

Ushirika wa Maendeleo ya Elimu Barani Afrika الرابطة لأجل تطوير التربية في إفريقيا Association for the Development of Education in Africa Association pour le développement de l'éducation en Afrique Associação para o Desenvolvimento da Educação em África

> TECHNICAL AND VOCATIONAL SKILLS DEVELOPMENT (TVSD)

# Remote Education Benchmarking Toolkit

Validated in July 2021 Updated in October 2023

> ADEA infyd

www.adeanet.org

C

### **Acknowledgements**

The REBTK team at ADEA are acknowledged for their guidance and support throughout the development and pilot process for the REBKT for Technical and Vocational Skills Development. The team includes Shem Bodo, ADEA Senior Programs Officer, Oswald RUTAYISIRE, ADEA Monitoring and Evaluation Officer, Helene Charpentier Aminata, the former ADEA Senior Projects Officer, Amara Kamaté, Coordinator of ICQN-MSE, Aminata Siahoué, the former ICQN-TVSD Project Officer.

ADEA also acknowledges Yamal Matabudul, the Chief Excutive Officer of Politechnics Mauritius, the resource person who worked tirelessly to adopt the REBKT for TVSD and lead the pilot process which helped to update and contextualize the REBTK for TVSD.

ADEA acknowledge the support of Amara Kamaté, the Coordinator of the Inter-Country Quality Node on Technical and Vocational Skills Development (ICQN-TVSD), Mrs Amina Siahoué, the former Project Officer for the ICQN-TVSD.

Finaly, ADEA acknowledge the support of Mr. Gordon Bamwine from WDA-Rwanda, who coordinated the pilot process in Rwanda. Mr Kouadio Essui Emmanuel from the Ministry of National Education and Technical Training in Côte d'Ivoire, and Khaled Raouani from the Ministry of Labour and Technical Training of Tunisia who supported the REBTK pilot phase for TVSD in their respective countries.

### **Table of Contents**

Ack	nowledgements	1
Tab	le of Contents	2
Acro	onyms	3
1.	Introduction	4
2.	Reopening of Learning Institutions: Challenges and Opportunities	6
3.	Rationale, purpose and target group for this REBTK	8
4.	How to use the REBTK	8
5.	User guide for the full-scale implementation of the REBTK for TVSD	9
Nori	m 1: Robust policy, legal, regulatory and quality-assurance framework	12
Nori	m 2: Appropriate teaching practices and competency-oriented learning curricula 1	16
Nori	m 3: Strong trainer workforce capacity	19
Nori	m 4: Equitable and inclusive access to remote education	21
Nori	m 5: Capacity, infrastructure and new technologies	24
Nori	m 6: Strong Education Management Information System	28
Nori	m 7: Public and private partnership	30
Nori	m 8: Work-based Learning	33
Nori	m 9: Resource mobilisation	36
Nori	m 10: Information, communication and reporting	39
Nori	m 11: Peace and conflict prevention and resolution	42
Nori	m 12: Monitoring, evaluation and assessment	44
Nori	m 13: Psychosocial Support	46
Con	clusion	48
Ann	exes	49

### Acronyms

ADEA	Association for the Development of Education in Africa
APA	African Psychological Association
CDC	Center for Disease Control
CESA 16-25	African Union Continental Education Strategy for Africa 2016-2025
COVID-19	Novelle Coronavirus
EMIS	Education Management Information Systems
ICT	Information and Communication Technology
ICQN	Inter-Country Quality Node
TVSD	Technical and Vocational Skills Development
IFRC	International Federation of Red Cross and Red Crescent Societies
ILO	International Labour Organization
IT	Information Technology
PESTLE	Political, Economic, Social, Technological, Legal, and Environment
PPP	Public Private Partnerships
SDGs	Sustainable Development Goals
SDG 4	Sustainable Development Goal on Education
STEM	Science, Technology, Engineering and Mathematics
UNESCO	United Nations, Educational, Scientific and Cultural Organization
UNICEF	United Nations Children Fund
WDA	Workforce Development Authority
WFP	World Food Program
WHO	World Health Organization

### 1. Introduction

Around the world, the COVID-19 pandemic has exposed the underlying vulnerabilities in our education systems to quickly adapt to virtual and remote learning and reminded us of the volatility and uncertainty that the future can bring. Technical and vocational skills development (TVSD<sup>1</sup>) has been the most impacted given its focus on delivering hands-on, practical skills at a time when face to face interaction is no longer possible. While extent and sophistication may vary, TVSD pedagogies rely heavily on demonstration of practical work, specialised equipment, apprenticeship, other forms of work-based learning and learning-by-doing. The ILO-UNESCO-WBG (2020)<sup>2</sup> publication rightly highlights that while a renewed focus on theoretical classes seems to be a logical short-term crisis response, it is not adequate for prolonged lockdowns.

Above all, the COVID-19 pandemic has compelled Governments and education and training institutions to come up with emergency response plans to mitigate the negative impacts on education systems including addressing learning loss due to school closures and revert to alternative means of education delivery, in particular non-residential models such as radio, TV broadcast, internet, SMS, among others. Access to good infrastructures, connectivity and internet remains a fundamental challenge in Africa. According to ILO-UNESCO-WBG (2020), while 87 percent of high-income countries can provide training remotely, only 5 percent of low-income countries can do so, many of which are in Africa. UNICEF goes further to highlight that 75 percent of the population has no access to internet in 25 African Union member states. UNEVOC (2021)<sup>3</sup> stipulates that in Sub-Saharan Africa, 89 percent have no access to a computer and 82 percent have no internet access. World Bank (2020)<sup>4</sup> highlights that across countries with broad-based connectivity among students and teachers, existing platforms for remote learning and medium/high internet penetration, remote learning is certainly a possibility. Within countries with larger sections of disadvantaged communities or more remote or spread-out inhabitations or having inadequate basic infrastructure and hence have weaker mechanisms to cope with the negative socio-economic impacts of the COVID-19 pandemic, remote learning may breed more inequality through learning delay and loss and in the case of TVSD create skills atrophy or "un-do" learning.

Before we proceed further, it is important to clarify the distinction that exists between TVSD<sup>5</sup> and TVET. TVSD has a broader and more outcome-focused remit which captures the traditional TVSD but also encompasses skills acquired through informal and non-formal semi-structured training and includes soft skills. ADEA has since the ADEA Triennale 2011 opted for this term being more expansive and reflective of the education and training taking place across Africa.

<sup>&</sup>lt;sup>1</sup> EU Commission (2012), Technical and vocational skills development (TVSD) indicates a move away from a school-orientated approach and includes non-formal programmes which may be delivered in the workplace, does not lead to formal qualifications and encompasses training in the informal economy; TVSD is understood as the acquisition of knowledge, practical competencies, know-how and attitudes necessary to performing a certain trade or occupation int he labour market. The notion of TVSD is non-discriminatory with regard to age, status, stage of life, type of learning, training environment and level of training. TVSD also indicates a move away from a purely school-orientated approach and includes non-formal programmes which may be delivered in the workplace, does not lead to formal qualifications and encompasses training in the informal economy.

<sup>&</sup>lt;sup>2</sup> ILO-UNESCO-WBG (2020), Skills Development in the time of COVID-19: Taking stock of the initial responses in technical and vocational education and training

<sup>&</sup>lt;sup>3</sup> UNEVOC (2021), <u>https://unevoc.unesco.org/home/COVID19\_digital\_training</u>

<sup>&</sup>lt;sup>4</sup> World Bank (2020), <u>TVET Systems' Response to COVID-19: Challenges and Opportunities</u>

<sup>&</sup>lt;sup>5</sup> Technical and vocational skills development (TVSD) emerged as a strong component of the ADEA Triennale 2011, "Promoting critical knowledge, skills and qualifications for sustainable development in Africa:How to design and implement an effective response through education and training systems?"

To ease navigation through the remainder of this document, a matrix is proposed which draws from the World Bank (2020) matrix consisting of three tiers, namely Coping, Managing Continuity and Improving and Accelerating Progress to depict a full spectrum of possible TVSD preparedness and response strategies.

	TVSD and COVID-19 Relevant Stages				
	Coping	Managing Continuity	Improving and Accelerating Progress		
OBJECTIVE	Reduce learning losses while schools are closed and support the emergency response through skills training	Promote learning recovery as schools and businesses gradually reopen	Build on innovative policy responses and lessons learned during the first two phases and build back better programs		
POLICY ACTIONS	<ul> <li>Provide remote TVSD learning where possible.</li> <li>Continue work- based learning to the extent possible.</li> <li>Engage TVSD trainers and students in provision of skills for the emergency response (health workers, care services, essential service workers).</li> <li>Where possible, exploit opportunities to skill idle (furloughed or unemployed) workers and train TVSD instructors.</li> </ul>	<ul> <li>Embed hygiene skills in learning programs.</li> <li>Work with employers on adapting work safety conditions for work- based learning.</li> <li>Reopen schools and work placements with flexibility to accommodate varying needs and contexts.</li> <li>Recognise prior learning obtained during closures.</li> <li>Provide psycho-social support to manage mental health impacts of the crisis.</li> <li>Provide tailored support for vulnerable students.</li> <li>Prepare for rapid assessment and response to emerging skill needs.</li> </ul>	<ul> <li>Design new or expand current programs to address emerging skill needs, in collaboration with in-company trainers and mentors.</li> <li>Invest in providing flexible (modular, part-time, evening) learning.</li> <li>Facilitate modular training and micro-credentialing in TVSD and life-long learning.</li> <li>Implement Tracer studies to track TVSD graduates' employability.</li> <li>Work in partnership with incompany trainers to provide rapid and modular skills training to idle and unemployed workers.</li> <li>Continue to build on remote learning infrastructure and skills.</li> <li>Structurally embed successful innovations in skill development systems.</li> </ul>		

