Strengthening the Responsiveness, Agility and Resilience of TVET Institutions for the Post-COVID-19 Era
UNESCO-UNEVOC’s COVID-19 response project

Final report
The COVID-19 pandemic continues to affect the lives of millions. It has caused untold human suffering, delivered a sudden, sharp shock to sectors including retail, hospitality, travel and arts and culture, and placed health services around the world under enormous strain.

Education has also been affected. When teaching and learning were forced to move online, technical and vocational education and training (TVET) providers had to fit years of digital learning into a matter of weeks. This mass experiment exposed a digital divide based on income and geography that has long existed.

However, with its focus on training and retraining people for the world of work, TVET has also helped to ease the transition to the new normal in work and society.

Since January 2021, UNESCO-UNEVOC’s COVID-19 response project has been helping TVET institutions to cope with the challenges of the pandemic.

Through targeted training for employability, it has supported efforts to reskill and upskill those whose livelihoods have been disrupted by the pandemic and strengthen their capacity to adapt to short and long-term changes.

The project also focused on providing training to teachers, managers and technical staff to meet the urgent need for greater digital skills and competencies. The three-month training programme was backed up by a series of webinars to discuss the challenges of digitalization in TVET, bringing together leading experts and interested practitioners from the global TVET community.

To ensure lessons learned along the way will not be forgotten after the crisis has subsided, a special peer-learning activity has enabled TVET institutions to pass on promising practices to other TVET stakeholders through a mix of assignments, workshops and webinars.

This combination of activities, focused on alleviating the short, medium and long-term-effects of the crisis, has supported TVET institutions in mitigating the social and economic impact of COVID-19 in their communities and contributed to their post-pandemic recovery. The new digital skills and competencies will also help them to become more resilient institutions – ones which are better prepared to deal with future shocks and crises.
COVID-19 has wreaked havoc on people’s ability to work and earn a living, especially for those already in vulnerable situations when the crisis began.

This activity aimed to soften the blow by teaching new skills to vulnerable groups in five countries in Africa, Asia and the Caribbean. This has enabled more than 400 trainees to develop new sources of income to replace those lost due to the pandemic. In the process, local TVET institutions have become more familiar with assessing skills’ needs in their communities and with delivering short, targeted training programmes to address skills gaps.

**Activity 1**

**Short-term skills training for employability**

“I have learned to prepare a business plan for starting my own enterprise. I am determined to utilize the knowledge and skills learned through this training.”

Participant in skills training programme

In Ghana, as elsewhere, many girls saw their education disrupted by COVID-19. Some may never return to school while others are at greater risk of adolescent pregnancy and early or forced marriage due to the crisis. The University of Cape Coast (UCC) trained community health workers and volunteers in counselling, nutritional support and mentoring for vulnerable girls as well as how to organize clinics in rural communities. This will better equip them for future projects while the training certificates will help them find paid work. The programme has also taught pregnant teenagers and young mothers entrepreneurial skills to help them set up their own micro-businesses.

In India, millions of migrant workers were forced to return to their villages when COVID-19 shut down their workplaces in the cities. In the Sundarbans coastal region of West Bengal, the Vivekananda Institute of Biotechnology (VIB) quickly set up an accelerated training programme for returnees. It covered biofertilizer use, aquaculture and solar energy — technical skills relevant to the local economy — backed up by entrepreneurship training and mentoring from VIB’s network of local experts. The trainees were encouraged to set up small businesses to help promote self-sufficiency in the post-COVID-19 period.

“This type of training improves volunteers’ chances of earning a living. It helps them gain skills they can use in their next project, or they can use the training certificates if they plan to look for employment.”

“Trainees are motivated to develop a workable project for themselves.”

Participant in skills training programme
Poultry farmers in Malawi suffered from the pandemic’s impact on food supply chains. A training programme carried out by Mikolongwe Vocational School (MVS) has helped small-scale farmers in Chiradzulu district learn how to take better care of their livestock and reduce losses to disease. Participants learned to use locally available grains to make chicken feed which they can also sell to other farmers for extra income. MVS also encouraged local farmers to form a network to pass on their new skills to others, increasing the reach and impact of the programme.

