



# Virtual conference on skills for a resilient youth

## Virtual conference report

UNESCO-UNEVOC TVeT Forum, 6-14 July 2020  
Moderated by Terry Neal, Education Specialist, Technical and Vocational Skills Development, Commonwealth of Learning

*Organized in celebration of World Youth Skills Day, 15 July 2020*



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# Virtual conference report AT A GLANCE

Every year on 15 July, the global community celebrates World Youth Skills Day. The day is an opportunity for young people, technical and vocational education and training (TVET) institutions, and public and private sector stakeholders to acknowledge and celebrate the importance of equipping young people with skills for employment, decent work and entrepreneurship.

World Youth Skills Day 2020 took place in a challenging context. Prior to the pandemic, young people aged 15-24 were two to three times more likely than adults to be un- or under-employed and often faced a prolonged school-to-work transition period. In post-COVID-19 societies, as young people seek employment and are called upon to contribute to the recovery effort,

they will need to be equipped with the relevant skills for today as well as the competencies to successfully manage evolving challenges and adapt to future disruptions.

The virtual conference on Skills for a Resilient Youth was held from 6-14 July 2020. It was open to all members of the UNESCO-UNEVOC TVeT Forum, an online community with more than 6500 members. The conference sought to gather knowledge, insights, experiences and practices from the international TVET community to understand how the pandemic is affecting youth and how TVET teachers, institutions and government agencies are responding.

## Key reflections

### **Young people's work and study has been severely affected by the pandemic with consequences that we are yet to see played out**

Prior to the pandemic, one in five of those 15-24 years of age were not in education, employment or training (NEET). Following the pandemic, the situation has worsened, and has exacerbated existing inequities because of differences in young people's access to technology and work opportunities.

### **In seeking to skill youth, TVET faces extra challenges in moving to distance and online learning because of the need to develop practical skills**

Most TVET courses cannot be offered fully online because they include development of practical skills. Simulations, and virtual and augmented reality can assist, but are not yet widely used and are limited in what they can achieve.

### **While TVET systems had already recognized the need to train youth in soft and digital skills, the pandemic has increased this awareness.**

TVET systems need to be flexible to respond to different skills needs in the face of changing ways of working and new patterns of employment. Soft and digital skills are increasingly important, and there is added benefit in real world settings to develop such skills.

### **Present experiences by students, institutions, employers and governments are moving systems towards a new normal for TVET**

The pandemic has pushed all TVET stakeholders to move towards online learning. Those who were already on their journey to distance and online learning were least affected and those without access to the technological infrastructure were, and still are, least able to take advantage of online opportunities.

### **Moving to a desired new normal for future resilient TVET requires changes across TVET systems, particularly to ensure the equitable access needed to meet global skills development needs**

TVET systems would benefit from moving to a new normal, blending online and practical and soft skills development. This blended new normal will require a changed mindset for all stakeholders within TVET systems, ranging from government agencies to learners.

# Background

Every year on 15 July, the global community celebrates World Youth Skills Day. The day is an opportunity for young people, technical and vocational education and training (TVET) institutions, and public and private sector stakeholders to acknowledge and celebrate the importance of equipping young people with skills for employment, decent work and entrepreneurship.

World Youth Skills Day 2020 took place in a challenging context. The ongoing COVID-19 pandemic has substantially affected education and training sectors worldwide in two ways:

