FOSTERING EMPLOYABILITY FOR DECENT JOBS - A COMMONWEALTH OF LEARNING INITIATIVE IN KENYA, ZAMBIA AND NIGERIA

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Abstract: A number of Commonwealth member states, classified as emerging markets and developing economies (EMDEs), exhibit high levels of informal employment, accounting for over 70% of total employment and contributing approximately one-third of national output (Ohnsorge & Yu, 2022). However, this output is often of substandard quality, reflecting the vulnerabilities faced by large segments of the young, active population. Many lack access to dignified work, social protection, or job security. Individuals, who have acquired skills informally through practice but lack formal certificate, remain excluded from gainful employment. Conversely, those with formal qualifications often face employment barriers due to a mismatch between their training and the actual demands of the labor market. To address these systemic gaps, the Commonwealth of Learning (COL), through its *Skills for Work* initiative, is collaborating with government policymakers and TVET authorities to strengthen frameworks and deliver targeted technical assistance. The initiative seeks to enhance institutional capacity to mainstream TVET-based skills training. This paper highlights the transformative impact of the initiative, providing empirical evidence from Kenya, Nigeria, and Zambia on how the integration of the *Skills for Work* framework and the e-apprenticeship model—leveraging Open and Distance Learning (ODL)—is driving inclusive, market-responsive workforce development.

Key Words: ODL, TVET, Employability, Skills mismatch, Long Life Learning, e-apprenticeship

Introduction

Unemployment and low productivity remain persistent challenges in many Commonwealth countries, particularly affecting youth, persons with disabilities (PWDs), and women. Declining youth labour force participation and the effects of COVID-19 have intensified the need for skills development. In response, the Commonwealth of Learning (COL) launched the *Skills for Work* (SfW) initiative to foster scalable, structured approaches that support livelihoods and resilience in TVET systems. Central to this effort is the *e-apprenticeship model*, currently piloted in Zambia, Kenya, and Nigeria, (herein referred to as partner countries), which integrates digital platforms with workplace-based training. It offers learners online instruction, remote mentorship, and practical job experience, culminating in recognized qualifications. Key components include experiential learning, digital theory modules, virtual guidance, and certification through digital tracking.

E-Apprenticeships blend digital learning with hands-on work experience. They offer scalable, inclusive, and flexible training pathways—especially for youth and informal sector workers (*TVET Trainer, n.d.; COL, 2024).* A review of common definitions collectively reinforce the concept of e-apprenticeship as a digitally enhanced, structured pathway for skill development:

- *(i)* The UNESCO-UNEVOC Report on Quality Apprenticeships defines apprenticeship as a unique form of vocational education combining on-the-job learning and school-based training for specific competencies *(UNESCO-UNEVOC, 2023);*
- *(ii)* The ILO's Definition of Modern Apprenticeship describes it as a regulated training system with formal contracts, compensation, and certification (*International Labour Organization [ILO], 2022);*
- *(iii)* The European Alliance for Apprenticeships Toolkit describes it as digital tools and platforms integrated into apprenticeship systems to support remote learning, assessment, and mentorship *(European Alliance for Apprenticeships, 2021*);
- *(iv)* The Springer Encyclopedia of Corporate Social Responsibility offers a comparative view of formal versus informal apprenticeship systems, emphasizing workplace-based learning and structured training *(Schwartz, 2015);*
- *(v)* The McKinsey Perspective on Expanding Apprenticeship advocates for redefining apprenticeship as a "way of life" to unlock broader opportunities across sectors (*McKinsey & Company, 2020).*

The Role of E-Apprenticeship in TVET Growth

This model addresses capacity challenges faced by traditional training providers, exacerbated during the Covid-19 pandemic. The objective is to improve access to training, reduce disruptions for remote learners, and develop necessary technology-based skills. It represents a transformative approach to vocational training, integrating various learning methods, combining workplace, theoretical, and informal learning.

