

## ILO-UNESCO Joint Survey on Technical and Vocational Education and Training (TVET) and Skills Development during the time of COVID-19

The purpose of this joint survey is to gather information on good practices and to allow knowledge sharing, with the aim of helping countries around the world mitigate the effects of the COVID-19 pandemic in the areas of TVET and ensure continuity of skills development. The survey targets:

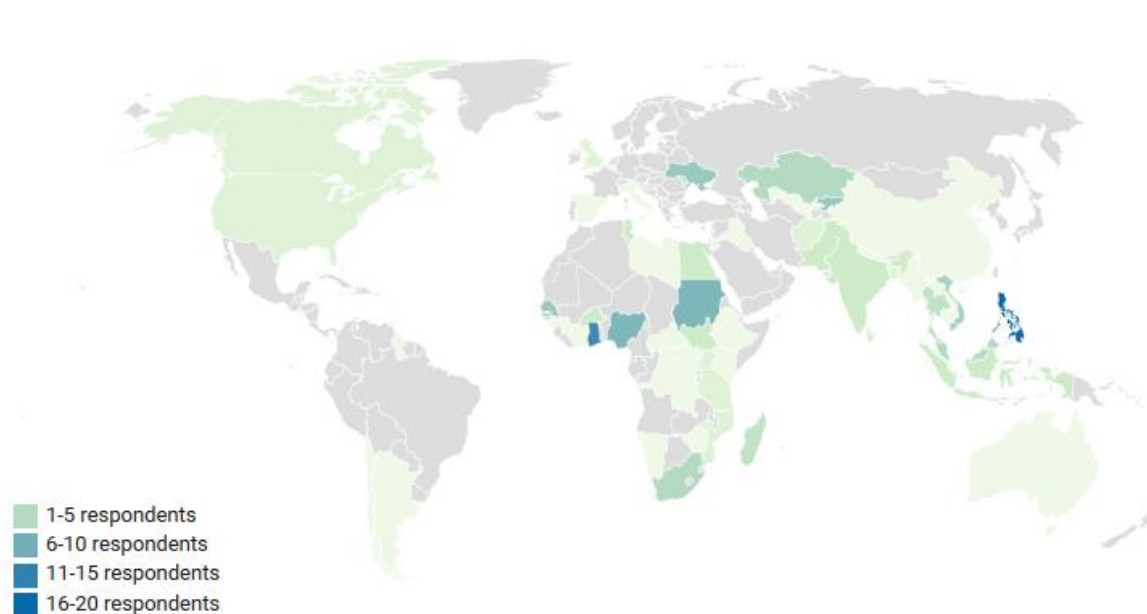
- providers of initial and continuing technical and vocational education and training
- policy makers (such as Ministries of Labour and Education)
- social partners (employers and workers organisations)

The information gathered through this survey will contribute to stocktaking and sharing knowledge about experiences and good practices, strategies and tools being mobilised in certain contexts that can help policy-makers, social partners, trainers and other TVET stakeholders in different countries mitigate the impact, manage the transitional learning and training processes more effectively, and increase resilience during the pandemic.

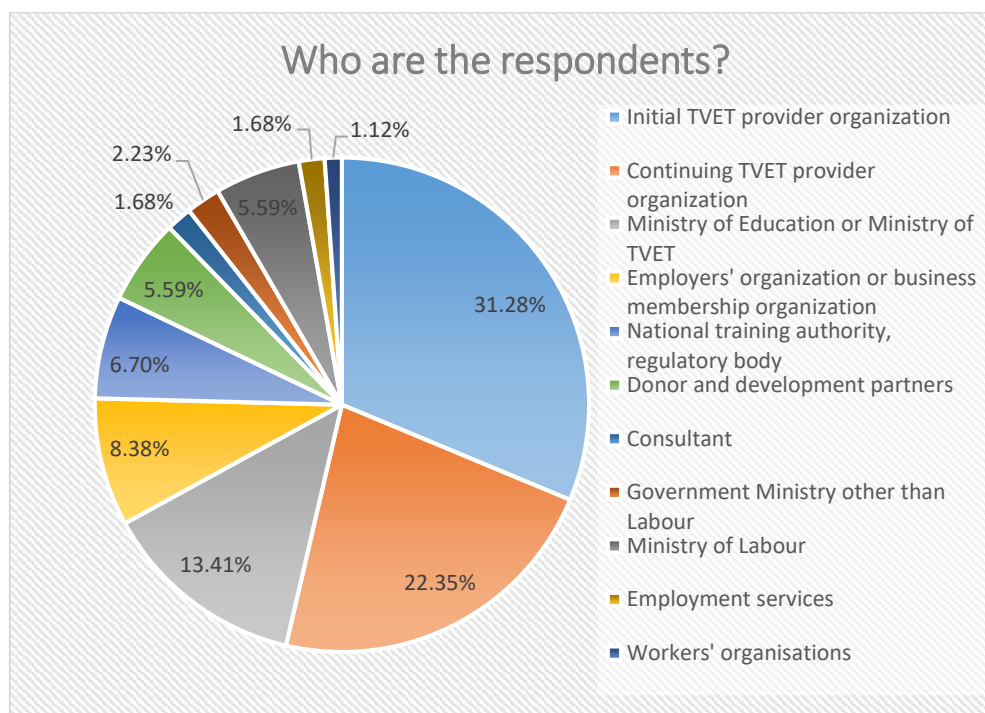
[Early results of the on-line survey: Overview of 179 responses received by 16 April 2020](#)