Matrix on TVSD and COVID-19 Relevant Stages, World Bank (2020), <u>TVET Systems' Response to</u> <u>COVID-19: Challenges and Opportunities</u>

### 2. Reopening of Learning Institutions: Challenges and Opportunities

## A. Situating the TVSD experience: Location, vulnerability, content, sophistication, access to distance learning, modality of learning

TVSD, differs significantly from other segments of education in that it takes place across different locations. In contrast with basic schooling and higher education that are located mainly at school and university premises, TVSD may take place through informal education, in secondary colleges, in NGOs, in specialised TVSD centres and at the workplace, among others. The World Bank (2020) stipulates that TVSD students on a higher count come from disadvantaged households of lower socioeconomic status compared to peers of similar levels in general education. Content also differs substantially based on country, context and demands of the local economy and labour market. Given its focus on demand centricity and work readiness directly with the labour market, TVSD provision tends to focus on areas that are relevant, topical, and borne out of national and local contexts. Sophistication is another variable that is inextricably linked to the state of the economy and manufacturing base and whether the economy is agrarian, low-income, middle-income or emerging sector oriented and therefore influences and impacts the nature of TVSD delivery. The UNESCO Institute for Statistics (UIS) estimates that the share of upper secondary level TVSD students, which globally make up the majority of TVSD learners, is 15 percent in low-income countries compared to 21 and 28 percent in middle and high-income economies, respectively. What further complicates the situation across Africa, is that to a large extent, the closure of schools has occurred against the background of persistent education inequality where learners attend under-resourced schools with poor infrastructure, ill-equipped teachers, low attainment, and high dropout rates. According to a brief by the ADEA-led consortium (2021)<sup>6</sup>, only 64 percent of primary and 50 percent of secondary teachers have received minimum training on the use of ICT in Sub-Saharan Africa.

#### **B.** Challenges

The hallmark of TVSD; its focus on practical skills and work readiness makes remote learning particularly challenging (ILO-UNESCO-WBG, 2020). Most countries in Africa are relying primarily on low/no tech, offline such as printed learning kits, books, radio and TV<sup>7</sup>, where internet penetration is low. For the time being, countries and TVSD systems are under pressure to rapidly accustomed to a virtual environment and curricula are being trimmed with examinations being adjusted to cover only content that has been dispensed or replaced with continuous assessments.

Remote learning is a weak substitute for practical exercises, especially when the "doing" is not computer related such as a course in cyber security or they require equipment or aids that are not the run-of-the-mill, available at home or next door but rely on expensive, industrial-grade machinery. In certain cases, virtual simulations can be used, however such platforms and equipment are seldom within the reach of low and middle-income countries and TVSD centres because of prohibitive conditions erected through barriers to access such as financial support, limited internet access and

<sup>&</sup>lt;sup>6</sup> ADEA (2021), First Brief KIX Observatory on COVID-19 Responses; Teaching and Learner Well-Being during the COVID-19 pandemic

<sup>&</sup>lt;sup>7</sup> ADEA (2021), Delivering Education in the COVID-19 environment, Available from: <u>https://www.adeanet.org/en/news/delivering-education-home-adea-african-member-states-amid-covid-19-pandemic-brief-status-report</u> (Accessed on 2 May 2021)

data costs, learners' internet access, availability of equipment, cumbersome procurement procedures, etc. Another challenge is that the comparability and mapping of content for secondary, general and higher education is more straightforward than for TVSD which finds itself no easy replacement in terms of transposability of content. Upper TVSD may have some more resonance with higher education given the more "academic" nature of some of the content and the work-specific skills that are akin to university education. With workplaces closed or not open to TVSD trainees due to statutory measures in place or hygiene and sanitation along with social distancing protocols, lethargy and deskilling may impact already acquired skills with the net effect to promote skills atrophy and hence "unlearning". With school closures, trainers and students are having to deal with self-isolation and confined spaces at home with little distraction leading to mental stress and psychosocial problems.

In some countries, TVSD may be attached to a Ministry other than that of education, or in certain cases, jointly managed by different Ministries and agencies. Consequently, there is a need to ensure that TVSD plugs cohesively in the overall educational response to mitigate the impact of the pandemic. Otherwise, funds will get diverted into resources solely for general education. Another risk is that because of the crisis, funds initially earmarked for TVSD may be shifted into unemployment benefits or other emergency measures.

### C. Opportunities

TVSD is well-placed to develop important skills and solutions to mitigate the impacts of the COVID-19 pandemic. This crisis time may also lend itself to an opportunity to rethink, re-imagine and revamp the approach towards TVSD and skills development to enhance its contribution to economic recovery in line with the UN Sustainable Development Goals and Africa's Agenda 2063: The Africa We Want.

In certain cases, practice can be translated through virtual simulations or through virtual and augmented reality. In this time of crisis, several Governments have pushed through innovations in an attempt to make the most of a negative situation. Countries like Mauritius and Rwanda have resorted to more sophistication in using virtual simulation environments and introduced Gamified Online Learning to keep TVSD students engaged and bolster the overall student experience. Morocco introduced the Office of Professional Training and Promotion of Work (OFPPT) to supervise virtual classes for all levels and types of vocational training and where learners can have access on the platform using computers, tablets or telephone free of charge. Practical work is filmed and projected to students and trainees.

According to the World Bank (2020), TVSD's focus on practical skills creates certain challenges for distance learning but also provides opportunities to acquire some useful skills through work-based learning during the crisis. It is common knowledge that during the 2014-2015 Ebola outbreak in Sierra Leone, a National Ebola Training Academy was set up to provide a platform of clinical training modules for frontline Ebola health care workers. The intensive short-term training had contributed to control the outbreak. TVSD's work-readiness focus could also imply that TVSD students could relatively easily be engaged in the emergency response.

To accommodate partial re-opening and social distancing, many tasks may be encouraged through self-learning with learners being followed individually at school or at the workplace as per a strict timetable. TVSD providers may temporarily cut down on theoretical classes, decrease the number of hours and/or days to practice a shift system, reduce class sizes and invite smaller cohorts of learners

face-to-face at school through live TV or asynchronous pre-recorded videos. The COVID-19 pandemic has also paved the way for some practical skills to be uptaken through emergency response services such as preparing personal protective equipment or meals for disadvantages and vulnerable groups or building containers for storing disinfectants. Some TVSD practical skills can find transposability at home, such as catering and hospitality, childcare or gardening and horticulture. Work-based learning may be integrated into a tutored project and practical training may be shortened, or when possible postponed or revert to project work or simulated demonstrations.

### 3. Rationale, purpose and target group for this REBTK

In order to obtain a clearer view of the status of education during the COVID-19 period, ADEA conducted two rapid surveys between March and June 2020 on the national situation of the education sector in 14 most-affected African countries. The main rationale and purpose of this engagement has been to provide guidance to the countries on how to better prepare for the future insulation of education to crises like COVID-19 while upping the resilience of education systems. To facilitate the way forward, ADEA has developed this TVSD Remote Education Benchmarking Toolkit jointly with countries and partners, that will inter alia, assist and handhold member countries in their change management model and bolster their TVSD remote learning readiness, act as a guide to progressively increase the level of sophistication in TVSD delivery through a checklist of normative standards applicable to TVSD and finally, provide a benchmark for Ministries responsible for TVSD and skills development to revise their national emergency response plans. The purpose is simple - make remote education in TVSD more accepted, resilient and sustainable.

### 4. How to use the **REBTK**

This Remote Education Benchmarking Toolkit employs a checklist-based approach to assist countries establish and sustain comprehensive and appropriate remote education systems in harmony with regional and international systems and practices.

It has 13 norms and a set of best practice standards under each norm, and a three-level benchmarking criterion: Ready, Partially Ready and Not Ready to serve as a pre-condition for country preparedness to deliver remote education during crisis or in normal situations. The Toolkit will also guide the strengthening of the capacity of relevant staff of Ministries of Education and education practitioners to develop remote education.

With this Toolkit, different technicians in the same ministry of education will need to review all the norms and standards to assess their level of readiness in delivering remote education effectively. In case the country is not ready yet or partially ready, the Toolkit will assist in identifying the areas of weakness, and hence what to address to mitigate the identified bottlenecks.

# 5. User guide for the full-scale implementation of the REBTK for TVSD

To harmonise the full-scale implementation of the Remote Education Benchmarking Toolkit (REBTK) for Technical and Vocational Skills Development (TVSD) across the African continent and to enable countries to use the toolkit effectively to review their status, identify gaps and thereafter development action plans to progressively bridge the gaps, the following guidelines, which have emanated from the pilot exercise, will provide the foundation for a systematic and coherent full-scale dissemination of the toolkit. These will also ensure a standardised reporting method to facilitate data analysis and will keep the control variables in-check for cross-national analysis.

### Step 1. Sampling Technique & Data Collection (By leading entity/department for a given country)

- a) To identify and define the target population which include, amongst others, officials from governmental organisation responsible for the development of remote TVSD, educational/TVSD statutory bodies, representatives of TVSD establishments, remote TVSD trainers, and remote TVSD trainees.
- b) To segregate the target population into different stakeholder clusters (forming Clusters).
- c) To implement a stratified sampling technique to ensure that every stakeholder group participates in the study and that the experience, knowledge, and involvement of each group is captured.
- d) To disseminate the REBTK for TVSD to the defined sample population (normally 200 minimum depending on the number of days for field data collection) for data collection, the research method being survey rather than face-to face interviews.
- e) To mobilise and train the financial and human resources to facilitate data collection on the field.