In today's digital age, the importance of e-apprenticeships is reflected in their ability to: (i) Bridge the digital skills gap, ensuring learner competencies are relevant to the job market; (ii) Expand access and inclusion, as digital platforms remove barriers like travel costs and rigid schedules, making training more inclusive *(UNESCO, 2023)*; *ILO, 2022)*; (iii) Support Lifelong Learning, offering upskilling and reskilling opportunities for workers to remain employable amid technological changes; (iv) Boost Employability and Career Progression, by integrating real – world experiences with digital learning for faster, more targeted skills acquisition *(McKinsey & Company, 2020);* (v) Enhance Flexibility and Scalability, allowing training to be personalised, tracked, and deployed across regions and industries in real time; (vi) Fuel Innovation and Economic Growth, as business leverage structured digital learning to remain competitive while strengthening local talent pipelines; (vii) Support Youth Employment, by providing accessible routes into formal work for new entrants; and (viii) Adapting to Industry Needs with curricula and platforms tailored to emerging sectors such as AI, green technologies and cybersecurity *(European Alliance for Apprenticeships, 2021).*

Comparison between e-apprenticeship and traditional apprenticeship

Table 1 Comparison between e-apprenticeship and traditional apprenticeship

Dimension	E-Apprenticeship	Traditional Apprenticeship
Accessibility	High – remote access enables participation from underserved regions	Limited – requires physical presence, often urban-centric
Flexibility	High – learners can train while working or caregiving	Low – fixed schedules and locations
Cost Efficiency	Lower delivery costs for providers; reduced travel for learners	Higher costs for infrastructure and logistics
Skill Relevance	Strong in digital and emerging sectors (e.g. AI, cybersecurity)	Strong in trades and hands-on industries (e.g. plumbing, carpentry)
Employment Outcomes	UK programs report 90%+ employment within 9 months	Traditional models show strong placement in skilled trades
Learner Satisfaction	High when programs are personalized and well-supported	High when mentorship and hands-on experience are strong
Scalability	Easier to scale across regions and industries	Harder to replicate without physical infrastructure

Partner country context: Zambia, Kenya and Nigeria have entrenched TVET systems with well literate populations of young and out of work youth. Deliberate policy efforts to elevate TVET as a driver for economic transformation, have been noted in this countries:

(i) ***Zambia***. In 2023, Zambia's youth unemployment rate, (aged 15-24) was approximately 9.76%, (*Statista. (2024)).* about 54% of this age group are unemployed mainly due to lack of training, skills mismatch and limited work experience. Similarly, a World Bank report on skills in 2024 *(Woldetsadik et al. (2024)* recognizes that Zambia is not harnessing the full demographic benefits of the youth potential, because of inadequate access to high-quality opportunities for skills development through formal education and employment. The report highlights that skills development and TVET in particular, is one of the possible policy levers for economic development and is a strategic focus and priority for the government. It notes that the government policy environment is highly fragmented, highlighting possible duplication of policies and programming, in relation to out-of-school youth, and in technical and vocational skills development.

The 8th National Development Plan (NDP) *(Ministry of Finance and National Planning [MOFNP], 2022),* prioritized skills development and TEVET emphasising on scaling up the provision of technical, vocational and entrepreneurship skills. It highlighted the need to strengthen the regulatory and quality assurance frameworks for vocational skills training. Key constraints noted were: *(i)* the misalignment of skills supply and demand due to weak links between TEVET institutions and industry; *(ii)* TEVET programs not giving enough attention to fostering foundational skills; *(iii)* TEVET teachers lacking pedagogical skills and industry experience to deliver quality training; *(iv)* Limited capacity of the training institutions to provide high quality skills training programs.

To address these challenges, it was recommended that; *(i)* Building the capacity of managers to implement the quality assurance framework for TEVET; *(ii)* Review of mechanisms for the development of occupational standards and curricula; *(iii)* Establish a high-level working group with representation from all key Ministries, the private sector, and other stakeholders involved in the provision of skills training to strengthen programming and *(iv)* Enhance linkages between industry and TEVET institutions.

