



ORIGINS AND INFLUENCES OF THE TECHNICAL AND VOCATIONAL EDUCATION TRAINING (TVET) CURRICULUM

(Review article)

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Abstract

Over the past few decades, the Ethiopian Technical and Vocational Education Training (TVET) curriculum has significantly transformed from a largely theoretical model to a competency-based, employer-led system. This transformation is anchored in national reforms following the 1994 Education and Training Policy and the 2008 National TVET Strategy. Models internationally, particularly the German dual system, have had a direct influence on shaping the curriculum that has been pushed for by agencies such as GIZ, UNESCO, and the World Bank. The heart of the new policy is National Occupational Standards (NOS), which ensure connection with the needs of the labor market. Active engagement of the private sector and continuous reorientation to economic imperatives underpin the curriculum's effectiveness and effectiveness. This study explains the historical evolution, international inspiration, and institutional change of Ethiopia's TVET curriculum, highlighting its role in national development and employability.

Keywords: Competency-Based Training (CBT), Ethiopian education reform, Technical and Vocational Education and Training (TVET), National Occupational Standards (NOS)

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1. Introduction

Technical and Vocational Education and Training (TVET) is crucial in empowering individuals with the skills and knowledge necessary to respond to labor market demands and support national development. In Ethiopia, TVET curriculum development has been a strategic initiative in response to the country's socio-economic issues, particularly youth unemployment, skills deficit, and the need for industrialization. Historically, the Ethiopian education system has been primarily concerned with academic education with scant attention given to vocational and technical competence. However, since the introduction of the Education and Training Policy (ETP) of 1994 and the National TVET Strategy of 2008, sweeping reforms were instituted to transform the curriculum towards more realistic competency-based training. This has been subject to strong domestic policymaking as well as external influences. Experience from other countries such as Germany, and support from international organizations such as GIZ, UNESCO, and the World Bank shaped Ethiopia's TVET response.

National Occupational Standards (NOS), the active involvement of industry stakeholders, and an emphasis on linking training to employability are signs of the shift. As Ethiopia keeps advancing towards industrialization and economic growth, understanding the origin and motivations of its TVET curriculum is essential to its effectiveness and future potential. This paper analyzes the historical development, international contributions, and structural growth of Ethiopia's TVET curriculum.

1.1. Background of the Study

In the past decades, Ethiopia has been faced with a growing need to reform its education system in order to make it more aligned with the demands of a modern economy. With a rapidly expanding population and a large number of youths entering the employment market, the country has increasingly recognized the importance of Technical and Vocational Education and Training (TVET) as a vehicle for employment generation, poverty reduction, and sustainable development. Vocational training in Ethiopia had also been narrow, often outdated, and disconnected from practical skills required by industries. As a result, the graduates used to be not ready for employment, contributing to the high youth unemployment. To combat these challenges, the Ethiopian government embarked on deep reforms, beginning with the Education and Training Policy (ETP) of 1994.

The policy paved the way for the shift towards a more inclusive and skill-oriented education system. The reform was further solidified through the adoption of the National TVET Strategy of 2008, which introduced Competency-Based Training (CBT) and the development of National

Occupational Standards (NOS). These reforms aimed to render TVET programs pertinent to labor market needs and capable of generating a competent, technically qualified workforce. The evolution of Ethiopia's TVET system has not been in isolation. It has been heavily informed by foreign models particularly the dual training system of Germany and the technical and financial support of international organizations such as GIZ, UNESCO, and the World Bank. These collaborations have enabled the development of a well-structured, outcome-based curriculum with an emphasis on practical training and active engagement with industry. As Ethiopia aspires to become a middle-income economy, the strengthening of the TVET system remains a key economic transformation approach and human capital development.

1.2. Literature Review

The contribution of Technical and Vocational Education and Training (TVET) towards socio-economic development has been a long-standing argument in policy and academic literature. TVET has been cited as a panacea to end unemployment, boost the productivity of labor, and accelerate industrialization, especially for developing countries (UNESCO, 2016). In the Ethiopian context, various studies determine the evolving role of TVET within national development programs, linking it to the Growth and Transformation Plans (GTP I & II) of the nation and industrial development policy (MoE, 2015).

Among the key themes in the literature is the shift from traditional, supply-driven education systems to demand-driven, competency-based models. Ethiopia's adoption of Competency-Based Training (CBT), according to King and Palmer (2010), is in alignment with global trends emphasizing the acquisition of practical skills, work readiness, and performance-based testing. The introduction of National Occupational Standards (NOS) has also enabled correspondence between the TVET curriculum and industry needs so that graduates acquire the competencies needed by industry (Mulu, 2018).

