

Introducing Dual Apprenticeships Training in Kenya: Perspectives of Selected Donor Projects in Technical and Vocational Schools

By

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Abstract

Dual education system is a successful and well-tested European training approach that develops skilled workforce using a combination of on-job training in companies and theoretical learning within vocational schools. In the last few years, various donor-supported dual apprenticeships training programs have been adopted to enrich the context of technical and vocational education in Kenya. This article highlights a desk review of documented literature and secondary data concerning five employer-led dual apprenticeships training projects in Nairobi and Mombasa. Overall, the analyses have shown a direct relationship between the dual apprenticeship learning models and the quality of vocational training. The results further affirm that dual vocational training is, potentially, the much-needed sustainable solution to the current problem of youth unemployment. This is because apprenticeship training equips trainees with market-relevant skills and a relatively smooth school-to-work transition for job seekers. Similarly, the collaborative engagement of the industry gives them a qualified apprentice improves work productivity and profitability in the process of learning, leading economic growth and national development.

Key words: Apprenticeship, dual vocational training, employment, industry

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Introduction

Apprenticeship is a centuries-old training system that has existed all over the world in a variety of different fields. In the recent years, apprenticeship gained widespread acceptance in formal education and training due to its long history of increasing opportunities for jobs and gainful employment among the skilled and unskilled populations. According to the International Labor Organization [ILO] (2012), effective apprenticeships, particularly the dual systems that combine workplace and school-based training, matches the supply of skilled labor to the need of employers. This approach also equips young people with the skills needed to enter the world of work, thus reducing incidence and duration of unemployment. Indeed, scholars affirm that the countries where a fifth or more of all 16-24-year olds undergo the dual training system have lower youth unemployment than where apprenticeship is not common (ILO, 2020; Mann, 2016; Ryan & Lorinc, 2018).

In this article, dual apprenticeships training occurs when trainees practice on-the job what they learning in the school. According to Gessler (2019), the learning potential of apprenticeship is related to the degree of formalization (curricula, duration and certification) on one side, and the degree of learning potential of the work on the other side. This implies that when employers offer an apprenticeship, the tasks of training and learning become part of the job description. It also allows learning on-the-job and offers training on-, near-, and off-the job (p.687). So far, Germany is recognized to have to longest tradition of dual training system with success stories of high youth employment and employer engagement in training. This model has adopted in several other European nations such as Austria, Switzerland, the Netherlands, Denmark and Great Britain (Deissing, 2015; Erica, 2016; Haasler, 2020).

Kenya is one of the developing countries in Africa where unemployment has remained on the rise for the growing population among the young people (Munga & Onsumu, 2014). In part, this problem is attributed to the failure of the formal postsecondary education and training to graduate qualified professionals who can meet the industrial sector needs. In response this, the government has put in place various policies and extensive initiatives, with particular focus in reforming the vocational training system (Erima, 2021; Obonyo, 2013). In fact, dual vocational training approach is one solution that has been launched in various vocational training schools. These are public-private sector partnership projects that combine practical training in companies (training on the job) and theoretical oriented lessons in vocational centers. These projects are adopted from the successful and well-tested apprenticeship vocational training models in Germany, Switzerland, Denmark and Austria to improve the quality of vocational training, develop a skilled workforce and reduce unemployment. For instance, the German dual vocational training system has proven results of increasing training opportunities, lowering youth unemployment and directly impacting growth of the German economy (TVETA, 2020; <https://www.kenia.ahk.de/vocational-training/youtu.be/sXhSRoSfxuU>).

Statement of the Problem

The dual apprenticeship training system is one of the key success factors of vocational education around the world. In Kenya, the need to address youth unemployment through TVET reforms has facilitated the introduction of dual apprenticeship in several formal vocational schools within the country. This article reviewed five dual apprenticeship training projects that have been launched by the Kenyan government in partnership with various international institutions, companies and vocational training centers. These are donor-funded projects that are offering opportunities for trainees to acquire theoretical knowledge and practical skills on particular disciplines in a company and in class alike. Therefore, this author hopes that the formal TVET institutions in Kenya could draw success lessons from the projects, adopt dual vocational training practices and fix the current shortage of skilled workforce.