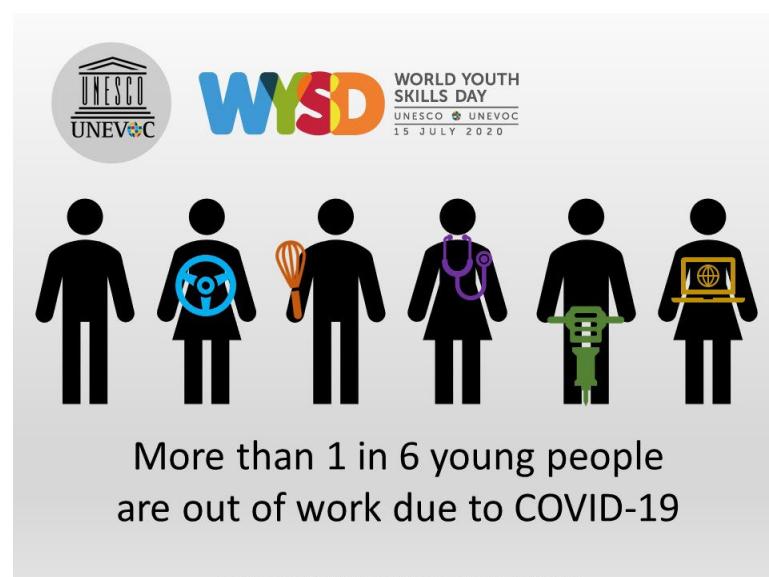
- **Institutional level.** Lockdown measures have led to the worldwide closure of TVET institutions and skills development organizations. UNESCO estimated that nearly three-quarters of the world's learners were affected by school closures across education levels by early May. As distance education and training becomes the norm, the ability of TVET institutions to implement such systems depends on their capacity to adapt curricula as well as the preparedness of trainers and teachers.
- **Systemic level.** The economic recession triggered by the COVID-19 crisis is causing a massive rise in un- and under-employment that could have a lasting impact on essential livelihoods. Transformations in the labour market will also result in changes in skills demands. TVET systems need to address the short- and medium-term impact of the current pandemic by not only scaling up TVET solutions but also formulating responses that reflect long-term sustainability.

While the pandemic has brought about unprecedented challenges, in many cases it further intensified existing

issues affecting TVET systems, including difficulties in harnessing the benefits of digitalization and mainstreaming entrepreneurial learning. Prior to the current crisis, young people aged 15-24 were two to three times more likely than adults to be un- or under-employed and often faced a prolonged school-to-work transition period. In post-COVID-19 societies, as young people seek employment and are called upon to contribute to the recovery effort, they will need to be equipped with the relevant skills for today as well as the competencies to successfully manage evolving challenges and adapt to future disruptions.

Moving forward, it is important to:

- **Ensure that young people around the world continue to have access to quality education and training opportunities, while keeping communities safe.** This requires innovative TVET institutions that can adequately provide distance learning and flexible learning pathways. TVET institutions face extra challenges beyond those affecting other education sectors, as it is difficult and sometimes impossible to develop practical skills online. TVET programmes often require a blended approach, with some time spent developing practical skills in workshops or industry settings.
- **Identify future skills needs and develop responsiveness to short-, medium- and long-term impacts.** Skills development stakeholders need to anticipate and respond to shifts in demands for labour market skills. As the predicted economic crisis unfolds, we need to better understand the impact of the current pandemic on existing challenges, including youth unemployment, climate change and the transition to greener economies.



# Overview

## The aim of the virtual conference was to:

- Assess the short-, medium-, and long-term impacts of the pandemic in different country contexts
- Share good practices from TVET institutions about how they have responded to the pandemic. For example, how institutions have provided distance learning in no-tech, low-tech and high-tech scenarios, and how teachers and trainers have been supported
- Gain insights from private sector, employee, and employer stakeholders about the impact of the pandemic on their sectors, and the changes in job profiles and skills needs that they foresee
- Learn from young people about their hopes and fears as well as the opportunities that they see moving forward
- Reflect on how TVET systems can respond to the short- and medium-term impact of the pandemic, while also keeping in mind longer-lasting challenges.

## The following topics were opened for discussion during the virtual conference:

### Thread 1: Context – Implications of the pandemic on youth skills development

Early in 2020, just before the COVID-19 pandemic, an International Labour Organization (ILO) report noted that 188 million people in the world were seeking employment, and that 285 million people had either given up searching for work or did not have enough work. The world was not tapping into the potential of nearly half a billion people – one in six of the world's working population, with women and youth particularly over-represented (ILO, 2020a). 141 million young people were affected by labour underutilization and 68 million were unemployed. Additionally, about one in five young people were neither in employment, education or training (NEET) in 2019, which meant that they were not gaining the skills that would enable them to gain entry to the labour market. At the same time, the percentage of industries struggling to find staff with the necessary skills is steadily increasing (ManpowerGroup, 2019), and existing skills development is reported to often not prepare people adequately for jobs, particularly in low- and middle-income countries (Palmer, 2017; Morsy and Adamson, 2019).

Since the start of the COVID-19 pandemic, the numbers of those who are unemployed and underutilized have gone up dramatically across the globe. The ILO predicted that in the second quarter of 2020, globally, working hours equivalent to 400 million full-time workers would disappear in response to the pandemic. The ILO also highlighted that 'worldwide, two billion people work in the informal sector (mostly in emerging and developing economies) and are particularly at risk' (ILO, 2020b).

