

Bridging Innovation and Learning in TVET

Thematic Workshop -

New Qualifications and Competencies in TVET

SFIVET, Lausanne, Switzerland, 12-13 November 2019

Workshop summary



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New Qualifications and Competencies in TVET





This summary captures the key outcomes of the thematic BILT Workshop on 'New Qualifications and Competencies in TVET', held at SFIVET in Lausanne, Switzerland, from 12-13 November 2019.

Bridging Innovation and Learning in TVET (BILT)

The BILT project is a collaborative initiative focusing on consolidating the European Cluster of the UNEVOC Network. An additional bridging and knowledge exchange component with UNEVOC Centres and TVET stakeholders in the Asia-Pacific

and African regions is initiated in 2020. At its core, BILT addresses TVET challenges in five thematic areas, or 'work streams', that the participating UNEVOC Centres and other TVET stakeholders will focus on. Within BILT, these are:



In addressing these work streams, BILT intends to share information, generate new knowledge, and enhance national and regional TVET capacities in order to provide quality TVET now and going forward. Besides re-energizing the European cluster of the UNEVOC Network, the BILT project seeks to enlarge membership of the cluster through the addition of new active members.

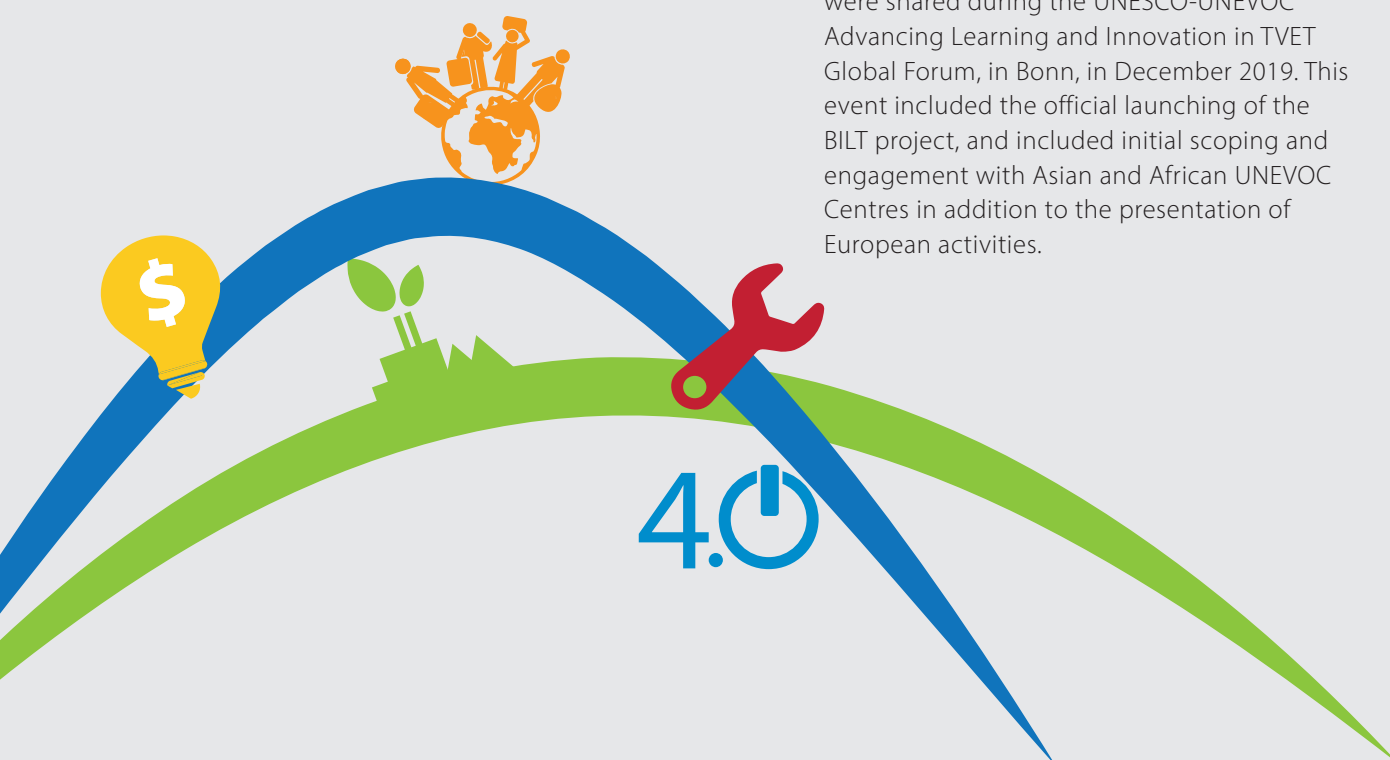
BILT is a collaboration between UNEVOC Network members, coordinated by the UNESCO-UNEVOC International Centre for TVET in Bonn, in partnership with the German Federal Institute for Technical and

Vocational Training (BIBB), and implemented with the financial support of the German Ministry for Education and Research (BMBF).