### Section I - Who are the respondents of the survey so far?

At the end of the second week, as on 16 April 2020, the survey has received 179 responses from 63 countries (83 responses from 40 countries in Week 1), based on which some interesting results are being shared on a weekly basis.



While the respondents represent a wide range of organizations, the highest proportion of responses was received from representatives from both initial and continuing TVET providers.



## Section II – The immediate effects of the COVID-19 pandemic on TVET provision

- As of 16 April 2020, around 90% of the respondents of the survey have informed of complete closure of TVET schools and centres in their countries as a response to the spread of the pandemic. However, the closure seems partial in some countries in Southeast Asia, like Indonesia, Philippines, Brunei Darussalam, Vietnam, Thailand, as well as in Egypt, South Africa, Australia and Mozambique.. It must be noted here that different respondents have provided different information from the same countries concerning complete or partial closure of TVET institutions.

In addition to class and laboratory based training, the delivery of work-based learning, including apprenticeships, is facing serious ruptures given lockdowns imposed on enterprises. In a number of countries, a lack of technological infrastructure and adequate connectivity are impacting the TVET providers ability to facilitate distance learning for trainees. In contexts, where distance-training initiatives are being launched, teachers and managers are facing challenges in terms of communication and coordination with trainees.

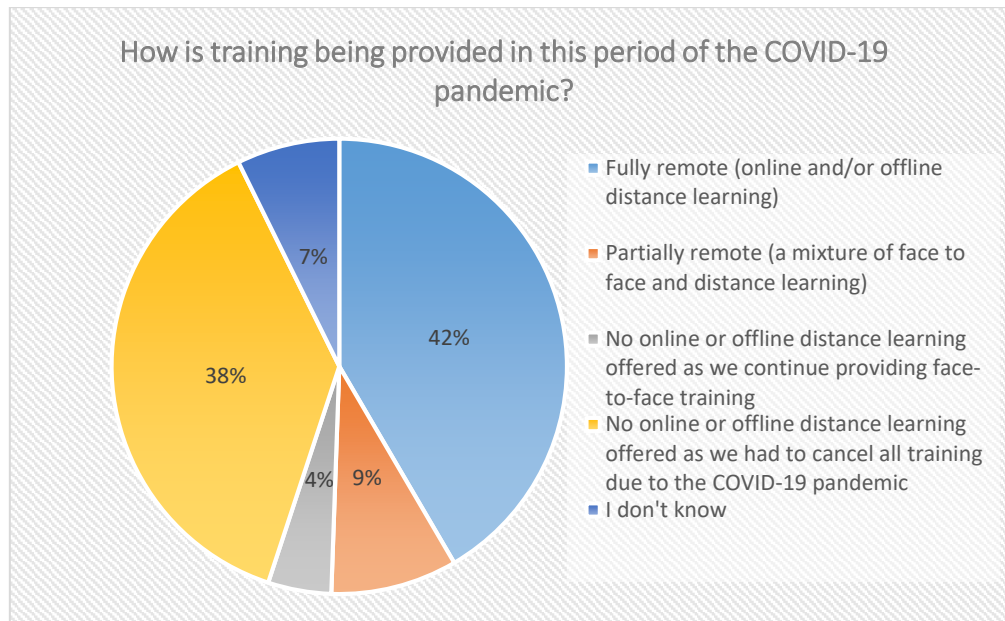
- Respondents from Uganda and Ukraine informed that the sudden nature of the crisis did not leave an opportunity to prepare to mitigate the impact on training.
- Respondents from Indonesia informed that no other crisis has affected the continuity of apprenticeship programs to this extent before.
- Respondents from a European country like Italy, severely affected by the pandemic, also inform of complete rupture of training activities with no clear plan of restarting activities.