Participants were asked the following questions:

- What are the youth unemployment and NEET rates in your context, and what are the general trends affecting youth unemployment (pre- and post-COVID-19)?
- Has skills development played an effective role in addressing the youth unemployment and NEET rates?
- Does the COVID-19 pandemic change the role of TVET and the way it is carried out? What good practices are emerging in response to the pandemic?

### Thread 2: TVET institutions – Good practices in distance learning in no-, low- and high-tech scenarios

Blending distance learning with practical skills development has proved effective in TVET for more than 100 years. For example, in 1910, in response to an urgent need following a typhoid epidemic, Australia introduced its first distance TVET courses to train health inspectors by correspondence while they worked.

Today, we find examples of blended learning for TVET happening across the world (Latchem, 2017). In the current crisis, as-distance-as-possible models allow for young people around the world to continue their TVET programmes while observing travel restrictions and physical distancing guidelines. Distance learning models also allow for the upskilling of essential workers in their workplaces and the reskilling of displaced workers.

The shift towards distance learning – which has been accelerated due to the current pandemic – offers the potential to rethink traditional face-to-face TVET by challenging educational practices that have excluded marginalized and remote learners due to high costs and limited flexibility.

Participants were asked the following questions:

- What distance learning approaches and good practices has your institution implemented in no-, low- and high-tech scenarios?
- What is the difference between emergency remote teaching, such as we are seeing in response to the pandemic, and good practice distance TVET?
- How is distance learning in TVET similar or different to distance learning in the primary, secondary and university sectors? What different solutions do TVET providers need?

### Thread 3: Labour market - Implications of the pandemic on jobs and future skills development

The COVID-19 pandemic is having a significant impact on the labour market. Many businesses are struggling in response to the economic downturn caused by the pandemic or will struggle to adapt to the new world in which we find ourselves. Companies who survive will successfully manage a return to work, learn from their time during the crisis, and chart a new path forward. A return to work will not necessarily mean that the work will be the same as before the pandemic – in many cases, changes in work processes will require workers to have additional skills. This is true for the formal and informal sectors. However, arguably, formal businesses in developed economies have more options, particularly those using technology, and greater resources available to them. Given the significant percentage of the world's population working in the informal sector who have not had government assistance to help them survive the pandemic, we need global solutions that meet the needs of both sectors.

Participants were asked the following questions:

- What impact will the pandemic have on skills demands in the formal and informal labour markets? Please try to refer to examples of job profiles and possible changes.
- What are examples of continuing training of workers in the formal and informal sectors? What makes these practices successful?
- How can TVET institutes better meet the skills development needs of the labour markets of the future?

### Thread 4: Young people – Perspectives on their hopes and fears going forward

The ILO estimates that more than one in six young people have stopped working since the coronavirus affected global economies, and that those who are still working have lost nearly a quarter of their working hours. The economic crisis caused by the pandemic is hitting young people harder and faster than any other group. Challenges include disruption to education and training, employment and income losses, and greater difficulties in finding a job. It is also unclear what the emotional effect of the crisis will be for this 'lockdown generation'. Young women are particularly vulnerable, being more likely to be in informal low paid work, and at greater risk of being excluded from education and training.

Participants were asked the following questions:

- What are some of the main hopes and fears that young people have? What are emerging opportunities?
- What can TVET stakeholders (ministries, national bodies, institutions) do to support young people in developing the skills to meet the current context?
- What else is needed alongside skills development to support young people at the moment?



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Engineering students at Gambia Technical Training Institute

