Adapting Apprenticeships Learning for Youth Employability: Evidences from Selected Dual Vocational Training Projects in Kenya

Winfred Kithinji (lecturer, Kenya Methodist University), Flora Ngeera (lecturer, Kenya Methodist University), Cecilia Kimanzi (postgraduate student, Kenya Methodist University), & Lawrence Njeru (Education Secretary – Diocese of Meru)

Correspondence email: wkathambikithinji@gmail.com

Abstract
Apprenticeships learning is part of the ongoing educational reforms to combat youth unemployment in Kenya. This paper presents findings of a study that assessed five donor-funded apprenticeships training projects using a descriptive research design. Using a sample of 54 respondents from apprentices, employers, school-based and in-company trainers, the study established that apprenticeship training improved the quality of vocational training. Moreover, apprenticeship training equipped trainees with market-ready skills that enabled a school-to-work transition for employment, with a higher employer preference of apprenticeship graduates compared to the school-based track. Similarly, the collaborative engagement of employers during training gave them a source of low-cost labor and high productivity so that they could support trainees and the vocational schools. The study recommended the need to mainstream apprenticeships learning in formal vocational training as a sure way of increasing employment opportunities.

Key words: apprenticeships learning, dual vocational training, youth unemployment

1.0 Introduction and background

A glance around the world shows that most countries have shifted towards the development and improvement of Technical and Vocational Education and Training (TVET) systems. While this attention is tied to the increasing demands of the labor market, TVET is a fundamental place of equipping the current and future workforce for better employment opportunities (International Labor Organization [ILO], 2021). Additionally, the current problem of youth unemployment is one of the most significant crises facing economies and societies in today’s world. Recent labor market information further shows TVET reforms as the central avenue for equipping youth with relevant skills and competences for sustainable development. This is in full alignment with the global context of 2030 Agenda and effort to “ensure inclusive and equitable quality education and lifelong learning opportunities for all” (United Nations Education, Scientific and Cultural Organization [UNESCO], 2016).

In Kenya, TVET is delivered through multi-level formal and informal setup. Accordingly, there are various public and private technical and vocational institutes, national polytechnics, technical universities, enterprises, and apprenticeship training centres offering various credit and non-credit skills-based qualifications. Notably, the informal sector accounts for over 90% of all skills training translating into 98% of businesses, 30% of the total employment and 3% of the Gross Development Product (GDP) (Ferej, Kitainge & Wanyeki, 2015). On the other hand, the alarming rate of youth unemployment, particularly among postsecondary education graduates, has suggested the need for a more responsive and industry-based training system. It is from this backdrop that employers and vocational training institutions have introduced apprenticeships learning within the formal vocational training programs. This paper presents findings from selected donor-funded apprenticeship programs launched in five vocational training schools since 2017. These are construction and hospitality projects that are developing skilled workforce through a combination of work-place training in companies and school-based theoretical learning. Predominantly, this training model aligns with the ongoing competence-based education and training (CBET) reforms. It is also an innovative approach of promoting collaboration between employers and vocational schools to improve the quality of training, equip graduates for the world of work and reduce unemployment (ILO, 2019; Kithinji, 2022).

2.0 Problem statement

Kenya is one of the leading economies in Eastern Africa and the larger sub-Saharan region. While the country boasts of a stable economic environment and a resilient service sector, youth and graduate unemployment has remained on the rise. In response, the government has partnered with various stakeholders to improve the quality and relevance of TVET through apprenticeships learning. In the context of this study, the failure of vocational training to cater for industrial sector’s needs has created a huge skills gap and inadequately qualified professionals in manufacturing, construction, enterprise and hospitality among others. Moreover, the high level of skills mismatch and limited employment opportunities for youth has caused serious economic and social challenges. Consequently, the potential role of formal apprenticeships has been found to enable trainees acquire the full range of competences that facilitate their transition from education to the world of work. Therefore, this
study was conducted to explore the characteristics and benefits of apprenticeships learning. Findings from the selected employer-led projects were used as evidence to mainstream apprenticeship learning in the TVET sector.

