



New Qualifications and
Competencies in TVET



Kenya Education for Employment

Program - KEFEP-02

Innovation and Learning Practice

Bridging Innovation and Learning in TVET (BILT) Project

Submitted by Sigalagala National Polytechnic, Kenya

Sigalagala National Polytechnic is a Kenyan institution participating in the Kenya Education for Employment Program (KEFEP). The initiative seeks to equip Kenyan youth with the qualifications and competencies required to compete in the country's workforce and support the country's vision of 'transforming to a middle-income country by 2030'.

Start date: May 2017

Type of implementing institution: Training provider

Target group: Administrators at TVET institutions, TVET instructors,
TVET students and industry partners

Sigalagala National Polytechnic, Kenya

Sigalagala National Polytechnic (SNP) is a publicly managed national polytechnic that was founded in 1950. Its mission is to provide innovative technical skills training for sustainable development in response to industry demands. The institution has 12 academic departments with more than 11,000 students, most of whom are enrolled at the post-secondary level. SNP prepares students to be well-equipped with technical and business skills that are in-demand by industry.

Description of activities

The Kenya Education for Employment Program (KEFEP) focuses on strengthening and supporting TVET in Kenya through ten institutional partnerships between Kenyan and Canadian post-secondary institutions. KEFEP-02 is one of these partnerships, which forms a consortium between three polytechnics in Kenya, including Sigalagala National Polytechnic, and Canadian partners led by Humber College in Toronto. KEFEP is a five-year programme funded by the Government of Canada through Global Affairs Canada and managed by Colleges and Institutes Canada (CICan), the national and international voice of Canada's publicly funded colleges, institutes and polytechnics.

KEFEP-02 works to harness the capacity of Kenyan National Polytechnics to develop industry-responsive skills training programmes and competency-based education training (CBET). The project's specific objectives are:

- improving the quality and relevance of skills training programmes at Kenyan TVET institutions;
- increasing the effectiveness of Kenyan TVET institutions in delivering accessible and gender-responsive skills training programmes that meet industry needs;
- increasing the effectiveness of Kenyan agencies in implementing TVET reforms; and
- creating economic opportunities for graduates from TVET institutions in Kenya.

The consortium draws on the expertise of both Kenyan and Canadian colleges to exchange knowledge on a wide range of institutional practices, policies and procedures in CBET curriculum design and delivery, industry engagement, gender equality, environmental sustainability and applied research.

Relevance

How does Kenya stand to benefit from a CBET approach in TVET?

KEFEP-02 supports the Kenyan Ministry of Education as the country shifts from a TVET system that is teacher-centred to a student-centred competency-based education and training approach. The need to ensure that TVET graduates are provided with training and competencies relevant to industry, and to design innovative approaches that improve TVET graduates' access to jobs and labour market participation, is an urgent requirement across the country. Additionally, KEFEP-02's focus

on gender equality and sustainable practices helps anchor these principles in the minds of students, instructors, communities and industry partners.

What key gaps does the programme address?

The programme's activities and outputs form a holistic approach to addressing four key areas:

- identifying industry and community programming needs and ensuring that curricula are built to reflect the competencies required in the workplace and by society;
- delivering training using approaches that focus on skills acquisition and not just theoretical knowledge;
- outfitting training spaces with industry-relevant technology and training staff to maintain and use the equipment; and
- providing training in institutional leadership and management by working with industry partners.

All areas include cross-cutting themes of gender inclusivity and environmental sustainability.

Added value

What elements of the project specifically target gender mainstreaming?

The project embeds **gender mainstreaming at a pan-institutional level**: curricular elements, physical classroom infrastructure and institutional measures are designed to turn a TVET institution like SNP into an inclusive space. Gender-neutral language and gender-sensitive depictions in classroom materials are integrated into training and curricula. Accommodations in infrastructure, such as SNP's breastfeeding room and separate restrooms for women, equipped with sanitary product disposal bins, can help counteract absenteeism and dropouts among female students. A gender committee was developed under the KEFEP-02 project, comprising representatives from faculty, non-academic units and students. This committee has led the development and implementation of gender-based policies and practices to increase institutional and instructor awareness of gender equality, address sexual violence and sexual harassment, and advocate for more robust gender sensitivity practices.

How is environmental sustainability embedded into CBET curricular offerings?

Initially, the involvement of the project's Canadian partners was limited in scope to developing solar photovoltaic academic programmes. Within this specific framework of the KEFEP-02 project, SNP instituted an environment committee (similar to the gender committee above) and an environmental sustainability policy with a standing mandate to ensure sustainable practices spread beyond the solar and renewable energy programme and reach all levels of the institution. **New CBET courses** include a basic unit on environmental literacy developed in collaboration with Canadian and Kenyan experts. The programme was developed with train-the-trainer activities focusing on industry-responsive curricula that use CBET methodology to integrate environmental sustainability considerations.

What role do industry partners play?

The project's focus on CBET ensures that industry stakeholders are involved in developing and upgrading the curriculum, choosing equipment for the classroom and advising

TVET institutions on skills gaps. The project created Industry Advisory Committees for every academic programme, leading to new and sustained contact with industry partners. This ensures that the curriculum is relevant to industry needs, and graduates are equipped with the 21st-century competencies and skillsets required in the workforce. Feedback from the industry during student internships and work-integrated learning is also incorporated when institutions consider soft skills training and how to influence attitudes and professional development atmospheres on the campus.