### Thread 5: TVET systems – System-wide responses to the impact of the pandemic

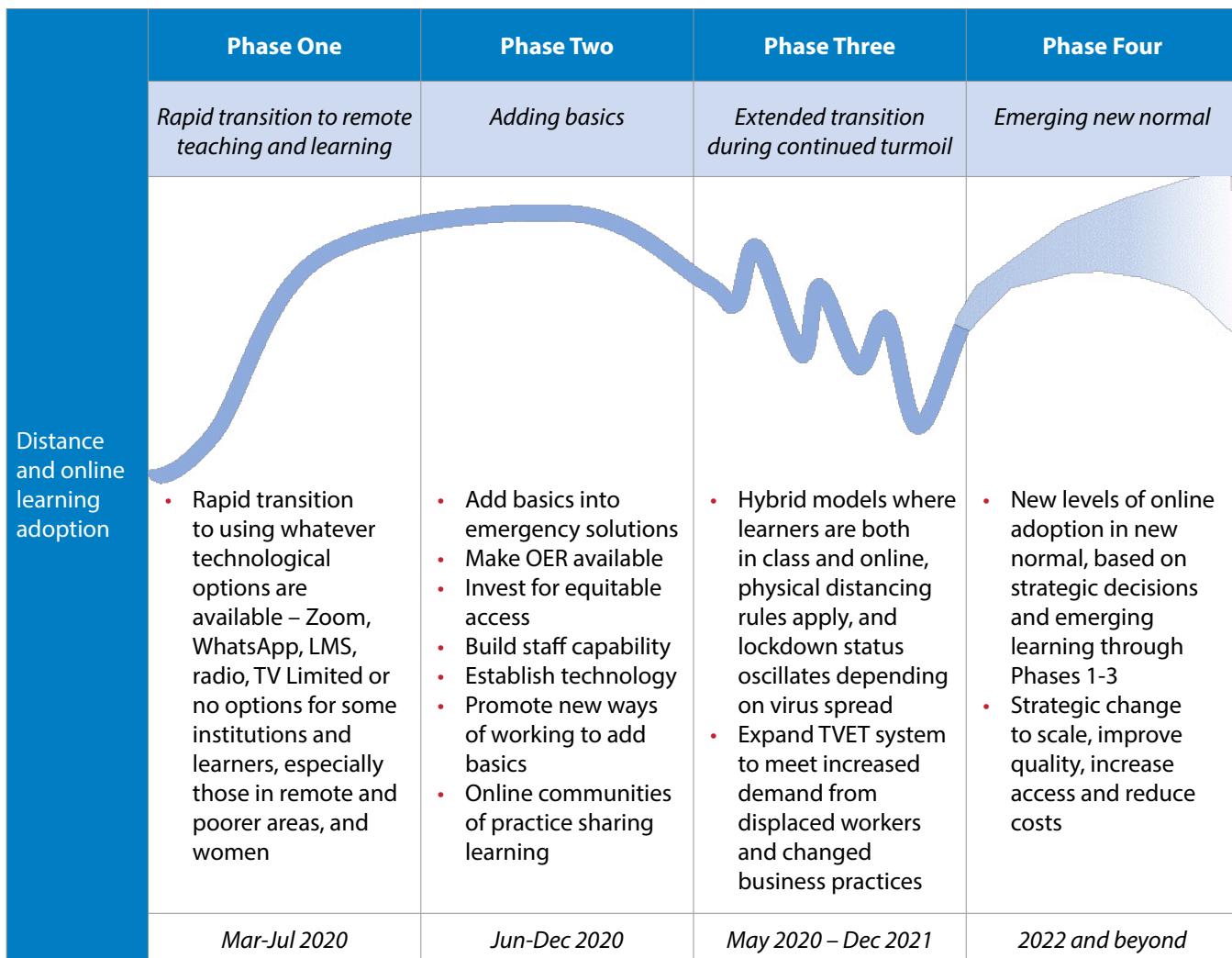
In response to COVID-19, through necessity, governments across the world are moving towards distance education more systematically than ever before. We can predict four phases through which educational institutions will move (Hill, 2020).

Government TVET agencies have a leadership role in supporting training institutions to offer emergency remote teaching now, and in the transition towards the ‘new normals’. Quality distance learning requires investment in adequate technological infrastructure, building staff capability and establishing new ways of working. However, governments globally are struggling to find the resources to respond to existing challenges, let alone be able to invest in leading significant change.

Participants were asked the following questions:

- How did the TVET system in your country respond to the pandemic in the first few months (Phase One)?
- What emerging patterns of change are we seeing as national TVET systems implement medium-term responses to the pandemic (Phases Two and Three)?
- What ‘new normals’ do you hope will emerge? What systemic changes are required to support distance learning in the future? Please think in terms of short-, mid-, and long-term changes. (Phase Four)

### Phases of TVET response to COVID-19



Adapted from Hill, 2020

# Key reflections

## Young people's work and study has been severely affected by the pandemic with consequences that we are yet to see played out

The virtual conference began with a recognition of the global context, prior to the pandemic, in which youth were three times as likely to be unemployed as those over 25 years of age, and young women were twice as likely as young men to be without work. At the same time, one in five of those 15-24 years of age were not in education, employment or training (NEET). Following the pandemic, the situation has worsened with many young people having lost their employment and now not able to continue their studies.