The BILT project began with a Kick-Off Conference in July 2019, where European UNEVOC and other TVET stakeholders considered two to three key issues within each BILT work stream. These topics became the framework to be explored in detail between October and December 2019 during a series of thematic workshops, each led by a UNEVOC Centre Focal Point. They were:

| Theme | Host | Dates |
|--|------------------------------|---------------------|
| Digitalization | OsloMet, Norway | 2-3 October 2019 |
| Greening TVET | MCAST, Malta | 23-24 October 2019 |
| Entrepreneurship and TVET | TKNIKA, Spain | 30-31 October 2019 |
| New Qualifications and Competencies | SFIVET, Switzerland | 12-13 November 2019 |
| Migration and TVET | University of Nottingham, UK | 10-11 December 2019 |

Interim results of each BILT Thematic Workshop were shared during the UNESCO-UNEVOC Advancing Learning and Innovation in TVET Global Forum, in Bonn, in December 2019. This event included the official launching of the BILT project, and included initial scoping and engagement with Asian and African UNEVOC Centres in addition to the presentation of European activities.



Thematic Workshop – New Qualifications and Competencies

SFIVET, Lausanne, Switzerland, 12-13 November 2019

Emerging trends and challenges in society – such as digital transformation, the urgent need for sustainable action, or the rising number of migrants – require frequent adaptations in TVET provision. Modern training must reflect these evolutions through the identification of new qualifications and competencies and their integration in curricula and training regulations. The BILT project addresses these mechanisms as an overarching theme. Four other thematic areas, digitalization, greening, migration and entrepreneurship provide current and prominent examples of such changes.

For BILT, an initial workshop on the ‘new qualifications and competencies’ was held in November 2019 with subject matter experts from eleven countries (Austria, Croatia, Denmark, Estonia, Finland, France, Germany, Latvia, Malta, Portugal and Switzerland) attending the event. Each expert contributed an example from their institution or business that concerned either the systemic or the implementation level of identification and integration of new qualifications and competencies into curricula and training regulations.

The workshop was an occasion to share innovative projects and to discuss key issues in response to the continuously needed update of curricula and training regulations, which emerge in view of new trends in society and the labour market. Additionally, outcomes and considerations of the four other BILT work streams were at the core of this workshop’s discussions. This report illustrates how stakeholders engaged during the workshop to address these challenges and ensure that TVET remains not only relevant now, but positions itself for the future.

During the BILT Kick-Off Conference in July 2019, UNEVOC centres had chosen key issues in response to the continuously needed update of curricula and training regulations, which emerge in view of new trends in society and the labour market. Seen through this lens, BILT attempts to understand what European TVET stakeholders are doing within the



Erik Swars, SFIVET

theme to address these challenges and ensure that TVET remains not only relevant now, but positions itself for the future.

Opening and framing

Mr Erik Swars, workshop host and Head of International Affairs at SFIVET, opened the workshop. He noted that as a recent addition to the UNEVOC Network, SFIVET’s role in the development of curricula and training in Switzerland meant that there was a keen interest in contributing to the BILT project. The topic is far from being new: evolution and progress are inherent characteristics of society and labour markets, which requires a continuous adaptation of competencies and job profiles. What is new is the dramatic increase of pace that technological innovations bring and the complexity of modern challenges, such as sustainability and globalization, which seem to decrease the half-life of required skills and competencies.

This position was reinforced by Mr Jérôme Hügli, Scientific Advisor at UNEVOC Centre, the Swiss State Secretariat for Education and Innovation (SERI), who acknowledged the importance

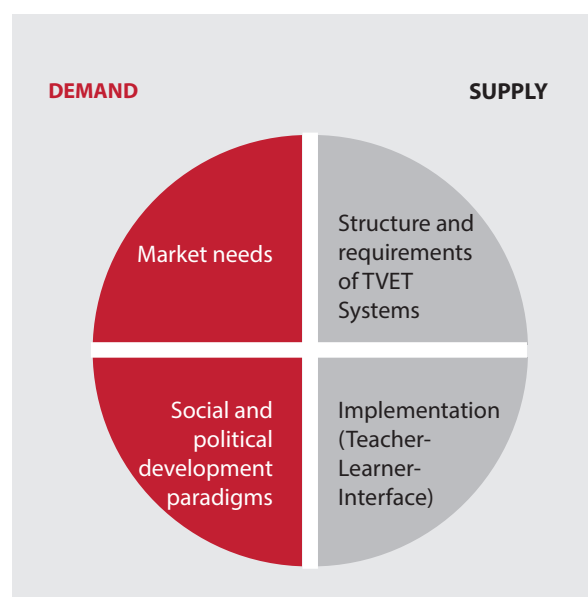
of international exchanges, networking and partnerships, in addressing new qualifications and competencies in TVET. Qualifications and competencies need to be updated constantly in order to more accurately reflect labour market needs. In Switzerland, occupational competencies are mandated to be reviewed and updated in a five-year cycle. Exceptions are given to certain professional associations in rapidly evolving sectors who can update them more frequently in order to reflect market changes, for example every two or three years. In this context of continuous adaptation to changing skill demands, Mr Hügli presented the cornerstones of the new strategy 'VET 2030' in Switzerland that has been created in partnership with all relevant TVET stakeholders.

