



United Nations  
Educational, Scientific and  
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UNEVOC

International Centre  
for Technical and Vocational  
Education and Training

# Managing skills in a time of disruption

Key highlights of the UNESCO-UNEVOC  
TVET Learning Forum



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The following report presents highlights of UNESCO-UNEVOC's TVET Learning Forum.

**The full report will be available later.**

All presentations, recordings and related information can be accessed at

[www.unevoc.unesco.org/learningforum](http://www.unevoc.unesco.org/learningforum)

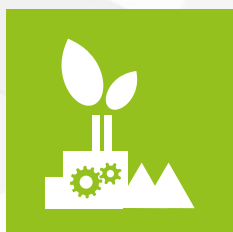
# Background of the Forum

At the international conference in Tangshan in 2017, UNESCO put a spotlight on the factors shaping the future technical and vocational education and training (TVET) landscape. These included shifts in the development paradigm towards sustainable development, and changes in demography, economic trends, the labour market and migration patterns. At the global level, the 2030 Sustainable Development Agenda is driving change in the way development is pursued. Developments in **digital technology**, including Industry 4.0, smart production and big data, have significant impacts on the world of work. They affect not only the skills demands, but also the profile of jobs with the addition of new professions and the disappearance of others. **Migration** and **demographic change** also have a consequence on the labour market including skills assessment and recognition methods. Not only do systems need to take into account the local skills landscape, but must also factor in skills possessed by migrating populations. Lastly, **climate change** and the transition towards equitable and sustainable economies is placing pressure on TVET systems to raise awareness, improve education and build human and institutional capacities to prepare the current and future labour force for green and sustainably orientated jobs.



## Digital disruption

Digital technology has permeated the world of work, creating the most prominent disruption of today in the form of digitization - with features that include industry 4.0, smart production, big data and data analytics and Internet of Things. These features are changing the profile of jobs; the demand for a different skills mix is high, often with a bias to digital skills. As a result of massive technological transitions, business structures are changing, some jobs are diminishing because of more efficient and productive automation processes run by machines. A whole value-chain of tasks are affected, rationalizing the need for human intervention. However, new opportunities are also created. Technology is altering the way people are accessing knowledge and services and so the potential of new and long-term job areas and entrepreneurial activities in a digital future are opening up. **How are TVET systems preparing learners for a digital future? How are TVET institutions transforming their programmes, organization and delivery modes to meet the needs? What support is needed to build institutional and teacher capacities? Where will resources come from?**



## Climatic disruption

The transition to a green and just economy is a pervasive agenda, and the Sustainable Development Goals (SDGs) serve as turnkey to embrace new alternatives to economic development and social transformation. New societal and cultural demands arise, demanding less environmental impact. Global emission targets are binding economies to become more efficient and to welcome new and alternative sources of energy and other resources. Organizational approaches are changing to adapt their strategies and value chains are getting rationalized to keep pace with the needs of an evolving economy and ecology. **What are TVET systems doing to raise awareness, improve education and build human and institutional capacities? How are institutions increasing skills mitigation and adaptation to prepare for green jobs and actively contribute to climate mitigation and adaptation? What capacities need to be addressed at the institution level? What investments are required and where will resources come from?**



## Migration and demographic shift-related disruption

Migration and demographic change are changing the face of the labour market. Not only does the labour market need to be oriented to local skills supply, but also the skills available from migrating populations, and the potential surplus or under-utilization of skills. The displacement of people and populations due to conflict, climate change and employment is driving this trend. Many skilled professionals and individuals are being up-rooted from their original place of work and will need to be integrated in their host countries to become productive. The notion of skills as an international currency can not be fully realized without adequate measures to assess or recognize skills of migrating populations. Traditional skills assessment and recognition methods will need to effectively determine the potential of migrant populations for employment or need for further re-skilling and accommodate the unprecedented impact of digitization, climate change and scale of movement of populations. **Are the tools used by TVET systems to unleash the employment potential of migrating populations adequate? What can be done at the level of the institution to increase labour market intelligence and cooperation with local enterprises? How can institutions improve their capacities to address equity, gender equality, inclusiveness of skills development programmes, leading to employment?**

Organized with the support of the German Federal Ministry of Education and Research (BMBF) and the Federal Ministry for Economic Cooperation and Development (BMZ), and in collaboration with the German National Commission for UNESCO and partners from the Inter-Agency Group on TVET and WorldSkills International, UNESCO-UNEVOC's TVET Learning Forum on 'Managing skills in times of disruption' convened over 100 participants representing all sectors of the TVET community, including centres from the UNEVOC Network, from all five regions of the world.

Opening the Learning Forum, Ms Elke Büdenbender of the Office of the Federal President of Germany emphasized the importance of TVET to overcome today's disruptions, and to this end, made a passionate plea for all types of education and training to be valued in the wider frame of lifelong learning.