- Respondents from Belgium inform of upcoming training activities being postponed until further notice.
- Respondents from Nigeria reported that due to lock down class sizes have reduced drastically, trainees are unwilling to come to the centres and interaction levels for training communication have reduced immensely.
- Respondents from India reported that due to lock downs, neither trainees or trainers can come to the centre for training as they are confined at home. While trainers and trainees are motivated to explore new ways of learning, they have highlighted several challenges related to online learning including connectivity, costs for trainees due to data usage, user friendly learning platforms, trainee friendly content and most importantly regulatory acceptance of online mode of training.
- Respondents from Canada reported that the motivation of some students, especially in programs with many practical activities, laboratories and workshops was greatly affected due to an increase in activities of more theoretical nature (reading, videoconferencing, demonstrations, videos, etc.). Teachers also experienced challenges in quickly reorienting their training strategies and this created a great deal of stress, pressure and anxiety.
- Respondents from Kyrgyzstan reported that since adopting different distance learning tools, teachers face a heavy workload with new teaching methodologies and increased messages and questions from students at all hours.
- Respondents from Australia reported that there has not yet been a coordinated response to the issue of work-based learning for a distance learning. Many workplaces employing apprentices are still operating, e.g. construction, factories, hairdressers, and certain shops.
- In some countries certifying exams and assessments have been postponed for TVET trainees and students, but this is not the case in some Southeast Asian countries, like Malaysia, Indonesia, Vietnam and Thailand, and others like Australia, Kazakhstan and Ukraine where the TVET school closure currently seems partial.

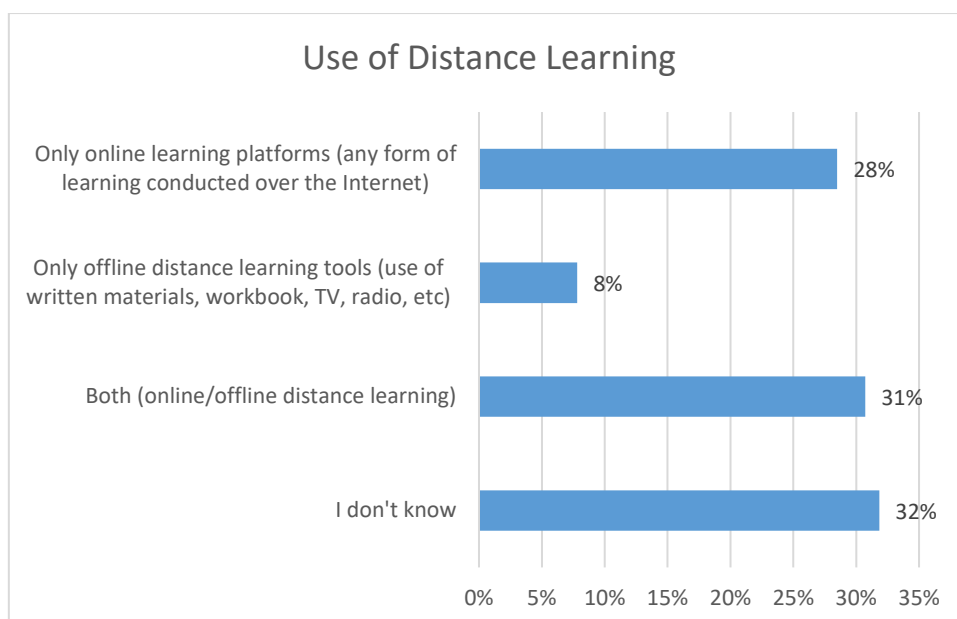
## Section III – The response of COVID-19 pandemic on TVET provision

