

Apprenticeship as a Work-based Learning in Addis Ababa City Administration of Ethiopia

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Abstract: This study aimed to examine apprenticeship from the standpoint of work-based learning and its function in skill development. Considering this, the study attempted to investigate historical settings as well as contemporary behaviors, including the potential and difficulties associated with apprenticeship. A qualitative method and quantitative data from documents were used to address this objective. Interviews were done to assess opportunities and difficulties throughout the apprenticeship. For analysis, the interview data were transcribed. To supplement this, documents and previous works on apprenticeship's institutional, organizational (employers) and individual (apprentices) contexts were used. The approach and materials consulted were chosen depending on policy relevance and contextual appropriateness. Accordingly, research-based documents were thematically organized and analyzed. Hence, the results showed that the development of skills and work behavior was aided by apprenticeships as a route of skill transition. Because costs were matched by companies (enterprises) in this arrangement, it gave young people a chance to support themselves. However, part of the problem emanates from the traditional nature of apprenticeship, which has a low contribution to economic development. Weak linkage was also observed between vocational institutes and apprenticeship providers. Finally, policy alternatives were suggested to fill the existing deviation in the direction of school-to-work transition.

Keywords: *Apprenticeship, vocational institutes, companies, school-to-work-transition, Work-based learning*

1. Introduction

Context and Problem Statement

Situated in the Horn of Africa, Ethiopia is a nation steeped in history. Other than an Italian short-term invasion, it is the only country in Africa that has never been colonized. Ethiopia is taken into consideration because of its location in the middle of a fragile ecosystem. The African Union and several international organizations are headquartered in the capital Addis Ababa, which also has the third-highest concentration of diplomatic missions worldwide, after only New York and Geneva. The population is estimated to be 108.4 million in the CSA's 2007 prediction of 2018 est., of which approximately half are female and 78.8% live in rural areas where agriculture is their primary source of income (2019 est.). It is also noteworthy to observe that, even though around 50% of the population is in the labor force, 19.1% of people in the nation are unemployed (2018 est.).

Although Ethiopia is the only nation in Africa to have its own written script dating back to the Axumite period (4th century), it has a low literacy rate of 51.8% (2017). Besides, despite a 66.1% gain between 2000 and 2019, the nation's Human Development Index (HDI) in 2019 was 0.485, placing it in the low HDI group. GNI per capita increased by 6.25% to 850 USD in 2019 from 2018. However, Ethiopia is spending money on education to end poverty. The government enrolls 20 million children in school, allocating nearly 20% of its budget to education.

Ethiopia is seeing a sharp increase in schooling across the board. Still, there is a long way to go before the educational system can raise the standard of instruction. There is educational inequality between boys and girls as well as between urban and rural (nomadic) populations. Furthermore, the TVET system is not strongly linked with small and medium enterprises (SMEs). Studies on the SME sector in Ethiopia have identified that skill training is not oriented to enterprise development; limited access to market information; lack of credit facilities to start or expand firms; and high prices of raw materials and low sales prices (Fitsum & Shumiye, 2000). Additionally, training facilities prioritize information acquisition over value and skill development. Besides, graduates lack employability or soft skills. Thus, this study focuses on apprenticeship as a work-based learning in Addis Ababa as a means of resolving this policy priority issue.

Background and Emergence of Apprenticeship

Informal vocational education dates to a time when people were living together and starting to provide for their fundamental necessities. To make room for hunting and food gathering, early humans cleared the

vegetation using fire, axes, sticks, and stones. Little knowledge was verbally transmitted from father to son. During this time, learning was done by skill imitation (Abramson, Tittle & Cohen, 1979; Brembeck, 1970).

According to Baliey & Stady (1973), the Babylonian Code of Hammurabi has the earliest record of informal apprenticeship: if a craftsman adopts a son and teaches him his trade, then others cannot legally sue him. The adoptive son might go back to his father's house if he doesn't educate him on how to make handicrafts. It appears from exhibits of ancient Egypt, Greece, and Rome that this was one way that skills were passed down.

People eventually learned how to make tools by melting metal and using fire to cook over time. With these talents, division of labor was required, as opposed to the earlier days of doing everything possible. While some people make their income as smiths, others are employed as carpenters, masons, or weavers. Different craftspeople formed social groupings due to the new social development, and the Middle Ages' guilds developed from these social groupings (Abramson, Tittle & Cohen, 1979).