### Step 2. Data Compilation and Reporting (By leading entity/department for a given country)

- a) To collect and compile the survey results in the form of tally (frequency) for each category (*Not Ready, Partially Ready, Ready*) for each Standard.
- b) To specify the readiness state by Standard based on the maximum frequency for a given category (*Not Ready, Partially Ready, Ready*).
- c) To compute the tally for the number of Standards for a given Norm classified as *Not Ready, Partially Ready, Ready.*
- d) To specify the readiness state by Norm based on the maximum frequency of Standards for a given category (*Not Ready, Partially Ready, Ready*).

Assumption: each Standard have equal relevance and impact.

e) To fill the PESTEL template (at Annex A) provided by responding to the criteria described under each category.

- f) To fill the *"Brief description of current implementation level"* for the given country while highlighting the country-specific qualitative data.
- g) To consolidate and fill the "Supporting Documentation (Policy documents, strategy documents, guiding frameworks, reports, etc)" for a given country, based on responses of the survey. The supporting documentation can be referred to using APA Style referencing system and the document submitted as attachments.
- h) To use the "Gap Analysis and Action Plan Tool" (Annex B) to review status, identify gaps, find root cause(s) for the gaps, develop action plans to bridge the gaps and monitor implementation through a three-phase evaluation. A fictitious example has been provided for ease of understanding.

#### Step 3. Cross National Analysis (By Lead Institution/department for remote TVSD)

- a) To segregate the countries into developed, developing and under-developed economies based on the filled PESTEL template, and the qualitative description.
- b) To conduct three separate comparative analysis.

Note: A flowchart is found at Annex C for ease of reference of the process.

The following are the 13 norms (the sets of standards for each norm is contained in the matrix):



### Norm 1: Robust policy, legal, regulatory and quality-assurance framework

There is need to put in place robust policies and protocols that ensure flexible and continual access to quality and equitable remote education as well as work-based learning including apprenticeship, especially in line with essential services and businesses that stay open. The policies and procedures should be accompanied by strong legal frameworks and revised regulatory guidelines that: (1) facilitate the establishment of a Remote TVSD Unit, embedded within the Ministry of Education or Ministry in which TVSD in anchored, with a clear mission, vision, strategy and legal mandate to oversee the provision of remote TVSD education; (2) ensure coherence and consistency of approach to TVSD in case the sub-sector is situated under a different Ministry; (3) provide quality and relevance in terms of trainer preparation, learner needs, industry needs and new, flexible ways of interaction among the different actors; (4) enable learner acquisition of the necessary 21<sup>st</sup> century competency skills and embracing digital culture; and (5) connect training institutions with in-company trainers and mentors, including Recognition of Prior Learning (RPL) mechanisms, in order to promote economic prosperity and social cohesion.

	LEVEL OF COUNTRY READINESS				
	READY	PARTIALLY READY	NOT READY	Brief Description of Current Implementation Level	Supporting Documentation
	Norm	1: Robust policy, legal, regulator	y and quality assurance frame	work	
STANDARDS	A centralised Remote TVSD Unit established within the Ministry of Education or relevant Ministry, well-resourced and functional, with a clear mission, vision, strategy and legal mandate, and clear guidelines on multisectoral engagement to provide remote TVSD education.	Remote TVSD Unit established within the Ministry of Education or relevant Ministry with weak strategy and legal mandate; guidelines on multisectoral engagement to provide remote TVSD education are not clear.	Remote TVSD Unit is not yet established within the Ministry of Education or relevant Ministry.		

		r	· · ·	
All stakeholders have a clear and defined role in the governance of the remote TVSD system.	Only a couple of stakeholders are involved in the governance of remote TVSD system, the roles are not clear and defined for other stakeholders.	There are no clear and defined delimitation of governance towards the ownership of remote TVSD system.		
Policy in place guiding flexible and organised access to remote TVSD education at all locations of TVSD delivery including work-based learning.	Policy development process ongoing / only procedures in place guiding access to remote education across certain locations of TVSD delivery.	There is neither a process of policy development nor procedures guiding access to remote TVSD education.		
There is a clear, established protocol for flexible work- based learning and arrangements for remote TVSD personnel on essential services and other businesses.	There are some ad-hoc efforts of involving remote TVSD personnel in work-based arrangements and emergency response.	There is no involvement of remote TVSD personnel in emergency response mechanisms.		
Remote TVSD education is relevant, with respect to pre- service and in-service trainer training development plan, learning needs, industry needs and embraces new ways of interaction.	Remote TVSD education is not adequately based on learning needs, industry needs and less emphasis on some new ways of interaction, with no clear trainer preparation strategy.	There is no strategy for retraining trainers and reorienting curriculum for remote TVSD education.		
Remote education ensures acquisition of technical & soft skills, 21 <sup>st</sup> century competency skills, and embracing digital culture.	Lack of clarity in balancing between acquisition of technical & soft skills, 21st century competency skills, and embracing digital culture.	There is little acquisition of 21 <sup>st</sup> century competency skills, with emphasis still on academics skills.		

Coordination task team assessing flexible competency-based framework between training institutions and employers (covering areas such as revised form of apprenticeship, artisan training and work-based learning) for remote TVSD.	Coordination partly established between training institutions and employers, including revised form of apprenticeship and artisan training, for remote TVSD.	The level of coordination not clear between training institutions and employers for remote TVSD.	
There is a centralised coordination unit and system that reviews and validates remote TVSD delivery and quality- assurance prior to broadcast.	A national coordination unit has a seldom and scant overview of remote TVSD delivery continuity and quality assurance prior to broadcast.	There is no system of pedagogical vetting of remote TVSD content prior to virtual dissemination.	
There is a clearly established e-RPL system to recognise skills for skilled workers and online/virtual recognition of prior experience for a number of established sectors.	There are online platforms that are seldom operational in recognising skills through e- RPL and experience for some sectors.	There is no e-protocol for access to RPL or procedures on how to e- validate experience.	
There is a clear process of creation and validation of short skills-based courses online for re-skilling and re-deployment of front liners, essential services and other businesses.	There is a weak policy on creation and validation of virtual short courses for reskilling and re-deployment.	There is no policy on creation and validation of virtual short courses for reskilling.	
There is an established policy on training levy <sup>8</sup> to address priority training for needy sectors.	There is a policy on training levy to address priority training but it is not functional.	There is no policy on training levy to address priority training.	

<sup>&</sup>lt;sup>8</sup> Training levy is not necessarily applied solely as a levy on working persons' salary as a mandatory contribution. It can be imposed on cash-rich and well-performing economical sector employers based on country and national context. For instance, if the diamond industry is an important source of export, it may be applied to employers in this economic activity

There is a clearly established policy on social safety net coverage for the extremely poor students and families to support ongoing remote learning and appropriate quantum based on vulnerability.	There is a policy on social safety net coverage for the extremely poor students and families to support ongoing remote learning but it does not have wide coverage.	There is no policy on social safety net coverage for the extremely poor students and families to support ongoing remote learning.	
There is an established guideline for the optimum divide between theoretical and practical learning for each trade.	There is a guideline relating to the divide between theoretical and practical learning for certain trades but it is not functional.	There is no guideline around the divide between theoretical and practical learning for specific trades.	
There is a fully-functional coordination unit that oversees in-school and in-company training delivery.	There is a coordination unit that oversees in-school and in-company training delivery but monitoring and implementation is ad-hoc.	There is no coordination unit that oversees in- school and in-company training delivery.	

### Norm 2: Appropriate teaching practices and competency-oriented learning curricula

For remote TVSD education to be effective, curricula for trainer preparation and skills uptake should focus on both theory and practice-based demonstration sessions that encourage interaction and learning-by-doing. The learning curricula should incorporate inputs of relevant stakeholders to build a solid bridge between the world of learning and world of work. Moreover, the curriculum should align with the existing framework and be recognised by different authorities nationally and internationally. The courses should: (1) have contents and teaching practices that meet the needs of the industry; (2) contain a reasonable balance of technical, soft and work based skills; (3) carry out competency based assessment to evaluate the skills progression of the learner; (4) integrate quality instructional materials that emphasises learning-by-doing; (5) mainstream and regularly evaluate and update technology due to its short shelf-life in industry; and (6) strengthen learner-centred pedagogy adopted for remote TVSD education.

	LEVEL OF COUNTRY READINESS					
	READY	PARTIALLY READY	NOT READY	Brief Description of Current Implementation Level	Supporting Documentation	
	Norm 2:	Appropriate Teaching and com	petency-oriented Learning Curr	ricula		
ARDS	There is an established protocol for trainer preparation for remote TVSD education with a focus on competency-based education.	Ad hoc trainer preparation for remote TVSD education with scant preparedness on competency-based education	No trainer preparation for remote TVSD education with focus on competency- based education			
STAND/	Remote TVSD education curriculum in place with clear input from industry experts and organised course delivery in a way that trainers and learners simulate practice and demonstration	Organisation of remote TVSD education curriculum for course delivery is poor and difficult to showcase demonstration	Remote TVSD education curriculum is not in place.			