(ii) ***Kenya.*** Unemployment among the educated youth, (15-34 years old) is in excess of 67%, according to the Federation of Kenya Employers. This is due to skills gaps, a mismatch between education and job market needs and limited access to employment opportunities. *(Federation of Kenya Employers, n.d.)* A report on Skills Need Survey, *(Federation of Kenya Employers, 2023)* listed the most demanded skills among employers as: *(i)* engineering offered by TVET institutions, specifically computer and software engineering and *(ii)* Electrical and electronics engineering and mechanical and production engineering. The study recommended that TVET training institutions should be empowered to train more graduates on engineering and information related areas and employers to be included in curriculum development and training through attachments, internships and apprentice opportunities.

(iii) ***Nigeria***. Youth unemployment is an important policy issue in Nigeria, particularly among educated youth. While the overall unemployment rate is high, youth unemployment rates are often even higher, reaching 8.5% in 2024 *(EnterpriseNGR, 2024)*. This creates a complex situation with broader economic and social implications. A significant number of young Nigerians, even with higher education, struggle to find decent employment, leading to low-paying jobs or unemployment. There is a gap between the skills that graduates acquire and the skills demanded by employers, leading to a mismatch in the labour market. The Informal Sector accounts for, ~65% of GDP in 2017 *(Bank of Industry, n.d.)*. Sector players face a myriad of challenges including inadequacy of technology, education and limited skills development among others. To address these challenges, The Federal Ministry of Education is rolling out a program to equip trainees with industry-relevant skills. In line with this initiative, the Ministry, through the National Board for Technical Education (NBTE), is rolling out an accreditation exercise of Skill Training Centres, Vocational Enterprise Institutions, and Mastercraft Persons. Accreditation enables them to receive government funding to train candidates under the TVET Program and award certification.

Key challenges facing TVET apprenticeship systems in **Partner countries**

Challenge Area	Zambia	Kenya	Nigeria
Funding & Infrastructure	Limited infrastructure, especially in rural areas	Inadequate budget, dilapidated facilities	Underfunded institutions, obsolete equipment
Industry Linkages	Gaps in aligning training with national goals	Weak coordination with employers	Poor school-industry collaboration
Trainer Capacity	Need for digital and CBET upskilling	Many instructors lack pedagogy skills	Shortage of qualified trainers,
Curriculum Relevance	Need for competency-based and green skills integration	Mismatch with labour market needs	Outdated curricula, low employability
Digital Integration	Emerging but uneven adoption of digital tools	Limited ICT access in rural TVETs	Digital divide hampers e-learning
Gender & Equity Gaps	Rural youth and women face access challenges	Underrepresentation of women in trades	Cultural barriers limit female participation
Monitoring & Evaluation	TEVETA improving M&E but gaps remain	Weak M&E systems for apprenticeship outcomes	Lack of standardized quality assurance

These challenges highlight the need for a systematic apprenticeship approach that meets the needs of the economy in the current digital age. For this reason, the SfW initiative developed the e-apprenticeship model currently being piloted in the 3 partner countries.

The E-Apprenticeship structure

The e-apprenticeship model is anchored in a uniform structure, adaptable to each country's political, macroeconomic, and social context. Effective implementation relies on three core pillars: (i) **Governance & Policy Leadership,** Government departments and education authorities must foster an enabling environment through policy guidance, quality assurance, and resource allocation. This includes maintaining high educational standards via continuous research and alignment with market needs; (ii) **Institutional Capacity Building,** TVET institutions and technical staff are trained in Open and Distance Learning (ODL) methodologies, content development, and digital platforms for delivery and assessment. In collaboration with industry stakeholders and qualification authorities, the TVET institutions design, accreditation, and recognition of prior learning (RPL); (iii) **Quality & Industry Integration,** to facilitate the development of occupational standards, industry-specific assessment tools, rigorous quality assurance, and identification of skilled trainers and verifiers. The model aligns apprenticeship programs with national qualification frameworks, fostering strong ownership from industry and the private sector.