Subsequently, Mr Oliver Diehl from the Federal Ministry for Education and Research (BMBF) in Germany, sponsor of the project, stated that one big aim of BILT has already been achieved: to mobilize interested UNEVOC Centres to actively participate in and contribute to the BILT project. On the backdrop of current challenges of the German TVET system – for example in low-wage sectors, successful integration of migrants or the highly debated modularization of curricula – Mr Diehl outlined Germany's positive engagement with the international TVET community, noting that international collaboration was an important opportunity to learn from each other. The BILT project brings international expertise together, both in the European cluster of the UNEVOC Network as well as in exchange with Asian and African UNEVOC Centres.

Mr Jens Liebe from UNESCO-UNEVOC further emphasized these goals of the BILT project in his overview on the objectives and milestones of the project. He pointed to the relevance of identifying and integrating new qualifications and competencies into curricula and training regulations for SDG 4 on Quality Education and SDG 8 on Decent Work and Economic Growth. The BILT project in its whole supports collaboration activities and thereby SDG 17 on Partnership for the Goals. Mr Liebe presented that in order for new qualifications and competencies in TVET to be adequately planned for and integrated, two main aspects should be considered:

- On the demand side, curricula and training regulations need to reflect labour market and industry needs as well as social and political

New qualifications and competences ecosystem



development paradigms. Emerging trends in the private sector should inform the regular, pro-active updating of curricula and training regulations that include these changes.

- On the supply side, it is necessary to explore how new qualifications and competencies are phased into curricula and training regulations at the systemic level, in accordance with the structural requirements of the respective TVET systems. Secondly, systemic innovations must translate into both the implementation level, and those at the teacher-learner interface level, so that teachers are trained and learners benefit accordingly.

To facilitate a framework for the workshop discussions, Mr Michael Schwarz from the German Federal Institute for Vocational Education and Training (BIBB) introduced a concept for new qualifications and competencies. He posed two possible guiding questions:

- Which new qualifications and competencies are relevant for modern TVET careers now and in the future?
- What do approaches to the integration of new qualifications and competencies into curricula and training regulations look like?

| Approach | Relevance | Example |
|---------------------------|---|--|
| Cross-Cutting | Skills relevant for all professions are implemented as cross-cutting competences in all curricula or training regulations | e.g. understand the relevance of and have competencies to take sustainability into account in all work and life related activities |
| Sectoral | Skills relevant for a specific sector | e.g. minimize transportation routes in the logistics sector |
| Occupational | Skills relevant for a specific occupation | e.g. learn how to repair electric cars as an auto mechanic |
| Additional/Modular | Optional modules that complement compulsory TVET training (in initial or continuing training) | e.g. a module on 'Green Skills' that a TVET student can choose to additionally complete |

Regarding the second question, four possible approaches for the integration of digital, green, entrepreneurial, intercultural or other future-oriented skills were given. For example, using 'Green Skills' this could be as follows:

Mr Schwarz explained that one of the workshop goals was to discuss these approaches, gather pilot initiatives and practice examples, and understand which approach those initiatives follow.

Mr Emanuel Wüthrich from SFIVET pointed out that new qualifications and competencies are increasingly related to the mindset of different actors. He observed a large gap between technological and scientific evolutions as compared to spiritual and ethical attitudes: How functional is the meritocratic profit maximization economy for the well-being of humankind on this planet? According to Mr Wüthrich, TVET should acknowledge its responsibility to teach 21st century values in a non-dogmatic way – that is, negotiating beliefs and attitudes, strengthen social competencies and move to a human-centred education. This also serves the private sector, which requires innovative, creative, pro-active, motivated and self-responsible employees. Mr Wüthrich therefore concluded that TVET should focus on attitudes and values besides knowledge and skills.

Finally, BILT team member Ms Vera Hark, from the German Federal Institute for Vocational Education and Training (BIBB), provided an overview on planned BILT activities as well as the structure of the workshop. The objectives and expected outcomes of the workshop were to:

- Share good practices and innovative solutions for TVET in the field of new qualifications and competencies with colleagues from across Europe;
- Engage participants in peer-learning activities, via the contribution of institutional experiences and learning from others; and
- Collect information on the examples presented for this theme, enabling their documentation and inclusion as 'BILT Innovation and Learning Practices' which will be shared with the TVET community.