Over the last 60 years, youth populations across the world have changed location, with Africa now having a higher percentage of young people than other regions. Countries with a high proportion of youth tend to have weaker technological infrastructure and less affordable data plans, making it more challenging to implement online learning.

Participants noted the importance of listening to youth to understand them, both directly and through research that others have done. Three World Skills Champions shared their experiences of having to adapt quickly to studying online, and to disruptions to their workplace learning, immediate opportunities and future aspirations.

*"At the time of the outbreak, I was working and going to college at the same time. After the declaration, all lectures and exams were replaced online and the company encouraged our staff to work from home ... so I am going through things I have never experienced before, such as video meeting, social distancing and to work while wearing a face mask"*

*"As [a] student, it's completely changed the way of my studies. I start[ed] taking online courses. As it is my first experience, it made me feel stressed and anxious at the beginning. The worry about my own health and that of my loved ones, the financial situation, the adaptation of a new different study method weren't pleasant things to do at this circumstance, but after deciding to think outside the box, see things from [a] different perspective and channel my anxiety into action, I figured out how interesting and magical it was to see how everything had become virtual but effective ... Be adaptable, don't be afraid to implement new habit[s]."*

*"The change for me is it put everything on hold. Being that I'm a chef in the hospitality industry, the hotels were pretty hard hit and closed pretty early, and my school as well was closed for the time being. So, it was just up to me to get used to going from a fast-paced*

*career where I was at work or school 24/7 to being at a complete stand still. But it's one thing that this pandemic has shown me that I'm extremely adaptable. Because I had to acclimate myself to online learning, which was a very interesting experience to begin with, but it all paid off in the end."*

Youth wanted to be able to continue with safe, relevant and 'non-boring' learning. They also wanted exposure to broader opportunities, development of their life skills, and to see the importance of TVET promoted more.

Other points made were that youth want support through these uncertain times, to cope with immediate anxiety and adaptation, and in reassessing their futures in response to changes that they cannot yet see. There was a recognition of the family's role in providing support and how lockdown could strengthen family ties. There were examples of young people developing skills while away from the campus, such as assisting at home, taking on online work and other income-generating activities, and helping community organizations in their relief operations. The COVID-19 pandemic has created an environment in which young people have developed and demonstrated adaptability and resilience.

There was consensus that the pandemic is exacerbating existing inequities between young people.

*"... the problem of COVID-19 will only further accentuate the social differences between the various existing social classes; with young people from the most vulnerable classes remaining in even more vulnerable conditions, mainly in terms of job opportunities. With the rush to complete the school year at any cost, precisely those who are already vulnerable by not having access to the internet and not even having computer equipment, end up being left behind."*

Even for those who can continue studying, it is not yet clear what will be the long-term impact of changes to ways of studying and the broader environment. Apprenticeships and internships are particularly at risk with potential closures and decreased operational capacity for many businesses.

*"We are still in the early days of the transition and the effects on students and competencies have yet to be fully assessed."*

## In seeking to skill youth, TVET faces extra challenges in moving to distance and online learning because of the need to develop practical skills

It was agreed that TVET faces specific challenges in response to the full or partial closure of campuses and workplaces. While theoretical components can be learned online, most TVET courses rely on access to equipment and materials in specialist physical contexts to develop practical skills. For some skills, particularly IT skills, the internet increasingly offers the environment in which to develop practical skills, so these courses, while practical, can be done fully online.

This means that solutions which other education sectors might use can only partly enable TVET delivery. In offering theory online, TVET providers face similar challenges to other sectors in remote regions with limited technological infrastructure and poor connectivity. Smaller TVET institutes are also less likely to have established systems to support online learning. Where online options are available, learners, particularly in developing countries, often struggle to afford data to connect. Learners may not even be able to access a messaging app, such as WhatsApp, which tends to be the most available option. Participants touched on the challenges of teachers and students not being used to online learning and challenges in building their buy in to new ways of working.

Teachers have worked with whatever technological solutions are available to them - which has ranged from the more simple, more readily available options such as messaging apps like WhatsApp, social media like Facebook and YouTube, modified use for education of existing technologies such as Google docs, MS Teams, radio and TV, through to educationally specific options like learning management systems and simulations.