### 3.1 How is TVET provision being organised before and during the COVID-19 situation?

- Before the outbreak of the COVID-19, distance learning was not widely used in countries participating in the survey. Around 42% of the respondents did not use distance learning for courses or training at all, and about 37% used it only occasionally. A mere 16% used it very often or regularly.
- These patterns should have implications on the organisation of TVET provision during the pandemic, but this survey presents some interesting findings. While around 37% of respondents indicated that no online or offline distance learning is offered as they had to cancel all training due to the COVID-19 pandemic, 41% of the respondents inform that training is being provided in their respective institutions in their countries fully remotely. Less than 10% of respondents reported that training is provided partially remotely – South Africa, the United States, Thailand, Egypt, Nigeria, India, Uzbekistan and some others



- Respondents suggest a number of reasons for the lack of availability of online or offline distance learning. The most common answers include:
  - Lack of/limited access to digital equipment and tools;
  - Insufficient internet infrastructure (including data packages); network issues especially in rural areas;
  - Limited online educational resources, no effective online learning system in place;
  - Insufficient capacity of teachers and trainers in enterprises and TVET institutions to transfer operations online and introduce distance learning (including the design and delivery of learning courses). This includes insufficient digital skills;
  - Insufficient digital skills of learners and their capacity to use ICT as a means of acquiring knowledge and managing their learning.
  - Challenge of conducting practical training without physical presence of trainer and trainee
  - Lack of time to prepare for a crisis situation of this nature leading to nationwide lockdowns
  
- None of the countries that reported continued provision of face-to-face training appear to have developed special official guidelines on health and safety for trainers/trainees and trainees, however, most of them reported following governmental and WHO guidelines/advice on protective measures against COVID-19.



- A mix of online and offline distance learning appears to be a widespread (31%) method of delivering courses and training remotely. Some respondents (28%) also reported that training now takes place only through online learning platforms. At the same time in countries like Bangladesh, Belize, Pakistan, Tunisia, Ukraine, South Sudan, Nigeria, Philippines, Moldova and Sudan, offline distance learning tools seem to be more common. It is to be noted that a relatively high number of respondents did not have knowledge on this topic (32%).
- In many countries migrants were reported as being able to take part in online and/or offline distance training courses. However, a little more than one in five respondents indicated that distance courses are not open to migrants. However, it is important to note that an even more significant proportion (one-third) did not have a response to this question, which indicates that this may not have been an intentional measure in most respondent institutions.

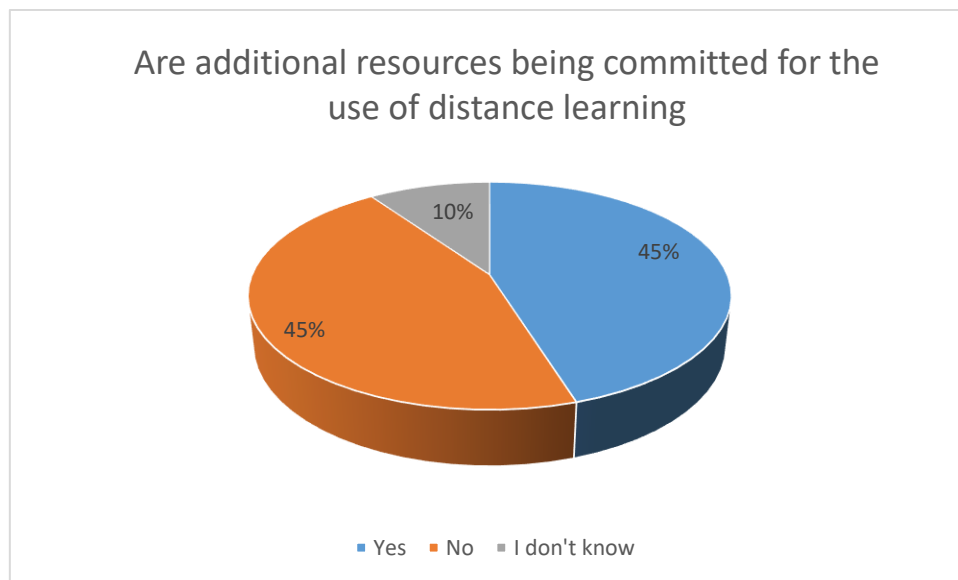
### 3.2 How is work-based learning, apprenticeships or practical training being provided?

