THE CATCH UP GAME: REVERTING TVET LEARNING LOSSES DUE TO COVID

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"How can we revert COVID-related learning losses in the TVET space?"

I. The Global Situation

Close to 1.6 billion students worldwide have been affected by school closures due to the COVID-19 pandemic since it started (World Bank 2020). Unlike most countries, the Philippines had to suspend formal face-to-face schooling for an extended period of time, starting from March 2020 (UNICEF, 20 September 2021). Limited face-to-face instruction was reintroduced the following year, notably through the pilot program in the National Capital Region in November 2021. While the TVET sector also implemented the same measures in various capacities, it is feared that the damage was already done. TVET in the Philippines was hit particularly hard by the closures, mainly because of its work-based, hands-on mode of teaching - one that is very difficult to maintain due to COVID having closed many workplaces as well, as they served as additional training venues for more practical instruction for TVET students.

To be fair, the challenges present in the Philippine TVET space are hardly a unique problem to the country as, according to the International Labour Organization (ILO), many TVET institutions around the world also experienced the same setback. Through a survey conducted by the ILO in 126 countries, it was discovered that these institutions and centers experienced learning losses, due to being mostly ill-prepared to face the onset of the Pandemic, forcing them to close down or limit operations. Their situation was further exacerbated due to the slow implementation of COVID response plans in their countries, with most schools and training providers saying they had to adapt to the situation "by ear" (ILO 2021) and implement alternative learning modes, catching up as fast as possible.

On the flipside, the COVID Pandemic had also accelerated the current efforts of governments, including the Philippines, to improve their learning systems as a whole. TESDA, for instance, created guidelines for limited face-to-face learning schemes to complement virtual or alternative learning arrangements in TVET schools throughout the country. Everywhere, the Pandemic forced both formal schools and TVET institutions alike to adopt distance learning, requiring them to improve their internet infrastructure and to review labor markets more extensively, as learning outcomes and job requirements rapidly shifted from the norm (ILO 2021). But as health conditions continue to improve, more and more of these schools and institutions are reopening, resuming

normal operations albeit in limited capacity. The time has come for educators, TVET included, to catch up with the learning losses due to COVID, to return to (or improve upon) the previous state of education prior to the Pandemic, and also to transition to a new kind of normalcy.

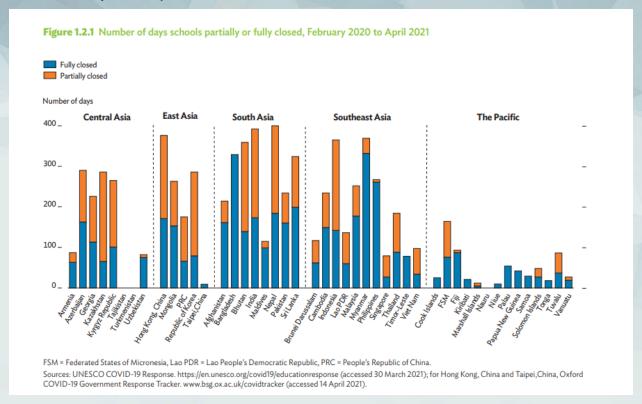
II. Learning Losses Due to COVID

COVID-19 has severely impacted the education sector in Asia, specifically in the terms of academic years that were lost due to quarantines, lockdowns, and the like (a.k.a. "learning losses"). Learning Loss is described as "any specific or general loss of knowledge and skills or to reversals in academic progress, most commonly due to extended gaps or discontinuities in a student's education" (UKFEIT, 2020). Even prior to COVID, learning loss is experienced by students during vacations. According to UKFEIT, existing data shows three possible ways in which learning loss occurs due to this crisis: the reduction in the level of learning, unequal levels of learning, and the prevalence of (school) dropouts. These scenarios directly or indirectly contribute to the learning loss wherein delays and disparity in learning occur.

According to the Asia Development Bank, the learning losses also had potential monetary losses across the region, ranging from 8% for those living in Pacific countries to 55% for countries in South Asia. The monetary losses were influenced by the effectiveness of a government's overall COVID response strategy: the more effective that recovery strategy was, the less time it took for schools to remain closed, and therefore the more time for them to recover from learning losses. Asian countries in the Pacific, such as Fiji, were much less impacted by the epidemic, at least relative to countries in South Asia, like Bangladesh, and Southeast Asia, like the Philippines. It is estimated that in 2020, the learning losses experienced by the entire Asia-Pacific Region amounted to 1.25 trillion US Dollars, or about 5.4% of the Region's entire gross domestic product for the year (ADB 2021). The quantification to monetary value was based on the premise that school closures resulted in significant disruptions to the learning of students, thus making them less likely to be qualified to join the workforce when they reach employable age.