The curricula integrate contents, teaching practices, balance skills methodology, competency based assessment and quality instructional materials through virtual platforms	The curricula integrate some contents, teaching practices, skills methodology, competency-based assessment and quality instructional materials to enrich learning.	Curricula does not integrate contents, teaching practices, balance skills methodology, competency-based assessment and quality instructional materials to enrich learning.	
Mechanism in place for regular evaluation and updating of technology to effectively support the learning goals and enhance the learning experience.	Mechanism for evaluation of learning is in place but weak on assessing competencies delivered virtually and the evaluation is ad hoc/not regular.	No mechanism in place for regular evaluation of technology to effectively support the learning goals and enhance the learning experience.	
Courses included in the program contain content that fully aligns with appropriate learning standards with a balance of skills and competency approach and include provisions for both intervention and accelerated learning opportunities.	Courses included in the program contain content that align with some of the learning standards skills or competency approach and provisions for intervention and accelerated learning opportunities are weak.	Course content does not align with appropriate learning standards skills or competency approach and has little or no provision for intervention and accelerated learning opportunities.	
Courses included in the program provide regular and consistent opportunities for interaction that support active learning-by-doing and evaluation of competencies	Courses included in the program provide only some or ad-hoc opportunities for interaction that support active learning-by-doing	Courses included in the program provide little or no opportunity for interaction that support active learning-by-doing	

Courses included in the program provide a variety of activities that include options for indepth learning through authentic problem-solving, work-based learning and experience from industry internships.	Courses included in the program provide a limited variety of activities for in-depth learning through authentic problem-solving, work-based learning and experience from industry through internships.	Courses have no variety of activities for in-depth learning through authentic problem-solving, work-based learning and experience from industry internships.	
The curricula strengthen learner-centred pedagogy for remote TVSD education.	Learner-centred pedagogy for remote TVSD education is weak.	The curricula show little or no learner-centred pedagogy for remote TVSD education	
Learning curricula and content are available in both synchronous modes through adequate internet connectivity on platforms and a variety of asynchronous modes	Learning curricula and content are available in asynchronrous modes mainly through low tech in printed handouts or pre-recorded sessions on CDs and pendrives	Learning curricula and content are neither available in synchronous nor asynchronous modes	

### Norm 3: Strong trainer workforce capacity

A well-trained and qualified trainer workforce with appropriate techno-pedagogical and industry skills is essential for successful remote TVSD education. This calls for comprehensively integrating aspects of remote TVSD education in in-service educator training that includes an elaborate in-service human capacity building programme on remote TVSD education, externships, continuous professional development, coaching, and mentoring for psychosocial support of students.

	LEVEL OF COUNTRY READINESS				
	READY	PARTIALLY READY	NOT READY	Brief Description of Current Implementation Level	Supporting Documentation
		Norm 3: Strong trainer	workforce capacity		
	Remote TVSD education is embedded in service trainer training including training on specific remote TVSD education software.	Remote education is partially integrated in service trainer training including training on some remote TVSD education software	Remote TVSD education is not integrated in service trainer training.		
ANDARDS	An elaborate in-service human capacity building programme is in place on remote TVSD education	An in-service human capacity building programme is in place on remote TVSD education, but it is not comprehensive.	No in-service human capacity building programme is in place on remote TVSD education.		
ST	Existence of protocol on externship, continuous professional development, coaching and mentoring of teachers related to remote TVSD education delivery.	There is no protocol, but a strategy exists on externship, continuous professional development, coaching and mentoring of teachers related to remote TVSD education delivery.	No protocol or strategy is in place on externship, continuous professional development, coaching and mentoring of teachers related to remote TVSD education delivery.		

There is a clear process of re-skilling and redeployment of experienced industry practitioners as remote TVSD trainers	There is partial redeployment of unemployed experienced industry personnel as remote TVSD facilitators	There is no redeployment of unemployed industry practitioners on remote TVSD training	
Integration of innovative approaches towards enhancing trainer capacity building in remote teaching and learning e.g. peer mentorship, project-based learning, practiced-based learning and collaborative learning.	Trainers are partially trained on cloud and trained on innovative approaches towards enhancing trainer capacity building in remote teaching and learning partially integrated.	No professional training of trainers on cloud and integration of innovative approaches towards enhancing trainer capacity building in remote teaching and learning.	
Trainers receive proper and consistent training on provision of social emotional learning and psychosocial support to assist students in remote TVSD delivery	Trainers have received ad- hoc sessions on social emotional learning to assist students in remote TVSD delivery	Teaching practices adapted to provide psycho-social support in remote TVSD education are inexistent.	
Incentive scheme in place to reward and retain dedicated, and innovative trainers involved in remote TVSD education.	Incentive scheme in place to reward and retain dedicated and innovative trainers involved in remote TVSD education.	There is no scheme and /or strategy to reward and retain dedicated and innovative trainers involved in remote TVSD education.	

### Norm 4: Equitable and inclusive access to remote education

The issue of equitable and inclusive access to remote education is an opportunity and a challenge at the same time. The remote education system should provide online and offline learning platforms including appropriate pedagogical and didactical tools to: (1) the hardest to reach; (2) most vulnerable households and areas; (3) women and girls; and (4) students with disabilities. TVSD education is considered as an effective approach to empower marginalised groups in society by increasing their skills and employability opportunities. The TVSD remote education system should adopt a flexible approach rather than a one-size-fits-all.

		LEVEL OF COUN	TRY READINESS		
	READY	PARTIALLY READY	NOT READY	Brief Description of Current Implementation Level	Supporting Documentation
No	rm 4: Equitable and inclusive acces	s to remote education			
S	More than 40% of TVSD students and trainees have equitable access to remote learning platforms and work- based learning through a host of schemes and incentives	Between 20% and 40% of TVSD students have access to the online/distance learning platforms and work- based learning	Less than 20% of TVSD students have access to the online/distance learning platforms and work-based learning.		
STANDAR	Programme contents delivered through remote TVSD education are customised to learners' cognitive levels, context and circumstances.	Programme contents delivered through remote TVSD education are partially customised to learner's levels.	There are no programme contents delivered through remote TVSD education customised to learner's levels.		
	The remote TVSD education uses local & foreign languages and inclusive pedagogies.	The remote TVSD education uses limited local language and some inclusive pedagogies.	The remote TVSD education uses limited local language only and no inclusive pedagogies.		

The remote TVSD education reaches more than 80% hardest to reach whether offline or online	The remote TVSD education reaches between 50% to 80% of those hardest to reach	The remote TVSD education reaches less than 50% of those hardest to reach.	
There is access to education of most vulnerable/marginalised groups that are less likely to enrol and more likely to drop out of school and assigned to alternative arrangements for workplace practical training	Access of most vulnerable/marginalised groups that are less likely to enrol and more likely to drop out of school is limited and re- assigned to workplaces for practical training	There are no arrangements to ensure access of most vulnerable/marginalised groups that are less likely to enrol and more likely to drop out of school is limited and no workplace training	
Remote TVSD education's eligibility requirements i.e. tools/ calendar/work-based attachment and levels are well communicated to learners and the community.	Remote TVSD education's eligibility requirements i.e. tools/ calendar and levels exist but not well communicated to students and the community.	Remote TVSD education's eligibility requirements i.e. tools/ calendar and work-based engagements and levels does not exist.	
There is a clearly established protocol for gender mainstreaming across remote TVSD education and artisan and technician jobs with an increase of 10-30% uptake of girls, back-to-work women and vulnerable and hardest-to-reach groups within 2-5 years	There exists some ad-hoc sensitisation campaigns for more girls' and women's participation in remote TVSD education and artisan and technician training preparation	There is no gender mainstreaming protocol in place to increase girls' and women's participation and remote TVSD education and artisan and technician training preparation	

### Norm 5: Capacity, infrastructure and new technologies

The remote TVSD education approach should rely on diversified vehicles tailored to contextual situations of trainers, learners, employers and communities. This necessitates having and maintaining infrastructure that supports the use of feature phones, tablets, laptops, software, intranet resources; as well as higher penetration of internet connectivity or fibre optic for eLearning platforms and to provide assistance to those living with poor connectivity. For TVSD, there is need for a whole-of-approach that also includes work-based learning being accessible in its different formats to connect employers and trainees for skill uptake.

	LEVEL OF COUNTRY READINESS				
	READY	PARTIALLY READY	NOT READY	Brief Description of Current Implementation Level	Supporting Documentation
		Norm 5: Capacity, infrastructu	re and new technologies		
S	The remote TVSD education system uses feature phones, apps and learning software.	The remote TVSD education system partially uses feature phones, apps and learning software.	The remote TVSD education system does not use feature phones, apps and learning software.		
TANDARD	The remote TVSD education system uses educational learning software programmes	The remote TVSD education system partially uses educational learning software programmes	The remote TVSD education system does not use educational learning software programmes		
S	The remote TVSD education system uses internet/intranet resources.	The remote TVSD education system seldom uses internet/intranet resources.	The remote TVSD education system does not use internet/intranet resources.		

There is a hotline and clear system in place for the feedback loop of ICT-use in remote TVSD education to address difficulties encountered	Remedial actions are in place but not comprehensive enough to respond to various difficulties encountered during remote TVSD education sessions.	There are no feedback loops and remedial actions in place to address difficulties encountered during remote TVSD education sessions.	
Trainers have been trained in the use of ICT and have at their disposal a suite of tools for the creation of asynchronous and synchronous content adapted to TVSD	Trainers have access to tools but have not been adequately trained and mentored in the use of ICT for the creation of asynchronous and synchronous content adapted to TVSD	Trainers do not have access to the tools to devise online TVSD courses	
There is a clear protocol for the creation of online courses for national TVSD qualifications including a centralised platform for vocational open online courses (a VOOC platform)	There is a weak policy in place to encourage creation of materials adapted to TVSD online	There is no repository of online courses adapted to TVSD	
There is a specific task team to respond to those living in areas with poor internet connectivity and ensure remote TVSD pedagogical continuity	There exist alternatives but with lack of proper coordination to support remote TVSD learners and personnel living in areas with poor internet connectivity	There are no programs for remote TVSD to support those living in areas with poor internet connectivity.	

There is good and reliable internet connectivity infrastructure and sufficient coverage and bandwidth to support remote TVSD education including simulations	There is basic internet connectivity infrastructure but not sufficient coverage and bandwidth to support remote TVSD education. Training can be done in a centralised place at the rural level – community centre or village hall through shared access to connectivity	No internet connectivity infrastructure and wide enough coverage that can support remote TVSD education	
There is a clear protocol in place to assist learners with no access to computer devices outside class, hardest-to-reach areas with zero means to download remote TVSD education course material	Limited measures exist and applied ad-hoc to provide help to remote TVSD learners with no access to internet connectivity and computer and non-computer devices (including phones) outside class	No measures are in place to provide help to remote TVSD learners with no access to internet connectivity and computer and non-computer devices (including phones) outside class	
IT resources have been streamlined for more than 70% of students to access remote TVSD education material (low or high tech) and work on them.	There exist adequate IT resources to make it possible for 40% to 70% of students to access remote TVSD education material (low or high tech) and work on them.	Absence of IT resources to make it possible for less than 40% of students to access remote TVSD education material (low or high tech) and work on them.	
Local and foreign languages are fully available in ICT tools, including personalisation to vernacular	Local and foreign languages are partially used in ICT tools.	Local languages are not used in ICT tools.	