The global partners' role is an area of scholarly controversy too. Weigel and Mulder (2007) studies identify emulation of Germany's dual system as the major impetus behind TVET reforms in Ethiopia via partnerships with GIZ and other multilateral donor agencies. The design is founded on deep partnership between industries and training institutions, bridging classroom instruction with occupational training. Other studies emphasize the role of global organizations such as UNESCO and the World Bank in shaping policy direction, offering technical assistance, and enabling curriculum design (UNESCO-UNEVOC, 2013).

Nevertheless, there are challenges. Several researchers (e.g., Desta, 2020; Teshome, 2017) indicate that while policies have been getting better, there are gaps in implementation. These

include limited contribution from the industry, substandard training facilities, insufficiently trained instructors, and weak quality assurance practices. Moreover, the mismatch between graduates' skills and the requirements of the labor market continues to be an issue, often resulting from delayed curriculum updates or the lack of involvement of employers in curriculum design. In general, the principal development of Ethiopia's TVET curriculum is driven by both local reforms and global pressures. While there is a strong policy framework in support of developing market-led training programs, actual outcomes are also dependent on successful implementation, constant curriculum review, and active stakeholder involvement.

2. Method

2.1. Research design:

This study employed a qualitative research design to explore the origin and factors influencing the Ethiopian TVET curriculum. A qualitative design was employed to gain a more in-depth understanding of policy evolutions, institutional setups, and stakeholders' perceptions regarding the evolution of TVET in Ethiopia.

2.2. Data Collection Methods

a. Document Analysis

Primary and secondary sources were reviewed, including:

Government policy documents (e.g., the Education and Training Policy of 1994, National TVET Strategy of 2008),

National Occupational Standards (NOS),

Reports from international organizations such as UNESCO, ILO, GIZ, and the World Bank, Academic journals, theses, and previous studies related to TVET in Ethiopia.

These documents were analyzed to trace the historical development of the TVET curriculum, identify key reform measures, and assess external influences.

b. Key Informant Interviews

Participants were selected using purposive sampling based on their expertise and involvement in TVET curriculum development and implementation.

Semi-structured interviews were conducted with 70 people as follows:

- 10 officials from the Ministry of Education and regional TVET bureaus,
- 12 Curriculum developers and TVET instructors,
- 36 Representatives from industry associations and private sector employers,
- 12 Experts from some international development agencies.

2.3. Data Analysis

The data collected were analyzed thematically. Major themes such as history of curriculum reform, global influence, competency-based training, and alignment with the labor market—

were determined and coded through qualitative analysis methods. Triangulation of data sources was used to ensure credibility and reliability of findings.

2.4. Scope and Delimitation

This study was interested in the national-level development of the TVET curriculum in Ethiopia. While there are regional variations, the emphasis was on federal policy directives, major reforms, and the role of external partners.

3. Results and Discussion

3.1. Historical Evolution of the Ethiopian TVET Curriculum

The policy document review and expert interviews reveal that Ethiopia's TVET curriculum has undergone a radical shift from a traditional, academic-focused model to a practice-based, skills-focused system. Prior to the 1990s, vocational training was fragmented, predominantly theoretical, and not standardized. With the introduction of the Education and Training Policy (ETP) in 1994, the government laid the groundwork for comprehensive TVET reform. The 2008 National TVET Strategy followed this shift even further by adopting Competency-Based Training (CBT) that emphasized practical skills and measurable competencies. This shift addressed the growing demand for a workforce that could contribute to the national development agenda, particularly in manufacturing, agriculture, and infrastructure sectors.

3.2. Competency-Based Training and National Occupational Standards

Perhaps most revolutionary of all the elements of the curriculum reform has been adopting the CBT approach. Based on interviews with policymakers and TVET teachers, the system has made training more relevant by connecting it to National Occupational Standards (NOS). The standards prescribe the specific skill and knowledge requirements for specific professions, and they serve as the foundation for the design of the curriculum and assessment of students. For all the promise, there are still issues of implementation. Instructors noted inadequate training and resources to affect CBT to best advantage, and employers mentioned skills gaps in graduates. This would imply a need for ongoing revision of curricula and increased instructor capacity.