Ideas for overcoming the challenge of practical skills development included:

- Sending physical kits to learners' homes to develop some practical skills
- Restructuring course delivery to focus on theory during lockdown and practical skills development when campuses or workplaces re-open
- Rethinking the use of on campus physical spaces when campuses re- open to catch up on practical skills development – by staggering appointments, increasing the number of study days per week from five to six, and reducing the length of the summer holiday.

Videos, animations and live demonstrations were proving useful in some contexts. Participants agreed that simulations, and augmented and virtual reality, offered the potential for learners to practice some online skills in environments that replicate real life. However, such software is not yet widely used. It is only available for some skills, is often proprietary and requires adequate technological infrastructure to implement, which makes it inaccessible for providers within many contexts.

The virtual conference shared examples from Italy and Finland of the use of technology to help build practical skills.

The story of one rural Italian TVET provider showed the benefit of being connected to broader projects which have developed sophisticated digital resources. Students have been able to continue learning cooking from home thanks to the pre-existing digital cooking academy which students and teachers were already using. This had been set up through INTERREG, a cross-border cooperation programme financed by the European Regional Development Fund (<https://impactalbacannes.eu/index.php/it/digital-learning>). Some industrial sector training courses at Italian TVET institutes such as electronics, industrial automation and robotics were also already using ICT software, namely CAD, CAM, PLC programming, and simulators (e.g. for production lines, robot lines, control numerical machines). Teachers were able to take a PLC control panel home and continue training with online classes using simulators, video lessons, and Moodle as an online platform. They were able to use digital material developed with Erasmus+ projects e.g. Arduino course, <http://www.openinproject.eu/>. Also, companies such as SOLIDWORKS, ROCKWELL, and FANUC gave Italian TVET providers free licenses for courses, simulators, and software.

The Finnish story shared how centralized services and digital resources meant that TVET providers were already using online learning, including some that help develop practical and soft skills through interactive multimedia.

Participants agreed that even if such solutions become more widely available, they cannot fully prepare learners to work in the real-life environments in which they need to prove themselves competent. However, the pandemic has also shown that learning to work in virtual environments is increasingly important in preparing learners for jobs of the future.

## While TVET systems had already recognized the need to train youth in soft and digital skills, the pandemic has increased this awareness

Participants agreed that TVET institutes need to be closely connected with industry through the pandemic. However, it can be challenging enough for institutions to change how they teach, let alone strengthening connections with industry and adapting quickly to meet new skills gaps.

TVET institutions need to be responsive, agile and flexible enough to respond to different skills needs in the face of changing ways of working and new patterns of employment. Soft and digital skills are increasingly important, and there is added benefit in real world settings to develop such skills. Prior to COVID-19, TVET systems had struggled to define, develop and assess the skills, particularly soft skills, that the world needs to build a better future.

To better understand how we might respond to the COVID-19 pandemic, the RMIT University in Melbourne (a UNEVOC Centre) is conducting an extensive research project. The project aims to explore the key challenges facing particular populations of young people and to co-design research-informed, place-based solutions for young people's sustainable futures (<https://unevocrmit.org>). One of the researchers from the RMIT suggested that we think more critically about the skills needed in a world characterized by crisis and disruption, including thinking more broadly than what employers want. The participant suggested that

"... we will do young people - who will carry the greatest burden in the downstream of COVID-19 crisis - a real disservice if, in a forum like this, our discussions about 'skills' fail to take up the challenge of transforming the world that COVID-19 entered - a world that was already in deep crisis, already marked by staggering inequalities, a world that we should not want to 'bounce back' to."

The participant also shared a discussion paper on how we capture soft skills which have been developed through the project .

Another example of including soft skills in skills development was that of the Commonwealth of Learning (COL) working with institutions in Namibia and Rwanda to improve the employability of graduates, using the COL Employability Toolkit. Feedback from employers in these countries was that they wanted learners to be able to 'hit the ground running' not just understand theory.

"Teaching them to memorize reams of points and write those into exam pads is just not useful anymore."

Entrepreneurship was also acknowledged as important, especially for those who had lost their income due to the

COVID-19 pandemic. Examples of entrepreneurialism from Kenya were informal businesses pivoting to produce PPE, and youth switching to grow food who also had the ICT skills to promote their goods through social media.

Some TVET institutes pivoted towards responsiveness and entrepreneurship. They acted quickly to use their skilled staff, trainee students and infrastructure to start producing products for their communities, such as masks, hand washing machines and sanitizers.

Participants noted the growing importance of digital skills and the benefit of using technology in teaching to build such skills, pandemic or no pandemic. It was felt that these skills would become more important and evolve in response to new ways of working.