Remote TVSD educational materials are replete with self- paced pre-recorded sessions of practical demonstrations and printed step-by-step guides to skilling in a number of trades and crafts.	Remote TVSD educational materials contain some demonstration videos and mostly printed step-by-step guides to skill building in very few trades and crafts.	Remote TVSD educational materials are purely theoretical and do not contain step-by-step guides to skill building	
The education online platform has in-depth provision for virtual simulation software including virtual and augmented reality for TVSD education and demonstrations along with offline functionality option.	The education online platform has limited provision for virtual simulations software and systems for TVSD education	The education online platform has no provision for virtual simulation systems for TVSD education	
There is extensive and consistent provision made for alternative infrastructures solution including TVs and Radios for effective remote TVSD learning	There are provisions for alternative infrastructures solution including TVs and Radios but not widely spread for effective remote TVSD learning	There are no provisions for alternative infrastructures solution including TVs, Radio, among others.	
More than 60% of TVSD establishments implement remote learning	30% to 60% TVSD stablishments implement remote learning	Less than 30% of TVSD establishments implement remote learning	

### Norm 6: Strong Education Management Information System

Education management information system is one of the key norms for organising and documenting effectiveness of remote TVSD education system to be able to capitalise on the key lessons learnt and to share the useful links with the wide networks especially countries and regions confronting similar challenges. The following are the key aspects to be embedded in an effective education management information system for remote TVSD education system: (1) timely data collection, analysis and utilisation for remote TVSD education is strengthened by the Ministry of Education or concerned Ministry; (2) the existing country's EMIS strategy embed remote TVSD education; and (3) the remote TVSD education data are customised to the school level, with the learner at the centre, and socio-economic characteristics.

		LEVEL OF COUN	TRY READINESS		
	READY	PARTIALLY READY	NOT READY	Brief Description of Current Implementation Level	Supporting Documentation
		Norm 6: Strong Education Ma	nagement Information System		
DARDS	Remote TVSD education data are regularly collected, analysed, and communicated to interested audience in a timely manner.	Remote TVSD education data are not regularly collected, analysed, and communicated to interested audience in a timely manner.	The remote TVSD education data are neither collected nor available.		
STAN	Remote TVSD education decisions are empirically- based and allow for matching skills demand to skills supply for better economic activity	Remote TVSD education decisions are sometimes evidence-based to support skill building for economic activity	Where remote TVSD education exists, decisions are not evidence- based to support skill building for economic activity		

Where measured, remote TVSD education data are fairly comprehensive in terms of inputs <sup>9</sup> and on outputs and outcomes <sup>10</sup> for impactful policy making	Where measured, remote TVSD education data are fairly comprehensive in terms of inputs <sup>11</sup> but do not track outputs and outcomes <sup>12</sup> for impactful policy making	The remote TVSD education data measure inputs only and are incomplete	
The remote TVSD education data component is embedded in the county's and Country's EMIS strategy that permit analytical work for empirical based policy making	Remote TVSD education data component is somewhat embedded in the local county's EMIS or on more rudimentary data capture tables and there is a weak EMIS strategy in place	The county or country either does not have an EMIS strategy in place or, if in place, does not include remote TVSD education data component.	
The remote TVSD education data users, including employers, are regularly consulted every quarter in order to update the EMIS information and implemented through e-surveys as well as regular surveys	The remote TVSD education data users are consulted but not on regular basis through surveys.	The remote TVSD education data users are not consulted at all.	

<sup>&</sup>lt;sup>9</sup> Inputs include students' level of education, type, nature, parents' level of education and socioeconomic standing; gender ratio per program; language; disability (if any)

<sup>&</sup>lt;sup>10</sup> Outputs and outcomes describe level of attainment, scale and scope of completed artisan training or apprenticeships, placements in jobs, tracer studies, etc.

<sup>&</sup>lt;sup>11</sup> Inputs include students' level of education, type, nature, parents' level of education and socioeconomic standing; gender ratio per program; language; disability (if any)

<sup>&</sup>lt;sup>12</sup> Outputs and outcomes describe level of attainment, scale and scope of completed artisan training or apprenticeships, placements in jobs, tracer studies, etc.

### Norm 7: Public and private partnership

Institutionalised partnership between players in the public and private sector, as well as with civil society, development partners and other key stakeholders ensure coherence in developing an efficient and effective ecosystem for remote education. This linkage between industry and Government is even more important for TVSD due to the practical model of learning based primarily with industry. The key is to enter as equal partners rather than being subservient to Industry.

		LEVEL OF COUNTR	Y READINESS		
	READY	PARTIALLY READY	NOT READY	Brief Description of Current Implementation Level	Supporting Documentation
		Norm 7: Public and pri	vate partnership		
	A PPP coordination unit for remote TVSD education is in place, including the possibility of long-term financing facilities and work-based learning (remote and physical) and it is well implemented	A PPP coordination unit for remote TVSD education exists, including the possibility of long-term financing facilities and work- based learning, but it is ad hoc.	A conducive environment for PPPs in remote TVSD education does not exist.		
N V L S	Skills necessary to prioritise and execute public private partnership (PPP) are enhanced for remote TVSD education	Skills necessary to prioritise and execute public private partnership (PPP) exist but are not enhanced for remote TVSD education.	Skills necessary to prioritise and execute public private partnership (PPP) do not exist for remote TVSD education.		

Fully functional institutional coordination mechanisms are in place between teachers, education actors and communities for the smooth remote TVSD education delivery.	Processes are in place to regularly consult beneficiaries of remote TVSD education regarding their needs, but consultations are on an ad hoc basis	No consultations or processes in place to regularly consult beneficiaries of remote education regarding their needs and evaluate the relevance and practical utility of remote TVSD education programs.	
A comprehensive variety of delivery systems are in place for interaction and feedback, contacting beneficiaries of remote TVSD education, making detailed comments and developing strategies for learner reinforcement focused on skill and competency building.	Coordination mechanisms are in place between teachers, TVSD education actors and industry for the smooth online education delivery but are use in an ad hoc basis.	There is no institutional coordination mechanism for remote TVSD education.	
There is a specific training levy scheme and incentive structures operated on a matching- basis with private sector to encourage PPPs in remote TVSD education focused on generating skills outcomes, not inputs	There is a training levy scheme that is not skill outcome focused but rather input-based with private sector for remote TVSD education	There is no specific protocol in place for collaboration with private sector in PPP for remote TVSD education	
Existence of clear orientation and information guide (document) to learners and their parents/ guardians on remote TVSD learning technologies and practices, differentiated by need and vulnerability	Remote education is partially free for targeted TVSD learners.	Remote TVSD education is expensive for targeted learners and PPP structures are not developed	

There is an established procedure for business owners and employers to take on TVSD trainees against stipends as temporary skilled personnel in essential services and other businesses that are open	There are structures and incentives for business owners and employers to take on TVSD trainees as temporary skilled personnel but ad hoc and only in essential services	There are no structures and incentives for business owners and employers to take on TVSD trainees as temporary skilled personnel	
A clear roadmap of intermittent and periodic surveys and stakeholder consultations are conducted to assess gap analysis in skills and employment from crisis and a proper cycle of feedback is carried out on remote TVSD education	Informal and ad-hoc surveys are launched to identify skills and employment gaps resulting from crisis and feedback is partially collected on remote TVSD education	No skills and employment gap analysis during and post crisis is conducted and feedback collected on remote TVSD education	
A comprehensive policy is in place that provides accessibility support services, including e-portals for simulation or job portals, in compliance with special education policies and procedures in TVSD	Government covers 50% while private sector and/ or donors cover 50% of the cost of remote education including setting up of e- portals for simulation or job portals	Private sector and/ or donors cover 100% of the cost of remote education, including setting up of e- portals for simulation or job portals.	
TVSD learners and parents/ guardians are regularly consulted for appropriate decision making on remote learning practices.	Existence of information to TVSD learners and their parents/guardians on remote learning practices but not documented.	There is no guide or information to TVSD learners and their parents/ guardians on online learning practices.	

### Norm 8: Work-based Learning

Work-based learning is crucial for TVSD education as it helps learners to get exposed to and learn in a real world of work environment. This methodology allows to transform theoretical knowledge into practice and is focused on skill generation as opposed to theory and knowledge capture. Work-based learning takes place in a number of locations including secondary schools, specialised TVSD centres, NGOs, informal education, at the workplace, among others. It adopts a number of forms– from artisan training, apprenticeship, traineeship, internships, and shadow assignments at work. It allows learner to: (1) gain more practical experience; (2) test theoretical knowledge learned in class in an applied setting; and (3) work directly with supervisors and industry experts on site.