Objectives

Dual apprenticeship system has long-standing success stories in vocational education and training within Germany and other countries such as Switzerland, Austria and Denmark. The objective of this paper is to demonstrate stems from the fact that it has long had a firm place in these countries.

Review of Related Literature

In its simplest form, the dual apprenticeship system is a vocational training approach that is based upon a combination of on-the-job training within a specific company, and class-room based training provided by a vocational school. According to Furstenau, Pilz and Gonon (2014), the dual system of vocational education and training (VET) is a specific training approach that aim at systematically combining the advantages of training in a company and education in a vocational school. This training system also has a long history of existence to a significant extent in Germany, Austria, Luxemburg, Switzerland, Denmark, parts of the Netherlands and the German-speaking regions of France and Italy. As documented in Dolphin and Lanning (2012) and ILO (2021), there are five elements of dual apprenticeship vocational training, namely:

- a) Learning take place at both the workplace (learning while working) and the formal vocational center
- b) The workplace tasks of the trainees (also referred to as apprentices), which are guided by a trainer or an experienced employee, are directly connected to learning. They also make sure that once the apprentices complete their training, they are able to discharge the specialized duties without supervision
- c) The formal vocational training school offers theoretical knowledge oriented to the selected occupation and specialization.
- d) Training in school is organized on either a regular basis (where apprentices attend school one or two times a week) or blocked arrangement (apprentices attend school for several weeks for one or two times per year)
- e) Depending on the profession of study, apprentices are contracted as employees and they spend a bulk of the training period for on-the-job and practical learning.
- f) The examination boards and assessments are conducted by representatives of employers, employees and the vocational schools.

Difference between apprenticeship and internship programs

Traditionally, the practice of apprenticeship and internship programs is meant to help students to implement college skills and knowledge at the work place. However, the two models differ in several ways. For instance, apprenticeships are the oldest form of training and has been a traditional part of craftsmanship since the Middle Ages. Moreover, apprenticeship is much longer and more educationally ambitious than an internship, usually lasting more than one year compared to a few months for internships (Frenette, 2015). Secondly, apprenticeships are more demanded in technical and application-based courses in order to help students get established in the career. On the other hand, internship programs are versatile in nature and often determined by the educational institutions rather than the employers who host the trainees. As such, there are lesser benefits of internships to employers as opposed to the commitment and work-related experience of apprenticeship programs (ILO, 2020) as presented in Table 1

Table 1
Differences Between Apprenticeships and Internships

	Apprenticeships	Internships
On-the-job training	coequal to coursework	supplemental coursework
Time frame	4 to 5 years	6 months to a year
Training designer	employer	educational institution
Benefit to employer	tangible	coincidental
Procurement	individual participant	educational institution

Source: ILO (2020)

In Kenya, dual apprenticeship training is one training approach that have been adopted to address enhance the quality and relevance of technical and vocational education and training (TVET). To begin with, TVET reforms are tied to the Session Paper No. 4, 2012 and the policy framework that initiated efforts to align education and training with the Kenya Constitution, 2010 and Kenya Vision 2030. These reforms have been actualized through the TVET Act of 2013 upon which the required knowledge, skills and attitudes are hinged. The government has also successfully redirected school leavers and the unskilled populace towards vocational skills training, and apprenticeship learning is now part of the ongoing competence-based education and training reforms (Momanyi, 2014).

On one hand, employers are actively spearheading apprenticeships training in the vocational schools to address the existing deficits in the skilled workforce. As noted by the ILO (2012), engaging employers in the dual trainings improves the alignment between supply and demand of skills. This is because employers ensure that curricula and competences remain up to date with the needs of the industry, which in turn improves the value and employment prospects associated with apprenticeship learning. Notably, improving the match between education and work is particularly important at the local level, where globalization and technological changes are creating a polarized labor market of high and low paid jobs (p.20). On the hand, apprenticeships vocational education is a novel training approach that could potentially solve the

widespread lack of skilled labor. Additional reports also indicate that apprenticeship training could reduce youth unemployment and the problems that graduates find as they transition from school to workplace (Ajuma, Ntale & Ngui, 2018; Momanyi, 2014; Partnership for African Social and Governance Research [PASGR], 2018).