- The majority of countries are not providing or assessing practical skills training such as usually developed in workshops/laboratories or through work-based learning and apprenticeships.
  - Respondents from Thailand and Australia (Victoria) indicated they still provide apprenticeship/face-to-face practical training but with precautionary measures such as social distancing and protective clothing put in place.
- Nevertheless, there are a number of initiatives being taken in this regard:
  - Respondents from Canada, Bangladesh and Mauritius indicated that work-based learning, apprenticeship or practical content has been (partially) delivered through online platforms although it is not clear exactly how this is being done. Nigeria is also developing online training packages. In Canada, certain practical skills are being taught through distance work (e.g. end-of-study projects in industrial design, business, ICT sector etc.);

- Respondents from Chile reported that they are planning to use the Padlet tool to evaluate the results of students' work through video recordings when performing skills, and, where possible, to also use digital simulators. In Kyrgyzstan students draw diagrams and technocards and send them to teachers for their evaluations. In Canada, for certain programmes teachers will evaluate practical knowledge through case studies, role-playing, problem-analysis etc.

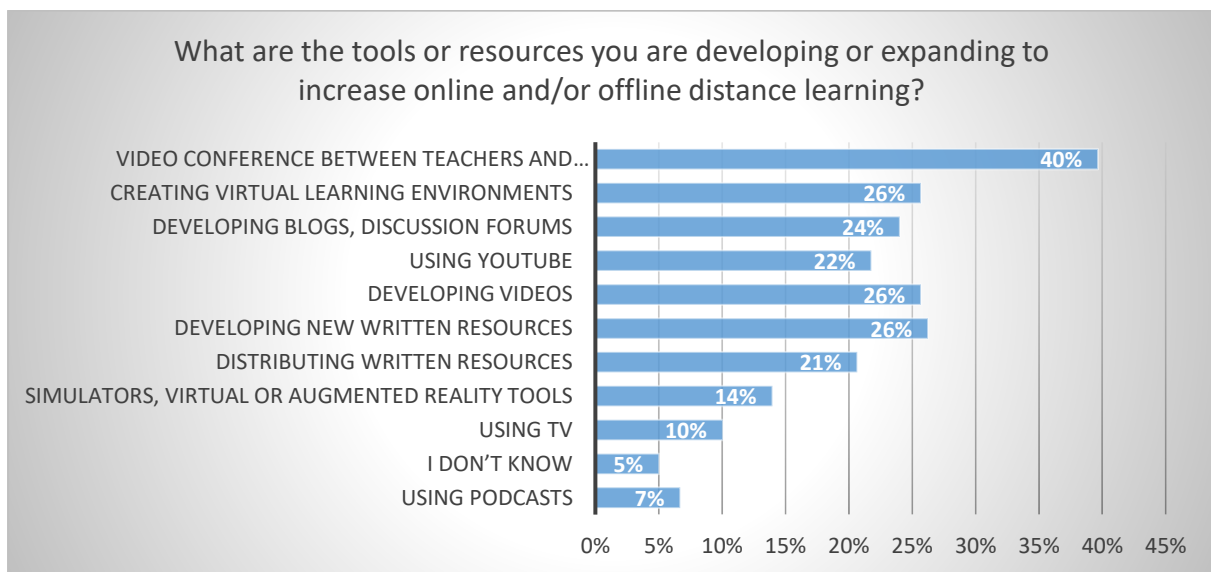
### 3.3 Additional resources that are being committed by TVET organizations to create new materials, deploy new technologies and/or expand the use of online and offline distance learning?

- As of 16 April 2020, approximately 45% of the respondents indicated that additional human and financial resources are being committed in their organisations to create new materials, deploy new technologies and/or expand the use of online and offline distance learning.