Workshop discussion format

For this work stream, UNEVOC centres jointly identified three defining key issues which would structure the workshop:

- Key Issue 1: Approaches to new qualifications and competencies on the systemic level

- Key Issue 2: Approaches to new qualifications and competencies on the implementation level
- Key Issue 3: Which new qualifications and competencies are needed?

In preparation of the workshop, the BILT team collected practice examples from European UNEVOC Centres and other TVET stakeholders within the new qualifications and competencies work stream. These 'BILT Innovation and Learning Practices' would form the core of presentations and discussions during the event.

For each key issue, a framing presentation included an overview of challenges while also providing information on recent developments and trends, allowing participants the opportunity to understand the context of the practices presented. Following this, participants presented examples in short 'pitches' designed to provide a high-level overview. In order to fully engage participants, the workshop proceeded in a World Café format where each example was given one hour to discuss three main questions:

- What is the added value of this example?
- Which approach for the integration of New Qualifications and Competencies does your example follow and why? Four approaches were proposed:
 - The cross-cutting approach
 - The sector-specific approach
 - The occupation-specific approach
 - The additional/modular approach
- Which elements/components of the project are relevant for your own context?

In this way, participants gained a deeper understanding of the presented projects and approaches towards new qualifications and competencies. Further group discussion following the World Café allowed participants to jointly identify common and exceptional elements from each example, and provided avenues for future exploration for the BILT project.



Workshop participants discuss a project example



Oliver Diehl, BMBF

Key issues

BILT Innovation and Learning Practices

The systemic and implementation levels of integrating new qualifications and competencies into curricula and training regulations were the two key issues that structured the first workshop day. Within the framework of each key issue, three 'BILT Innovation and Learning Practices' were presented and each was discussed in a World Café format. In addition to the summaries of the examples in this report, more detailed information as well as further material on each example is accessible via the BILT knowledge platform.

SYSTEMIC LEVEL

Employers intervention in the governance of the French qualifications system in the light of recent TVET reforms

**Presented by Mr Matteo Sgarzi,
UNEVOC Centre CÉREQ, France**

Since one year a profound reform of the TVET system is deploying its effects in France. The impact of major societal changes (Industry 4.0, sustainable development, demographic and economic change) are at the heart of the new organization. One of the main goals of this reform is to reinforce the participation of employers in qualifications and standards design. The presentation showed how the system is evolving in order to reinforce a TVET system and put it as close as possible to the real economy. In addition, the real capacity of recruiters to formulate new competencies demands was questioned. Are these demands correctly formulated? What are the available instruments capable to support employers in the identification of competence needs? In the second place, what are the institutional mechanisms that permit to transmit the employers' voice in the making of TVET standards?

ESF funded project: VET reform in Croatia

**Presented by Ms Karolina Maduna,
UNEVOC Centre AVEATE, Croatia**

The VET reform in Croatia entails the modernization of curricula in education CQF (Croatian Qualification Framework) levels 2-5. It strongly increases the connection of curricula with labour market needs through the creation of occupational standards based on competencies and learning outcomes. As currently most VET curricula in Croatia are outdated, the aim is to modernize the Croatian VET system fundamentally. At the time of the workshop, strategic documents had been developed within the project and the system had been alerted and was starting to be responsive to requirements for the changes needed. The project is intended to establish a new methodology on the making of occupational standards.

BuildEst Project

**Presented by Ms Aulika Riisenberg,
UNEVOC Centre Foundation Innove, Estonia**

The project "BuildEst" was funded by the European Union programme Intelligent Energy Europe. Its main aim was to develop training schemes and material for non-qualified and qualified workforce and trainers' training in the Estonian construction sector to achieve the EU2020 Energy Efficiency targets. The general objective is to increase the number and competencies of qualified workforce in the construction sector in Estonia to be able to deliver high energy performing renovations and new buildings with almost no energy consumption. In addition, it aims to ensure the field's stable development, consistent quality

and broader availability of training, and to significantly increase the share of employees who have acquired specialized qualifications in the field.

IMPLEMENTATION LEVEL

Securing the validity of online exams

**Presented by Mr Alan Amstrup,
UNEVOC Centre CBC, Denmark**

This initiative involves the use of online examinations in the tertiary and continuing education sector in Denmark. It is designed to make learning and assessments more accessible for learners so that they may complete their studies from remote locations that allow them to take into consideration private and/or professional considerations that prevent them from coming to a physical classroom. However, using this option, some adaptations must be given in terms of how content is taught and also how to ensure the validity and robustness of a given examination method.

