A World View of Remote Assessment During Covid-19
The field of Technical and Vocational Education and Training has been markedly affected by the global health pandemic gripping the world. It is important that assessment of vocational education continues, particularly for students who need to gain qualifications, further their careers and for industry that require trained, qualified, graduates to enter the workforce. Remote assessment may be a permanent assessment tool that will go some distance to reducing the time and cost of some parts of the assessment process. This survey aimed to find out how countries around the world managed remote assessment.

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The Abu Dhabi Centre for Technical and Vocational Education and Training (ACTVET) was established under the directive of His Highness Sheikh Mohammed bin Zayed Al Nahyan Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, through Resolution No. 49/2010. ACTVET, the first Awarding body in the UAE has a mission to regulate the Technical Vocational Education and Training (TVET) sector in the Emirate of Abu Dhabi to build a national workforce that is capable of effectively participating in the sustainable development of the country. ACTVET strives to create an environment that encourages TVET institutions to innovate and reach their goals, contributing to the achievement of Abu Dhabi Economic Vision 2030.

The National Qualifications Authority (NQA), was established by Federal Decree No. 1 of 2010 issued by His Highness Shaikh Khalifa bin Zayed Al Nahyan, President of the United Arab Emirates (UAE) on 23rd August, 2010. The NQA maintains the National Qualifications Framework (NQF) for the UAE, called the QF Emirates and collaborates in leading the development and implementation of a range of outcomes of education and training and in particular vocational education and training. Additionally, NQA quality assures outcomes and relationships with the labour market.
The world is facing an unprecedented crisis due to “The global health pandemic. As a result, there is a widespread learning crisis with the unprecedented scale of impact reflected in the TVET sector. With a halt in the normal running of TVET schools and training institutions, students, trainees and apprentices are systematically unable to continue planned learning. Under the circumstances, TVET, including work-based learning, continuing training and professional development (UNESCO, 2018), cannot be a silent spectator. In this time of crisis, TVET can play an important role, by conducting evidence based research. I am very glad to see that a survey to measure the effect of the lockdown on assessment in vocational education has been conducted. I hope developmental partners will take note of the findings of the research study for future planning. As we are all aware that COVID-19 is not just a health crisis, but also learning crisis, economic crisis and mind-set crisis”
“MILSET is a Non-governmental Organisation (NGO) that has focused its efforts on providing spaces where youth can gather scientific, social and cultural skills for improving their lives. Due to the pandemic, lifestyles are changing forcing educators, parents, and students to reformulate how information is received, processed and transmitted. Education has faced enormous challenges and through necessity has had to transform content and courses to online platforms in record time. Students have been forced online to learn, interact and develop, without physical contact with colleagues. Parents have taken a key role in supervising the learning process. TVET based on Science, Technology, Engineering, Arts and Maths (STEAM) concepts and skills such as critical thinking, problem-solving, creativity, effective communication, collaboration and agile thinking are a primary need. The future is uncertain, but we must be confident that our efforts to support youth are worthwhile.”

“Throughout history, vocational education has given students hands-on experience to prepare for employment. MILSET founders in 1987 were convinced that youth required to be involved in complementary activities that provide tools for improving their lives, still nowadays one of the main objectives of MILSET organisation. The current pandemic has become an opportunity to define new strategies for developing communication, evaluation and learning processes. However, it has posed several challenges. Students and assessors have had to become familiar with online platforms, virtual assessment and new methods for developing effective and accurate communication. Even during this uncertain time, we must remain strong and provide skills and knowledge to youth for overcoming challenges. This survey has given a precise landscape on how this pandemic has changed the assessment of learning but also highlights that continuation of education is a right and priority in all societies.”

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Traditionally, Technical and Vocational Education and Training has been delivered to enable skills to be developed for occupational requirements in the workplace. Vocational education has been defined by UNESCO (2018) as those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life. Further, technical and vocational education and training has been determined as the preparation for work (ISCED, 2011) that provides youth and workers with the competencies and skills required to allow businesses to recruit the workforce they need for growth (ILO, 2018-2022).