3.0 Literature review

This review comprises of globally documented accounts of apprenticeships philosophy in vocational training sector. Firstly, ILO report of 2019 indicates that over 43 million post-secondary young graduates could not secure job opportunities due to lack of experience, skills, social networks and assets to access wage or self-employment. Similarly, youth unemployment and underemployment is highest in Africa and Middle East due to capacity constraints and poor linkages between TVET and employers, thus the notion of embracing apprenticeships learning. In Ryan (2012), this is a dualistic idea that synthesizes classroom learning theory with workplace practices and functions. In this arrangement, workplace learning is conducted in real job settings for the trainees to get the concrete experiences of the occupation. Secondly, scholars further point out that apprenticeship learning is a supply-side training approach that promotes employable skills development and reskilling opportunities (ILO, 2020; UNESCO, 2016; Zenobia & Mujuru, 2020). Certainly, the long standing apprenticeships and dual vocational training models in parts of Europe and America have been adopted around the world with success reports of high employment opportunities, young and adult populations alike (Cassidy, 2014).

In Kenya, dual apprenticeship learning is a new approach that has been adopted to enhance the quality and relevance of TVET. To begin with, TVET is part of the ongoing agenda of aligning education and training to the policy needs of Kenya Constitution and Kenya Vision 2030 (MOE, 2012). Through the TVET Act of 2013, upon which postsecondary knowledge, skills and attitudes are hinged, all school leavers and the unskilled populace have been redirected towards vocational education and training. In this, apprenticeship and dual vocational learning is considered under the CBET structure (Momanyi, 2014). Secondly, employers and industry initiated dual apprenticeships learning due to skills deficits among the skilled and unskilled youth. While this employer engagement seeks to align supply and demand of skills (ILO, 2017), employers will ensure that competences remain up to date, thus improve the value and employment prospects associated with apprenticeship learning. Similarly, efforts to match education and work remain important at the local level because globalization and technological changes have largely created a polarized labor market of high and low paid jobs (p.20).

Lastly, apprenticeships learning has been introduced in the vocational schools to solve the widespread problem of school to workplace transition among vocational school graduates in Kenya. In fact, a available reports affirm that apprenticeship training could potentially increased skilled development and resolve the current problem of youth employment (Ajuna, Ntale & Ngui, 2018; Partnership for African Social and Governance Research [PASGR], 2018). As such, the government has swiftly accepted apprenticeships learning in formal vocational settings as an unavoidable response to the current skills training incongruity between vocational schools and occupational needs. Remarkably, the dual character of apprenticeship learning gives trainees more learning period at the real workplace than vocational schools, and eventually a smooth transition to working life after completion (ILO, 2020). This model also increases access to postsecondary training thus increasing the number of skilled and qualified workforce needed for economic productivity and national growth (Kithinji, 2022, Okinyi, Nyerere & Kariuki, 2021; World Bank, 2017).

It is along side this review that this research was conducted amongst selected employer-led apprenticeship training projects in Kenya. In this survey, these were five donor-supported dual vocational training projects implemented by various employers, manufacturers and government agencies since 2019. The study was anchored on Becker’s Human Capital theory assertion that quality education and training helps job seekers to fit into the dynamic labor market. Similarly, effective implementation and utilization of vocational training programs inculcates skills and competences that help the youth the gain employment and be self-reliant, leading to the much desired human capital development in the economy (Samiulla, 2014; Audu, Obeta & Onoh, 2013). Therefore, the authors of this paper employed the Human Capital Theory to elucidate apprenticeships learning as a potential avenue of providing skills needed to reduce youth unemployment and contribute to economic development. Overall, the study collected evidences that could inform adoption and mainstream of apprenticeship learning in formal vocational training in Kenya.

4.0 Research Methodology

This research utilized the descriptive survey design to determine and report the current status of the study phenomenon. The target population was participants involved in apprenticeships learning and dual vocational training programs in Kenya since 2019. These were five vocational training schools, two construction
companies, two hotels and one manufacturing industry. Study participants were training apprentices, vocational school trainers, in-company trainers and employers. Purposive and convenient sampling techniques were used to select 54 respondents. Data collection was conducted using semi-structured interview schedules and document analysis guides within a period of two months. Data analyses and presentation was prepared using qualitative and quantitative techniques. Ethical considerations of research, such as informed consent, anonymity, privacy and plagiarism checks, were observed throughout the study and during report writing.

5.0 Study Findings and Discussion

This research explored the apprenticeships learning projects that have been introduced in vocational training centres in Kenya. This section presents the findings guided by the research questions.