Learning Loss can be avoided during the closure of schools or training institutions by using learning methodologies that will allow the continuous learning, like distance learning/ online learning. The use of technology and ICT platforms that ensure the monitoring of the progress of the students would also help to make sure that learning really takes place. However, during the pandemic no one anticipates the prolonged closure. Throughout 2020 and the early part of 2021, schools in Asia were closed for almost an entire year (i.e. more or less 300 days), but with varying degrees. As shown in Figure 1, most schools in the continent were only "partially closed", or that they're closed only in select areas of a country where COVID-19 infections were high and/or they're closed only for certain age groups/segments. "Partially closed" was also used to refer to schools that reduced the duration of their sessions and supplemented that lost time with virtual/online learning methods instead. "Fully closed" referred to those schools that were shutdown with almost no caveats. In Southeast Asia, the Philippines had the greatest proportion of schools being fully closed vis-a-vis partially closed, for about 200 to 300 days. By contrast, Indonesia closed its schools between 300 to 400 days, but most of these were partial closures, which allowed many students to continue their learning with the traditional methods even in a limited capacity.

Figure 1. Number of Days Schools in Asia were Partially or Fully Closed (February 2020 to April 2021)



Source: ADB

Alternatives to the traditional face-to-face learning included online classes, TV instruction, radio classes, and take-home modules. Most countries in Asia were able to provide all four methods, though online and TV remained the dominant forms for some countries like Singapore and Thailand, which also seemed to mirror the rest of the continent as a whole (ADB 2021). The effectiveness of these alternative forms tend to vary. Some anecdotes in Asia said that online/distance learning made students perform worse in examinations, whereas others say there was barely any difference in terms of student performance. The latter anecdotes echoed the results of a study by Paul and Jefferson (2019), which, as cited by the ADB, also shared the same sentiment for American students during the pandemic. For the latter, poor school performance through online/distance learning was likely caused by limitations on the learners' part (i.e. lack of appropriate equipment to access online learning platforms), which reinforced the results of a separate study by McKinsey and Company (2020). This one, which was also cited by the ADB, inferred that such modes of distance learning could result in learning losses tantamounting to three months of face-to-face school instruction.

As for more tangible results of learning losses, the ADB referred to the findings of Montenegro and Patrinos (2014), whose study was conducted before the COVID-19 pandemic. Here, it was surmised that each year of schooling increased a person's annual earnings by 9.7% - the opposite was thus also true, ergo each year of schooling lost would decrease annual earnings by 9.7%. By the ADB's estimates, students in Asia who were affected by the closures of their schools were estimated to potentially have lost about \$180 of annual income due to COVID, with some regions experiencing higher percentage declines than others (i.e. East Asia sees \$771 less in annual earnings due to extended periods of school closures), as seen in Table 1. The ADB reached such conclusions due to their calculation of learning-adjusted years of schooling, then

produced three estimates of learning losses across three scenarios (i.e. *optimistic* as indicated in Paul and Jefferson (2019), *pessimistic* as indicated in McKinsey and Company (2020), and *intermediate* as a compromise for a middle ground derived by ADB in the same study).

Table 1. Potential Learning Losses of Students in Asia

	Losses in ea	Losses in earnings per student per year, current \$		% decline in earnings per student per year			Baseline average earnings per worker
Subregion	Optimistic	Intermediate	Pessimistic	Optimistic	Intermediate	Pessimistic	per year, current \$
Central Asia	39	56	78	1.1	1.6	2.2	3,552
East Asia	332	771	1,344	1.7	4.0	7.0	19,182
South Asia	68	78	92	3.5	4.0	4.7	1,948
Southeast Asia	105	167	247	1.2	1.9	2.9	8,663
The Pacific	30	42	58	0.5	0.6	0.9	6,509
Developing Asia	99	180	286	1.3	2.4	3.8	7,637

Notes: These estimates do not include the following economies because data are not available for at least one parameter: Afghanistan; Bhutan; the Cook Islands; Kiribati; Maldives; the Marshall Islands; the Federated States of Micronesia; Niue; Palau; Papua New Guinea; Solomon Islands; Taipei, China; Tonga; and Tuvalu. Because data on baseline earnings are not available for Tajikistan and Turkmenistan, they are not included in the baseline average for Central Asia.