Innovative approaches to learning the professions at Daugavpils VET school

**Presented by Ms Oksana Soročina,
Daugavpils Construction Technical School,
Latvia**

This example focused on the creation of modular curricula in the construction sector in Latvia, at Daugavpils Construction Technical School. As a TVET institution, the school offers masterclasses for teachers and students alike where they can improve their skills in new technologies within the construction sector. This involves close collaboration with industry and involves practical experience, for example when students build one of the new buildings on the campus.

Individual learning paths and use of modern technologies in learning

**Presented by Ms Kati Valtonen,
UNEVOC Centre OMNIA, Finland**

The new Finnish TVET system offers individualized learning programmes that allow changes in the length of studies combined with the use of modern digital technologies, e.g. artificial intelligence and robotics. One of the key principles is continuous competence development. OMNIA makes different ways to achieve a qualification possible, so that students may choose the most suitable study path according to his/her needs and goals. Students can choose how and where they want to study (school environment, work-based learning at working life and online learning). Furthermore, changes in working life and the TVET system require the development and continuous updating of the skills of teaching and guidance staff. Therefore, OMNIA has created different developer-teacher roles, including 'pedagogical peer coach', 'qualification coordinator', 'digital tutor teacher' or 'work-life cooperation coordinator'. These teachers are a peer support in their work community by helping, advising and encouraging colleagues to face everyday challenges and changing situations, and they also support the management.

As an introduction to the second day, BILT project team members Mr Cole and Ms Hark highlighted relevant elements from the other work streams. They displayed a range of BILT Innovation and Learning Practices from other thematic workshops and how these integrate new skills into curricula and training regulations. One example, the 'Green Wheels' project from the UNEVOC Centre National Institute for Education (NUV) in Czech Republic had been presented during the workshop on 'Greening TVET' on Malta. This initiative resulted in the integration of green skills in training regulations for auto mechanics, therefore following an occupation-specific approach.

In this line, the workshops programme subsequently entailed presentations of BILT Innovation and Learning Practices, which stemmed from one of the thematic areas presented in prior BILT workshops.

In the following, three examples related to the integration of digital skills and two examples related to the integration of green skills are summarized.

DIGITAL QUALIFICATIONS

Changing labour markets, upskilling and TVET

Presented by Mr Manuel Aeppli, UNEVOC Centre SFIVET, Switzerland

This presentation illustrated the results of an expert-workshop that identified important digital competencies for TVET-occupations in Switzerland. Little evidence was found for disruptive changes (e.g. occupations that disappear as a whole or significantly increasing unemployment rates) but rather for structural changes within occupations (e.g. the tasks that are bundled by occupations and the competencies demanded to perform an occupation). Many occupations are not entirely new, nor will many occupations disappear completely during the ongoing digital transformation. However, many occupations need to adapt to new processes and new products. Thus, curricula need to be adapted regularly and this should be done in close collaboration with representatives of the respective occupations to ensure a close link between curricula and ongoing development in the labour market.

Create new skills and certifications for additive manufacturing

Presented by Ms Margarida Segard, ISQ Academy, Portugal

Together with international partners, ISQ Academy is creating an Additive Manufacturing European Observatory for use by learners and industry. This will include a skills development matrix, learning outcomes, incorporate the recognition of prior learning, and provide different qualification levels for an internationally-recognized certification scheme. Currently, ISQ Academy is engaged in multiple Additive Manufacturing projects focused on the creation of qualifications, training, and education culture for learners and professionals.

Individual ability and different paces of learning of each trainee

Presented by Mr José Novais da Fonseca, CENFIM, Portugal

The project aims to provide an adaptable response to individual availability and different paces of learning of each trainee. An individualized training approaches are supposed to allow each trainee to choose their learning content, the best time to start, his/her schedule and his/her learning pace. Within this project, the training programme focuses on the final skills expectations instead of rigid learning routes and curricula. Main outcomes of the project include the development of teaching content and resources, re-designing of shopfloor layouts based on an analysis of space use to increase efficiency, Other outcomes include trainers pedagogical preparation, and the development of specific IT tools for shopfloor equipment access and scheduling.

The initial project focus has been on metalworking, with the additional sectors of welding, metrology and 3D printing also now being included with the intent to produce similar results.

GREEN SKILLS

Aligning TVET curricula and greening with the SDGs**Presented by Ms Audrey Gatt,
UNEVOC Centre MCAST, Malta**

This Erasmus+ project is carried out with European partners from Spain, North Macedonia and Greece. Its main idea is that individuals become more conscious of greening issues and the environment. The target groups of this project are threefold: firstly, TVET learners – by providing them greening related exposure and accredited training that benefit their employability skills; secondly, TVET teachers – by involving and supplying them an accredited training module about greening and a toolbox to enable them to deliver the greening related training; thirdly, the communities – by improving their understanding of greening issues, and also from benefitting from the job opportunities created through greening initiatives.