**Malawi**

“Women were more likely to be laid off or unemployed than men. Women now have the potential to support their families.”

Successive lockdowns in Thailand prevented farmers in Chiang Rai province from tending their crops or supplementing their incomes with work in fruit canning factories. Rajamangala University of Technology Thanyaburi (RMUTT) trained people from the village of Giang to cultivate bamboo and weave bamboo strips into a range of natural products. The next stage of training will cover entrepreneurial skills, including marketing and selling products online. The trainees have already received their first orders for bamboo trays from Canada. Their new skills will provide an alternative source of income that will help provide some economic stability.

**Thailand**

“No they can use their TVET skills to make a product from local materials which are from a sustainable source.”

When COVID-19 struck Jamaica, many domestic workers were sent home without pay or saw their hours cut back sharply. This had a devastating impact for many members of a collective who tend to be female, migrants and working without a contract. In response, the Heart/NSTA Trust launched a programme to teach domestic workers entrepreneurial skills as a stepping stone towards setting up a business in the formal economy. After completing seven weeks of training in areas including stock control, team management, health and safety and customer service, trainees earned a vocational qualification in micro-entrepreneurship.

**Jamaica**

“The course motivated the trainees and a lot of people are coming in now to ask about courses.”
Building the digital capacities of TVET staff

While digitalization is not a new trend, the COVID-19 pandemic has sharply increased the demand for digital skills. This activity, implemented by Omnia Education Partnerships (OEP), supported TVET institutions in meeting the ongoing challenges of digitalization and harnessing its opportunities.

A three-month training programme for TVET managers, teachers and ICT staff in five countries was complemented with a series of webinars open to the wider TVET community to help build digital capacities.

The training programme for some 62 TVET teachers, managers and ICT staff, was implemented in Jamaica, Kenya, the Maldives, Nigeria and Peru. Trainees came from different backgrounds with a varying degree of underlying digital skills and experiences of working in online environments.

Opportunities were provided for identifying personal and institutional development goals related to digitalization. Good practices in digital learning were shared, and participants were introduced to new digital tools and services and how to use them in teaching and learning. Participants were also encouraged to carry out a practical development project to gain the most out of the experience. At the end of the programme, which was delivered in English and Spanish, TVET staff said they appreciated the ‘real experience’ of what they could take into the classroom.

The webinars, featuring experts on TVET and digital learning, were attended by more than 700 participants from over 100 countries. They focused on particular challenges such as building digital competence to better prepare learners for the future of work, social aspects of digital learning and how to navigate the maze of digital tools and services.

The webinar highlighted that when it comes to ‘e-readiness’, it is not just a question of skills but also whether TVET teachers and managers can change their mindsets and adapt to the demands of teaching TVET online, and in the longer term, to changes in the workplace.

When TVET institutions had to react to sudden change brought about by the pandemic, the challenges of equipment, infrastructure and connectivity for online learning were quick to emerge, highlighting a startling digital divide. Even in countries and institutions where this was less of a problem, many teachers lacked digital skills to teach remotely and struggled to deliver curricula which had been designed for face-to-face teaching. Others had to cope with less obvious challenges such as having the self-confidence to operate within the new environment.

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Recent surveys have shown that TVET teachers and students alike feel stressed about the lack of social interaction in online teaching. Many teachers are concerned they have not been able to reach some students for lengthy periods of time. Students often lack motivation to learn and inclusion is an issue with online learning.

Teachers themselves need support as the digital leap has put a strain on all due to the demand for new skills. Beyond the technical aspects of the shift to online teaching, it requires even more effort to create an online learning community. School alone cannot be responsible for solving all societal challenges, but peer learning, mentoring, encouraging communities of learning and sharing good practice can help provide much-needed social support.

Different aspects must be considered when choosing a digital approach for TVET. Connectivity and device-related limitations, diversity of users and their digital competence, desired pedagogical approaches, readiness and availability of support services, budgetary concerns and possible rules and regulations on storage of data and privacy. For digitalization to be successful, the different perspectives of management, IT support and TVET teachers need to be combined – what might be the ideal solution from one perspective might not work on an institutional level.