Her remarks, as well as those from Mr Svein Ostveit (UNESCO), Ms Susanne Burger (BMBF), and Ms Marion Edel (BMZ), set the tone for what grew into a highly engaging two-day forum that consisted of plenary sessions, panel discussions, and strategy labs, which

**Elaborated** on the challenges and opportunities accompanying disruptions,



Ms Elke Büdenbender addressing participants of the Learning Forum during the opening session

**Examined** their implications for institutions engaged in delivering TVET and skills programmes,

**Showcased** recent and ongoing collaboration projects, research initiatives and their findings

**Raised awareness** about TVET collaboration projects in the UNEVOC Network, and

**Shared** UNESCO and UNEVOC new initiatives for supporting improved skills response.

## Key reflections

- » **Understanding disruptions requires having an overview of developments at the global and local levels.** Comprehending the workings and impacts of the disruptions requires a macro-level perspective, but also knowledge about the local skill ecosystems. The impacts disruptions have on TVET and skill development must be contextualized since they can vary from one place to another.
- » **Cooperation is key to strengthening TVET's response.** Skills development cannot work in silos. Disruptions are interconnected, as are the solutions. For example, one policy solution for skilling migrating populations can also enable approaches to transfer competences that increase employability, develop entrepreneurial talent, and enhance sustainability contributions in their host country. Collaboration must take the shape of inter-sectorial policy interaction and exchange, engagement of different stakeholders and players in education, training, employment, business and local communities.
- » **Lifelong learning must be a key component in TVET design.** Education and training play an important role to make the world sustainable and inclusive, and an emphasis on lifelong learning is essential. TVET should not only prepare students to contribute to the immediate needs of societies and economies, but also ensure that individuals are able to learn all along their lives and develop their talents and potential. This requires flexible and accessible pathways, as well as the anticipation of future skills demands. TVET also needs to contribute to the development of a mix of skills, including foundational, transversal, soft, and job-specific skills.
- » **Teachers and trainers need to be empowered.** The role of teachers and trainers in education and training has long been acknowledged. However, responding to today's disruptions requires new pedagogical approaches and knowledge, not to mention motivation and approaches to take advantage of technological developments in the classroom and in the workplace. Teachers and trainers need to be capacitated to continue to play their important roles.
- » **Policy-making requires broad stakeholder engagement.** Responding to disruptions requires the input and voices of a host of stakeholders that are able to help progress multi-level responses and inform the development of realistic policies and actions grounded on different levels. These stakeholders include, but are not limited to, ministries, national bodies, international governmental and non-governmental organizations, the private sector, teachers and trainers and youth.



Forum participants and organizers on the last day after the closing session

UNESCO-UNEVOC, together with its partners, extend its gratitude to all participants and experts who took part in the discourse and provided valuable leads and examples of cooperation in the field of TVET.

# Main conclusions of the strategy labs

Strategy lab sessions, co-organized and facilitated by UNEVOC Centres and development partners in TVET, were structured into world café, short seminar or round-table workshops. They discussed key issues and opportunities addressed by the Forum, and examined disruptions – their implications for TVET and skills development – and available tools and resources to turn these disruptions into a positive force. The outcomes of the Strategy Labs under each subject can be summarized as follows:

## Diversifying financing and investment in TVET

- » **TVET is a valuable ground to engage different actors, resources, and to develop new investment schemes that can address disruptions.** Convincing other actors to get involved requires an understanding of the return on investment in TVET. On the one hand, the economic impact is often easy to demonstrate using employer data. Social benefits on the other hand, including the impact to society and the individual, are often not quantifiable using these data and not systematically integrated when analyzing the returns of TVET. More should be done to collect hard evidence on both, as both sets of data are required to guide employers and public authorities, help individuals make career choices, and encourage a multi-level participation.
- » **TVET authorities are encouraged to develop or share more examples.** There should be more efforts to analyze or measure the return on investment where cases are scarce. These authorities need to build capacities in data collection, establish norms for data sharing across different stakeholders, and support the transfer of return on investment analysis frameworks across different TVET settings. This includes the informal sector, which accommodates high rates of youth that have fallen out of formal systems.
- » **Tools to better understand the issues around the return on investment should be disseminated effectively.** For example, UNESCO-UNEVOC and NCVER have developed a framework and practical guide that will be published in 2018. These tools can help strengthen and develop methods and approaches for TVET institutions.

## Skills, training, and vocational education for migrant and displaced youth and adults

- » **It is essential to have an understanding of the complexity of systems at the national and individual levels.** At the individual level, more needs to be done to assess the migrants' needs and appraise their skills. At the national level, it requires a flexible TVET system that is able to adapt to the situation of refugees.
- » **A multi-level approach involving numerous stakeholders is required.** Strong partnerships and forums to share experiences and provide guidance is needed.
- » **Key actors should be proactive.** Instead of only reacting to the situation, key actors should do more to tackle the issues in countries that displaced youth and adults come from. This includes, amongst other things, strengthening the education and TVET systems in those countries.