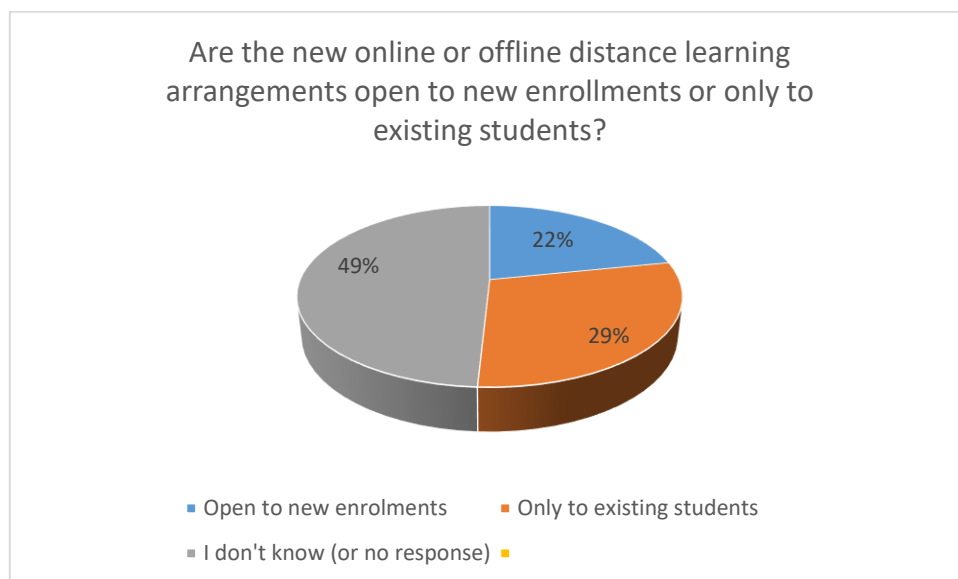


- For developing and enhancing online learning, the most common tools or resources used are video conference (such as Zoom), virtual learning environments like Google classroom, blogs, discussion forums, videos and Youtube. Some respondents have also reported the use of simulations like STR, Opera and Amadeus, as well as social media platforms such as Facebook and Instagram and communication tools like Whatsapp and email to facilitate coordination between trainers and trainees. A number of respondents from countries like Italy, Ukraine and Kazakhstan are reportedly using locally developed platforms, which provide distance learning solutions in local languages. Other specific examples include:
  - Indonesia: online training platforms that were being developed in normal course, their development is being accelerated for immediate use.
  - Malaysia: home grown learning management system is being deployed to support distance learning
  - El Salvador: Platforms and programmes developed for students in the areas of software and health

- Egypt: Enterprises and TVET institutions training and developing the capabilities of their trainers and teachers to modify face-to-face courses for delivery through distance learning, or to recruit, via short-term contracts, online/distance learning experts/advisers.
- Philippines: A TVET school has online platforms for teachers and students, where the school can design the modules, activities and assessments in that virtual classroom. Students can take examinations, read online books and relevant links. The platforms also features google applications.
- To a lesser extent, tools or resources for offline distance learning are also being developed or expanded, which includes new written resources such as self-paced learning guides and learner notes.



- It is more often the case that the new online or offline distance learning arrangements are restricted to existing students and not open to newly enrolled students. It must be noted that almost half (49%) the respondents were not aware or did not respond to this question.



### 3.4 Measures developed to address skills shortages in occupations and sectors affected by the COVID-19

- Relatively few respondents suggested that the new or expanded online or offline distance learning materials or technologies have been used to address skill shortages in occupations or sectors affected by the COVID-19 pandemic. For example,
- In the United States of America, virtual reality is being introduced to a nursing program.
- A respondent from India reported that new resources are used to develop healthcare related skills and raise awareness related to health and hygiene.
- A respondent from Ghana pointed out that they face challenges in developing new learning materials due to limitation of movement and high cost of data.
- A respondent from Malaysia reported about having access to learning contents on ventilator machines.
- In Indonesia, a respondent informed about efforts to initiate trainings for medical equipment technicians, other healthcare workers as well as garment factory workers and call centre workers given the urgent need of the hour for skills in these domains.
- A respondent from the United Kingdom reported on learning material about Infection control and prevention at the workplace.

### 3.5 Main lessons learned and obstacles for TVET provision

A range of observations were made by respondents regarding the lessons learned since the beginning of the crisis:

- E-learning materials have to be developed in the different student languages.
- Students should be prepared to become independent learners, learning to learn is important.
- E-learning methodologies need to be developed in greater number.
- Having multiple platforms and tools for instruction and learning, including communication tools, is important.
- System contingency and disaster recovery plans should be put in place well in advance.
- Physical contact is not the only method for learning, as the long history of distance and e-learning has demonstrated. Blended learning should become a permanent option for learning in TVET to ensure continuity of training in situations like these. This response appeared recurrently, on-line learning should become part of the normal.
- Teachers need to be more flexible to create new methods and materials. They also need more training and support to do so.
- ICT skills are important, both of teachers and students alike.
- Investments in Technology (including IT platforms for e-learning and tools, and IT trained professionals) should be considered and connectivity-related issues should be tackled. Lack of internet and electricity are recurrent problems mentioned. Moreover, in many countries (and in rural areas), internet access is expensive and data access through mobile phones is low.
- Trainees cannot practice their skills in the workplace or labs, e-learning is not enough.
- E-learning is expensive, poverty is a challenge.