Transferability

How is KEFEP-02 being scaled?

The successes achieved at SNP and the other Kenyan institutions in the KEFEP-02 consortium are now being scaled to smaller, often rural TVET institutions (known as technical training institutes) around the country through a mentorship network. SNP directly supported Bumbere Technical Training Institute. Additional institutions mentored by the Kenyan KEFEP-02 partners include Keroka TTI, Nyamagesa VTC, Nyaore VTC, Kenyanya VTC, Macalder VTC, Ngisiru VTC and Awendo Marindi VTC. Broadly speaking, the following key elements are the focus of efforts for replication and sharing of knowledge:

- establishing CBET standards,
- industry partnership,
- gender equality and women's empowerment, and
- environmental sustainability.

Outside of the Kenyan context, focusing on these areas provides a solid foundation for TVET systems looking to make a similar pivot towards CBET that provides curricular updates in addition to introducing or increasing sustainable development measures. The train-the-trainer model implemented throughout the project provides the capacity to transfer knowledge at scale as resources allow; this is essential to perpetuating these partnerships and knowledge transfer locally, regionally and even internationally.

How has the initiative impacted the wider community?

One of the most significant impacts of the KEFEP-02 programme has been the spillover effect of gender mainstreaming activities. As trainees in areas such as hospitality and electrical engineering shift in terms of gender demographics, those industries are being pressured/influenced to reflect a more gender-diverse workforce. Government policies about gender at the institutional level also support changes in the private sector.

Gender-sensitive outreach efforts are also effective at creating new learning and exchange opportunities: at SNP, women enrolled in the **electrical engineering programme** reached out to female industry role models through the gender committee and asked them to visit the campus. The visits motivate and encourage other women to break systemic barriers in STEM.

Collaboration on gender mainstreaming can also influence policy. The gender committee works with the State Department for Gender in partnership with the National Gender and Equality Commission to scale lessons learned at SNP into public policy. Outreach efforts like the ones listed here are likely to have a larger impact if coordinated through a gender committee or similar entity.

KEFEP-02 implemented at Sigalagala National Polytechnic is one of the BILT project's Innovation and Learning Practices that address systemic challenges within the five work streams of the project. Specifically, KEFEP-02 addresses new qualifications and competencies in TVET:



New Qualifications and Competencies

How can they be put into practice, ensuring future-oriented, attractive TVET career paths?

- *Identify them through suitable approaches and instruments;*
- *Integrate them into curricula and training regulations; and*
- *Implement them through new teaching and training approaches.*

Additional Innovation and Learning Practices cover the following areas:



Digitalization in TVET



Entrepreneurship in TVET



Greening TVET



Migration and TVET

Contact persons:

Mr Tom Makomere, Head of Department (HoD),
Electrical and Electronic, Sigalagala National Polytechnic
makomeretom@yahoo.com

Ms Nalini Andrade, Manager, International Development Institute,
The Humber College Institute of Technology and Advanced Learning
nalini.andrade@humber.ca

For more information about this practice:

<https://sigalagalapoly.ac.ke/>
<https://idi.humber.ca/>

The designations employed and the presentation of material throughout this document do not imply the expression of any opinion whatsoever on the part of UNESCO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The ideas and opinions expressed in this document are those of the authors; they are not necessarily those of UNESCO and do not commit the Organization.

© UNESCO, 2021

This document is available in Open Access under the Attribution-ShareAlike 3.0 IGO (CC-BY-SA 3.0 IGO) license (<http://creativecommons.org/licenses/by-sa/3.0/igo/>).

By using the content of this publication, the users accept to be bound by the terms of use of the UNESCO Open Access Repository (<http://www.unesco.org/open-access/terms-use-ccbysa-en>).

Cover photo: [gorodenkoff/Gettyimages.de](https://www.gettyimages.com/detail/photo/gorodenkoff/Gettyimages.de)

Design: Christiane Marwecki

About the BILT Project

UNESCO-UNEVOC's Bridging Innovation and Learning in TVET (BILT) project is a reference point for innovation and learning in TVET. It utilizes the international UNEVOC Network to create opportunities for collaboration and a platform for bridging innovation and learning between Europe, Africa and the Asia-Pacific region. BILT complements developments at the national level in supporting innovative, market-oriented and attractive modes of learning and cooperation in TVET.

The BILT project explores the process of identifying, integrating and implementing new qualifications and competencies in TVET. This is known as the 'three I's process'. In addition to the broad focus on new qualifications and competencies, BILT addresses four complementary themes: Digitalization and TVET, Greening TVET, Entrepreneurship in TVET, and Migration and TVET.

For more information, please visit

www.unevoc.unesco.org/bilt

or contact us at

unevoc.bilt@unesco.org

New Qualifications and Competencies in TVET

- Identifying new qualifications and competencies in a timely manner;
- Integrating them into appealing and flexible curricula and training regulations; and
- Implementing them in innovative training approaches

Entrepreneurship in TVET

Unlocking the potential of innovative entrepreneurial activities and fostering entrepreneurial culture

Greening TVET

Responding to new development paradigms for sustainability and reduced environmental impact

Digitalization in TVET

Providing response to new skills demands, as technology has permeated the world of work and is changing the profile of jobs

Migration and TVET

Accelerating the integration of migrants into their host communities, and allowing them to become productive members of the workforce

IMPLEMENTED BY



WITH SUPPORT OF



SPONSORED BY THE