The International Labour Organisation (2020) have stated that education and training are key to making people employable, allowing them to gain access to income and escape poverty. For society to reach the goal for full employment and sustained economic growth, there needs to be investment in education and human resources development (Majumdar and Araiztegui, 2020).

Over 1.54 billion students in 188 countries

Over 1.54 billion Students in 188 countries have had their education disrupted due to the health crisis (Majumdar and Araiztegui, 2020). It was reported in a recent UNESCO survey (2020) that, as a response to the global pandemic, around 90% of respondents reported complete closure of TVET centres in 114 countries (ILO-UNESCO, 2020).

It is estimated that 12 to 13 million people attending training courses have had to give up their opportunity to continue study during the health crisis (CINTERFOR, 2020). Students’ progressing in TVET education, requiring observation of competence, have been particularly effected. Thus indicating that traditional in-person assessment methods during the health crisis has been severely compromised.
The main focus of the Remote Assessment Survey was on the effect of the health crisis on the ability of the student to continue being assessed and the ability of the Assessor to assess remotely. Most governments have temporarily closed Technical and Vocational Education and Training entities in an attempt to contain the spread of the COVID pandemic (UNESCO, 2020). Closure has disrupted student’s ability to complete qualifications. However, opportunity for continuity of learning is available online or through distance learning. In most cases, it has required access to the internet, with learning remotely the most common way to continue (UN-EVOC, 2020). Whilst some entities were geared for online remote learning, others needed to prepare.

A survey jointly conducted by:

- **NQA** National Qualifications Authority
- **ACTVET** Abu Dhabi Centre for Technical and Vocational Education and Training
- **MILSET** International Movement for Leisure Activities in Science and Technology
- **TESDA** Technical Education and Skills Development Authority

The main focus to measure the effect of the lockdown on assessment in vocational education. The survey comprised of 14 questions, 13 closed on a Likert scale from:

- not applicable or no connection
- very poor
- poor
- average
- good
- excellent

for ease of use and one open question for additional comment.
More than 24 occupations were being studied by students or being assessed by Assessors with the top three fields of study being: Hospitality, Tourism and Food Preparation; Health and Social Care and Business Administration. The majority or 73% of qualifications being undertaken were at certificate level and 11% were at Diploma level.
Remote Assessment Survey

The first question in the Remote Assessment Survey asked about student and Assessor connection to the internet. In total 81% or Assessors and students had access to excellent, good or average internet connections. Among assessors, 33.5% reported having good access to the internet and among students 37% had average connection to the internet. This is a positive result as it indicated that the majority of Assessors and students had access to and could continue assessment online. However, in total, 19% of Assessors and students had poor, very poor or no connection to the internet which would have an effect on their ability to complete work online. Therefore, although the majority of assessors and students were able to continue online, others would have difficulty accessing facilities to do so.

Immediately, it was identified that access to and the ability to function online was needed by all Assessors and students. For some this may have been a skill already acquired, for others this was a new skill. Further, to accommodate the online approach, new procedures needed to be adopted. To function on the internet, the following was required:

- access to the internet
- stable and continuous connectivity
- devices with basic packages and apps in related field of study
- access to technical support and information.

Therefore, connectivity and connection to the internet was extremely important for continuation of assessment during the health crisis lockdown, to allow students to continue in their studies.
The second question considered whether there was any effect on the ability of assessors and students to work and communicate remotely. Equal number of assessors (73%) and students (73%) said they had good or average ability to communicating remotely. Previous communication may have been in-person, with face-to-face training, professional discussion, observation of competence and assessment, but those options were no longer available due to social distancing and health restrictions. This meant that students and Assessors had to adapt to new ways of assessment by reducing in-person contact as a result of the temporary closure of many training centres and workplaces. Therefore, non-contact communication between the Assessor and the student was necessary meaning there was going to be changes to the assessment strategy.

Method of communication between Assessor and candidate
Where to find assessment process and procedures and requirements for workplace assessment
How to access assessment and feedback on performance
What assessment requirements are and what will be accepted for completion
How to access student portals or learning platforms
What are the workplace attendance requirements for those not in full time employment?
What are the adjustment to work arrangements for those in full time or part-time employment?