During the Middle Ages, an apprenticeship program was run by the guild's association (association to safeguard members' interests). Apprenticeship was created because family legacy and intuitive learning were not sufficient means of passing down knowledge. It consists of young people studying any trade under the guidance of skilled artisans and in compliance with set guidelines. Training and production are combined in this approach to help the trainees grow into adult life (Hanson, 1977 & Brubacher, 1987).

Subsequently, the fast development of machinery and the increased demand for goods led to a greater need for mass production than apprenticeship. Thus, the primary cause of the fall of medieval apprenticeship and the rise of new formal schooling models and advanced apprenticeship was the Industrial Revolution (Abramson, Tittle & Cohen, 1979).

Although apprenticeship in its informal form is as old as mankind, its development is at an early stage in most developing countries including Ethiopia. Informal apprenticeship of the old times is related to the transmission of family heritage, unconscious learning, and the guilds of medieval apprenticeship. Nowadays, informal apprenticeship involves unstructured traditional apprenticeship in work situations. Formal and modern apprenticeships, on the other hand, are regulated through a contract between companies and apprentices.

The Trend and Development of Apprenticeship in Ethiopia

Handcrafters, artisans, and other manually skilled people faced discrimination and hatred in Ethiopia. They were viewed as lower castes to the point where parents would not permit their sons or daughters to marry in those homes while they were young. It is depressing to observe a circumstance in which many people make use of their household utensils and appliances while paradoxically displaying hostility. Names are connected to vocations in Germany. For example, the terms "blacksmith," "leather worker," and "shoemaker" are indicated by the terms Schmidt, Lederer, and Schumacher. Conversely, names of Ethiopians like Getachew, Goitom, and Bulcha are more indicative of self-glory than occupations (Teklehaimanot, 2003).

Even though modern education was introduced in the 20th century and the Ethiopian government intended for people to acquire technological skills, most courses taught in schools were intellectual, to prepare students for various administrative and clerical roles.

The information that is now available suggests that structured apprenticeship programs and vocational training were not prevalent in previous times. Nevertheless, it was mentioned that there had been a need for foreign artisans during the reign of Emperor Theodros (1855–1868). Emperor Menlik II also played a crucial role in the introduction of a few Swiss artisans to Ethiopia in 1877 (Girma *et al.*, 1990).

Ethiopia's educational system has recently shifted to emphasize apprenticeships and vocational training—a mix of workplace training in firms and relevant technical and theoretical study in school. Before 1997, there were just 17 TVET institutes, a situation that persisted for almost ten years. With the addition of 25 skill development centers to the system in 1997, there were 42 TVET institutions in total. Dramatic reform attempts were made to the TVET system in 2001. As a result, there were 141 TVET intuitions in 2001 and 582 in 2016–17, with a total enrollment of 302,083 students under public and non-government responsibility.

TVET trainees in Addis Ababa City Administration rose from 31,186 in 2012–13 to 40,447 in 2016–17, with 50.3% female participants. The number of TVET institutes rose from 33 in 2012–13 to 90 in 2016–17. However, job searchers and employment opportunities are not aligned. Additionally, the growth of TVET institutions puts pressure on the placement of apprenticeships (MoE, 2016/17).

Proclamation No. 391/2004 states that the TVET office is responsible for determining the apprenticeship program for each occupation, after consulting with employers and considering occupational norms (FDRE, 2004b). The three alternate models listed in the apprenticeship guidelines are as follows:

- trainees are assigned for apprenticeships after finalizing training in the TVET centers at several occupations.
- possibility for trainees to conduct three of the five modules they enroll in and go for cooperative training and then pursue the remaining modules upon accomplishing apprenticeship.
- trainees can only undertake an apprenticeship after completing all training modules.

In the past, a lot of training facilities chose the first course of action. Currently, though, the final option—which has to do with cooperative training—has gained popularity. The proclamation states that organizations that will participate in the provision of apprenticeship will be chosen by a state-authorized body using standards and criteria set by the office. Despite being mentioned in the proclamation's language, the present practice of choosing apprenticeship providers does not follow the established standards. This can be attributed to the scarcity of apprenticeship providers (companies/enterprises).