"Moving towards the 'new normals', I imagine that those skills labelled as highly dependent on personal social interaction will change. Communication and collaboration for example remain critical to many job tasks, but how they are carried out will be different. I think we can all see it in our daily lives - physical meetings have been replaced by digital meetings. But it isn't that simple. You can't run a digital meeting as you would run a physical meeting - it requires a different awareness, design and setup to keep participants engaged."

"Training our youths towards a digital driven economy is key to development."

The virtual conference also noted the importance of green skills for the future with some concern that these might be being overlooked within urgent responses to COVID-19.

"Discussions have been focused on the economic, health, and social implications of COVID-19, but the environment should not be forgotten. Scientists are going back to nature and the environment in search of cure for the infection ... To care for humanity, we must care for nature and commit to a green and resilient future."

As the World Health Organization notes in the introduction to its manifesto for a healthy recovery from COVID-19:

"The pandemic is a reminder of the intimate and delicate relationship between people and planet. Any efforts to make our world safer are doomed to fail unless they address the critical interface between people and pathogens, and the existential threat of climate change that is making our earth less habitable."



*Informal furniture cooperative in Zambia, supported by the Commonwealth of Learning*

## Present experiences by students, institutions, employers and governments are moving systems towards a new normal for TVET

The first response to the pandemic tended to be training TVET teachers in online learning and making existing technologies and digital materials available to teachers. Those who were already on their journey to distance and online learning were least affected and those without access to the technological infrastructure were, and still are, least able to take advantage of online opportunities.

This was true at different levels of TVET systems – regional, national, institutional, companies, teachers and learners.

For example, European TVET institutions and those in Commonwealth countries benefited from existing teacher training and digital resources. While these are freely available to others, those who were already aware of them could move more quickly and easily to using them.

At the national level, Omnia in Finland was able to quickly create an 'online pedagogy support task force' to help teachers move online. The Zambian Ministry of Education built on its existing Centre of Excellence in online learning and COL's available online courses to rapidly scale up training of TVET teachers. In Kenya, as the Ministry of Education TVET Directorate developed a strategy to respond to COVID-19, it was able to establish an advisory group made up of individuals already experienced in online learning. The TVET Authority had previously developed guidelines for online teaching and learning.

Educational institutions with organizational structures set up to lead online learning were also well-placed. For example, Yaba College of Technology's existing Flexible Skills Development Centre was able to lead the institution's response. They regularly surveyed teachers to understand their context, offered weekly online classes to help them in using a range of technologies and existing digital resources, and appointed departmental online learning champions to support their colleagues. They also offered free online courses to students to help build their skills in online learning.

Companies with technology in place to enable workers to work from home, including those who had invested in advanced manufacturing technologies that could control production virtually through the Internet of Things, tended to be less affected. Therefore, they were less likely to need to reduce staff and cease training programmes. In contrast, many industries, such as hospitality and service industries that require close interaction between staff and customers, have been more severely affected. Many have struggled to keep going as businesses, let alone to continue workplace training. This is especially true in countries with a large informal sector and where governments have not been able to offer subsidies to support businesses, such as in the case of the Zambian informal furniture making cooperative.

As previously mentioned, teachers have worked with whatever technological solutions are available to them - which has ranged from the more simple, more readily available options such as messaging apps like WhatsApp, social media like Facebook and YouTube, modified use of existing technologies such as Google docs and forms, MS Teams, radio and TV for educational purposes, through to educationally specific options like learning management systems. Some companies have made simulations available to educators. Assessment was a challenge, especially where it relies on invigilated examination. Participants also expressed concern at the fairness of online assessment for learners without reliable or affordable internet access.

Across the globe, learners vary significantly in their experience of and access to online learning. In many places, whether Africa, Latin America or the Caribbean, particularly in rural settings, access to data, devices and the internet is still a challenge. One participant suggested that print resources are a possible option to ensure ongoing access to learning in such contexts.

## Moving to a desired new normal for future resilient TVET requires changes across TVET systems, particularly to ensure the equitable access needed to meet global skills development needs

Participants noted that the main driver for online learning is the urgent need to ensure continuity of learning while maintaining physical distancing to keep communities safe. There is uncertainty of how much longer the pandemic and the need to socially isolate will continue.