The project has 6 main objectives:

- Greening in TVET module at EQF level 4
- Teachers' greening in TVET module
- Teachers' greening in TVET toolkit
- Greening in TVET website and logo
- Greening in TVET App
- Greening the campus initiative

At the end of the project, all developed materials will be made available to freely share and were designed to be adapted with minimal effort to different contexts and languages.

GRÆDUCATION**Presented by Ms Silke Steinberg and
Ms Stamatia Aidonidou,
FIAP e.V., Germany/Greece**

The project GRÆDUCATION – Research, development and testing of educational services to improve the training of environmental engineering professions in Greece – is a joint Greek-German collaborative project that aims to develop new educational services through a co-creative approach. The German and Greek partners contribute their knowledge about the specific situation in their countries and jointly develop solutions that make the educational content transferable. New educational services will be created to meet the needs of Greek educational institutions and companies.

Tristan Cole, UNESCO-UNEVOC



Findings

New qualifications and competencies trends and opportunities

Identifying relevant new skills and integrating them into TVET is an ever-present challenge. While every system evolves according to its own logic, partnerships, peer learning and the exchange of experiences can serve as effective accelerators to this process. The BILT project hopes to contribute towards positive solutions to TVET challenges via a combination of project activities, data and knowledge generation and dissemination, and collaboration between TVET stakeholders, all illustrated via the BILT knowledge platform.

On a general note, participants at the workshop on 'New qualifications and competencies' emphasized that it is important to **maintain a clear separation between systemic interventions** such as reforming TVET systems to make them more learning-outcome oriented, **as compared to interventions on the implementation level** such as teaching methods or content. These two levels concern different types of TVET actors.

KEY ISSUE 1

Approaches to new qualifications and competencies on the systemic level

Regarding the first key issue, TVET needs to adapt continuously to new trends and advancements in technology and other future-oriented fields. Consequently, there is a **need for efficient design and updating of curricula and training regulations**. One possible strategy stressed by participants is to complement national frameworks with a modular or additional approach that allows a quicker response to new developments. However, the **challenge is to assure recognition within (national) systems**.

Keeping this challenge in mind, flexibility of national frameworks allows to adapt on the local level to the emergence of new skills requirements. In contrast, system-wide adaptations can be a time-consuming process. In this line, participants saw **flexibility within the national framework to**

reflect local or regional needs of the labour market as an indicator for success. It enables institutions to address gaps in curricula/training regulations, and to provide a valuable service for training providers and the private sector.

Concerning the **four approaches proposed for the integration of new qualifications and competencies into curricula and training regulations** (cross-cutting, sectoral, occupational, and modular), participants proposed that a combination of those is often the most appropriate solution. Some stated that green skills, for example, should be integrated as cross-cutting skills from a very young age, to allow for a holistic and critical understanding of the concepts.

As with other BILT project workshops, successful practice examples presented in the framework of this workshop involved a **close collaboration between TVET stakeholders** at various levels for successful curricula adaptations. However, when it comes to responding to demands from the private sector, a challenge is the diverging needs of small and medium enterprises as compared to larger companies, which both need to be satisfied when it comes to curricula development or modernization. Flexibility of curricula and training regulations can allow for small and medium enterprises and large companies to adapt these to their needs.

The **introduction of individual learning pathways or the individualization of curricula** was the focus of several presentations during the workshop. Examples such as 'LearnIT – learning tools and routes for individuals' from the Portuguese TVET provider CENFIM demonstrated how curricula can be redesigned based on a focus on the individual learner with his or her own learning pace and style. The UNEVOC Centre OMNIA reported of the newly introduced Finnish system, which lays a focus on a personalized study path that recognizes prior learning and bases evaluation on individual competencies. Participants pointed to this topic as being of major importance for future

TVET curricula and standards – it had already been at the heart of other workshops' discussions, as in 'Digitalization and TVET' with an approach to open vs. closed curricula from the UNEVOC Centre CINOP in the Netherlands.

Finally, as for **reforms of TVET systems, a difference between revolutionary vs. evolutionary processes** became evident – more precisely, a difference between radical change and small steps. While many systems are obliged to work with small steps or do not need radical change, others can benefit a lot from fundamental examination and updating. Most examples presented in Lausanne followed an evolutionary approach, while examples such as the TVET reform of the Croatian UNEVOC Centre AVEATE stands for a successful revolutionary change.