2. Concepts of Apprenticeship

Meanings of Apprenticeship, Internship, and Cooperative Training

Vocational training may be situated along a continuum. At one end is secondary school-based training and at the other side of the continuum comes firm-based (apprenticeship) training. The category of apprenticeship ranges from more of the training exclusively undertaken by enterprises for unemployed school leavers to more formal secondary school vocational training with some familiarization training in enterprises. Most developing countries pursue the latter, that is, school-based vocational training with little attachment to enterprises. Conversely, developed countries prefer the former which focuses on labor market-oriented apprenticeship. Between these two extremes, German-speaking nations have a dual paradigm that combines a higher percentage of apprenticeship in companies with less part-time in-school training.

Apprenticeship involves individuals learning in companies or small firms through contractual agreements and under the guidance of master craftsmen. The term cooperative training, being the recent version of apprenticeship, was introduced to reinforce the dual nature of training at both the TVET institutes and companies or enterprises.

Apprenticeship contributes to building positive work habits involving continuous improvement, reshaping, and redevelopment of individuals. Work habits and attitudes cannot be associated with a single effect but are the result of repeated interface through learning by doing (Patton and McMahon, 1999).

Apprenticeship, internship, and cooperative training try to integrate both in-school and in-company training. These concepts could be used interchangeably or slightly differ and their application is context-based. For instance, in health sciences, an internship is mostly used, whereas in TVET apprenticeship or cooperative training is practiced. According to the Addis Ababa TVET Agency, in strict cooperative training, trainees will be assigned to companies for skill-based training under company supervisors after completing at least one module or unit of competency in TVET institutes. Regarding internship, trainees will be placed in companies upon completion of one level (minimum of two to three modules) at TVET institutes. On the other hand, an apprenticeship scheme will be commenced when the in-company training is undertaken upon completion of the total required in-school training. Thus, all these three concepts are aimed at facilitating school-to-work transitions (SWT) and strengthening the community's way of life through hands-on experience and value formation.

Traditional Apprenticeship as a Means for Informal Skill and Value Formation

Due to the increased expenses of formal apprenticeships and lack of relevance, attention is being given to traditional apprenticeships in some developing countries. In Kenya, 40% of trainees receive skill training through traditional apprenticeship. Similarly, traditional apprenticeship is responsible for 80-90% of skills development in Ghana (Abdelkarim & Haan, 2002/03). Traditional apprenticeship is very important in Senegal. According to Maldonado and et.al (2001), about 68% of the total micro and small enterprises are traditional apprentices.

The community including the apprentices, the family, and master crafts (wo)men have different attitudes towards a traditional apprenticeship. Given the relative potentials and limitations of traditional apprenticeship, Table 1 presents the following comparative perspective.

Table 1: Potentials and Limitations of Traditional Apprenticeship Training (TAT)

TAT strengths	TAT weaknesses
basic skills are covered in the training, together with instruction in a technology pertinent to the sociocultural conditions of the area basic business skills included in the training practical, hands-on training is the major focus training allows for the gradual development of a business network in the informal sector. training frequently leads to employment in the same workshop. training costs are low as there is no need for training centers or separate training tools and equipment training costs are minimal; the "master" and/or the apprentices' families are responsible for all training expenses & subsidies are not required although TAT is frequently utilized by young people as pre-employment training, it is available to anyone who wants to learn a trade. Hence, it can also be used for skill enhancement.	limited introduction of technological advancement theoretical issues are not given enough attention typically, no pre-planned training program and no training materials • low-quality training tools and equipment and absence of standards • no protections against using apprentices as cheap labor frequently, high apprentice/'master' ratio masters may lack appropriate teaching abilities resulting in passive learning and repetition, inadequate training/working environments. rarely linked with post-training skills testing without recognized training certificates. there is no further training assistance or follow-up. payment of fees can be challenging for apprentices from low-income homes. apprenticeship is less relevant for girls and women since it is more popular in male-dominated trades

Source: (Abdelkarim & Haan, 2002/03)

Although traditional apprenticeship as pre-employment training is related to the socio-economic situation of the community and is less costly, it has limitations in terms of technology, standards, and working conditions. However, concomitant to promoting modern practical attachments, homegrown and indigenous traditional apprenticeship approaches need to be scaled up.