Therefore, more emphasis needed to be placed on non-contact online communication and assessment with around three quarter of assessors and students having access to good or average connectivity, with students having greater access as a group.
Next, Assessors and students were asked about whether there were issues loading information to an online system. A number of institutions and international organisations made efforts to reach out to learners through online delivery by making online learning materials and resources available as a means to replace modes of delivery content (Majumdar and Araiztegui, 2020). Of all respondents, 73% had good or average ability to load information onto an online system, conversely, 17% of all respondents had poor, very poor or no ability to load information to an online system. Among Assessors 16% had difficulty and among students 10% had difficulty with poor, very poor or no ability to load information to an online system.

Therefore, this result would indicate that more Assessors than students would be disadvantaged, regarding loading information and fulfilling all qualification requirements online.

**Points needed for loading to an online system are as follow:**

- Access to platforms and learning management systems
- Ability to navigate online systems
- Knowledge of types and size of evidence to be uploaded
- Access to submission requirements and procedures
- Knowledge of submission dates and penalties for late submission
- Access to discussion forums.
Sourcing & receiving evidence

Receiving evidence

This question concentrated on the sourcing of evidence and the receiving of evidence online. Sourcing evidence online supports assessment practice and underpinning knowledge. Therefore, access to online search engines and libraries were necessary. Receiving evidence online also required the student and the Assessor to send and collect performance or competence evidence online. The latter may have proved more difficult than the former as video and visual transmissions are large files and take time to load.

Of all the respondents, 76% had good to average ability to source and receive evidence online. Among assessors 15% and among students 10% reported poor, very poor or no ability to source and receive evidence online. Conversely, among students, 17% as opposed to 11% among assessors had excellent ability to source and receive evidence online. It was apparent that Assessors were not as able to access, source and receive evidence, as students.

To conclude, difficulties may occur in the sourcing and receiving of documentation. However, the transfer of large files such as videos may cause issues. Although apps are available for transferring large documents, it is the loading time that may be a challenge for some assessors and students.

For sourcing & receiving evidence the following is required:

- Access to online search engines
- Ability to access online libraries
- Ability to send/receive online documentation from Assessor/student
- Ability to produce performance evidence
- Access to synchronous or asynchronous learning
- Participation in the performance of real or simulated skills-based activities
Remote professional discussion plays a role in the measurement of a person’s competence. By discussing how they achieved competence of certain processes or completed documents assists the Assessor to gauge competence. Remote professional assessment has been facilitated by the number of online platforms offering online video conferencing. Therefore, as an assessment method, remote professional discussion was a realistic assessment method during the lockdown period. Of all respondents, 76% reported good to average ability for participate in remote professional discussion, with students reporting 17% and Assessors reporting 10% poor, very poor or no ability to participate in remote professional discussion. The result would indicate that although there was connectivity and the availability of the internet, this use of remote professional discussion had not been utilised.

To maximise the value of remote professional discussion it requires the Assessor and student to:

- Have the ability on devices to see, converse and record communication via camera
- Check devices are working and conduct a trial recording before conducting the remote assessment discussion
- Agree the schedule for the remote professional discussion
- Include the professional discussion: introductions of name of Assessor and name of student, date, time and subject of the recording, state the starting and end time of the discussion and at the end the recording state the time.
- Use a counter on the video for referencing evidence
- Speak clearly, have a topic and remain on topic per question asked
- Assessor asks probing questions and discusses why, what, where, when, and how, competence is demonstrated.

To conclude, professional discussion is a valuable assessment method which can be conducted online, with minimal disruption to the process because of the health crisis. However, Assessors may have greater difficulty than students in conducting and completing the process.
Therefore, it is possible to record skills performance using camera and voice which would allow some assessment of performance. This result indicates that students were better prepared to be able to utilize the available technology to undertake vocational behavioural competence virtually than assessors.

Feedback about performance using communication platforms, voicemail, or email is utilised.

Assessor has sufficient video to capture the skill demonstrated to make a judgement and give students feedback.