Sources: ILOSTAT for baseline average earnings per worker; Asian Development Bank estimates.

Source: ADB

III. How to Revert the Learning Losses?

According to the World Bank, the best way to revert learning losses is to reopen schools for face-to-face instruction, as schools still provide the best venue to equip students with the proper competencies needed for when they finally join the workforce. The ideal situation is a return to, or an improvement over, a pre-pandemic state, but it is acknowledged that concessions will have to be made in terms of learning objectives, instruction modes, and school year length due to the disruptions brought by COVID (World Bank 2021). There is also the matter of student engagement, as the pandemic's economic impact may have also reduced students' willingness to enroll again, as well as their capacity to keep up with the learning objectives due to reduced resources (i.e. they may not be amenable to online learning if they cannot afford computers/smartphones and reliable internet). Further, the reopening of schools would not simply address the requirements of learning loss. Training providers should ensure established mechanisms where the competencies that were missed during the closure will be supplemented.

In the meantime, educators and government officials can consider the following steps that can be taken to dampen the effect of learning losses, if not revert them completely:

1. Determine the state of the students before schools reopen for face-to-face TVET instruction - TVET schools and educators must devise ways to keep track of their students before schools formally reopen for face-to-face instruction. Specifically, they should check how much that the students have learned from online/distance/alternative learning methods that were implemented, what gaps and challenges they encountered (to be addressed once school restarts), and who among their students need additional support. The third one is particularly important, because the negative effects of the pandemic are not completely universal (i.e. some students are more agile than others in adapting to alternative learning methods). For such students, individual learning plans or separate tutoring

tutoring sessions may be necessary so that they can be on par with the rest of their batch once face-to-face instruction is resumed.

2. If face-to-face instruction is still infeasible, explore other alternative methods of TVET instruction - As said by the ADB, the most common alternatives in Asia for face-to-face instruction during the pandemic are TV and online platforms. Schools and institutions should therefore consider other methods of learning such as take-home modules or even radio, which are also commonly used throughout Asia during the "coping stage". It may even be necessary for educators to coordinate with industry groups and determine if work-based instruction is possible, given that workspaces experienced relatively less closures than schools (World Bank 2021). As certain TVET courses in the Philippines entail hands-on instruction at actual work venues, it may be necessary for schools to continue aspects of the curricula this way while they continue to find alternatives to face-to-face instruction.

The key here is to prevent the instruction from ceasing completely, as was faced by institutions for primary and secondary education in Asia where the number of dropouts increased due to inactivity. If students are completely prevented from engaging in any form of learning during their school year, they may be discouraged from taking it up again once normalcy is restored (ADB 2020).

3. Review the current skills programs and align them more with current needs - While this is a given even before COVID hit, the World Bank argued that reviewing current skills programs is more important at this stage as industry sectors have generally shifted their labor needs, usually in line with prevailing government recovery strategies. A good example of one such sector is Hospitality and Tourism, which was stated to be among the hardest hit industries in the world due to global travel restrictions and lockdowns. Skills demands in this sector shifted dramatically as a result, putting greater emphasis on digital skills (since booking apps have become more popular) and socioemotional skills than it did before.

It may also be possible for skills demands in a sector to be aligned with the government's recovery strategy, such as when face masks and other protective gear were in such high demand that TVET courses associated with them (i.e. sewing and knitting) were redesigned for their production. This was particularly lucrative not only for TVET students, but also for displaced workers who, lacking their primary source(s) of income due to the pandemic, were able to find other means of sources of revenue. As another example, TESDA implemented the Indigenous People as Empowered Agripreneurs towards a Collective End (IPEACE) Project in 2020 amidst the Pandemic, in part as a response to the renewed importance of agriculture and thereby ensure food security and provide sustainable income in these trying times.

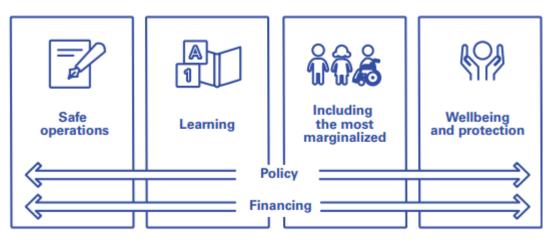
IV. The Framework for Reopening Schools

As its TVET space begins to recover and accept new students, the Philippines may wish to look to the Framework for Reopening Schools from UNICEF for guidance. It was published in 2020 to help governments look into the various factors that determine where and when schools can eventually resume their usual functions, but with extra focus given to students who are severely adversely impacted by the Pandemic.