Social & Economic Contributions of Apprenticeship for Work-based Learning

Apprenticeship as a social phenomenon of learning should not only rely on the traditional transmission model (apprentice-master relationship). Instead, it needs to spearhead transformative learning, which considers not only the transmission of existing knowledge but also the value of new knowledge being created within workplace communities (Guile & Young, 1998).

Work-based learning such as apprenticeship should be demand-led. Hence, there is a need for partnership among employers, training providers and apprentices. These partners should be convinced about the social and economic importance of learning in the workplace. The presence of partnership increases the value added and is ultimately responsible for shifting the focus from merely considering learning as a cost to of learning as an investment (Smith & Betts, 2000).

Based on the works of the European Centre for the Development of Vocational Training (Cedefop) and other partners, work-based learning (WBL) refers to:

"All forms of learning that take place in a real work environment. It provides individuals with the skills needed to obtain and keep jobs and progress in their professional development. Apprenticeships, internships/traineeships, and on-the-job training are the most common types of work-based learning" (Cedefop, et.al, 2022: 7).

UNESCO-UNEVOC outlined why work-based learning matters. To this end, Sweet (2013) specified the benefits of work-based learning hereunder.

- Work-based learning can raise firm efficiency and competitiveness,
- Work-based learning is a powerful form of pedagogy,
- Work-based learning can enhance trainees' career development,
- Work-based learning can result in decent youth transitions, and
- Work-based learning can raise the quality of vocational studies.

As discussed in the section above, work-based learning benefits both individual trainees (apprentice) and apprenticeship-offering organizations. Enterprises fulfill their social responsibilities by contributing towards the enhancement of school-to-work-transition (SWT). For apprentices, work-based learning familiarizes them with the work environment.

Contextualized learning that considers the reality of the workplace increases student motivation for vocational students with part-time apprenticeship arrangements, relative to their counterparts under a purely school-based approach. Such problem-solving and workplace-oriented methods bring better learning outcomes to vocational trainees (Grubb, 1995; Unwin & Wellington, 1995).

In apprenticeship, it is important to maintain the balance between production and learning (practice). Otherwise, the learning environment in the workplace will be adversely affected. In support of this, Brooker and Butler (1997: 487) asserted that "in a context where production is valued over learning, several effective learning processes are underdeveloped and undervalued." Moreover, some apprenticeship offering employers used to limit learning at the workplace in the interest of immediate production (Ryan, 1994). Hence, learning and production are complementary and sparing for learning to enhance productivity.

The profitability of vocational training, among other things, depends on duration and mode of delivery. To this end, social return to different modes of training is acceptably high. Conversely, World Bank studies indicated that firm-based training and short-term courses have a higher payoff than vocational training which, mainly takes place in schools at least in Kenya, Peru, India, and Israel (Metcalf, 1985 & Psacharopoulos 1987).

Besides, according to research in Israel, apprenticeships are found to be cheaper and equally effective than vocational schools (Lauglo, 1993). Similarly, the cost per student is nine times higher for vocational schools than for apprenticeship or firm-based training (Metcalf, 1985).

Informal Apprenticeship versus Modern Apprenticeship

Whereas formal or modern apprenticeship is a contract between firms and apprentices that is regulated by the Apprenticeship Act, traditional or informal apprenticeship involves skill training in small firms and family circles. In a traditional apprenticeship, trainees live with their master's family and receive training by working under them. It is uncommon for modern apprenticeships to follow this method. In a conventional apprenticeship, the apprentice must pay the master for the knowledge and skills they wish to acquire. However, in a modern apprenticeship, the apprentice receives compensation from the proprietors of the respective industries. Industries typically provide apprenticeships in addition to trade theory. A trade test is given after the course, and certificates are given. Employers would rather hire an apprentice than someone unfamiliar with the nature of the work if there is a vacancy in the industry.

One of the most successful and economical methods is modern apprenticeship. Because employers bear most of the costs, the government saves money on it. Less money will be spent overall on the national economy because the same resources—instructors, tools, supplies, and time—will all be pooled. Apprenticeship, in the modern sense, requires cooperation among employers, apprentices and the government. Apprentices' Assessment Form may serve as a communication document between training institutions and apprenticeship

providers. If apprenticeship is to stay competitive, employers need to be the primary decision-makers about how many apprenticeship placements to offer and what skill standards are aimed for. However, strong employers and chambers that coordinate apprenticeship do not exist in most countries except in Germany, Austria, Switzerland, and some other countries (Steedman, Gospel & Ryan, 1998).