Similarly, the government has accepted dual vocational training as one unavoidable response to the failure of vocational schools in catering for industrial sector needs. While skills gap is part of the problem of youth unemployment (Okinyi, Nyerere & Kariuki, 2021) apprenticeship training is an alternative avenue of increasing access to postsecondary training. As noted in World Bank (2017), apprenticeships training could help most of the developing countries in Africa, including Kenya, to increase the number of the qualified professionals who are needed to raise economic productivity and foster national growth. Moreover, the demand for the dual character of vocational training is on the increase since it gives trainees more learning period to the real workplace than at the vocational schools, and thereafter help trainees to transition to working life at course completion (ILO, 2020).

This article presents a comprehensive survey of five case studies of employer-led dual apprenticeship training programs in Mombasa and Nairobi. These are donor-supported projects which are implemented by employers, manufacturers and government agencies, including the Ministry of Education (MOE). The review is anchored on the assertion of Becker's Human Capital theory 'quality education and training benefits job seekers to fit into dynamic labor market' (Samiulla, 2014). The author opines that this article provides adequate insights, evidences and resources for the formal vocational training centers to adopt the apprenticeships dual training practices within the ongoing educational reforms in Kenya.

Methodology

A desk review was carried out to identify dual apprenticeships training programs in Kenya. Data was collected from the published literature in the websites and databases of the donors, companies and vocational centers that are involved in the ongoing or completed dual apprenticeship projects. Additional data collected from available global reports, government published reports, books, project documents, journal articles, newspapers, magazines, newsletters and documentaries. A document analysis guide was employed to collect secondary data concerning each of the five donor-funded apprenticeship projects. This included: project name, finding donor or donors, training partners (company and the vocational schools) and the TVET level of the occupation (course). The results are presented as case study findings herein.

Findings and conclusions

I. Case Study 1: Severin Craftsmanship Training in Mombasa – Level 4

This apprenticeship training project was born as a social responsibility project of Severn Sea Lodge and Mombasa Go-Kart targeting unskilled youth in the County of Mombasa and Kilifi. This arose out of persistent difficulties to find qualified craftsmen for routine repairs and maintenance within Mombasa region. Each year, 30 young craftsmen are enrolled in the apprenticeship project for craft level occupations in electrician, plumber, carpenter, mason and welders as presented in Table 1. The trainees go through the apprenticeship program under a team of experienced craft supervisors. They also conduct practical work in the maintenance

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department of Severin sea lodge and Mombasa Go-Kart. Later the apprentices go through the National NITA examinations Grade III, Grade II and Grade I, which is the highest grade.

Table 1: Severin Apprenticeship in the German structure

Project Title	One trainee at a time: Become part of a well-trained and skilled society		
Objective	Raise of pool of well trained and qualified craftsmen for handyman services		
Donor/Founder	PROFI/Severin		
Name of the vocation	Electrician, plumber, carpenter, mason, welder		
Vocational school	Company	Partners	
Severin craftman training center	Severin Sea Lodge, Bamburi Beach Hotel	German Association of International Cooperation (GIZ)	
Level of the program(s)	Craft (Level 4)		
Duration	3 years		
Regulator(s)	TVETA, NITA, GIZ		

Source: Severin training center. 2022

II. Case Study 2: Skills Expert Training in Hospitality Sector – Level 6

The Delegation of German Industry and Commerce (AHK) for Eastern Africa is the official representation of the German economy in Eastern Africa, with office in Kenya, Uganda and Tanzania. The AKH Kenya office is promoting the German dual training system as a platform for training in Technical and Vocational Education and Training (TVET) in Kenya. So far, the first apprenticeship dual training in the hospitality sector started in 2019 after AHK (Kenya) and the hospitality curriculum was accredited by the Kenya National Qualifications and the Technical and Vocational Education and Training Authority (TVETA). This is a two- and half-year course that awards trainees a German certificate that corresponds to Diploma (Level 6) in Kenya.