Though primarily created for the benefit of schoolchildren, the steps posited by the Framework can also be adopted for the reopening of the Philippines' TVET institutions. Given that the COVID situation in the country is easing, at least for the moment, the guidance provided by this document may be more relevant now than before.

The Framework suggests that while schools and learning institutions need to reopen as soon as possible, as part of any government's COVID-19 recovery plan, there are several factors that must be considered. First and foremost, the state of the learners and the status of current health protocols need to be taken into account so as to mitigate risks of infection. UNICEF noted that these two factors are largely context-specific, thereby incentivizing decision makers to strike a balance between the students' learning and wellbeing, then weighing them against the risks entailed by reopening the schools. To simplify this process, the Framework suggests looking into the dimensions of post-COVID 19 learning, namely: ensuring safe operations at the venue, ensuring proper learning, inclusion of the most marginalized into the learning system, and upholding the wellbeing and protection of all involved. These dimensions need to have robust policy and financing systems to support them so that learning centers and schools can be reopened with the least risks (see Figure 2).

Figure 2. Number of Days Schools in Asia were Partially or Fully Closed (February 2020 to April 2021)



Source: ADB

Even then, reopening the centers and schools needs to be done in three phases. The first phase is done prior to reopening, where policymakers look into the current situation, prepare critical policies and financial plans to improve schooling (with focus on safety and implementing remote learning). The second phase deals with the actual reopening process itself, which delves into adapting the schools' infrastructure to a post COVID 19 learning environment, as well as ensuring that even the most marginalized can keep up with the program via distance learning or other means. The third and final phase focuses on active monitoring of health indicators, continuous support to the wellbeing and protection of learners and teachers alike, and also adjusting teaching processes as the situation develops (now with extra consideration given to imparting important information about COVID transmission, prevention, and containment).

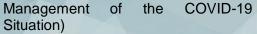
V. The Framework vis-a-vis TESDA's Initiatives

TESDA, as the leading authority for TVET in the Philippines, has seen fit to take steps to help TVET institutions in the country at the onset of the Pandemic itself. Through a series of issuances, the agency helped to prevent the spread of COVID at learning centers and institutions, as well as TESDA offices themselves, then took measures to allow continuous operation once certain conditions were met. Through these memoranda and circulars, TESDA has already laid the foundation from which a more robust COVID Recovery Program can be initiated to allow all TVET centers in the country to reopen, similar to other schools and learning institutions. Table 2 lays these issuances down and compares them to the recommended actions from UNICEF's Framework. The same measures are also applied for assessment and certification purposes, as what is needed from TVET graduates before being awarded their credentials.

Table 2. TESDA Issuances on COVID Response Compared to UNICEF's Framework for Reopening Schools

Key Dimension for Reopening Schools	Equivalent TESDA Issuances	Included in the current implementation
Safety Protocol	 Memorandum No. 214-2020 (Mandatory Enrollment to the eLearning Training on Practicing COVID-19 Preventive Measures in the Workplace) TESDA Circular No. 087-2020 	Training Institutions shall follow the government quarantine protocols that shall be provided by IATF, including percentage of allowed trainees and assessee.
	 (Guidelines in the Management of Covid-19 Cases in the TESDA Offices) TESDA Circular No. 050-2020 (Adoption of Measures for the Enhanced Community Quarantine and Further Guidelines for the Management of the COVID-19 Situation) 	TESDA's own health protocols are implemented across the board and in all settings, such as the observance of social distancing, observance of handwashing and sanitizing, and so on. A template for the Daily Health
	TESDA Circular No. 066, s.2020 (TVET Arrangements Towards the New Normal During the COVID-19 Crisis)	Survey is provided for TESDA offices and Training Institutions alike, to implement.
	 TESDA Circular No. 066-A, s.2020 (Amended/Supplemental Guidelines on the TVET Arrangements Towards the New Normal During the COVID-19 Crisis) 	The use of health monitoring equipment such as thermal scanners and thermometers are encouraged.
	 TESDA Circular No. 066-B, s.2020 (Amendment to TESDA Circular No 66-A s2020 on the Amended-Supplemental Guidelines on the TVET Arrangements Towards the New Normal During the COVID-19 Crisis) TESDA Circular No. 76, s. 2021 (Amended/Supplemental Guidelines 	The implementation of the aforementioned health and safety protocols are to be reviewed regularly by a designated TESDA Crisis Management Committee or the equivalent. Regular Sanitization of tool,