Table 2: Summary of Relationships between Modern and Traditional Apprenticeship

Modern Apprenticeship	Traditional Apprenticeship
A contract among companies, TVET institutions and apprentices that is regulated by the Apprenticeship Act	Involves skill training in family circles or small firms.
Promotes transformative learning, which considers not only the transmission of existing knowledge but also the value of new knowledge created within the workplace	Learning through the traditional transmission model (apprentice-master relationship)
Apprentices need to travel to companies or enterprises for practical training.	Apprentices are trained by working & residing with their master's or live in surrounding with their families.
Owners or managers of companies pay allowance for apprentices, and it is cost-effective for the government because employers share most of the cost.	Apprentices need to pay their masters for the skills required to learn.

Source: (Researcher's Own Construct from the Literature)

Apprenticeship, in its informal sense, is one of the oldest means of transmitting knowledge, skill and values. In the earlier periods, experiences passed from father to son verbally and through imitation. Conversely, modern apprenticeship involves youngsters learning in enterprises under the guidance of company supervisors and agreement between the apprentices and the organization. Although both traditional and modern apprenticeships are practiced in Ethiopia, their implementation lacks appropriate structure and coordination.

Objectives of the Study

- To stress the need for integrating traditional apprenticeship with modern apprenticeship after assessing its relative strengths and limitations.
- To contribute to the enhancement of working culture and school-company ties by resolving issues and utilizing the favorable environment already in place.

3. Research Methods

The research aimed at examining the apprenticeship context of Addis Ababa City Administration from the viewpoint of work-based learning and its role in skill development, which is one of the policy debates in technical and vocational education and training. To address this challenge, the study approach was qualitative with some statistical data from documents and concerned TVET agencies. An interview was employed to investigate the problems that affect the social learning process and economic returns of in-company training during apprenticeship. The interview was conducted with two officials and five experts from Addis Ababa TVET and Technology Development Bureau after getting their consent and explaining the purpose of the study. The time and venue were decided at the convenience of the interviewees.

To supplement this, the researcher used secondary sources including previous research and policy documents on apprenticeship regarding apprenticeship's legal, institutional, organizational (employers) and individual (apprentices) contexts. The approach and materials consulted were chosen depending on policy relevance and contextual appropriateness. Accordingly, research-based documents were thematically organized and analyzed. Lastly, policy recommendations were presented considering the findings to bridge the gap between the status of apprenticeship and its ideal condition.

Research Questions

- What are the major strengths and weaknesses of traditional apprenticeship? In what ways traditional apprenticeship is integrated with a modern apprenticeship?
- What are the potential and limitations of apprenticeship that promote workplace culture and school--company relations?

Ethical Considerations

The main ethical concerns in the study were informed consent and the privacy of the respondents. These were addressed by informing the participants about the objectives of the study and obtaining their informed consent. The author also states that there is no financial or non-financial conflict of interest.

4. Findings and Discussion from Existing Activities and Review of Previous Practices

The Tables and interview findings below provide information about the state of apprenticeship in Addis Ababa.

Table 3: Summary of Apprenticeship Coverage

Year	No Apprenticeship Providers (Companies)	No Trainees Enrolled	No Trainees Placed for Apprenticeship	Apprenticeship Coverage (%)	Remark
2012/2013	468	23400	20601	88	
2013/2014	1758	25521	24963	97.8	
2014/2015	1322	24406	21920	89.8	
2017/2018	2059	16,160	13,736	85	
2018/2019	2,173	32331	28,128	87	
2019/2020	Complete data not obtained			55	Data not obtained
2020/2021	1281	19,355	12,010	62.05	
2021/2022	1445	23,593	17,251	73.12	

Source: Addis Ababa TVET & Technology Development Bureau

Table 3 shows that there was a minor decline in apprenticeship coverage in 2014/2015 after an increase in 2013/2014. Besides, from 2017 to 2019, coverage in government TVET institutes increased concerning trainees and companies/enterprises. However, in 2020, because of the Covid-19 pandemic, coverage declined. But, as of 2021, coverage exhibited an upward tendency. Thus, encouraging participation in cooperative training or apprenticeship needs to be strengthened and supported by improving TVET–company relations.