	LEVEL OF COUNTRY READINESS								
	READY	PARTIALLY READY	NOT READY	Brief Description of Current Implementation Level	Supporting Documentation				
	Norm 8: Work-based Learning								
STANDARDS	There is an effective mechanism in place for work-based learning that includes remote TVSD learning and it is consistently applied	A protocol for work-based learning that addresses remote TVSD learning exists but not yet implemented	No protocol in place for work based learning that addresses remote TVSD learning						
	There is a policy and scheme for TVSD's role in short-term and bullet e-courses on re-skilling and up-skilling gaps through a centralised virtual ecosystem because on e-surveys of gaps from industry and essential services during crisis	There is a policy and scheme for TVSD's role in short-term and bullet e-courses on re-skilling and up-skilling gaps but virtual ecosystem is not developed and surveys of immediate gaps in crisis are not done	No policy or scheme for TVSD's role in short-term or bullet e- courses on re-skilling and up-skilling gaps						

There is a virtual platform for work-based learning and remote skills exchange software between TVSD trainees and employers	There is a virtual platform for work-based learning and remote skills exchange software between TVSD trainees and employers but it is seldom used	There is no virtual platform for work- based learning and remote skills exchange software between TVSD trainees and employers	
There is a proper protocol and centralised system to administer online work-based learning for the capacity development of TVSD personnel and stakeholders with more emphasis on high-tech <sup>13</sup>	There is little capacity development of TVSD personnel and stakeholders to administer online work-based learning on an ad-hoc basis and more emphasis on low-tech <sup>14</sup>	There is no capacity development of TVSD personnel and stakeholders to administer online work- based learning	
There are clear mechanisms for digital assessment and certification system for TVSD work-based learning	There is a slow progressive move from low tech to high tech in devising digital assessment and certification system for TVSD work-based learning and not executed properly	There is no digital assessment and certification system for TVSD work-based learning	
There is a clear procedure for e-portfolios of practical work systematically implemented and monitored by regulatory authorities in the form of online repositories and journals accessible to employers, trainers and trainees of TVSD	Ad-hoc portfolios of practical work exist and system is implemented partially by the regulatory authorities but mainly in the form of printed and low tech formats accessible to employers, trainers and trainees of TVSD	No portfolios to track assessment and progression of practical work through work-based learning in TVSD	

<sup>&</sup>lt;sup>13</sup> Refer to Home Learning Modalities Matrix of the <u>UNICEF remote learning COVID-19 response decision tree</u>

<sup>&</sup>lt;sup>14</sup> Refer to Home Learning Modalities Matrix of the <u>UNICEF remote learning COVID-19 response decision tree</u>

There is a clear protocol on redeployment of unemployed industry persons as trainers in remote TVSD delivery focused on essential services and eventually businesses that are open	There are some ad-hoc efforts to contract-out to industry practitioners as trainers during crisis for remote TVSD delivery, especially in essential services	No procedure on redeployment of unemployed industry persons as trainers in remote TVSD delivery	
There is a systemic process for impact evaluation of the quality assurance system around virtual and remote work-based learning through skill impact assessments, tracer studies for TVSD	Few evaluations are carried out on an ad-hoc basis but there is a systemic framework to evaluate the impact of remote work-based learning on skill building for TVSD	There is no quality assurance process for impact evaluation of remote work-based learning for TVSD	
There is a protocol in place to periodically conduct an impact assessment for remote vs. physical TVSD delivery with feedback loops for enhancing work-based learning	Ad-hoc studies and analysis are done comparing remote TVSD delivery to physical TVSD delivery but not consistently applied to measure work-based learning efficacy	There is no impact assessment of comparing remote TVSD delivery and physical TVSD delivery for work-based learning efficacy	

#### Norm 9: Resource mobilisation

TVSD education is very resource intensive. Conducting remote TVSD effectively requires a blend of theoretical knowledge dispensed online and alternative models to physical practical training that may include synchronous and asynchronous formats such as virtual simulations, pre-recorded videos of demonstration of practical work, printed handouts of step-by-step guides on skill building, among others. Like any other initiative, without effective and efficient financial and human resources, the remote TVSD education would not yield the intended outcome to both the economy and students. Resource mobilisation should include the following key components: (1) ensure the appropriate budget is availed to enrich the remote learning unit; (2) review and mainstream financial and technical (including equipment) resources mobilisation strategy; (3) regular upgrading of trainers' ICT skills to deliver remote TVSD education; (4) strengthen alternative ways of financing the most marginalised students to benefit from remote education to ensure equity; and (5) develop alternative models of engaging with industry for remote work-based learning.

	LEVEL OF COUNTRY READINESS						
	READY	PARTIALLY READY	NOT READY	Brief Description of Current Implementation Level	Supporting Documentation		
		Norm 9: Resourc	e mobilisation				
DS	A systematic approach is in place to develop a comprehensive budget for a TVSD remote learning strategy and unit with the support of all actors	Insufficient budget is allocated to setting up a TVSD remote learning strategy and unit that results in a partial	No budget is allocated for a remote TVSD learning strategy and unit				
STANDARDS	Consistent integration of innovative approaches towards enhancing trainer capacity building in remote teaching and learning e.g. peer mentorship, project-based learning, practiced- based learning and collaborative learning, for TVSD	Trainers are partially trained on cloud and trained on innovative approaches towards enhancing trainer capacity buidling in remote teaching and learning partially integrated for TVSD.	No professional training of trainers on cloud and integration of innovative approaches towards enhancing trainer capacity building in remote teaching and learning for TVSD.				

Innovation and creation of additional resources for TVSD educators to avail digital and remote learning content.	TVSD educators are not well supported to invent and innovate new or additional resources to be able to avail digital and remote learning content.	There is no innovation and creation of additional resources for TVSD educators to avail digital and remote learning content.	
Remote TVSD education financing modalities, including grants, donors and PPPs, are mobilised and are supported by a sustainable strategy for long term investment	Remote TVSD education financing modalities, including grants, donors and PPPs, are mobilised from few sources but inconsistent to warrant massive investment	Remote TVSD education financing modalities, including grants, donors and PPPs, are not mobilised	
The marginalised and vulnerable students, including girls and women, form an integral part of a whole-of-approach to remote TVSD resource mobilisation both in the form of low and high tech <sup>15</sup>	The marginalised and vulnerable students, including girls, women and students with disabilities, receive little and sporadic access learning content on radios and TVs but no TVSD printed materials and no synchronous mode of remote TVSD education	The marginalised and vulnerable students, including girls and women, are not included in remote TVSD resource mobilisation	
There is a clear protocol for the creation of online courses for national TVSD qualifications including a centralised platform for vocational open online courses (a VOOC platform)	There is a weak procedure in place to encourage creation of materials adapted to TVSD online	There is no repository of online courses adapted to TVSD	

<sup>&</sup>lt;sup>15</sup> Refer to Home Learning Modalities Matrix of the <u>UNICEF remote learning COVID-19 response decision tree</u>

There is a specific budget allocated for TVSD remote learning based on the share of spending relative to ratio of TVSD to general education	There is an ad-hoc budget earmarked for remote TVSD delivery but it is not consistent	There is no specific budget allocated for TVSD remote learning within general education remote delivery		
---	---	---	--	--

## Norm 10: Information, communication and reporting

A time of crisis is a time of instability and uncertainty. Anxiety and higher stress levels are commonplace amidst the population. Above all, there is need to: (1) communicate clearly and in simple terms to the whole population; (2) ensure that mechanisms are in place for feedback gathering and communication to all stakeholders, including administration, teachers, students, parents and employers; (3) ensure clear statements about any change in TVSD delivery and approach to remote TVSD education in a concise and step-by-step manner; (4) provide information counters and helplines and hotlines for students and trainers; (5) ensure use of clear, concise, unambiguous language for online/distance education; (6) strengthen use of communication channels that the community prefer where possible, to reduce cultural and communication barriers; (7) be sensitive to different communication styles and varying cultures while communicating to students and parents remotely; (8) enhance remote TVSD education system by eliminating communication barriers between students, trainers and parents; and (9) issue clear communication to employers involved in work-based learning in terms of their role in remote TVSD education.

	LEVEL OF COUNTRY READINESS					
	READY	PARTIALLY READY	NOT READY	Brief Description of Current Implementation Level	Supporting Documentation	
		Norm 10: Information, comr	nunication and reporting			
STANDARDS	Effective and efficient communication channel between remote TVSD students and trainers.	Communication channel between remote TVSD students and educators exists but is not effective.	No communication channel between remote TVSD students and their trainers.			
	Feedback gathering and communication to stakeholders (including administration, students, trainers, parents and employers) timely and strengthened for remote TVSD	Feedback gathering and communication to stakeholders (including administration, students, trainers, parents and employers) not strengthened for remote TVSD.	Feedbacks gathering and communication to stakeholders (including administration, students, trainers, parents and employers) does not exist for remote TVSD.			

Clear statements about TVSD delivery, especially if different Ministry than Education, and revised approach to remote TVSD education provided to students, trainers and employers	Communication around TVSD delivery, especially if different Ministry than Education, and revised approach to remote TVSD education provided to students, trainers and employers are in place but not clear.	No statements about the goals of the TVSD delivery and revised approach to remote TVSD education provided to students, trainers and employers	
Assistance through information counters, helplines and hotlines for remote TVSD students and trainers is in place and protocol is followed strictly	Assistance through information counters, helplines and hotlines for remote TVSD students and trainers is in place but not always consistently applied	Assistance through information counters, helplines and hotlines for remote TVSD students and trainers is not in place	
Use of clear, concise, unambiguous language for TVSD remote education for all students and trainers.	Language for TVSD emote education is not clear, not concise, and ambiguous for some students and trainers.	Language for TVSD remote education is not clear, not concise, and ambiguous for all students and trainers.	
Communication channels that remote TVSD education communities prefer are used effectively and efficiently to reduce cultural and communication barriers.	Communication channels that remote TVSD education communities prefer are not used as effectively and efficiently to reduce cultural and communication barriers.	Use of communication channels which are different from what remote TVSD education communities prefer to create cultural and communication barriers.	
Remote TVSD education course summaries, additional resources, and feedback to help students evaluate their learning progress remotely are communicated clearly.	Remote TVSD education course's summaries, additional resources, and feedback to help students evaluate their learning progress remotely are not communicated clearly.	No course summaries, no additional resources, and no feedback are availed to help remote TVSD students evaluate their learning progress remotely.	