	for TVET Under the New Normal Arrangements)	equipment, workshops, and laboratories
Focus on Learning	 TESDA Circular No. 066, s.2020 (TVET Arrangements Towards the New Normal During the COVID-19 Crisis) TESDA Circular No. 066-A, s.2020 (Amended/Supplemental Guidelines on the TVET Arrangements Towards the New Normal During the COVID-19 Crisis) TESDA Circular No. 066-B, s.2020 (Amendment to TESDA Circular No 66-A s2020 on the Amended-Supplemental Guidelines on the TVET Arrangements Towards the New Normal During the COVID-19 Crisis) Joint Memorandum Circular No. 20-06: Additional Technical Vocational Education and Training (TVET) Qualifications allowed for Face-to-Face Training and/or Assessment for Areas under General Community Quarantine (GCQ) TESDA Circular No. 76, s. 2021 (Amended/Supplemental Guidelines for TVET Under the New Normal Arrangements) NITESD Memo No. 216, s. 2021 (Invitation on the Opening Program to the Trainers' Methodology Course Level II for TTI Trainers and Staff) NITESD Memo No. 719, s. 2021 (TESDA Order for the Conduct of Regional Lead Trainers Development Program (RLTDP) on Barangay Infectious Disease Management Services Level II) 	Guidelines are provided for the conduct of several activities, including enrollment, application for scholarship, and face-to-face training or assessments (plus the inclusion of house rules). TVET courses that can do face-to-face training/assessment are distinguished from those that can't. EBT, In-Plant or in-company part of the Dual Training System, OJT Implementation of training through different delivery modalities, like: • full online/e-learnings • distance learning for TVET programs • e-learning component of blended learning for TVET program Mandatory program for learner, trainers and TVI personnel to undergo the module on "Practicing COVID-19 Preventive Measures in the Workplace" Provision of Virtual or Portfolio Assessments, except in areas under Level 5 or Granular Lockdown. Conduct of specific training programs that meet the needs of COVID response
Wellbeing and protection	 Memorandum No. 214, s.2020 (Mandatory Enrollment to the eLearning Training on Practicing COVID-19 Preventive Measures in the Workplace) Memorandum No. 143-2020 (COVID19 Adjustment Measures Program) TESDA Circular No. 050-2020 (Adoption of Measures for the Enhanced Community Quarantine and Further Guidelines for the 	Administrative protocols are created to reduce/contain the spread of the virus. Guidelines are established for the conduct of TVET activities depending on the prevailing quarantine classification/levels in the local area. Health guidelines are strictly implemented when conducting



- TESDA Circular No. 066, s.2020 (TVET Arrangements Towards the New Normal During the COVID-19 Crisis)
- TESDA Circular No. 066-A, s.2020 (Amended/Supplemental Guidelines on the TVET Arrangements Towards the New Normal During the COVID-19 Crisis)
- TESDA Circular No. 066-B, s.2020 (Amendment to TESDA Circular No 66-A s2020 on the Amended-Supplemental Guidelines on the TVET Arrangements Towards the New Normal During the COVID-19 Crisis)
- TESDA Circular No. 76, s. 2021 (Amended/Supplemental Guidelines for TVET Under the New Normal Arrangements)

face-to-face training/assessments (i.e. "Seven Commandments").

Daily self-surveys are initiated to ensure the health of learners, instructors, and staff.

It is acknowledged that many of these issuances may be altered or rescinded in the coming days, as the Philippines is slowly moving towards easing COVID restrictions. The issuances include provisions on the delivery of the training program through Flexible Learning Delivery. Likewise, the implementation of the TESDA Online Program was realized by TESDA which catered to a wide range of learners during the pandemic. Nonetheless, the policies indicated in the table and other similar initiative can still be used as a basis for responding to future pandemics or similar emergencies that impede face-to-face TVET instruction. The key takeaway here is that while 'safety' and 'health' are paramount concerns, 'learning' should also be given equal attention to help students recover from learning losses.