It is anticipated that trainees will be placed in businesses to receive hands-on training. If trainees are not placed in cooperative training or apprenticeship, they will participate in project-based learning at their TVET institutions. The Addis Ababa TVET & Technology Development Bureau's annual report for 2022 states that 73.12% of training was covered in cooperative settings. Apprentices must take competency examinations, which, are referred to as the Certificate of Competencies (CoCs) after completing their apprenticeships in their firms. According to the report mentioned above, 86% of the graduates were competent, and 80% of them were able to find employment.

After obtaining permission, the researcher undertook an interview with representatives and specialists from Addis Ababa TVET. To hide the respondents, the interview participants (p) coded as p1, p2, p3, ... As shown below, one of the specialists indicated the implementation of apprenticeship as:

"Despite facing challenges related to ownership problems and a weak legal environment, apprenticeship offers several opportunities. It allows apprentices to learn about work ethics, provides a chance to wage employment and self-employed jobs, helps firms find skilled workers who are already familiar with the work situation, and reduces the cost of training and recruitment. Moreover, it opens the door for firms to establish partnerships with TVET institutions through a memorandum of understanding (MoU) (Interview, p 1, Expert)."

Furthermore, the researcher was able to witness the presence of apprenticeship strategies, manuals, and recommendations. The second respondent highlighted the following challenges on apprenticeships from the perspective of the company:

"Lack of statistical data on TVET; poor communication between TVET institutions and businesses regarding the state of trainees and potential jobs in the future; and the availability of employment data that is not broken down by apprenticeship or cooperative training (i.e., does not indicate the percentage of trainees in the apprenticeship that secure employment). According to apprenticeship providers, enterprises place trainees on existing gaps that might not be appropriate for their needs; they avoid placing trainees on pricey machinery and equipment because of the risk of damage and expense; and they do not offer trainee insurance (Interview, p 2, Expert)."

Both interviews (experts) explained their concerns about the role of TVET institutions and companies in jointly undertaking apprenticeships. Whereas the first expert stressed more on the enabling factors or opportunities of apprenticeship, the second expert stated the challenges mostly from the company's side.

Mulugeta (2014) states that among the criteria used to choose apprenticeship providers were the interest in cooperative training providing companies/enterprises, as well as the availability of business supervisors and related jobs. Other opportunities that arise during the implementation of apprenticeship include the government's dedication, strategies, manuals, and the existence of prospective firms in Addis Ababa. Lack of training resources, trainers' inadequate credentials, and trainees' transportation expenses resulting from great distances traveled for apprenticeship are some of the problems negatively impacting the practice of apprenticeship.

Concerning strengthening ties between TVET institutions and companies, Vocational Guidance, and Technology Transfer and Industry Extension units play a great role in facilitating school-to-work-transitions (SWTs).

According to Fita (2014), intervention areas for the implementation of industry extension service programs are Entrepreneurship (business plan, essential bookkeeping, etc.), Technical Assistance (identification skill deviation & training), Technological assistance, and Kaizen (continuous quality improvement & workflow). About this, an official from Addis Ababa TVET and Technology Bureau has the following to say:

TVET instructors take part in industrial extension support, short-term training, and regular TVET training. Apprentice placement, being one of the components of cooperative training, links TVET institutions with businesses to offer hands-on training for the apprentices and thereby opens doors for future job possibilities in the same business firm or elsewhere. Such in-house instruction could help get students ready for independent work (Interview, p. 1, Official).

By connecting the activities of industrial extension and vocational guidance services, the second official explained the practice in the following manner:

Every TVET institution exerts effort to connect education with employment by carrying out tracer studies, offering career counseling, and disseminating labor market data. Advice and assistance will be provided to students who did not secure employment following graduation to help them create saving habits and business strategies. Following that, a relationship with SME will be established. The SMEs seek to develop young business owners and facilitate possibilities of getting workspace" (Interview, p. 2, Official).

Based on the remark by one of the experts, "Technology Transfer and Industry Extension at the TVET institutions provides support for new TVET graduates and for those already established in small and medium enterprises (SMEs) (Interview, p 3, Expert)."

Nevertheless, the other expert outlined the undermentioned factors that adversely affected the vocational guidance and industry extension services at TVET institutions.

- High turnover of trainers,

- Inadequacy of credit facility,
- Weak market opportunity,
- Weak network possibilities with employers and chambers, and
- Poor infrastructure (Interview, p 4, Expert).

