

Virtual conference on the future of TVET teaching and learning

Topic at a glance

[UNESCO's 2015 Recommendation concerning technical and vocational education and training \(TVET\)](#) reminds us that TVET in all forms and settings should be oriented to equipping all youth and adults with relevant knowledge, skills and competencies for work and life, and that this should be done through an overall lifelong learning framework. The Recommendation recognizes the crucial role of teaching staff in assuring TVET quality and relevance, and states that 'policies and frameworks should be developed to ensure qualified and high-quality TVET staff, including teachers, instructors, trainers, tutors, managers, administrators, extension agents, guidance staff and others'. To this end, the Recommendation asks Member States to build the necessary institutional capacities to 'ensure the relevance of TVET to current and evolving needs in the world of work, nationally, regionally and internationally, including those implied by the transitions to green occupations, economies and societies'.

Yet implementing this Recommendation may not be so straightforward, given the unprecedented impacts that global disruptions like climate change, the Fourth Industrial Revolution, digitalization, migration and demographic change are having on people's lives, the world of work and the world of learning. The resulting transformations, especially the emergence of new job roles, call for learners to continuously upgrade their knowledge, skills and competencies in line with evolving labor market needs, which in turn requires flexible and responsive TVET programmes with up-to-date curricula and state-of-the-art teaching and training methods (both theoretical and practical). However, despite the expansion of support mechanisms for TVET teaching staff in many countries – specifically concerning new pedagogies, curricula and technologies – challenges persist in ensuring that TVET teachers and trainers possess future-oriented competencies that they can pass on to students.

The implications of global disruptions for the future of TVET teaching and learning are yet to be fully unpacked, understood and synthesized into an actionable framework. We still lack evidence on and insight into how TVET teaching and learning can be organized to keep pace with a rapidly changing labor market. A better understanding of what policies, practices, frameworks and mechanisms will most enhance the teaching-learning experience in various TVET locations (schools, in-company, online or blended programmes, etc.) and across different forms of training is also required to plan for the future.

This virtual conference seeks to gather knowledge, insights, experiences and practices from the international TVET community on the future of TVET teaching and learning in the context of global disruptions. **The conference will explore what skills are likely needed for the future of work and what steps TVET systems need to take – at policy, institutional and practitioner levels – to prepare teachers and trainers to deliver these skills.** The discussions will focus on (but will not be limited to) three broad areas that have been identified as crucial for new forms of work:

- Education and training for sustainable development (skills for green jobs, global citizenship, equity, innovation, etc.)
- ICTs and digitalization
- Entrepreneurship

Insights gained from the virtual conference will form part of the evidence base for the forthcoming UNESCO-UNEVOC trends mapping study on the 'future of TVET teaching and learning'.

Structure and expected outcomes

The virtual conference aims to:

- Collect insights on the skills needed for the future of work in the context of global disruptions, and the impacts of these disruptions on different forms of TVET teaching and learning.
- Gather knowledge, experiences and practices on the steps that TVET systems should take – at policy, institutional and practitioner levels – to prepare teachers and trainers to deliver the skills needed in the 21st century and beyond.
- Collate evidence from the international TVET community as a contribution to the UNESCO-UNEVOC trends mapping study on the ‘future of TVET teaching and learning’, and as a first step to developing an actionable framework for improving the responsiveness of TVET to an increasingly complex and rapidly changing labour market.

The following threads will be opened for discussion and will remain open throughout the virtual conference period:

Monday, 7 October	Thread 1	The future of work and learning
Tuesday, 8 October	Thread 2	Skills needs of teachers and trainers in a responsive TVET system
Wednesday, 9 October	Thread 3	Support needed by TVET teachers and trainers to deliver future-oriented skills
Friday, 11 October	Thread 4	Key partnerships for improving TVET effectiveness through teacher-focused interventions
Monday, 14 October	Thread 5	Recap and lessons learned

At the end of this virtual conference, participants will be able to:

- Understand the impacts of global disruptions on the future of work and learning, and explain how these developments present challenges as well as opportunities for TVET teachers’ and trainers’ role in fostering responsive, future-oriented TVET systems.
- Recognize the importance of continuous TVET teacher and trainer development and identify the types of support mechanisms that teachers and trainers need to deliver the skills of the future in a rapidly changing and increasingly complex labour market.
- Appreciate the role that different stakeholders (governments, TVET institutions, employers and other key partners) play in supporting and motivating TVET teachers and trainers to deliver relevant and high-quality skills.
- Identify policies and practices that can improve the responsiveness of TVET systems through the medium of TVET teachers and trainers.

Threads and leading questions

Thread 1: The future of work and learning

This thread seeks to collect views and evidence of the context in which education and skills development will take place in the future. Relevance in TVET means providing the skills demanded in the workplace, while changes in the way work is done may necessitate new educational content and delivery structures.