The structure of e –apprenticeship development

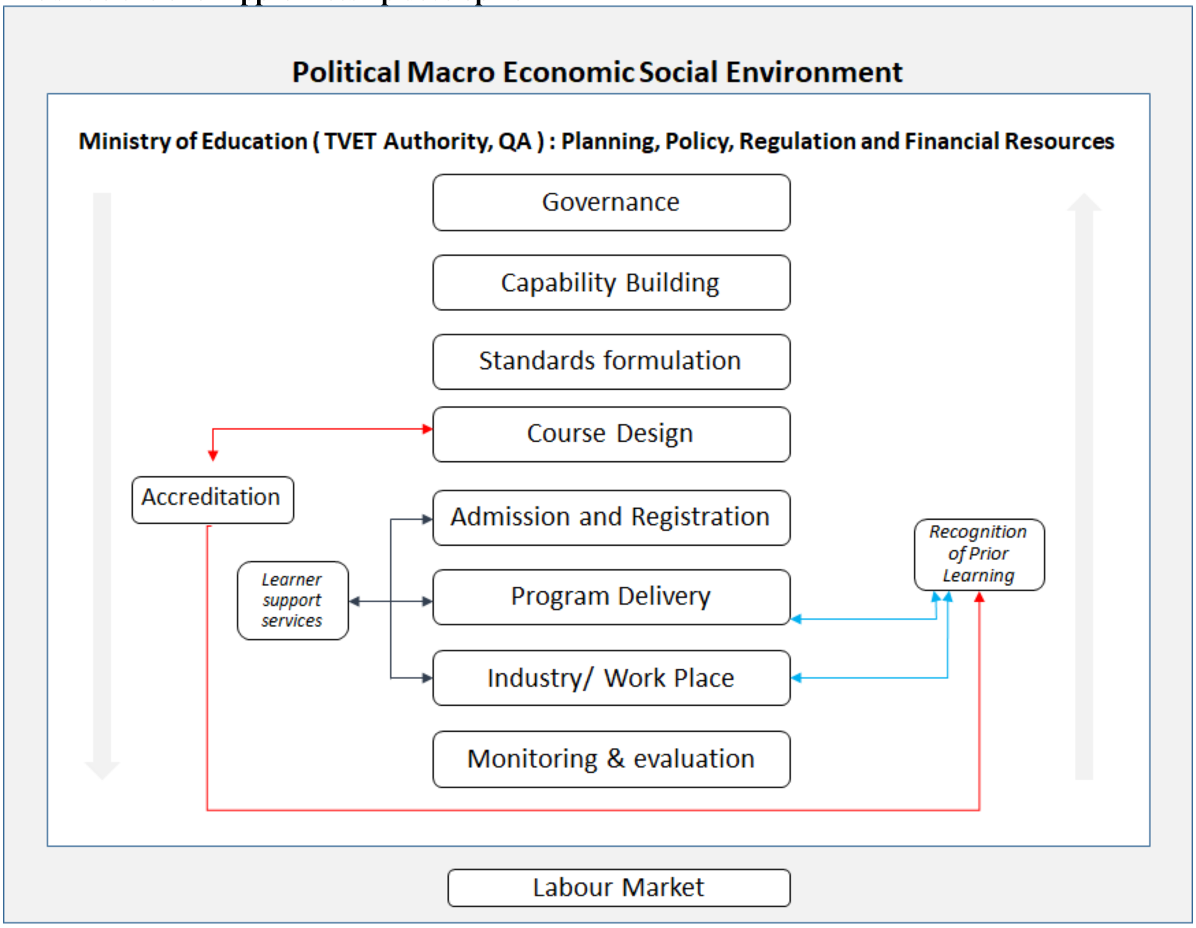

Figure 1 E-Apprenticeship structure

Upon establishing the governance and quality assurance frameworks, the next phase of the structure is program delivery, assessment and apprenticeship training**.**

(i) **Program Delivery, Instruction, and Certification phase of the e-apprenticeship model**: Instructional Design Foundations are inspired by *Gagné's (1985)* pedagogical, andragogical, and heutagogical principles. Core tenets are open registration, open learning, open assessment, and micro credentialing. Instruction time Allocation put more emphasis on the workplace training and self-paced learning.