6.1 Response rate

This study targeted 54 participants who were selected from five apprenticeships learning projects in Kenya. These were 39 beneficiaries of the donor-funded trade courses in chef, welding, masonry, carpentry and joinery, plumbing, electrical installation and painting occupations. They were 31 male and eight (8) female apprentices aged 19 to 32 years. All these trainees were postsecondary education leavers and were enrolled in trade courses certified by TVET, NITA and Ministry of Education. These courses were Artisan (Level 4), Craft (Level 5) and Diploma (Level 6). The study also included five vocational institute trainers, five company trainers and three employers making an overall response rate of 96% as presented in Table 1.

Table 1: Response Rate

| Respondents                  | Sample size | Response Frequency | per cent |
|------------------------------|-------------|--------------------|----------|
| Apprentices                  | 39          | 39                 | 100      |
| Vocational school-based trainers | 05          | 05                 | 100      |
| In-company trainers          | 05          | 05                 | 100      |
| Employers                    | 05          | 03                 | 60       |
| **Total**                    | **54**      | **52**             | **96.29**|

(2523)

This response rate agreed with Mugenda and Mugenda (2012) assertion that a response rate that is above 70% is excellent for analysis and reporting.

6.2 Characteristics of the apprenticeship training projects

Further analysis show the distribution of trainees and trainers in the apprenticeships learning projects was done using data collected from the document analysis guides. This data included the trainees who were not direct beneficiaries of the donor-funding apprenticeship training but already enrolled in the vocational training schools participating in the dual apprenticeships projects. The findings revealed that electrical installation and plumbing had majority of trainees in the targeted apprenticeships courses (35%). In part, this finding affirmed previous scholarly reports on the high demand of skilled plumbers and electricians particularly in the growing construction sector (ILO, 2017; Powers & Watt, 2020). These results also revealed a significant gender disparity in the trade courses, with majority (79.81%) of trainees and trainers being male, and a minority (26.40%) being female. This inequality concurred with previous scholarly output and the call to promote career guidance, role modelling and the gender-based strategies to attract more females in TVET (Akama, 2019; ILO, 2019; Ngugi & Muthima, 2017; Okwelle et. al, 2018).

Table 2: Target Trade Courses and Distribution by Gender

| Apprentices | Vocational school | In-company |
|-------------|-------------------|------------|
| Male        | Female            | Male       | Female | Male | Female |
| Chef        | 11                | 05         | 01     | 03   | 05     |
| Welder      | 13                | 04         | 03     | 00   | 04     |
| Mason       | 15                | 05         | 03     | 00   | 04     |
| Plumber     | 23                | 08         | 04     | 00   | 05     |
| Carpenter   | 11                | 02         | 02     | 00   | 03     |
| Electrician | 23                | 14         | 05     | 01   | 05     |
| Mechanic    | 13                | 06         | 03     | 01   | 04     |
It also emerged that the employers involved in the targeted apprenticeship training projects were mainly in construction and manufacturing sector. Affirming the high enrolment of the apprentices in plumbing and electrical installation, one of the respondents stated, “Kenya needs qualified electricians, masons and plumbers because the country is growing and there are many construction sites right now.” Another respondent affirmed, “As employers, we want to support as many young people as possible to train in the blue-collar labor force to reduce unemployment.” On the same note, vocational school trainers asserted that apprenticeship learning approach was an alternative way of reducing the huge shortage of skilled workers in the industry. As the respondent stated, “Since our vocational school started training alongside employers, the trainees are acquiring and graduating with the actual skills that employers need. In fact, one employer informed that dual vocational graduates are performing better that the graduates who take the traditional school-based training and internship track. If asked, this is the most sure way of formal training to give the young people a chance to get out of poverty.” Overall, this finding affirmed the increasing popularity of apprenticeship and dual vocational learning among employers and students alike. As ILO (2017) indicated, employers in occupations like chef, waiter, mechanic, electrician and plumbing recommend apprenticeships learning as the most effective modern method of vocation training globally.

6.3 Benefits of Apprenticeships Learning and Youth Employment in Kenya

This study also examined the benefits of apprenticeship learning as an innovation approach of addressing the problem of youth employment in Kenya. As presented in Table 3, majority (89%) of the respondents agreed that the apprenticeships learning projects allowed the vocational training schools to collaboratively develop and implement selected trades with the industry. It also emerged that in-company training allowed trainees to practice the theory-based teaching that is offered in the vocational schools. By this, majority of the respondents (70%) agreed that the dual training at school and workplace gave the trainees a smooth transition to work after graduation. Moreover, trainees benefited in terms of quality training, stipend and exposure to safe work environments, as opposed to the informal apprenticeship learning. These results are further highlighted in Table 3.