Table 2: AHK Skills expert training program (German model)

Project Title	Skills Expert' Program in the Hospitality sector (2019-2024)	
Objective	Promoting German Dual Vocational training in Kenya's hospitality sector	
Donor/Founder	The Delegation of German Chamber of Industry for Eastern Africa (AHK)	
Name of the vocation	Chef, Hotel Specialist	
Vocational school	Company	Partners
Kibondeni College of Catering, KeMU Technical Institute	Tribe / Trademark Hotels, Intercontinental Hotel, German School, Diani Sea Lodge, Leopard Resort	AHK
Level of the program(s)	Diploma (Level 6)	
Duration	2 ¹ / ₂ years	
Regulator(s)	TVETA, KNQA, AHK	

Source: www.kenia.ahk/de/dual-vocational-training (2022)

In contrast to the regular school-based training, this apprenticeship program offers 60-70% of training in the workplace, while 30-40% takes place in a vocation school. AHK also offers a vocational trainer qualification course '*Training of Trainers*' to develop the trainers' pedagogical capacity and skillsets to effectively implement dual training. So far, the first apprenticeship Chef course (2019 -2021) between Trademark/The Tribe Hotels and Kibondeni College of Catering and Hospitality Management graduated seven chefs in September 2021. In the training, 70% of practical occurred in the partner hotels, while 30% of theoretical training was conducted in the partnering college. This offered trainees an opportunity to directly put into practice what they learnt in class and become part of the team in the company (hotel) [Kenia, 2022]. This program is currently ongoing in Nairobi and Mombasa with the entry of new partners hotels (Diani Sea Lodge, Leopard Beach, Bamburi Beach Hotel) and vocational centers, including Kenya Methodist University. Indeed, the hospitality sector in Kenya will reap many benefits from this dual vocational training program even as AHK plans to expand the training to additional courses in logistics and manufacturing sectors.

III. Case Study 3: Swiss Dual apprenticeship training for skills in construction sector – Level 4

This is a Swiss apprenticeship training project that is jointly driven by private and public partners to equip job seekers to access better jobs and higher incomes in the construction sector. The training targets Kenyan youth who are aspiring to acquire construction trade qualifications in plumbing and electrical installation. Notably, the partner construction companies define the competences which are relevant for practicing the profession of electricians and plumbers. As such, the training is anchored in enterprises and the apprentices are taught skills on the job. However, this practical company-based learning is complemented with theoretical training at the

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vocational centers. Ultimately, this training modality is not only cost-effective, but it also gives the young apprentices access to jobs. In addition, the partner construction companies benefit from the quality services provided by educated and productive workers.

Table 3: Swiss Dual vocational training in construction sector (Kenya Project)

Project Title	Apprenticeship for a skilled workforce in construction sector (2021-2022)	
Objective	Improving the vocational skills of young people in Kenya	
Donor/Founder	Hilt Foundation, Swiss Agency for Development and Cooperation (SCD), Federal Department of Foreign Affairs (FDFA), Swisscontact	
Name of the vocation	Plumber, Electrician	
Vocational school	Company	Partners
Eastlands College of Technology, Don Bosco	Allied Plumber Limited Kenya, Master Builders' Association, Federation of Registered Electric Contractors	Schneider Electric, Kenyan plumbing and electrician companies
Level of the program(s)	Craft (Level 4)	
Duration	2 years	
Regulator(s)	NITA, TIVETA, TIVET –CDACC	

Source: Swisscontact (2022)

IV. Case Study 4: GIZ Introduces dual vocational training in Kenya – Level 3

Since early 2017, the BMZ (Federal Ministry of Economic Cooperation and Development) has been working with enterprises and vocational training centers to develop training programs for young men and women in the coastal region of Kenya. So far, over 6,000 unemployed youth have received training to become welders, carpenters, painters and decorators, electricians, restaurateurs and hoteliers. Among them, nearly 2,700 graduates have now either found a permanent job or successfully become self-employed in the various areas of training.