KEY ISSUE 2

Approaches to new qualifications and competencies at the implementation level

Concerning the second key issue, the role of teachers and trainers was an important element under discussion. Changes in content requires teachers and trainers to stay informed and abreast of technology, but also moving towards collaborative programme and content design. As in other BILT workshops, participants discussed the **motivation and training of teachers and trainers** as being a challenging but crucial element, which further BILT activities could focus on. A strategy to improve training is via close cooperation with companies, especially small and medium enterprises, in this endeavour.

Moreover, a crucial discussion point was the **changing role of teachers and trainers who become more of a mentor or coach** in the learning process. The UNEVOC Centre OMNIA pointed to a possible new identity of teachers and trainers: they do not transmit knowledge to a passive student audience as in the past, but rather facilitate the learning process as counsellors.

Finally, practice examples presented on the integration of new skills into training often had an impact on the quality of learning, that is the **teaching practice and methods**, rather than changing a curriculum or training regulation on

the systemic level. While curricula and training regulations guarantee a minimal standard, teaching methods allow for content design and adaption on a local level. When for example working with Virtual Reality glasses, as in the GRAEDUCATION project, TVET students' digital literacy increases and learning improves considerably. Thanks to technological advances such as Virtual Reality glasses, dangerous working environments or the interior of big machines can be simulated and become tangible for TVET students. While this successfully reflects modern evolutions of skills demand within the existing framework, it does not change curricula or training regulations.

KEY ISSUE 3

Which new qualifications and competencies are needed?

The presented initiatives facilitated consideration of what new qualifications and competencies are emerging or needed in TVET for the future. Projects saw entrepreneurial, digital, and green skills embedded in TVET programmes. Besides, the focus was set on the **need of a changing mindset with regards to emerging trends**. In addition to technical skills related to topics such as greening or digitalization, TVET students need to consider their continual professional and personal development through the adoption and use of new qualifications and competencies that can lead to their long term employability and allow them to respond to evolving trends effectively.

Another discussion point was the **growing importance of soft skills**, such as creativity and critical reflection of the own work, as nowadays required from most employers. These skills might be integrated transversally or as entrepreneurial skills through a cross-cutting approach in curricula and training regulations, as they matter for all professions.

While the mindset and soft skills are certainly of fundamental relevance, **technical skills stay at the heart of a relevant and updated TVET curricula and standards**. To contribute an example for modern skills demands in digitalization, the UNEVOC Centre SFIVET from Switzerland presented its research on digital skills, including a list of frequently mentioned competences with growing importance in TVET.

BILT peer learning

Participants underlined that **even though contexts and systems are diverse in Europe, the challenges faced by UNEVOC Centres have many similarities**. Since peer learning helps to understand approaches of how to face these challenges, participants emphasized the benefit of networking activities such as within the BILT project. However, they are required to dive even deeper into individual examples in future BILT activities in order to have a better understanding of their logic and implementation. Finally, participants understand differently what curricula and training regulations are, and how they are integrated. Importantly, as integration varies between TVET systems this remains an element to be investigated further in future BILT activities.

Jérôme Hügli, Scientific Advisor at the Swiss State Secretariat for Education and Innovation, discusses the Swiss approach



List of Participants

| Name | Institution | Country |
|------------------------|---|-------------|
| Maneul Aepli | SFIVET | Switzerland |
| Stamatia Aidonidou | FIAP | Germany |
| Alan Amstrup | CBC | Denmark |
| Tristan Cole | UNESCO-UNEVOC | Germany |
| Oliver Diehl | BMBF | Germany |
| José Novais da Fonseca | CENFIM | Portugal |
| Audrey Gatt | MCAST | Malta |
| Vera Hark | BIBB | Germany |
| Dorte Kjaargaard | CBC | Denmark |
| Jens Liebe | UNESCO-UNEVOC | Germany |
| Karolina Maduna | AVEATE | Croatia |
| Reinhard Nöbauer | BMBWF | Austria |
| Linda Pudane | Daugavpils Construction Technical School | Latvia |
| Jenna Randriamboavonjy | SFIVET | Switzerland |
| Aulika Riisenberg | Foundation Innove | Estonia |
| Philippe Roesie | State Secretariat for Education, Research and Innovation | Switzerland |
| Michael Schwarz | BIBB | Germany |
| Margarida Segard | ISQ Academy | Portugal |
| Matteo Sgarzi | CÉREQ | France |
| Oksana Soročina | Daugavpils Construction Technical School | Latvia |
| Silke Steinberg | FIAP | Germany |
| Erik Swars | SFIVET | Switzerland |
| Kati Valtonen | OMNIA | Finland |
| Gitte Vestergaard | CBC | Denmark |
| Emanuel Wuthrich | SFIVET | Switzerland |



Participants from the BILT Workshop on New Qualifications and Competencies in TVET, SFIVET, Lausanne, Switzerland