Sensitivity in different communication styles and varying cultures while communication to remote TVSD students and parents remotely are emphasised and maintained.	Sensitivity in different communication styles and varying cultures while communication to remote TVSD students and parents remotely not adhered to consistently.	Sensitivity in different communication styles and varying cultures while communication to remote TVSD students and parents remotely are not adhered to.	
Remote TVSD education system adequately enhanced as there is no communicational barriers between students, trainers and parents.	Remote TVSD education system not adequately enhanced despite the effort to eliminate the communicational barriers between students, trainers and parents.	Dysfunctional remote TVSD education system resulting in communication barriers between students, trainers and parents.	
There is an established protocol for communication between authorities and employers in the new protocol for work- based learning, especially remote TVSD learning	There is a line of communication established between authorities and employers in the new protocol for work- based learning, especially remote TVSD learning but it is not clear or consistently applied	There is no specific line of communication between authorities and employers in the new protocol for work- based learning for remote TVSD	
There is a periodic and consistent protocol of communication between in- company and in-school trainers about the progress and performance of remote TVSD students	There is a communication line between in-company and in-school trainers about the progress and performance of remote TVSD students but it is not consistently done	There is no communication between in-company and in-school trainers about the progress and performance of remote TVSD students	
There is a clear protocol in place for two-way communication and feedback from employers on efficacy of remote/physical work-based learning for TVSD	There is a process in place to assess efficacy of remote/physical work-based learning for TVSD from employers but is not consistently applied	There is no process in place to assess efficacy of remote/physical work- based learning from employers for TVSD	

## Norm 11: Peace and conflict prevention and resolution

There is need to put in place sound policies and procedures for peace and conflict prevention and resolution. It is only when students and parents feel safe that they will abide by the new regulations around remote learning. Policies and procedures should be accompanied by strong national legal frameworks that facilitate: (1) social safety net coverage for extremely poor students and families; (2) movement of students, trainers and families in jeopardy and unable to stay and learn from home; (3) inclusivity of the remote learning especially for war-affected, disabled, marginalised students; (4) special remedial TVSD learning for those afflicted through special tutorials and bespoke assistance; and (5) full safeguarding of students during apprenticeships including website access for malicious attacks and illicit materials.

	LEVEL OF COUNTRY READINESS					
	READY	PARTIALLY READY	NOT READY	Brief Description of Current Implementation Level	Supporting Documentation	
		Norm 11: Peace and confli	ct prevention and resolution			
ARDS	National social protection systems are in place including over TVSD remote learning and across the whole TVSD ecosystem	Existing social insurance schemes based on community or occupation basis or family situation but not consistently applied across the TVSD ecosystem	There are no social insurance schemes in place based on community or occupation basis, or family situation across the TVSD ecosystem			
STANDA	Sensitisation practices for public, especially parents and community, on students' well-being during remote TVSD education mainstreamed	Local organisations are not adequately involved and aware of provisions made by the Ministry of Education for remote TVSD education.	Advocacy and sensitisation activities that include the community, local NGOs and media are not yet established by the Ministry of Education or relevant Ministry for remote TVSD.			

A clear mechanism is in place for families and students that cannot safely study from home and are at risk, to be transported to safe locations in a systemic manner	A mechanism is in place for families and students that cannot safely study from home and are at risk to be transported to safe locations but no systemic coverage exists	No mechanism is in place or communicated for families and students that cannot safely study from home and are at risk	
There are specific alternative models of remote TVSD learning in place for the war-affected, disabled, marginalised students and ensure pedagogical continuity and NGOs are active in maintaining pedagogical continuity	There is a process in place for alternative models of remote TVSD learning for the war-affected, disabled, marginalised students and ensure pedagogical continuity but it is not consistently applied	There is no process in place for alternative models of remote TVSD learning for the war-affected, disabled, marginalised students	
Remote TVSD education includes aspects of peace building and psychosocial support which is consistently applied across all at risk locations	Remote TVSD education includes aspects of peace building and psychosocial support but it is not the case for all counties and not systemically followed	Remote TVSD education does not include aspects of peace building and psychosocial support for the afflicted	
There is an established safeguarding protocol for employers before taking on remote TVSD students in apprenticeship	There is some safeguards in place to prevent exploitation of remote TVSD students during their apprenticeships but inconsistently applied	There is no framework for safeguarding of remote TVSD students during their apprenticeships	

#### Norm 12: Monitoring, evaluation and assessment

Monitoring, evaluation and assessment is a critical link in the value chain of education. In TVSD education, monitoring, evaluation and assessment is more complicated because learning takes place at different locations, in different formats and through different actors – trainers, supervisors and mentors at the workplace. Remote TVSD education makes it increasingly difficult given the practical nature of the learning. There is need, therefore, to strengthen: (1) feedback around continuity and frequency of access to remote TVSD content; (2) formative assessment for timely remediation interventions; (3) remote summative assessment for certification of teachers and students; (4) effectiveness of remote/physical work-based learning through employers for practical skills; (5) impact of short-term training for re-skilling and up-skilling of persons; (6) access to remedial support for partial and full drop outs; (7) effectiveness of take home packages and DIY kits; and (8) the use of multiple methods to determine whether learning objectives/goals were met.

	LEVEL OF COUNTRY READINESS					
	READY	PARTIALLY READY	NOT READY	Brief Description of Current Implementation Level	Supporting Documentation	
		Norm 12: Monitoring, evaluation	ation and assessment			
ARDS	There is an established central monitoring and evaluation protocol in place for access to remote TVSD content	There is ad-hoc monitoring and evaluation conducted for access to remote TVSD content and it is not systematically collected.	There is no monitoring and evaluation protocol over access to remote TVSD content			
STAND/	Ongoing timely and accurate formative assessments are provided for programme remediation and interventions where needed for remote TVSD.	Some formative assessments are provided for programme remediation and interventions for remote TVSD.	No formative assessments are provided for programme remediation and interventions for remote TVSD			

<b>—</b> , , , , , , , , , , , , , , , , , , ,			
The remote summative assessment process and certification system on skill uptake is mainstreamed for remote TVSD	The remote summative assessment process and certification system is weak to assess skill uptake for remote TVSD	There is no remote summative assessment process and certification system to assess skill uptake for remote TVSD	
There is a mechanism in place for a periodic feedback loop on short-term training as re-skilling and up- skilling for unemployed TVSD trained persons	There is a communication cycle in place for feedback on short-term training as re-skilling and up-skilling for unemployed TVSD trained persons but it is not consistently followed	There is no feedback on short-term training as re- skilling and up-skilling for unemployed TVSD trained persons	
There is clear protocol on remedial support for partial or full drop outs from remote TVSD and data is periodically collected	There is remedial support for partial or full drop outs from remote TVSD but is seldom the case	There is no access to remedial support for partial or full drop outs from remote TVSD	
The process to assess efficacy of take-home packages and DIY kits for skill uptake is in place and regular feedback is obtained	There is a process in place to assess efficacy of take-home packages and DIY kits for skill uptake but cannot be consistently measured	There is no process in place to assess efficacy of take-home packages and DIY kits for skill uptake	
Multiple methods are utilised to determine whether learning objectives/ goals were met for remote TVSD, and the data are used for remedial action.	Fewer methods are utilised to determine whether learning objectives/ goals were me for remote TVSD t and the data are not really used for remedial action.	No system in place to determine whether learning objectives/ goals were met for remote TVSD.	
Existence of strong and comprehensive quality assurance and assessment mechanisms for remote TVSD education learning outcomes.	Existing quality assurance and assessment mechanisms for remote TVSD education are weak.	There is no quality assurance and assessment mechanisms for remote TVSD education learning outcomes.	

## Norm 13: Psychosocial Support

The well-being of students and trainers, instructors and facilitators in education and especially dealing with remote education needs to be closely monitored and supported. Prolonged lockdowns and self-isolations can easily give rise to anxiety, stress, demotivation, mental health and depression. As the teaching pedagogies and environment is different, the psychological support is very much required to promote wellness and wellbeing. The psychosocial support includes: (1) wellbeing of all educators and promotion of pleasant working atmosphere; (2) wellbeing of students towards their learning and educational progression; and (3) support to employers in addressing skills atrophy and unlearning of trainees and students at the workplace or in tele-work.

	LEVEL OF COUNTRY READINESS					
	READY	PARTIALLY READY	NOT READY	Brief Description of Current Implementation Level	Supporting Documentation	
		Norm 13: Psych	osocial Support			
ARDS	Psychosocial support exist for the wellbeing of all remote TVSD teaching personnel and learners	Psychosocial support exists but not implemented for the wellbeing of all remote TVSD teaching personnels and learners	No Psychosocial support exist for the wellbeing of all remote TVSD teaching personnels and learners			
STAND/	There is an established protocol in place for a counsellor or psychologist to periodically monitoring remote TVSD trainers and students to ensure their wellbeing	Policy is in place for a counsellor or psychologist to monitor the mental and behaviours state of remote TVSD trainers and students, but not yet fully implemented	No counsellor (neither part-time) or psychologist for assistance at remote TVSD school			