VI. Moving Forward

TESDA has already taken steps in response to the COVID-19 Pandemic, which can in turn be used as a basis for further action to ease the transition to the reopening of TVET institutions. That said, more could be done to streamline these efforts and complement the overall national initiative to reopen face-to-face classes across all institutions, TVET-related or not, across the country. To that end, the following may be TESDA's further steps, in addition to those indicated in the reopening of schools:

1. Create a TESDA Task Force or an equivalent ad hoc body that will implement and monitor the agency's COVID-19 initiatives, including the return of face-to-face classes once it is deemed permissible and addressing the learning loss. This Task Force or ad hoc body will (ideally) determine where in the country could TVET schools finally reopen to full operability vis-a-vis where partial reopening is more feasible as well as helping students cope with the learning that they are supposed to acquire. The Task Force or ad hoc body should consist of the appropriate offices in Central, as well as Regional and Provincial offices that can enact measures and enforce the COVID-19 initiatives on the ground. Regular, perhaps quarterly, progress reports must also be gathered and reported to gauge the initiatives' success.

- 2. Enjoin all TVET institutions to comply with prevailing COVID-19 guidelines, perhaps through the inclusion of appropriate metrics in TESDA's regular audits of TVET institutions and the like. How TESDA could implement this particular measure may have to be consulted with the National Institute for Technical Education and Skills Development, the National Inspectorate for Scholarship Programs, and/or the Regional Operations Management Office, considering their regular functions in relation to TVET institutions. Enjoining these institutions may also entail the passage of resolutions from Regional and Provincial Technical Education and Skills Development Committees, thereby cementing more binding commitments of compliance from not only TESDA field offices and government agencies, but also industry representatives, TVET educators, labor groups, and employers.
- 3. Seek improvements to existing TVET systems, making them more resilient. As said by the World Bank, the COVID pandemic tested the robustness of education systems around the world, and most were quickly disrupted due to lockdowns that prevented students from attending their schools in-person. TESDA, therefore, has more reason to finally review its existing systems to see if they can adapt to the new rigors of a post-COVID learning environment. Specific recommendations to improve existing TVET systems include the following:
 - a. Alternative learning methodologies for all TVET courses should be considered, as it is noted that most learning losses are incurred due to schools shutting down in response to COVID. Alternatives to face-to-face TVET learning, such as the TESDA Online Program, must be utilized as quickly as possible and that may mean creating separate methodologies of instruction for TVET courses that relied mainly on face-to-face and/or hands-on training. It is acknowledged that not all courses can be taught through these secondary methods, but contingencies have to be made to ensure that their instruction does not completely halt during another pandemic. Live streaming platforms like Zoom may also be considered to facilitate an online classroom-like environment.
 - b. Investments in smart technologies are a good start, as while TESDA has its Online Program to facilitate remote learning via the Internet, the Program can be refined further to enhance the user experience. As an example, a real-time feedback mechanism for both learners and instructors may have to be considered to ensure that the former's learning needs are properly met by the latter. Should discrepancies be seen, then the instructors will have to adjust so that the learning experience is properly adapted to account for these flaws.
 - c. Additional capacity-building for TVET instructors may also be considered to ensure that they are properly equipped to handle both face-to-face and online instruction, thereby preparing them for crises similar (or worse) than COVID-19 in the future. It may be necessary to screen potential instructors for their proficiency in using smart technologies (as it may be necessary for them to facilitate distance learning if another COVID-like event strikes) and their knowledge of basic health protocols for managing similar crises.
 - d. Refinement of TESDA's gathering of student data may be considered as well so that educators and policymakers alike will have a better grasp on how TVET students fared during and after the pandemic information that can have a significant impact on all TVET-related decisions, moving forward (particularly those made by the above-mentioned Task Force/ ad hoc body). Should another COVID-like crisis happens, it will be important for TESDA to find out who among its students will require support in attending online or distance learning classes, or who among those already enrolled in such programs are performing better than their peers.
 - e. Further discussions with TVET schools and instructors may be necessary as the aforementioned measures are not necessarily applicable to all learning settings and needs. Much like what educators in primary, secondary, and tertiary education have said, a 'one-size-fits-all' approach is not infeasible to recover from COVID-related learning losses due to various differences in setting, students, and even the nature of the learning objectives themselves. It is only by continuous coordination with TVET schools and instructors that TESDA can tailor its systems as close as possible to the situations on the ground, and thereby give students the best tools they need to continue their education despite the challenges presented by COVID or a similar kind of crisis.

f. Establish strategies to address learning loss of students due to pandemic to cope limitations in the learning that trainees are supposed to experience and competencies that were not acquired because of the closure of the training institutions. The strategies may include remedial classes, additional activities, among others, to make sure that they have acquired the required skills needed in the workplace.

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