Table 2 Instruction Time allocation Framework – 10:20:30:40 Model

Allocation	*Activity Type*	*Delivery Method*	*Key Actors*
10%	Presentations & Support	Synchronous (Zoom, MS Teams); Asynchronous (LMS, in-person)	Technical teams, pastoral & andragogic facilitators
20%	Apprenticeship Support	E-portfolios, reflective learning, peer feedback	Master Craftspersons (MCs), Master Trainers (MTs)
30%	Self-Paced Learning	LMS, AptusPi, micro-learning resources, print materials	Learners guided by interactive tools
40%	Workplace Training	In-person, experiential learning in real work settings	MCs, employers, mentors

(ii) **Assessment & Certification.** TVET institutions conduct Competency-Based Assessment (CBA) at workplaces and remotely using ODL tools leading to formal certification and awards.
(iii) **Apprenticeship Training & Progression.** The Apprentices undergo Skills development at MC workspaces via ODL. External verifiers conduct the Final assessment. Post-certification mentoring conducted at incubation and innovation centers for start-ups and accelerators.

Activities and achievements of the model

The flexibility of e-apprenticeship may be limited by the challenges of internet connectivity in many areas in the developing world. However, its significance and relevance in this information age is underscored by three studies: (i) A study comparing cooperative apprenticeships—similar to e-apprenticeships—with traditional models in the U.S. automotive sector found higher employment rates, income, and satisfaction among cooperative participants *(Smith & Comyn, 2001)*; (ii) In the UK, digital apprenticeships show positive wage associations when advanced digital skills are included, especially in mid-level occupations *(Speckesser & Carruthers, 2019)*; and (iii) UNESCO notes that traditional apprenticeships dominate in informal economies but often lack structure, safety, and scalability *(Molz, 2015)*. A review of country partner countries specific activities show that the model is a catalyst of developing a system that adopts to the unique needs of a country as indicated below.

Table 3 Cross-Country Apprenticeship Initiatives -2025

Country	***Sectoral Focus***	***Key Programs & Features***	***Lead Institutions***	***Policy/Innovation Highlights***
Zambia	Hospitality, Agro-processing, Heavy Equipment	Blended learning for 126 apprentices in hospitality (*Technical Education, Vocational and Entrepreneurship Training Authority, n.d.*) Heavy equipment apprenticeship with theory + practical exposure (*Barloworld Equipment Zambia Ltd, 2025; GoZambiaJobs, n.d.*) - Digital pedagogy & e-assessments for trainers *(Technical Education, Vocational and Entrepreneurship Training Authority, n.d.)* - UNDP-supported digital apprenticeships in agro & creative sectors *(Technical Education, Vocational and Entrepreneurship Training Authority, n.d.)*	TEVETA, Barloworld, UNDP, World Skills Africa	Structured mentorship schemes; digital training tools; creative industry inclusion
Kenya	Automotive, ICT, Creative Industries, Informal Sector	- Hybrid technician apprenticeship in automotive *(CFAO Mobility Kenya Limited, 2025a; 2025b)* - Kenya Skills Hub: central listing for creative/digital apprenticeships *(National Youths Opportunities towards Advancement, n.d.)* - Nyota Project: 5-month mentorship-based apprenticeships with NITA certification *(Nyota, n.d.)* - RPL with digital portfolios to formalize informal worker skills	CFAO Mobility, Nyota, NITA, Kenya Skills Hub	Youth-focused models; emotional intelligence; digital credentialing; RPL integration
Nigeria	Banking, ICT, Creative Arts, Engineering	- Sterling Apprenticeship Program (SAP): earn-while-you-learn + degree *(Sterling Bank, 2025)* - Pan African Institute: digital access to apprenticeships across key sectors *(Pan African Institute for Entrepreneurship and Community Development, n.d.)* - National Skills Development Policy supports digital apprenticeships and mobile certification platforms	Sterling Bank, Pan African Institute	Wage-inclusive pathways; mobile-first credentialing; robust policy scaffolding

The on-going activities in each country are highlighted in the table below.