Many teachers exposed to digital technologies for the first time felt overwhelmed by the abundance of choices. Furthermore, many lacked institutional guidance on how to apply them to the needs of their learners. The webinar provided some pointers on what to consider while navigating the maze.
Building institutional resilience through peer learning

As online learning and new forms of collaboration swiftly emerged during the pandemic, TVET institutions faced challenges adapting their courses and developing the skills of teachers for the digital environment.

Sharing lessons learned and promising practices in supporting stakeholders have provided the basis for peer learning throughout the project. These activities were carried out through a series of regional workshops and webinars attended by 178 participants from 43 UNEVOC Centres, which aimed at helping institutions better prepare for future disruptions.

“... The training equipped participants with knowledge, skills and attitudes needed to continue to lead their teams to achieve unit and institutional goals in parallel to managing the challenges created by COVID-19."

Institution participating in peer learning

When Universiti Tun Hussein Onn Malaysia (UTHM), a UNEVOC Centre, introduced a digital TVET learning platform based on an analysis of participants’ needs, it was initially an immediate response to the pandemic. It soon became evident that it could be a longer-term solution for delivering online skills to meet the needs of the digital economy. UTHM recognized it was not enough to shift learning modules online. Teachers and instructors needed coaching and support to use the platform and new digital tools. These included using virtual reality and augmented reality tools to closely simulate a practical training environment. Their practices and experiences have been shared with TVET institutions in various countries, including Indonesia, the Philippines and Sri Lanka.

The forced shift to virtual classes could have threatened the progress made by Más Mujeres en las TICs (More women in ICT). The programme, implemented by Duoc UC, a UNEVOC Centre, promotes Chilean women’s interest, participation and leadership in ICT careers. Instead, the pandemic became an opportunity to scale up activities to reach other regions and countries including Colombia, Mexico and Paraguay. As part of scaling-up, Duoc UC improved its online courses and developed a handbook so that activities could be replicated by other institutions in Chile and around the world. This led to a significant increase in student enrolment. From 40 female ICT students in 2019, the number increased six-fold to 247 by the end of 2020.

An initiative by Niagara College in Canada to build TVET leadership skills in times of crisis and disruption focused on tools for planning change and building resilience. These included tackling teachers’ feelings of insecurity due to rapid change and from lack of familiarity with online learning platforms that could hamper effective engagement. Modules to support and guide managers and leaders of TVET institutions and self-awareness training helped boost confidence in using digital tools. It was combined with strategies for inclusion of minority and disadvantaged groups. The practices were shared with institutions in Barbados, Brazil and Grenada, among others.
Disseminating project experiences and promising practices

UNESCO-UNEVOC is keen to ensure the knowledge and learning resources generated by this project continue to be accessible once it has come to an end. The following are some of the highlights and useful materials from the six-month project which will be of interest to the global TVET community.

Project leaders and participants from Canada, Chile, Ghana, India, Malaysia and Thailand discuss their activities and learning outcomes in this series of articles on the major themes of the project:

Retraining young people and workers displaced by COVID-19
TVET provides a lifeline to Thai farmers
Building resilience in vulnerable communities
Strengthening peer learning for the post-pandemic era

A three-part series of webinars on the challenges of digitalization and how TVET institutions are dealing with them:

Webinar 1: Digital Competence and the Future of Work – Pathways for TVET Institutions
Synthesis report
Recording in English and French

Webinar 2: Social Aspects of Digital Learning in TVET
Synthesis report
Recording in English, French and Spanish

Webinar 3: Navigating the Maze of Digital Tools and Services
Synthesis report
Recording in English, French and Spanish

UNESCO-UNEVOC’s database of Promising and Innovative Practices in TVET includes ten examples, drawn from all three of the project activities. It enables participants to share experiences and provide inspiration for other TVET institutions around the world facing similar challenges.

To find out more about UNESCO-UNEVOC, visit our website at www.unevoc.unesco.org

Access the project website at https://unevoc.unesco.org/home/COVID-19+response

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