**Table 3: Benefits of Apprenticeships Learning in the Selected Vocational Training Projects**

| Response                                                                 | %   |
|--------------------------------------------------------------------------|-----|
| Employers and vocational schools collaborate in training                 | 89  |
| High quality training at the workplace                                   | 87  |
| The sponsorship in training helping youth to access training for free     | 74  |
| Smooth transition from vocational school training to the workplace       | 70  |
| Apprenticeship learning contract gives trainees access to a wage/stipend/allowance | 65  |
| Reducing skills mismatch between training and labor market needs         | 65  |
| Apprentices’ assurance of availability of jobs during and after training | 64  |
| Increased enrolment in the vocational centers                            | 61  |
| Opportunities for additional skills development among the trainers       | 59  |
| Support to acquire modern training equipment and technologies in the vocational schools | 54  |
| Access to role models and soft skills training at the workplace          | 52  |

(n=52)

During the interviews with the vocational school trainers, all the respondents agreed that the introduction of apprenticeship learning has eased training pressure in schools. As one trainer explained, “The training courses under this apprenticeship learning are designed for theory here (in school) and practical experience at industry – where they spend more time with the company trainers.” Another responded affirmed, “Since the time our college trainees joined the apprenticeship trade in electrical installation and plumbing, we now pride that we are able to train with the industry, and not for the industry. They (employers) have also enabled us develop and enroll apprentices in the courses that have ready employment.”

Agreeing with in-company trainers on the employment opportunities in apprenticeship learning, one respondent among the trainees stated, “The company trainers have promised us (apprentices) that we shall be absorbed for permanent employment immediately we complete our chef course in this hotel. This is our greatest motivation since we started this school-work training program. For now I am doing my best to become an outstanding chef.
The course will also give us an internationally recognized certificate. We are practically learning about international cuisines – and I could work as a chef in any hotel in any part of this world. So far I am enjoying the work – training experience and I cannot wait to complete this course!

From these findings, it emerged that companies and employers significantly supported apprenticeships learning methodology in Kenya. This further confirmed previous global reports that over 88% of employers found apprenticeship training to be an effective mode of transferring skills needed in various occupations. Indeed, ILO (2021) and Zenobia and Mujuru (2020) indicates that companies recognized apprenticeships learning as the primary model of training future employees. They further acknowledge dual vocational training as an important factor through which employers increase company reputation while accessing low labor costs from the apprentices. On the other hand, apprenticeship training was attractive to young trainees because they receive a monthly remuneration, gain work experience and learn skills that are relevant on the labour market (ILO, 2017; Kithinji, 2022, PASGR, 2018).

6.4 Mainstreaming Apprenticeships Learning in Formal Vocational Training in Kenya

This study examined the effectiveness of apprenticeships learning as a novel model that has been introduced to increase the quality and relevance of vocational training in Kenya. From the findings, apprenticeships has the potential to equipping individuals with the skills needed to reduce skills gap and the problem of youth employment, particularly among the first-time job seekers and vocational school graduates. From the study respondents, 89% agreed that most apprenticeship graduates found employment immediately after graduation, as compared to the conventional school-based vocational training. Employers also indicated that they planned to recruit all the students involved in the selected apprenticeships programs. Based on this background, the following apprenticeship and dual vocational methodologies were found as effective avenues of mainstreaming apprenticeships learning in Kenya:

a) Planned and policy-based collaboration between employers, industries and vocational institutions to implement and utilize apprenticeships learning as a core respond to the actual occupational needs of the workplaces.

b) Introduction of a legal regulatory apprenticeships training framework of matching skills in demand in the labour market with skills and programs provided in the vocational training systems.

c) Development of a national apprenticeships learning toolkit in TVET programs. This includes apprenticeship contracts between the training schools, leading enterprises and employers across occupations and professions.

d) Integration of digital innovations in the design, development and implementation of quality vocational training programs. This is tied to the rapidly changing technologies in the technical and vocational sector and the increasing skills gaps for the digital economy.

e) Government and the social partners to continuously ask for advice on ways of building up quality apprenticeships learning systems and programmes in TVET schools. This includes establishment of local and international development agencies and knowledge centres to generate research findings and evidence-based principles of apprenticeships learning.

f) Promote apprenticeships learning schemes among young people, parents, training providers and the private-public employment services, with awareness raising on apprenticeships as a pathway for employment and broader professional opportunities.

g) Provide sufficient incentives for all actors, includes employers and public authorities to support apprenticeships training schemes. This includes additional remunerations, social protection of apprentices and tax reliefs particularly in small and medium-sized enterprises that supply work-based training spaces.

