & Phrommathed, P. (2005). *Research methodology* (pp. 43-50). Springer US.
- Lauglo, J. (2009). Research for TVET policy development. In *International Handbook of Education for the Changing World of Work* (pp. 891-904). Springer, Dordrecht.
- Lewa, M. Mutuku (2009). Factors Affecting the Implementation Plans in Government Tertiary Institutions: A Survey of Selected Technical Training Institutions. *European Journal of Business & Management*, 3(3).
- Li, H., Meng, L., Wang, Q., & Zhou, L. A. (2008). Political connections, financing and firm performance: Evidence from Chinese private firms. *Journal of development economics*, 87(2), 283-299.

- Luyali, E., Olel, A. & Lucas (2015). Enrolment Trends in YPs in West Pokot. *Journal of Education and Practice* Vo. 6.No. 10
- Lyngdoh, B. W. (2005). Skills for work in the future: A youth perspective. *Prospects*, 35(3), 311-316.
- Maclean, R. (2005). Orientating TVET for sustainable development introduction to the open file. *Prospects*, 35(3), 269-272.
- Magudii, w. v. (2015). *Determinants of program implementation on student* (doctoral dissertation, university of nairobi).
- Marshall, A. (1975). *Early Economic Writings* (Vol. 2). London, Macmillan.
- Martin, R., & Sunley, P. (1998). Slow convergence? The new endogenous growth theory and regional development. *Economic geography*, 74(3), 201-227.
- Mason, D., Lind, A., & Marchal, G. (2002). *Statistical Techniques in Business*.
- Mbokothe, G. M. (2012). *Influence of vocational training on youth employment: a case of Mukuru Skills Training Centre, Nairobi County, Kenya* (Doctoral dissertation, University of Nairobi, Kenya).
- Mincer, J. (1958). Investment in human capital and personal income distribution. *Journal of political economy*, 66(4), 281-302.
- Mugenda, O.M and Mugenda. A.G. (2003). *Research Methods, Quantitative and Qualitative Approaches*. Nairobi: Acts press.
- Ngechu, D. (2006). *Conceptual Framework in social sciences*. EagleCliffes: Prentice Hall.
- Nguku, E. (2012). *Analysis of textile & clothing training institutions in the East-Southern Africa*. Nairobi: ICIPE.
- Ngware, M. W. (2002). Gender participation in technical training institutions: An assessment of the Kenyan case. *Eastern Africa Social Science Research Review*, 18(1), 21-33.
- Nicholas B & John V. R, (2007). "Measuring and Explaining Management Practices Across Firms and Countries," *The Quarterly Journal of Economics*, MIT Press, vol. 122(4), pages 1351-1408, November.
- Njati, C. (2011). *The Impact of Vocational Training for Rural Development in Nyambene District Kenya. A Case of Muthara Youth Polytechnic*. Kenyatta University *MED Thesis*.
- Nyagah, J. M. (2012). *An investigation of the effects of receivables management on the financial performance of technical industrial, vocational and entrepreneurship training (TIVET) institutions in Kenya*. Nairobi: *Kenyatta University*.
- Nyanjom, J. O. (2012). *Determinants of students' enrollment for engineering courses in Technical, Industrial, Vocational and Entrepreneurial Training Institutions in Nyanza region-Kenya*. Nairobi: *University of Nairobi*.
- Nyerere, J. (2009). *Technical, industrial & vocational education and training (TVET) sector mapping in Kenya*. Nairobi: *Dutch Schokland TVET programme*.
- Okello, B. (2013). *Factors influencing the attitude towards technical vocational education and training in Uganda*. Nairobi: *Kenyatta University*.

- Okoye, K. R. E. (2010). Enhancing Quality in Educational Practice and Instructional Delivery by Teachers of Technology and Vocational Education in Nigeria. *African Research Review*, 4(2).
- Ondigi, R. S. (1998). Students Attitudes, Values and Beliefs towards Vocational Training in Kenya. A Case study of four Youth Polytechnics in Gusii. Nyanza. *PHD Thesis*
- Orodho, J.A. (2005). *Elements of Education and Social Science Research Methods*. Nairobi: Nasola Publishers.
- Pack, H. (1994). Endogenous growth theory: intellectual appeal and empirical shortcomings. *Journal of Economic Perspectives*, 8(1), 55-72.
- Palley, T. I. (2014). The middle class in macroeconomics and growth theory: a three-class neo-Kaleckian–Goodwin model. *Cambridge Journal of Economics*, 39(1), 221-243.
- Pischke, J. S. (2001). Continuous training in Germany. *Journal of population economics*, 14(3),
- Ployhart, R. E., & Moliterno, T. P. (2011). Emergence of the human capital resource: A multilevel model. *Academy of management review*, 36(1), 127-150.
- Richardson, K., & Van den Berg, G. J. (2002). The effect of vocational employment training on the individual transition rate from unemployment to work.
- Schochet, P. Z., McConnell, S. M., & Burghardt, J. A. (2003). *National Job Corps Study: Findings using administrative earnings records data*. Mathematica Policy Research, Incorporated.
- Schultz, T. W. (1961). Investment in human capital. *The American economic review*, 51(1), 1-17.
- Shultz, R.E (1961), *Instructional Product Development*, New York: Van No. Strand Reinhold.
- Simiyu, J. (2007). Introducing e-learning as a strategy to increase enrolment in TVET. *1st African UNESCO-UNEVOC Summit on Access and Inclusion for TVET in Africa through New ICT-based Solutions, Safari Park Hotel, Nairobi.*
- Simiyu, J. W. (2009). Factors influencing the attractiveness of a Technical and Vocational Education and Training Institution: A case study of a Technical Institute in Kenya. Nairobi: *Moi University.*
- Smith, A. (1776). An inquiry into the nature and causes of the wealth of nations. *London: George Routledge and Sons.*
- Takala, M. (2007). The work of classroom assistants in special and mainstream education in Finland. *British Journal of Special Education*, 34(1), 50-57.
- Tripney, J. S., & Hombrados, J. G. (2013). Technical and vocational education and training (TVET) for young people in low-and middle-income countries: a systematic review and meta-analysis. *Empirical Research in Vocational Education and Training*, 5(1), 3.
- Vila, L. E. (2000). The non-monetary benefits of education. *European journal of education*, 35(1), 21-32.
- Wairimu, G. (2009). Technical, Vocational Education and Training in Africa: has it lost its significance? *KMAfrica Dakar Conference*. Dakar: KMAfrica.