Scheduled awareness and sensitisation training/refresher sessions are conducted for remote TVSD management, trainers and parents' representatives on behaviours and attitudes control	Awareness and sensitisation training/refresher sessions are conducted on an ad hoc basis for remote TVSD management trainers and parents' representatives	There are no measures in place to ensure that every member of the remote TVSD community understands the importance of well-being and psychosocial support	
Procedures are in place and used for reporting any adverse behaviour of trainer during remote TVSD education	Procedures in place for reporting any adverse behaviour of trainer during remote TVSD education but no proper follow up is done	There is no monitoring of trainer's behaviours during remote TVSD education	
There is a concerted strategy around financial and psychosocial support for remote TVSD personnel and trainers to fulfil their roles in ensuring well-being of students	There is one-off psychosocial support at re- opening of TVSD centres for remote TVSD personnel and trainers to fulfil their roles in ensuring well-being of students but no concerted strategy for sustaining support	There is no additional financial and psychosocial support for remote TVSD personnel and trainers to fulfil their roles in ensuring well- being of students	
There is an established procedure for ongoing monitoring and feedback of remote TVSD trainees' well-being at the workplace or during remote work-based learning and assessment of the psychosocial support present at work	There is a monitoring mechanism in place to assess remote TVSD trainees' well-being at the workplace or during remote work-based learning but not consistently applied	There is no monitoring in place to assess remote TVSD trainees' well-being at the workplace or during remote work-based learning	

## Conclusion

Today, with the COVID-19 pandemic and resulting crisis at hand, governments around the world are having to rapidly adapt a traditional system of education that has for long relied on a more traditional approach to education based primarily on a "talk and chalk" model of teacher addressing students in a physical class. The need for a comprehensive and robust plan to ensure continuation of learning while maintaining health, safety and hygiene of the students cannot be underestimated. With regards to TVSD delivery, governments need to prepare their education and training systems, and readapt their governance models to accommodate opportunities for TVSD institutions that recognises their pivotal role to society and the economy. This will also enable TVSD to detach from its earlier weaker conception as lower level to academic learning and be recognised in the whole skill ecosystem as a full-fledged partner in developing solutions, especially given that the delivery is deeply tied to industry. Policymakers are also in a strategic position to think on different time spans when planning their actions and consider short-term, medium-term and long-term response reactions, as per the matrix outlined by World Bank (2020), earlier in the document.

As a repository of high technical knowledge, TVSD systems have a crucial role to play in re-skilling and up-skilling around essential services and opening up their centres for access to equipment and facilities that can help those who are suffering in the short term. In the medium term, remote TVSD systems can play a key role in bringing innovative approaches to the nexus of how governments collaborate with industry through revised approaches to work-based learning and skilling.

At the same time, it is important to think of innovation in TVSD and its cost and implications. Learning that is fully online is unworkable at present because it cannot be equitably implemented and accessed by the majority of learners across many countries in Africa. If it is at the expense of the poor and vulnerable, the cost is too high. However, in the meantime, for those who have access to digital learning and the trainers who are able to make the transition, new practices, tools and methods, whether digital or traditional, or a mixture of the two, should be tried, shared and used to inform leaders and policymakers. Hence, there is need for this Toolkit to prepare the TVSD sub-sector to build progressive resilience by embracing TVSD remote education as a standalone or hybrid. A staircase strategy is also suggested for countries to adopt remote education as a step-by-step process moving from basic to higher levels of sophistication with proper mentoring and handholding. From this kind of incremental innovation, inequalities may well be reduced and the quality of learning improved for all learners.

#### Annexes

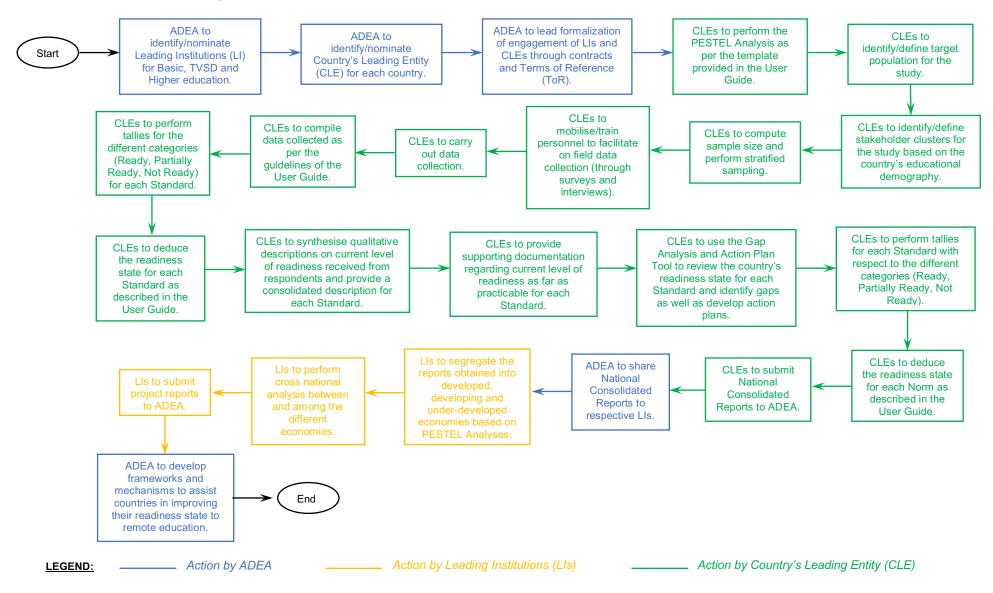
# Annex A: PESTEL Template

<ul> <li>POLITICAL</li> <li>Political governance</li> <li>Political stability</li> <li>Level of corruption</li> <li>Tax policy</li> <li>Trade restrictions and reforms</li> <li>Tariffs</li> </ul>	ECONOMIC <ul> <li>GDP</li> <li>GDP growth rate</li> <li>Inflation rate</li> <li>Currency strength</li> <li>GDP per capita</li> <li>Minimum wage</li> <li>Unemployment rate</li> <li>Credit and financing availability</li> </ul>		
SOCIAL <ul> <li>Population Size</li> <li>Population demographic</li> <li>Population growth rates</li> <li>Literacy rate</li> <li>Cultural norms and diversity</li> <li>Age and Income distribution</li> </ul>	<ul> <li>TECHNOLOGICAL</li> <li>Innovation and development policy</li> <li>Technological advancements</li> <li>Technological adoption</li> <li>Internet connectivity</li> <li>Electrification rate</li> </ul>		
<ul> <li>ENVIRONMENT</li> <li>Corporate Sustainability Responsibility</li> <li>Penetration rate of renewable energy</li> <li>Circular economy</li> <li>Blue economy</li> <li>Green economy</li> <li>Pollution level and electricity grid emission factor</li> </ul>	<ul> <li>LEGAL</li> <li>Remote education legal framework</li> <li>Health and safety</li> <li>Employment rate</li> <li>Consumer protection rights</li> <li>Discrimination and safeguarding laws</li> <li>Trade regulation and restriction</li> </ul>		

## Annex B: REBTK-TVSD Gap Analysis and Action Plan Tool

	А	В	С	D	Е	F	G
1	1 REBTK for TVSD - Standards					Logical	
2	SN	READY	PARTIALLY READY	NOT READY	collection (Use dropdown list)	Instruction 1	Why? Possible Causes
4		Norm 1: Robust policy, legal, regulatory and qual					
5		well-resourced and functional, with a clear mission, vision, strategy and legal mandate, and clear guidelines on multisectoral engagement to provide remote TVSD education.	of Education or relevant Ministry with weak strategy and legal mandate; guidelines on multisectoral engagement to provide remote TVSD education are not clear.	Remote TVSD Unit is not yet established within the Ministry of Education or relevant Ministry.	Partially Ready	Proceed to Column G	Lack of reinforcement strategy     Lack of aknowledgement of     importance of remote TVSD         · Lack of expertise to develop strategy     and legal mandate at the Remote     TVSD Unit
6			Only a couple of stakeholders are involved in the governance of remote TVSD system, the roles are not clear and defined for other stakeholders	There are no clear and defined delimitation of governance towards the ownership of remote TVSD system			•
7			Policy development process ongoing / only procedures in place guiding access to remote education across certain locations of TVSD delivery	There is neither a process of policy development nor procedures guiding access to remote TVSD education.			
8			There are some ad-hoc efforts of involving remote TVSD personnel in work-based arrangements and emergency response	There is no involvement of remote TVSD personnel in emergency response mechanisms			
9		development plan, learning needs, industry needs	Remote TVSD education is not adequately based on learning needs, industry needs and less emphasis on some new ways of interaction, with no clear trainer preparation strategy.	There is no strategy for retraining trainers and reorienting curriculum for remote TVSD education.			
10		& soft skills, 21st century competency skills, and	Lack of clarity in balancing between acquisition of technical & soft skills, 21st century competency skills, and embracing digital culture.	There is little acquisition of 21st century competency skills, with emphasis still on academics skills.			
11		competency-based framework between training institutions and employers (covering areas such as	Coordination partly established between training institutions and employers, including revised form of apprenticeship and artisan training, for remote TVSD.	The level of coordination not clear between training institutions and employers for remote TVSD.			
12		that reviews and validates remote TVSD delivery and quality-assurance prior to broadcast	overview of remote TVSD delivery continuity and quality assurance prior to broadcast	There is no system of pedagogical vetting of remote TVSD content prior to virtual dissemination			
10			There are online platforms that are seldom operational in recognising skills through e-RPL and	There is no e-protocol for access to RPL or procedures on how to e-validate experience			
>	=	Annex B-REBTK GA-APT +					

This is an excel template to be used for REBTK-TVSD data compilation, gap analysis and Develop the Costed Action Plan. Please click to access the Annex B To User Guide Gap Analysis and Action Plan Tool.xlsx



#### Annex C: Full-scale implementation of the REBTKs Process



Ushirika wa Maendeleo ya Elimu Barani Afrika الرابطة لأجل تطوير التربية في إفريقيا Association for the Development of Education in Africa Association pour le développement de l'éducation en Afrique Associação para o Desenvolvimento da Educação em África

Association for the Development of Education in Africa (ADEA) African Development Bank Group (AfDB) Immeuble CCIA Plateau, Avenue Jean-Paul II, 01 BP 1387 Abidjan 01, Côte d'Ivoire Tel: (+225) 27 20 26 39 64 Email: adea@afdb.org - Website: www.adeanet.org