Table 4: GIZ – Kenya Dual apprenticeship program

Project Title	Employment and Skills for Development in Africa (E4D): Youth Employment and Vocational Training for Self-employment (2017 -2022)	
Objective	Reducing youth unemployment by improving vocational training system in Kenya.	
Donor/Founder	Federal Ministry of Economic Cooperation and Development (BMZ), GIZ, Ministry of Industrialization	
Name of the vocation	Welders, carpenters, painters, decorators, electricians, restaurateurs, hoteliers	
Vocational school	Company	Partners
Mwabanyundo Polytechnic, Lamu Vocational Training Centre, CAP-YEI MCK Wesley Community Center	Hotels and Informal sector	German Development Cooperation (GDC), the Korea International Cooperation Agency (KOICA)
Level of the program(s)	Artisan (Level 3)	
Duration	9 months	
Regulator(s)	NITA, TVETA	

Source: www.giz.de (2022)

In this GIZ project, seven vocational centers have also been mapped for upgrading to become centers of excellence and models of dual vocational training in selected trades. There is also a strategic focus to introduce blended learning by digitizing courses that apprentices can access on-site and with less travel between the training companies and vocational schools. This innovation will also give apprentices more workplace time and prepare better for the world of work.

V. Case Study 5: Blum’s dual vocational training in furniture construction– Level 4

Blum is a cabinet manufacturing company in the State of Vorarlberg, Austria. Together with Institute for Cooperation in Development Projects, a non-profit organization in Austria, Blum established a cabinet making course in one of the vocational training centers in Kenya. Through PG Bison – the sales partner in Kenya, Blum introduced ‘cabinet-maker’ training program at St. Kizito vocational center, Nairobi. Through their expertise, over 42 young people (11 female and 31 male) have completed the dual cabinet making course since 2019. The trainees acquire the practical cabinet manufacturing skills at the PG Bison factory on rotational basis. Blum also donated to the vocational center adequate modern machinery for drilling and the installation of fittings to ensure quality training in cabinet construction. As the Sales Manager for Kenya states, ‘We are delighted that we can support local experts with cabinet making skills. These young people now have a unique chance to acquire new skills and unlock a completely new profession in cabinet construction.’ (*interview excerpt retrieved on 14/1/22*).

Table 5: Dual cabinet making course

Project Title	Blum Furniture Construction in Kenya (2019)	
Objective	Prepare Kenyan youth to actively contribute to economic life	
Donor/Founder	Blum manufacturers -Vorarlberg, Institute for Co-operation in Development Projects – Austria	
Name of the vocation	Cabinet maker	
Vocational school	Company	Partners
St. Kizito vocational training centre	PG Bison	PG Bison
Level of the program(s)	Craft (Level 4)	
Duration	2 years	
Regulator(s)	TVET, NITA	

Source: www.blum.com (2022)

Conclusion and Recommendations

Dual apprenticeship is a vocational training system that allows trainees to spend most part of the learning time in the real work and business processed while the other time they learn at their vocational centers. This implies that vocational schools and the workplace work collaborative places of student learning. While literature shows that this training system has a long-standing tradition and success stories from Europe, particularly in Germany and Switzerland, the global need for nations to match education with work has created the rapid demand for dual apprenticeship learning. This is more urgent in the many developing nations that are struggling with problems of unemployment, underemployment, low paid jobs and a rising youth population. In Kenya, the recent introduction of dual apprenticeship training in the cited projects has given some evidence-based insights for all vocational training centers to adopt the dual apprenticeship practices in all their curricula and programs. Remarkably, the presence and participation of employers and industry associations in the five apprenticeship projects affirms vocational training to be more employer-led and less school-focused. Tied to the ongoing reforms in education system, these models also affirm that apprenticeships training should be embedded within the existing technical and vocational education framework. In conclusion, this author upholds that there are immense benefits of dual apprenticeship training and all stakeholders need to delve into this novel vocational framework. They include: (i) Enhanced quality and relevance of vocational education and training (ILO, 2020). (ii). Access to earning and other incentives for the engaged apprentices (O’Higgins, 2017). (iii). Improved graduates’ transition from education to the world of work (Archir, 2020). (vi). High employment rates (ILO, 2012). (v). Alignment between supply and demand of skills (World Bank, 2017). (vi). Reduced skills mismatch (World Bank, 2017). (vii). Access to skilled workforce (ILO, 2012). (viii). Increasing productivity and profitability of the enterprises (ILO, 2020). (ix). Strong TVET linkages with the labor markets (Modlane, 2015).

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