However, there was general agreement that TVET systems would benefit from moving to a new blended normal. The blend needs to include online learning to teach theory and allow practice of practical skills using simulations and augmented and virtual reality, and face-to-face interaction to support practical skills development on campus and in workplaces, and soft skills in real world situations. These blends would help TVET systems prepare learners for the future and to be as resilient as possible in the face of any future pandemics, climate change and natural disasters.

This blended new normal will require a changed mindset across all stakeholders within TVET systems, ranging from government agencies to learners.

Suggested steps include:

- **Develop new policies** to drive the change to blended TVET, which are led by ministries of education, working in collaboration with other agencies, such as those responsible for employment, social welfare, health, agriculture and rural development, and gender equality. Public-private partnerships are also important to ensure a focus on relevant skills and the opportunity to develop skills in real life workplace settings.
- **Upgrade ICT infrastructure** to meet the requirements for distance learning, and provide affordable access to the internet and to devices, such as computers, laptops and smartphones. Some of this needs to happen at a national level, for example national level negotiations with telecommunications companies, such as what happened in Nigeria, can increase internet affordability for learners. Institutions also need to design and implement solutions that support equitable access for poorer and more remote learners.
- **Provide a national platform** with quality course materials mapped against formal TVET qualifications, including simulations, and augmented and virtual reality. Examples have shown the benefits of a regional or national sharing of digital resources for teacher training and to support learning, particularly for higher end examples such as simulations. In the same way that teachers are not all expected to create their own textbooks, TVET systems can benefit from sharing high-quality materials.

- **Change the mindset of teachers** regarding online learning, recognizing fear of change in some. Build teachers' capabilities to find, use, adapt and create digital resources, using online learning so that they experience it for themselves.
- **Change the mindset of students**, building their buy in and preparing them to learn differently - so that they understand how the role of a student is different in online learning and so that they have the new skills they need to learn effectively online
- **Manage the change within TVET institutions**, building the capability of TVET managers to understand and implement new business models, and new ways of teaching and assessing learners.

To end with a quote from Nigeria:

"There is a necessity to mainstream the virtual learning environment as it has become a focus in this period. The fact that any learning could take place thanks to [a] virtual learning environment indicates that it has come of age as a model that all MoEs need to fully adopt and adapt to as much as face to face. Several emerging structures in the online and blended learning space will become better developed and adhered to and the TVET systems must not make a mistake to ditch it away when 100% resumption takes place."



# Shared resources and learning materials

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## Videos

### Thread 2:

- Omnia in Finland, higher tech story <https://www.youtube.com/watch?v=ZS2sNCShivk&feature=youtu.be>
- Yabatech in Nigeria, lower tech story <https://youtu.be/AIDtjr0M3R4>

### Thread 3:

- Mr. Anshul Sonak, Senior Director - Global AI Readiness, Global Partnership and Initiatives, Intel Corporation, Singapore, speaks on Future of jobs post-COVID [https://youtu.be/Df7\\_0aboXIM](https://youtu.be/Df7_0aboXIM)
- A short interview with members of an informal furniture cooperative in Zambia [https://youtu.be/y8oxpu\\_xsws](https://youtu.be/y8oxpu_xsws)

### Thread 4:

- Insights from World Skills Champions <https://www.youtube.com/watch?v=BInZz70k32s&feature=youtu.be>

### Thread 5:

- Germany's TVET system response to the pandemic, with an emphasis on analysis of data to inform strategy <https://www.youtube.com/watch?v=8CJ1UTf0hE&feature=youtu.be>
- Zambia's TVET system response to the pandemic, with an emphasis on immediate actions <https://www.youtube.com/watch?v=mslF2jHmPEM&feature=youtu.be>

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Published in 2020 by the UNESCO-UNEVOC International Centre

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## About the moderator

Terry Neal is the Education Specialist: Technical and Vocational Skills Development at the Commonwealth of Learning (COL). COL is an intergovernmental organization created more than 30 years ago to promote the development and sharing of open learning and distance education knowledge, resources and technologies. Terry Neal has worked in distance TVET for 20 years. In 2000, she was part of the team to first introduce online learning at New Zealand's specialist distance TVET institution, Open Polytechnic of New Zealand. She has also managed online learning teams in a face-to-face polytechnic and industry training organization, managed national capability building and innovation projects across New Zealand, and advised the New Zealand government on blended TVET. She has consulted across the Commonwealth. In her present role, she is working with institutes and governments in developing Commonwealth countries to build their capability in flexible and blended TVET, with an emphasis on blending distance and workplace learning.