Table 4 Ongoing activities

Country	Lead Agencies & Focus	Key Achievements & Innovations	References
Zambia	TEVETA, Luanshya Technical College, UNDP, COL	• Piloting ODFL standards in TEVET system • M&E framework aligned to ODFL goals; data systems established *(COL, 2024)* • Baseline survey to identify capacity gaps • Completion and adoption of TEVET Policy and Strategy Framework • Scaling ODL models & aligning Industry Advisory Committees with ILO apprenticeship standards *(COL, 2024)* • RPL pilot in agriculture & carpentry at Luanshya Tech supported by blended learning *(COL, 2024)* • Mobile-based e-apprenticeships in furniture & agribusiness with expert feedback loops *(COL, 2024)*	*Commonwealth of Learning (2024); Technical Education, Vocational and Entrepreneurship Training Authority (n.d.); Barloworld Equipment Zambia Ltd (2025); (GoZambiaJobs (n.d.))*
Kenya	TVETA, Kenya School of TVET, KNQA, Eneza Education	• Scaling ODeL standards at national polytechnics • National Open TVET Centre M&E Framework developed *(COL, 2024)* • Baseline survey on infrastructure, readiness, support systems • COL-supported blended learning through industry partnerships *(COL, 2024)* • Mobile-first learning platforms targeting remote learners *(COL, 2024)* • Digital curricula, entrepreneurship-focused apprenticeships, soft skill integration *(KNQA, 2024; COL, 2024)*	*Commonwealth of Learning (2024); Kenya National Qualifications Authority (2024); CFAO Mobility Kenya Limited (2025a, 2025b); Nyota (n.d.)*
Nigeria	NBTE, YabaTech, Auchi Polytechnic, COL	• ODFeL standards and accreditation tools piloted *(INCLUDE, 2023)* • Baseline survey conducted on system readiness • Revised national TVET policy adopted • RPL initiatives for informal trades: tailoring, welding, auto repair *(Akande, n.d.)* • COL-supported blended e-apprenticeship pilots in ICT & crafts *(INCLUDE, 2023)* • Digital inclusion strategies: mobile-first, AI-driven, informal-to-formal transitions *(INCLUDE, 2023)*	*INCLUDE (2023); Commonwealth of Learning (2024); Akande (n.d.); Sterling Bank (2025); Pan African Institute (n.d.)*

Planned activities in the partner countries
The planned activities across the three partners include: (i) Performance & Scalability, refining indicators to measure long-term impact of ODL initiatives; (ii) Data-Driven Insights, enhancing data quality and analysis to better understand learner outcomes; (iii) Stakeholder Engagement, introducing structured feedback loops from industry, trainers, and learners; (iv) Inclusivity, addressing access barriers for marginalized populations; and (v) Strategic Communication, highlighting success stories via case studies and impact reporting.

Recommendations. Going forward COL should reinforce capacity across Policy formulation, Strategic implementation and Monitoring and evaluation systems. Recognizing the emerging trends, there is need to focus on Hybrid instructional formats, AI-personalized learning and simulation-based training to include block chain credentials and micro-certifications that are gaining traction as part of global digital education reforms *(World Economic Magazine, 2025).*

Conclusion. SfW activities are having the desired effect on member partners in realizing the importance of TVET apprenticeship in youth employment creation. The results highlight the importance of developing a structured national TVET framework aligned with the national development strategy and relevant policies. They show the need to align policies on robust evidence, to inform the strategy of strengthening linkages between the productive sectors and TVET. A review of the baseline reports form each partner country indicated the need of developing an enabling environment for the participation of representatives of all relevant stakeholders including the most economically vulnerable particularly in the informal sector, through social dialogue in the development and implementation of TVET policies and programmes. More efforts to promote a culture of lifelong learning, allowing individuals to upgrade their skills, through reskilling and upskilling, throughout their careers is a key consideration.

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