- It is unrealistic to make a quick transition from face-to-face to on-line learning. This is a process requiring careful planning and preparation. Therefore, after the crisis, the systems should be updated and roles and responsibilities should be established and agreed with the students.
- Work-life balance is difficult while teaching or learning at home.
- Motivation plays an important role on e-learning provision.
- More online training resources need to be developed.
- More collaborative initiatives are required to develop training materials and facilitate distance training between institutions, IT professionals, private sector, internet providers and governments etc.
- Importance of developing online meeting management skills also came up.

### 3.6 Supporting measures being provided for teachers and trainers

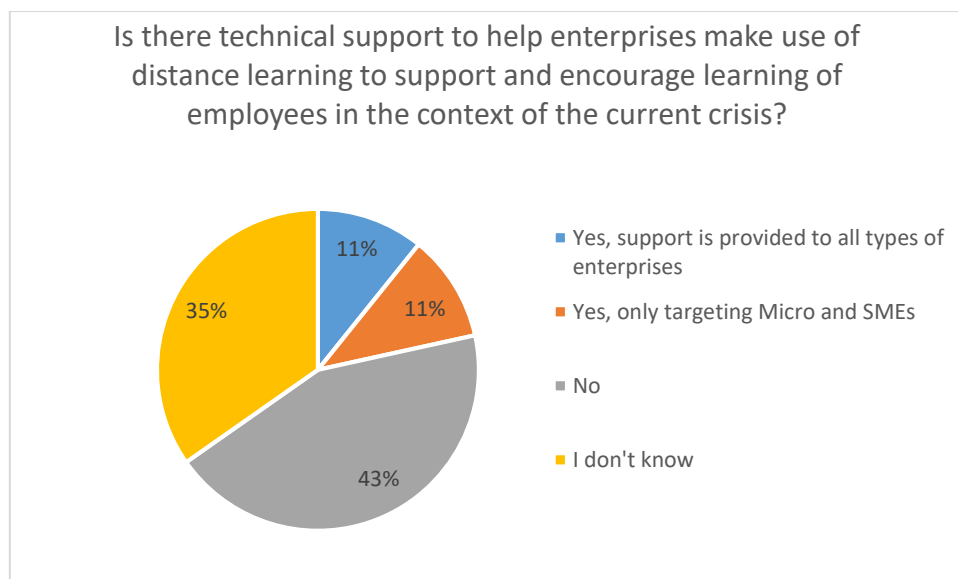
- Many countries are providing diverse support measures to teachers and trainers through online training, workshops and seminars. These aim to upgrade the ICT skills of teachers and trainers and to assist with the preparation of e-learning materials. Some examples are provided below:
  - A number of countries use a free and open-source learning management system (LMS) such as Moodle “Modular Object-Oriented Dynamic Learning Environment”- a learning platform devised to provide teachers, trainers, supervisors, and learners to generate customized learning settings (Egypt, USA)
  - Other countries provide support on how to conduct online sessions through mentoring during the first few sessions by Master Trainers and Technology teams (India). Support measures also include video resources, 24/7 tech support by the learning management system (LMS) (the USA); other online tools, IT labs, good quality Internet, montage and movie production technicians (Egypt, Thailand), and technological upgrading and related continuous technical support (Canada).
  - In Nigeria, personal development grant applications are offered to teachers and trainers for deployment of online training to complement their support on the use of digital tools and on providing best practices for teaching remotely.
  - In Kyrgyzstan, the operator Megacom provided free SIM cards to all teachers of the lyceum for 2 months with free Internet and data (up to 60 GB) and free conversations within the network.
  - In Afghanistan, while the government is encouraging schools and universities to provide online classes, the major challenge is proper access to the internet
  - In El Salvador, management and technical support from the authorities is provided for the use of online platforms for carrying out teaching, evaluation and getting feedback from their students through surveys. It also maintains stable access for teachers and students to the platforms.
  - Some countries provide support to teachers and trainers for exchanging their strategies and practices through mentorship programmes by teachers who have more experience and can support their colleagues (Canada)

- In Madagascar, the support was not only through providing materials and internet connections, but also on motivating teachers and trainers in further delivering their courses and training resources.
- In Philippines, teachers are receiving material support in the form of equipment the lack of which poses a major challenge for distance learning. Additionally, support for teachers is coming from telecom providers in the form of reduced tariff for data bandwidth.
- In Malaysia, privately owned platforms are offering free access to learning platforms for the period of the crisis.
- While various types of support were provided to teachers and trainers, some expressed their concerns as to the accessibility by many of teachers and trainers and to the fact that the cost of accessing the internet are at the expense of teachers and trainers.

