

# BRIDGING INNOVATION AND LEARNING IN TVET (BILT)

## Final Report

covering the period

1 February 2019 - 31 December 2024

BILT is carried out in collaboration with the UNEVOC Network, implemented by UNESCO-UNEVOC with support of BIBB and sponsored by BMBFSFJ.

Implemented by



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### Introduction

#### Background

The Bridging Innovation and Learning in TVET (BILT) project is implemented by UNESCO-UNEVOC with support of BIBB, and sponsored by the Federal Ministry for Education, Family Affairs, Senior Citizens, Women and Youth (BMBFSFJ), formerly Federal Ministry of Education and Research (BMBF).

BILT addresses global TVET challenges in five thematic areas. These are: **Digitalization, Greening, Entrepreneurship, Migration, and the overarching theme New Qualifications and Competencies in TVET**. In 2024, focus was put on the dual transition digitalization and greening along with inclusion (migration). The BILT project complements national developments to explore and support innovative modes of learning and cooperation in TVET. It puts [UNESCO's TVET strategy](#) into practice, particularly by supporting skills anticipation within and across borders. Furthermore, it is a building block in implementing the Osnabrück Declaration and the 'Excellence in TVET' Initiative of the German Federal Government.

#### BILT Project Phases and New Initiative 2025-2027

The BILT Project ran in three phases from 1 February 2019 until 31 December 2024.

As of 1 January 2025, the new initiative "[Excellence in TVET. Towards a Global TVET Agenda](#)", funded by BMBFSFJ, with BIBB coordinating the implementation, includes BILT under UNESCO-UNEVOC's contribution: 'Innovation and Excellence in TVET' (IET). The initiative runs from 1 January 2025 to 31 December 2027 (cf. [BIBB / DaPro - Project database](#)).

This final report covers the period of 1 February 2019 – 31 December 2024.

#### Global Summary of Achievements:

Over the course of six years 2019-2024, BILT established and later expanded and deepened collaboration with partners in the UNEVOC Network and beyond. BILT fosters exchange of knowledge and innovation – targeting TVET practice as well as regional and national TVET policy development. **BILT features as a flagship project in UNESCO's TVET Strategy 2022-2029.**

During Phase III, 2022-2024, BILT was implemented and constantly developed by UNESCO-UNEVOC with the support of BIBB. Strategic steering was conducted jointly with BMBF, and with input from the international BILT Advisory Committee (BAC). Main achievements of Phase III are summarized below:

- UNESCO-UNEVOC and BIBB established the 'BILT community' of 190 leading TVET institutions, including ministries, national authorities, research institutes and education providers from Africa,



Asia and the Pacific and Europe that aim to shape future-oriented and competitive TVET through international collaboration.

- BILT strengthened **German and European participation in the UNEVOC Network**, including exchange and collaboration ('bridging') with UNEVOC Centres in Africa and Asia and the Pacific. The interactive *Peer Learning Wheel* on the BILT website was launched in 2022; it maps expertise and collaboration interests of institutions in the community.
- **Key multilateral and regional partners** form part of the BILT community as **regular contributors** to BILT activities, such as ETF, Cedefop, OECD, ILO, and other UN agencies: UNHCR, UNWTO, UNEP; and the African Union Commission, ASEAN TVET Council, ASEAN Future Workforce Council.
- **BILT established successful policy and peer-learning formats:** BILT Bridging Events and Learning Fora, Learning Labs, Expert Groups as well as the ATLAS and Innovation and Learning Practices (ILPs). The formats serve to exchange on responses to current challenges in TVET systems in TVET policy, advocacy, research and practice. They support inter- and intraregional transfer of successful TVET approaches – particularly in the areas of digitalisation and sustainability (the 'dual transition') as well as inclusion (migration) and entrepreneurship.
- **The BILT focus** on identifying, integrating, and implementing 'new qualifications and competencies' **provided concrete starting points for collaboration and exchanges on reform and advancement in TVET systems – towards excellence, attractiveness and inclusion.** Results include sector-specific recommendations for TVET development in the dual transition, strategies to enhance the flexibility of initial and continuing TVET towards a lifelong learning approach, e.g., through micro-credentials, and approaches to inclusive excellence in TVET, and TVET practices, which have been discussed in engaging formats, with over 50 examples identified and documented by BILT.

*By the end of 2024, BILT has evolved from a project into a 'brand' that is known and respected within the global TVET community. It provides a strong foundation for further development as part of UNESCO-UNEVOC's 'Innovation and Excellence in TVET' project under the 'Excellence in VET – Towards a Global TVET Agenda' initiative.*

## Summary of Highlights of the three Project Phases

### Highlights in Phase III, 2022-2024:

#### 2024

- The [BILT Bridging Event as part of the African Union's Africa Skills Week](#), held in Ghana in 2024, which served as international platform to present the concept of a 'Global TVET Agenda' with multilateral partners.
- The [BILT Bridging Event for Europe](#), held in Como in 2024, which created the link between UNEVOC Centres and the European Centres of Vocational Excellence (CoVEs) with a debate on 'inclusive excellence'.
- The [Clean Energy Learning Lab Series](#) in 2024 that reached over 500 live participants from over 60 countries. This marked the development of the Learning Lab format from a single session to a series.
- The identification of two new German UNEVOC Centres: *Handwerkskammer Ostwestfalen-Lippe zu Bielefeld* and *Handwerkskammer Koblenz*.