3.3. International Influences on Curriculum Design

Evidence confirms that foreign models have had significant influence on the Ethiopian TVET system in particular, of which is the German Dual System. GIZ support enabled pilots on dual-models of training combining classroom instruction and work-based training, complemented by technical as well as financing assistance of numerous organizations, such as UNESCO, ILO, and the World Bank, to capacity-building initiatives towards establishment of national strategy, of NOS, and on. This international collaboration has been instrumental in institutionalizing new training practices, quality assurance processes, and curriculum standardization. However,

borrowing external models is also problematic when it comes to contextual applicability, as some of the components may not fully be compatible with the socio-economic context of Ethiopia.

3.4. *Industry and Private Sector Engagement*

The success of a competency-based TVET curriculum is dependent on firm industry connections. The study found that mechanisms for industry involvement exist such as advisory committees and partnership agreements but their participation is normally limited. The employers cited time and absence of incentives as reasons against increased participation in the design of the curriculum and training of the students. But where there are live partnerships, i.e., construction and manufacturing sectors, the impact on curriculum relevance and employability of graduates is more visible. Developing these partnerships further remains a sustained core recommendation for curriculum development.

3.5. *Ongoing Challenges and Opportunities*

While Ethiopia has made significant progress in reforming its TVET curriculum, limitations due to a shortage of funds, limited infrastructure, and shortage of qualified teachers have hampered full rollout. Conversely, the establishment of centers of excellence, increased emphasis on entrepreneurship training, and digitalization initiatives present opportunities for future innovation and development in the TVET system.

Overall, the Ethiopian TVET curriculum is the integration of domestic reform activities and global pedagogic practice. The transition toward competency-based, industry-relevant learning is a significant step toward addressing economic requirements. However, sustained investment, stakeholders' coordination, and context-specific implementation are required to achieve the optimal contribution of the curriculum toward national development and labor market performance.

4. **Conclusions and Recommendations**

The evolution of the Ethiopian TVET curriculum illustrates a radical shift in the country's education and labor force development strategy. From its initial limitations in the 20th century, Ethiopia's TVET system has embraced a competency-based approach that is better aligned with industry needs and labor market demands. This development, initiated by the Education and Training Policy of 1994 and consolidated through the National TVET Strategy of 2008, has been informed by the global best practice of the German dual system. Ethiopia expects, through this innovation, to mitigate the most vital problems of unemployment among youths, skill shortages, and economic progress. Still, the implementation of the reformed curriculum is ever confronted with problems of gaps in industry involvement, inadequacy of resources, and delay in revising the curriculum. While immense improvement has been achieved, the best utilization

of the potential of TVET in Ethiopia will require continued efforts in addressing these challenges and enhancing the link between education and the labor market.

To make sure that TVET graduates possess the skills required by the labor market, there is a need to strengthen collaborations between training institutions and industries. Employers must be more involved in curriculum development, training delivery, and assessment. Institutionalizing these collaborations would help ensure that curriculum content is aligned with actual industry needs and that internship and apprenticeships are well integrated into TVET programs. Investment in Teacher Training and Resources: For the proper functioning of a competency-based curriculum, TVET instructors must be adequately trained in the new pedagogy (Karani & Waiganjo, 2022). Professional development, teaching materials, and equipment investment are essential to improve the quality of education and align training practices with the requirements of modern industries.

The rapid pace of industrial change in the world necessitates revision of the TVET curriculum every now and then to match technological advancements and market conditions. An effective mechanism for frequent revision of National Occupational Standards (NOS) as well as the curriculum will guarantee that the training is relevant and effective in preparing graduates for employment. As digital technologies continue to play increasingly central roles in various sectors, incorporating digital literacy and entrepreneurial competencies into the TVET curriculum should be a priority. This would not only allow graduates to secure employment but also to generate employment through innovation and entrepreneurship, thereby promoting economic diversification. Adequate finances are required to equip TVET institutions with adequate infrastructure and facilities to provide good quality training. Political will towards long-term investment in the TVET sector, complemented by support from international donors and the private sector, will resolve the current infrastructural constraints.

Encouraging the involvement of women in TVET programs remains a challenge in Ethiopia, especially in traditionally male-dominated areas such as engineering and construction. Special schemes promoting gender equality, mentoring, and women's scholarships can enhance women's coverage and participation in vocational training. Therefore, the Ethiopian TVET system holds significant potential to play a very important role in advancing Ethiopia's development agenda, including poverty reduction, industrialization, and job creation. Through an intervention that addresses the issues mentioned above and institutes the proposed reforms, Ethiopia can further enhance the quality, relevance, and effectiveness of its TVET programs and thus ensure that they play an important part in equipping its labor force to meet the demands of an increasingly dynamic global economy.

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