Leading questions

- What are the most noticeable changes in workplace organization and practices that have occurred over the past 3 years, and what major shifts are expected to occur over the next 10 years? How will these changes affect the demand for workers and skills?
- In what areas are there currently skills gaps, and what skills will workers likely require in the future?
- How should TVET be taught and what should be taught in TVET programs to ensure that graduates have the skills they need for the future of work? Do additional steps need to be taken to ensure that no one gets left behind in the market for future-oriented skills?

Learning materials

- UNESCO. 2019. *Futures of Education: Learning to Become*. <https://youtu.be/7865y7hbehY>
- BIBB. 2019. *Robotics, Artificial Intelligence and the Future of Work*. https://www.bibb.de/dokumente/pdf/2019_02_07_tasks_5_cfp_181217_v5.pdf
- UNESCO. 2015. *The Futures of learning 1: why must learning content and methods change in the 21st century?* <https://unesdoc.unesco.org/ark:/48223/pf0000234807>
- NCVET. 2017. *Skills for a global future*. https://www.ncver.edu.au/_data/assets/pdf_file/0041/3179885/Skills-for-a-global-future.pdf
- OECD. 2018. *The future of education and skills: Education 2030 – position paper*. [https://www.oecd.org/education/2030/E2030%20Position%20Paper%20\(05.04.2018\).pdf](https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf)
- World Economic Forum. 2017. *Realizing Human Potential in the Fourth Industrial Revolution*. http://www3.weforum.org/docs/WEF_EGW_Whitepaper.pdf
- ILO. 2018. *Skills policies and systems for a future workforce*. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/publication/wcms_618170.pdf

Thread 2: Skills needs of teachers and trainers in a responsive TVET system

Responsive TVET systems are those that supply the skills demanded in the workplace. As teachers and trainers are at the frontline of TVET delivery, they need to possess future-oriented competencies in order to pass them on to students. This thread is concerned with the skills needs of teachers and trainers in a responsive TVET system. It seeks to gather insights on what knowledge, skills and competencies TVET teachers and trainers possess, or still need, to be able to deliver future-oriented training. It also seeks to elicit ideas, research or practices on how to bridge the skills gap to improve TVET effectiveness across different locations (schools, colleges, in-company, private institutes, etc.) and formats (in-class, online, blended, etc.).

Leading questions

- What skills do TVET teachers and trainers need to be future ready, and what skills do they currently possess or lack? Where are the gaps, and how can they be bridged?
- How can TVET teacher training systems be adapted to improve their responsiveness to the changing content, methods, pedagogies and/or technologies needed to deliver skills to learners across different training locations and formats?
- Can you share any practices from your country/region for improving access to quality training for both young and seasoned teachers/trainers?

Learning materials

- UNESCO. 2017. *E2030: Education and skills for the 21st century*. <http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Santiago/pdf/Meeting-Report-Buenos-Aires-2017-E2030-LAC-ENG.pdf>
- International Task Force for Teachers. 2014. *Technical and vocational teachers and trainers in the Arab region: a review of policies and practices on continuous professional development*. <https://unesdoc.unesco.org/ark:/48223/pf0000231160>
- OECD. 2005. *Teachers Matter: Attracting, developing and retaining effective teachers*. <https://www.oecd.org/education/school/34990905.pdf>

- CEDEFOP. 2016. *Professional development of teachers and trainers – a guarantee of quality in VET*. https://www.cedefop.europa.eu/files/plf_teachers_and_trainers_summary_open_space_final3659.pdf
- European Commission. 2018. *Teachers and Trainers Matter - How to support them in high-performance apprenticeships and work-based learning*. <https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8131&furtherPubs=yes>
- UNESCO. 2017. *Beyond Access: ICT-enhanced innovative pedagogy in TVET in the Asia-Pacific*. <https://bangkok.unesco.org/sites/default/files/assets/article/ICT%20in%20Education/TVET/TVET%20pub.PDF>

Thread 3: Support needed by TVET teachers and trainers to deliver future-oriented skills

In a rapidly changing and increasingly complex labour market, TVET teachers and instructors need training as well as other support to deliver the skills of the future. This thread is concerned with the current support mechanisms available to TVET teachers and trainers across different countries/regions to help them fulfill their role as disseminators of future-oriented skills, as well as the support mechanisms needed in the future. It seeks to collect evidence on what support mechanisms exist to equip TVET teachers and trainers with state-of-the-art teaching and training methods (both theoretical and practical), as well as what incentives are offered to motivate teachers and trainers to continually assess and acquire the knowledge, skills and competencies they need to offer training in line with sectoral and methodological changes.