#### 2023

- The hybrid [BILT Learning Forum](#), held at the UN Campus, Bonn, in 2023, which reached almost 500 participants from over 70 countries, to discuss strategies for excellence and expert-based international collaboration in TVET. BMBF was represented by Dr Johanna Börsch-Supan, Director General for General Education, Vocational Training and Lifelong Learning.
- The [BILT Bridging Event Asia and the Pacific](#), held in Singapore in 2023, which focused on solutions for the dual transition in TVET for hospitality and tourism. BMBF was represented by Dr Catrin Hannken, Deputy Director General for VET, while BIBB was represented by its President, Prof Dr Friedrich Esser.
- The work of the 2023 [BILT Expert Group](#) that strengthened engagement in sectoral events, projects and networks, and culminated in two UNESCO publications: the report with recommendations for policy, advocacy and practice, and a compendium of innovative practices from Africa, Asia, and Europe.
- Four [Learning Labs](#) covered the topics micro-credentials in the tourism sector, greening of TVET curricula and workplace practice, and support for young women in TVET.

#### 2022

- The first [BILT Bridging Event](#), held in Espoo, Finland, in June 2022, which offered the space to discuss emerging trends in new qualifications and competencies (NQC) in Africa, Asia-Pacific and Europe. In November of the same year, the [BILT Bridging Event in Nairobi, Kenya](#), transferred the NQC discussion to the African context, with a focus on the hospitality and tourism sector.
- The BILT Bridging Webinar [Ready to respond: TVET and refugees](#), highlighting the urgency of TVET pathways to include refugees (and migrants) in labour markets and societies.

- The [BILT Atlas](#) was launched as a living resource and an interactive digital report taking stock of key trends in TVET in Africa, Asia and the Pacific, and Europe. It features regional overviews and insights that illustrate how current challenges are being addressed within different country contexts.
- Three [Learning Labs](#) covered the topics: training needs in the hydrogen economy, VR-based learning in TVET, and a makerspace concept to foster entrepreneurship.

### Highlights in Phases I & II, 2019-2021:

#### 2021

- The online [BILT Learning Forum](#), held in December 2021, provided a platform for multiregional discussions on the future of TVET, reaching more than 510 participants from 82 countries. BMBF was represented by Dr Catrin Hannken, Deputy Director General for VET, while BIBB was represented by its Director of Research, Prof Dr Hubert Ertl. It featured the 2<sup>nd</sup> International [BIBB Roadshow “Digital Media in VET”](#)- with a focus on immersive technologies and their use in vocational training practice.
- The work of the first BILT Expert Group culminated in a Three-Volume Guide [New qualifications and competencies for future-oriented TVET](#), which brings together perspectives from key TVET stakeholder groups and provides concrete insights into the challenges and solutions associated with identifying, integrating and implementing new qualifications and competencies.
- The [BILT Learning Lab](#) on Thailand’s adaption of the ASEAN in-company trainer standard, in October 2021, marked the start of a webinar format designed to showcase innovative TVET practices, exchange experiences and explore the transferability of practices across diverse regional and institutional contexts.

#### 2020

- The global online [Bridging Conference](#) on New Qualifications and Competencies in TVET, held in December 2020, showcased examples of successful identification, integration and implementation of new qualifications and competencies in TVET by UNEVOC Centres in the Philippines, Austria and Mozambique. It was attended by 163 participants from 49 countries.
- Online [BILT Conference on New Qualifications and Competencies \(NQC\) in TVET](#) in June 2020. It discussed how NQCs are identified, integrated and implemented into TVET curricula and practice.
- [European Trends Mapping Study publication](#) in October that identified nine trends related to NQCs.

#### 2019

- The [BILT Kick-Off Conference](#), held at the UN Campus in Bonn in July 2019, marked the formal start of the project with a focus on European perspectives. It introduced *New Qualifications and Competencies (NQC)* as the overarching theme of BILT and laid the

groundwork for content steering and network engagement. BMBF was represented by Kornelia Haugg, Director General for General Education, Vocational Training and Lifelong Learning, while BIBB was represented by its Director of Research, Prof Dr Hubert Ertl.

- The [global launch of the BILT Project](#) at the [UNESCO-UNEVOC Global Forum](#) in December 2019 marked the start of BILT’s inter-regional Europe–Africa and Europe–Asia bridging dimension.
- A series of five [BILT thematic workshops](#) on the BILT overarching theme New Qualifications and Competencies in TVET as well as the BILT focus themes digitalization, greening, entrepreneurship and migration were held in partnership with European UNEVOC Centres from October to December 2019. Hosting institutions were: MCAST, Malta; OsloMet, Norway; SFUVET, Switzerland; TKNIKA, Spain; and University of Nottingham, UK.