### **3.7 Policy and institutional measures to encourage or to manage initial or continuing vocational training in response to the crisis**

- Majority of countries have not setup specific policy responses to increase TVET response to the crisis. Some TVET providers have started to increase their online offer.
- Nevertheless, there are growing and encouraging examples of targeted responses.
  - In Nigeria an online digital platform for youth training has been developed in a collaboration between IBM and the Federal Ministry of Youth And Sports Development.
  - In Senegal, peer groups of learners have been developed utilising Whatsapp, for mutual support.
  - In Egypt a number of organizations have started to recruit distance learning experts via short-term contracts to work and advise on transfer from face-to-face courses into a distance learning.
  - In Thailand, the Ministry of Education as officially signalled to colleges the need to prepare for online learning with the support of central administration services.
  - In Chile, the Ministry of Education has created a Contingency Action Plan ([Plan de Acción para enfrentar la contingencia](#)) for higher education which includes measures to assure quality of provisions, provision of the learning platform Google suite for institutions without distance learning tools, dedicated funding for online learning reinforcement and diffusion of good practices for capacitation of teachers for online learning.
  - In Malaysia, respondents report on policy measures for financial and food related assistance being announces to students under the Malaysia Movement Control Order 2020 to support the students and continuity of training.

### **3.8 Support to help enterprises make use of online and/or offline distance learning**



- The majority of countries do not appear to have yet developed dedicated measures to encourage distance learning in enterprises. Only 11% of respondents answered that the support was delivered to all types of enterprises for the use of distance learning.
- While only 11% of the respondents reported targeted initiatives to support MSMEs, there are targeted initiatives under development in Egypt, Bangladesh, Philippines, Nigeria, Tunisia, Canada, Malaysia, Viet Nam, Indonesia, Ukraine, Kyrgyzstan. In some cases, they are making use of e-government programmes and strategies, such as the a2i programme in Bangladesh. Support in the form of free access to internet is being offered in some cases in Kyrgyzstan.

### 3.9. Suggested additional measures

- Respondents suggested a high number of additional measures which can be implemented:
  - Provision of free internet and data packages for youth and in less affluent areas, improvements in internet infrastructure to increase speed and respond to demand and ensure that basic infrastructure is also in place (e.g. electricity)
  - Access of learners and trainers to inexpensive or free digital equipment such as computers and tablets
  - Develop and make available free learning platforms, video conferencing and VR tools
  - Learning platforms should be responsive to learners needs and capacities as well as to TVET providers requests
  - Creation of single points of access for school resources online with screening and curation of contents
  - Combine several distance learning channels, including television and radio
  - Introduction of practical training in online courses
  - Alignment of online provision with skills assessments and forecasts
  - Development of learning modules in local languages with telecommunication industry support

- Support enrolment processes and costs for learners and facilitates assessments/examinations
- Associate online learning to entitlements and universal rights to education, through practical policies
- Create a regulatory framework for blended learning in TVET
- Plan for the post COVID-19 world, instead of just providing reactive measures

#### Section IV – TVET related online training that could be useful for other countries

Highlights of information provided about online materials that can be useful for VET providers:

##### General online learning resources and tools

- Moodle: <https://moodle.org/>
- Google classroom: <https://classroom.google.com/>
- Common Wealth of Learning: [www.Col.org](http://www.Col.org)
- Scientific Animation Without Borders (SAWBO): <https://sawbo-animations.org/home/>
- Thinkific: <https://www.thinkific.com/blog/low-cost-tools-create-online-course/>
- Canvas: <https://canvas.instructure.com/login/canvas>
- Zoom : <https://zoom.us/>
- Skype: <https://www.skype.com/en/>

##### Guides for training providers and teachers on distance learning

- UNESCO: <https://en.unesco.org/news/covid-19-10-recommendations-plan-distance-learning-solutions>
- Joint Education Trust (JET): <https://www.jet.org.za/research-bootcamp>
- UNESCO-UNEVOC <https://unevoc.unesco.org/home/COVID-19+disruptions>

##### Contents for Online and/or offline distance learning

- Online learning material provided by Ministry of Labour, TVET and Handicraft (Senegal) (in French): <https://e-jang.sec.gouv.sn/>
- Khan Academy: <https://www.khanacademy.org/>