Video and voice captured and recorded performance, preferably during real life or simulated work conditions.
Due to the health crisis, some countries have been disadvantaged with the assessment of their qualifications some have been completely halted, whilst other countries have made allowances. This meant that some students could not complete their qualifications remotely. In countries such as the United Kingdom allowances have been made, including allowing: adapting training to meet the needs of the student, giving consideration to those who's employment has been interrupted; giving allowances to affected populations including those in rural areas, those in the informal economy, and giving pass grades based on past performance to students to allow for progression to further or higher education (Williamson, 2020). Further, the United Kingdom, Secretary for State for Education, the Rt. Hon Gavin Williamson CBE MP has taken a positive stand announcing:

‘In line with section 129(6) of the Apprenticeships, Skills, Children and Learning Act 2009 ... I consider it to be essential that, unless there are exceptional circumstances which mean it is not possible, students currently studying vocational and technical qualifications which fall within the scope of this direction are provided with a result this year’ (Williamson, 2020).

Of all respondents, 75% reported they had good to average ability to complete qualification remotely therefore 25% of all assessors and students had poor, very poor or no ability to complete qualification remotely. This result implies that some students may be disadvantaged because of their assessor’s inability to assist students to complete qualifications. This means that the majority of students would have been able to complete qualifications during lockdown, but recognise that one quarter of students will have difficulty. Conversely, among students 21% reported they had excellent ability whereas among Assessors, only 11% judged they had excellent ability to complete qualification remotely. This result indicates that more students are affected where assessors would not be able to complete a qualification using remote online services only.
Availability of standards for remote accessing

There was consideration that there may not be standards for remote assessing, although some organisations may have developed their own. Supplying standards would have helped all centres worldwide to understand minimum requirements. Of all respondents, 68% reported good to average access to standards for remote accessing and 22% reported poor or very poor access to standards for remote accessing.

Therefore, for a more practical guide for Assessors and students, the following are recommendations:

- Computer access to the internet is stable and continuous
- Devices are loaded with basic packages and apps in the related field of study
- Learning platforms, online systems, learning management systems, student portals discussion forums, are available
- Access to technical support and information, voicemail, video, chat, email online search engines, and online libraries are available.

Communication between Assessor and student is:

- Advised, established and is ongoing, with learning support available either synchronous or asynchronous
- Arrangements for workplace assessment and simulated assessment, agreed and communicated prior to assessment

Assessment information about the assessment process and procedures includes:

- Methods of completing assessments
- Procedures for submission with dates and penalties for late submission
- Types and sizes of evidence acceptable and information about sending large documents available
- Performance, competence, progress mapping, recording and reporting of learning outcomes
- Receiving judgments and feedback about performance against performance criteria.
In total, 90% of all respondents did not have additional comments. However, there were a range of comments, the most popular comments noted below representing:

- **Students without devices have difficulty completing evidence.**
- **Tools/material resources are insufficient due to financial problems.**
- **The Community Base Training scheduled for Assessment was set, participants were reviewed for knowledge and skill but suddenly the schedule was altered due to Covid-19 lockdown.**
- **I personally answered all “excellent” because I am referring to during normal weather in our place.**
- **I definitely support this 100% for the welfare of our clientele especially those who need it the most.**
- **Multiple functions in management, supervision and facilitation of assessment are challenges.**
- **Inadequate supplies of materials for remote assessment.**
- **No availability of centres for practical/hands-on assessment.**
- **The big challenges in “re-scheduling” of assessment due to possible technical issues which cannot be resolved immediately.**
- **Transportation and allowances problems especially for students from remote areas.**
The result of the remote assessment survey has highlighted that although many students lost the opportunity to attend in-house training and in-person assessment services, assessment carried on. The main reason being, students were familiar in using devices connected to the internet. What was evident was that the health crisis was a sudden disruption to assessment and completion of qualifications resulting in studies being affected. Further, guidelines for online assessment were not found on an internet search and it can be assumed were not readily available. Therefore, as a successful outcome of this research, recommendations were prepared for assessors and students for remote assessment for technical and vocational education and training.

References

- UNESCO (2018), TVETipedia Glossary Resources and Services, International Centre for Technical and Vocational Education and Training, TVETipedia. UNESCO /UNEVOC