Concerning the demand side of apprenticeship provision, one of the experts reacted that, "apprenticeship offering organizations did not invest in team learning or social learning for the trainees during in-company training. Conversely, some TVET institutes were not strong in communicating with apprenticeship providers about the situation of the apprentices and future job opportunities" (Interview, p 5, Expert).

As the interview findings revealed, the demand and supply side argument on apprenticeship placement and participation is vital in strengthening in-school and in-company training schemes. Failure to address the gap will adversely affect the feasibility of apprenticeship training. To this effect, guidance offices from vocational education and training intuitions and company supervisors are expected to jointly undertake and evaluate apprenticeship programs. There is also a need to involve major stakeholders including the Ministry of Education (MoE), Ministry of Labor and Skills (MoLS), Chambers of Commerce, Employers' Federation, Trade Union, etc. in designing curriculum or occupational standard (OS), supporting labor market information system, and administration of competency test upon completion of the apprenticeship training (CoC trade test). Hence, the social and economic aspects of apprenticeship need to be carefully integrated to facilitate the school-to-work transition and thereby enable young people to learn work culture and be on their own.

Regardless of the current conducive policy environment for apprenticeship, the trend and development of apprenticeship programs encountered a lot of limitations including scarcities of industries for apprenticeship placement, reluctance of apprenticeship providing organizations to collaborate, inadequate motivation, apprentices often not ready, and absence of partnership (Wondwossen, 2021).

Table 4: Summary of Opportunities & Challenges in Apprenticeship Extracted from the Findings

Opportunities	Challenges
- Enables to nurture work ethics & facilitates access to wage employment and enterprise development	- Apprentice providers not willing to accept trainees for practical training
- Assist businesses in obtaining qualified personnel who are used to the workplace, which lowers training and hiring expenses	-Apprenticeship providers did not assign apprentices to heavy appliances because of the associated expenses and fear of damage
- Prepares employers to sign memorandums of understanding (MoUs) with TVET directives	- Poor relationship between TVET colleges and employers about apprentice's situation and employment opportunities
- Presence of favorable policy & working documents	- Absence of organized TVET statistical information

Hence, the apprenticeship scheme or cooperative training program in Addis Ababa is expected to maximize opportunities in the local and international environment so that it may stay competitive to the extent some of these opportunities may not be lost or even turn into hindrances. In essence, the more TVET institutions become internally strong in the direction of training and lifelong learning, research, community service and entrepreneurial development, the more they will be equipped to make use of existing favorable environments and address challenges.

Table 5: Data on Apprenticeship Assignment and Contract in 2017/18

TVET Providers	Organizations Providing Apprenticeship							Apprenticeship Providers Signed Memorandum Agreement			
	Companies			Enterprises			Grand Total	Companies		Enterprises	
	New	Existing	Total	New	Existing	Total		New	Existing	New	Existing
Public	442	949	1391	274	394	668	2059	203	358	179	249
Private	120	274	394	134	200	334	728	115	100	70	80
Total	562	1223	1785	408	594	1002	2787	318	458	249	329

Source: Addis Ababa City Administration TVET Bureau

As shown in Table 5, positive development is witnessed in the practice of apprenticeship. Out of the total 2787 apprenticeship-providing organizations, 1354 (48.6%) signed agreements with TVET providers. Hence, such positive development of apprenticeship placement of TVET trainees should be scaled up through the provision of capacity building and incentive schemes for companies.

5. Conclusion and Recommendations

Conclusion: Trends of development and practices of apprenticeship in Addis Ababa concerning opportunities and challenges were discussed. Although there are encouraging trends in devising strategic plans, policy documents and directives about apprenticeship, the structure, network, coordination, and resources surrounding its execution are thought to be inadequate.

Recommendations: The above findings indicated the need to focus on homegrown Indigenous practices by integrating traditional apprenticeship with modern cooperative training. The value of apprenticeship for social learning in the workplace and economic development was also underscored. Encouraging apprenticeship coverage should be supported by effort in motivating trainees. In addition to trainee efforts, apprenticeship-offering organizations and TVET providers should give financial assistance as well as a robust and ongoing follow-up. Finally, this study has policy implications in the direction of school-to-work transition and is expected to contribute to wider research on the nexus between apprenticeship and work-based learning.

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