Leading questions

- What training and support do TVET teachers and instructors need to deliver future-oriented skills? Do they need special training and support to ensure that the future of learning is inclusive and equitable?
- What can governments and TVET institutions do to prepare and support TVET teachers and trainers to deliver the skills needed for the future of work and learning?
- What policies or mechanisms can be put in place to ensure that TVET teachers and trainers continuously monitor and take steps to address their own skills needs? Is such an expectation realistic and/or actionable?

Learning materials

- UNESCO. 2017. *E2030: Education and skills for the 21st century*. <http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Santiago/pdf/Meeting-Report-Buenos-Aires-2017-E2030-LAC-ENG.pdf>
- UNESCO – UNEVOC. 2017. *Greening TVET: a guide for institutions*. https://unevoc.unesco.org/up/Greening%20technical%20and%20vocational%20education%20and%20training_online.pdf
- Ministry of Education. 2012. *Supporting future-oriented learning and teaching - a New Zealand perspective*. https://www.educationcounts.govt.nz/_data/assets/pdf_file/0003/109317/994_Future-oriented-07062012.pdf
- *Practices at Maungaraki School, Future Oriented Teaching and Learning*. <https://youtu.be/Y1EGrf9yQU>

Thread 4: Key partnerships for improving TVET effectiveness through teacher-focused interventions

Teacher- and trainer-focused interventions aimed at improving TVET responsiveness and effectiveness are currently being implemented by a range of stakeholders across the world. Evidence also shows that partnerships between stakeholders at different levels are needed to rapidly and sustainably overcome the financial, technical and/or infrastructural barriers that many (especially poorer) countries face in improving TVET quality and relevance. This thread seeks to identify which stakeholders are taking steps to improve TVET quality through teaching interventions and what roles they play in different countries/regions. It also seeks to gather examples of innovative projects and partnerships that have led to improvements in TVET quality and relevance through teacher-focused interventions.

Leading questions

- Which stakeholders are involved in training and supporting teachers and trainers in your country/region, and what role do they play? What are the impacts of their interventions on TVET quality and relevance?
- Do you know of any innovative projects or partnerships that have led to improvements in TVET quality and relevance through teacher-focused interventions? Can you provide any information on these interventions?
- What actions are different stakeholders (individually or collectively) taking to improve the relevance of TVET teaching – for example, by improving access to information on future labor market trends? Can you provide

any examples of promising practices in this area?

Learning materials

- GIZ. 2019. *Future ASEAN Agenda for TVET*. https://sea-vet.net/images/seb/e-library/doc_file/490/future-asean-agenda-for-tvet.pdf
- BMZ. 2018. *Supporting TVET- Shaping the Future: Technical and Vocational Education and Training (TVET) in Development Cooperation*. https://www.bmz.de/en/publications/topics/education/Materialie303_supporting_tvet.pdf
- EPF. 2017. *The Role of the Private Sector in Vocational and Educational Training*. https://www.bibb.de/dokumente/pdf/epf_the_role_of_the_private_sector_in_vet_official.pdf
- UNDP. 2017. *Engaging the Private Sector in Skills Development*. <http://www.sesric.org/files/article/600.pdf>
- Central Support Service of eTwinning (CSS). 2018. *Measuring the impact of eTwinning activities on teachers' practice and competence development*. <https://www.etwinning.net/eun-files/eTwinning-report-2018-EN.pdf>

Thread 5: Recap and lessons learned

This thread is designed to validate whether the overall picture emerging from the previous week's discussions accurately reflect participants' ideas and experiences and can be used as a reliable input to the UNESCO-UNEVOC trends mapping study on the 'future of TVET teaching and learning'.

About the moderator



Gita Subrahmanyam is founder and director of the Inclusive Development Lab, a UK-based international development consultancy that provides research, training and advice focused on reducing poverty and inequality and building more inclusive and sustainable societies. She is also a university lecturer with affiliations to the London School of Economics and other University of London institutions, where she continues to teach postgraduate courses and offer teacher training, both in the UK and internationally. She holds a PhD in Government and an MSc in Public Policy and Administration from the London School of Economics, as well as a BSc in Economics from the Wharton School, University of Pennsylvania.

Ms Subrahmanyam has authored a range of economic briefs and reports on various aspects of TVET, including the UNESCO Bangkok TVET progress review titled 'Enhancing Relevance in TVET', which formed the basis of the *Kuala Lumpur Declaration on Quality Education and Skills Development for a Sustainable Future (2015)*. This is the second UNESCO-UNEVOC virtual conference that Gita will be moderating. She previously co-moderated the 2013 eForum online conference on 'Tackling Youth Unemployment through TVET'. Gita is conducting the trends mapping study on the 'future of TVET teaching and learning' for UNESCO-UNEVOC.