Workshop Agenda

| 12 November | Tuesday |
|--------------------|--|
| 08:30–09:00 | Registration and welcome coffee |
| 09:00–09:45 | Welcome and opening Erik Swars, Head of International Affairs, SFIVET Jens Liebe, Senior Programme Expert, UNESCO-UNEVOC Philippe Roesle, Scientific Advisor, State Secretariat for Education, Research and Innovation SERI, Switzerland Dr. Oliver Diehl, Deputy Head of Division, Federal Ministry for Education and Research, Germany <i>Introduction of the participants</i> <i>Group Picture</i> |
| 09:45–10:30 | Framing the workshop Overview of the BILT project: objectives and expected outcomes Jens Liebe, Senior Programme Expert, UNESCO-UNEVOC New Careers and Competencies Framework Michael Schwarz, Deputy Head of Division, BIBB New Qualifications and Competences from a Swiss perspective Emanuel Wüthrich, Senior Advisor International Affairs, SFIVET Introduction to the structure of the thematic workshop Vera Hark, Project Manager/Technical Advisor, BIBB |
| 11:00–11:30 | Coffee break |
| 11:30–12:00 | Approaches to New Qualifications and Competencies (Session I): Identification of New Qualifications and Competencies and their Introduction into Curricula and Training (Systemic Level) 1. Employers Intervention in the governance of the French qualifications System in the light of the most recent VET reforms Matteo Sgarzi, CÉREQ, France 2. ESF funded project: VET reform in Croatia Karolina Maduna, AVEATE, Croatia 3. BuildEst Project Aulika Riisenberg, Foundation Innove, Estonia |

| 12 November | Tuesday |
|--------------------|--|
| 12:00–13:00 | World Café Debate (Session I) Three Tables with guiding questions |
| 13:00–14:00 | Lunch |
| 14:00–15:00 | Approaches to New Qualifications and Competencies (Session II): Practical examples of new competencies in the field of initial and continuing TVET and in the field of upskilling (Practical Level) <ol style="list-style-type: none"> 1. Securing the validity of online exams Gitte Vestergaard/Alan Amstrup, CBC, Denmark 2. Innovative approaches to learning the profession at Daugavpils VET School Oksana Soročina/Linda Pudane, Daugavpils construction Technical School, Latvia 3. Individual learning paths and use of modern technologies in learning Kati Valtonen, OMNIA, Finland |
| 15:00–16:00 | World Café Debate (Session II) Three Tables with guiding questions |
| 16:00–16:30 | Coffee break |
| 16:30–17:00 | Bridging Innovation and Learning in Practice & Wrap up Day 1 Erik Swars, Head of International Affairs, SFIVET Vera Hark, Project Manager/Technical Advisor, BIBB Tristan Cole, Project Officer, UNESCO-UNEVOC |
| 17:00–17:30 | Open Networking Session Opportunity for bilateral conversations |
| 19:00 | Group Dinner |

| 13 November | Wednesday |
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| 09:00–09:30 | Cross-Cutting BILT: Elements relevant from other work streams Tristan Cole, Project Manager, UNESCO-UNEVOC Vera Hark, Project Manager/Technical Advisor, BIBB |
| 09:30–10:30 | Which New Qualifications and Competences are needed? Examples from across the BILT themes 1. Digitalisation: <ul style="list-style-type: none"> Changing labour markets, upskilling, and VET in Switzerland Manuel Aepli, Research and Development, SFIVET Create new skills and certifications for additive manufacturing Margarida Segard, ISQ Academy, Portugal 2. Greening: <ul style="list-style-type: none"> Aligning VET Curricula to Greening and the SDGs Audrey Gatt, MCAST, Malta GRÆDUCATION Silke Steinberg/Stamatia Aidonidou, FIAP e.V., Germany/Greece 3. Entrepreneurship: <ul style="list-style-type: none"> Individual Availability and Different Paces of Learning of each Trainee José Novais da Fonseca, CENFIM, Portugal |
| 10:30–11:00 | Coffee Break |
| 11:00–12:30 | World Café Debate Three Tables with guiding questions |
| 12:30–13:30 | Lunch |
| 13:30–14:15 | Bridging Innovation and Learning in Practice & Wrap-Up Day2 Erik Swars, Head of International Affairs, SFIVET Vera Hark, Project Manager/Technical Advisor, BIBB Tristan Cole, Project Officer, UNESCO-UNEVOC |
| 14:15–14:45 | Wrap up and closing Erik Swars, Head of International Affairs, SFIVET Jens Liebe, Senior Programme Expert, UNEVOC Dr. Oliver Diehl, Deputy Head of Division, Federal Ministry for Education and Research, Germany <i>Q&A including feedback by participants</i> |
| 14:45–16:00 | Open Networking Session Opportunity for bilateral conversations |
| 16:00 | (Open) End of workshop |

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