## Emerging models for TVET to meet the demands of green jobs and enhance local actions

- » **Enhancing local actions for sustainable development requires committed stakeholders.** TVET institutions should play a leading role to promote the Sustainable Development Goals and TVET's contribution to sustainable development.

- » **Greening should be recognized and included as a fundamental skill throughout the entire curriculum.** In addition to job-specific skills, knowledge for sustainability and promoting a 'green culture' are fundamental to the transition towards green societies and economies.
- » **Greening TVET requires motivated and confident teachers, and the involvement of students and other local community actors.** More discussions should take place on the capacity-building needs of teachers, and the support mechanisms needed to enhance student and local community involvement.

### TVET teacher preparation for the digital future

- » **Supporting TVET teachers to teach for the digital future of work requires actions at the policy and local levels.** Policies should be geared towards providing sufficient capacity-building opportunities and backing. Small-scale initiatives also should be identified and supported.
- » **Preparing teachers requires the involvement and support of many stakeholders at various levels.** Additionally, mechanisms for strengthening collaboration are needed.
- » **Small-scale initiatives and good practices need to be disseminated effectively.** It is important for these activities to be collected and disseminated effectively so that others can learn and implement similar practices in their contexts.

### Pathways of progression between TVET and higher education

- » **TVET programmes need to promote and ensure lifelong learning.** This reduces the barriers to further education. To this end, initial TVET programmes should be designed to support students to make the bridge to more advanced programmes.
- » **The changing nature of the world of work needs to be reflected in the education system.** This can be done by, for example, diversifying training pathways at the post-secondary education level.
- » **Ensuring transparency is key.** More is required to ensure greater transparency to promote progression pathways and reduce fragmentation.

### Modelling innovative entrepreneurial learning in TVET

- » **Promoting entrepreneurial education is key to adapting to disruptions.** In a time of disruptions, a traditional way of teaching and learning in the education system is no longer sufficient. Entrepreneurial education helps young people to adapt to disruptions, to cope with any challenge in life and to create values.
- » **It is essential to promote experiential learning.** In entrepreneurial education, it is crucial to help students to experience and to learn from experience (including failures), and to develop entrepreneurial mindset and values, which is not limited to knowledge about entrepreneurship and how to start business.
- » **There should be more investment in the capacity development of teachers and development of a conducive entrepreneurial culture in TVET institutions.** All TVET teachers, regardless of their disciplines, must have entrepreneurial mindset. At the same time, TVET schools have to be open to mobilize and bring in partners from the community and the business world, for example, to inspire and to serve as mentors.



# The way forward

The international TVET community, including the UNEVOC Network, are invited to work with UNESCO and UNESCO-UNEVOC to:

- » **Develop the capacity of leaders to drive innovation and change.** One of the perceived bottlenecks in effecting change in TVET institutions relates to the lack of change leaders, and a lack of capacity to develop a vision and implement change. Any action to address changes external to TVET systems can be realized by TVET leaders who are equipped with the knowledge and skills to understand the issues from the global and regional perspectives, and formulate strategies from within the existing systems and local skills ecosystem. TVET leaders need to be equipped with the tools to understand the scope of the problems and develop institutional strategies to be able to create timely responses.
- » **Generate and share knowledge.** Networking is about bridging experiences – transferring and connecting experiences around the world. Important to bridging experiences is establishing dialogue and an understanding of other contexts and local ecosystem responses. Guides and materials produced by UNESCO-UNEVOC and other actors in thematic priority areas help institutions implement strategies to respond to the challenges brought about by disruptions. The lessons learned from the successes and failures of others can play an important role in bridging the knowledge gap and evolving innovation in TVET.
- » **Strengthen collaboration.** Institutions in the network will be supported to break down the barriers and increase synergy and collaboration. The best experiences and practices in skills development across sectors and institutions (including within the UNEVOC Network) need to be disseminated effectively to encourage peer learning.

Under its Medium-Term Strategy for the period 2018 to 2020, UNESCO-UNEVOC will aim to address the capacity needs of TVET leaders and managers, strengthen collaboration, knowledge exchange, and peer learning. Those objectives can only be fulfilled with and through the UNEVOC Network. By increasing ownership of global challenges at the institutional level, disseminate knowledge at the national level, and develop partnership at the international level, UNEVOC Centres will be instrumental in the transformation of TVET systems worldwide.

**Please click here to access UNESCO-UNEVOC's Medium-Term Strategy II**



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UNESCO-UNEVOC TVET Learning Forum

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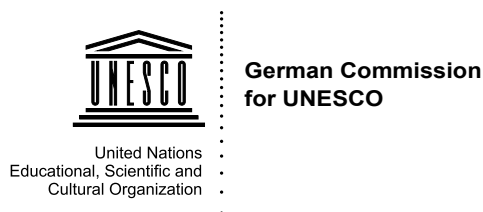


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