7.0 Conclusion and Recommendations

Since the 97th session of ILO 2008, apprenticeships training is recognized as the most effective means of equipping young people with work experience along with technical and professional training. In Kenya, formal apprenticeships is a new approach that has been introduced to help the government address the problem of youth employment by combined on-the-job training with school-based training. From the findings of this paper, the authors acknowledge the model of combining on-the-job training with school-based instruction as an effective means of enabling vocational trainees to acquire occupational and employable competences. It also emerged that trainees gain work-place familiarity along school training, making it possible for them to overcome ‘lack work experience’ by time they leave school for work. To scale up apprenticeships training in the formal vocational schools in Kenya, this paper recommended the development and implementation of a robust regulatory framework for an inclusive engagement between the TVET institutions and the labor market. This
includes coordination between employers for on-the-job training and TVET institutes offering off-the-job training. As ILO (2021) reports, a well structured and country-specific apprenticeships learning could benefit nations to meet their industry needs. It is also the core characteristic of developing pools of skilled workforce in the ongoing efforts of resolving unemployment among the rising youth population.

References

Ajuna, A., Ntale, J. & Ngui, T. (2018). Impact of training on the performance of women entrepreneurs in Kenya: The case of Meru town, International Academic Journal of Innovation, Leadership and Entrepreneurship, 2 (2): 93-112

Akama, S.K. (2019). Gender equality and education in Kenya: A case of Women in TVET schools in Nairobi and Kiambu Counties. Unpublished LL.M degree, University of Nairobi.

Audu, R., Obeta, C. & Onoh, C. (2013). Human Capital Development in Technical Vocational Education (TVE) for Sustainable National Development. Journal of Education and Practice, 4(7), 100-106.

Cassidy, N. (2011). German apprenticeships: A model for Europe? Europe business correspondent, BBC News, southern Germany (Published 14 December 2011)

Ferej, A., Kitainge, K., & Wanyeki, P. (2015). Training And Workplace Requirements: Strategies for minimizing the Mismatch Gap. African Journal of Science Technology and Education, Nigeria.

ILO (2017). Overview of apprenticeship systems and issues. Geneva, ILO.

ILO (2020). ILO Toolkit for quality apprenticeships. Geneva, ILO.

ILO (2021). A framework for quality apprenticeships. Geneva, ILO.

Kerre, B.W. (2010). Technology and Vocational Education and Training (TVET): A Strategy for National Sustainable Development. Eldoret, Kenya. Moi University Press

Kithinji, W. K. (2022). Introducing Dual Apprenticeships Training in Kenya: Perspectives of Selected Donor Projects in Technical and Vocational Schools. Journal of Popular Education in Africa. 6(1), 102–113.

Ministry of Education (2012). A Policy Framework for Education and Training Reforming Education and Training Sectors in Kenya. Nairobi: Government Printer

Ngugi, M.N., & Muthima, P. (2017). Female Participation in Technical, Vocational Education and Training (TVET) Subsector: The Kenyan Experience. Public Policy and Administration Research, 7, 9-23.

Okinyi, R.A., Nyerere, J.K.A., & Kariuki, S.I. (2021). Internal efficiency of public vocational training centres in Kenya. African Educational Research Journal, 9 (2): 375-384.

Onsumu, E. & Munga, B. (2014). State of Youth Unemployment in Kenya. Brookings.ed/blog/Africa in focus (2014/08/21)

Powers, T.E. & Watt, H.M.G. (2020). Understanding why apprentices consider dropping out: longitudinal prediction of apprentices’ workplace interest and anxiety. Empirical Res Voc Ed Train 13, 9.

UNESCO (2016). What is education 2030. https://unesdoc.unesco.org/

World Bank (2017). Youth unemployment: challenges and opportunities in economic development. Retrieved from: web.worldbank.org.
