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Responding to the changing needs of the labor market: Overview of the country's TVET

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Despite the growth of technical and vocational education and training (TVET) in the country due to the reforms in the education sector since the Congressional Commission on Education (EDCOM) in 1991, its implementation has been surrounded by pressing concerns such as limited resources and its less favorable impact on employment generation (ADB 2021).

As declared by the United Nations Education, Scientific and Cultural Organization (UNESCO) and the International Labour Organization (ILO), technical and vocational education should be a significant component of the educational process in all countries, serving as a mechanism to develop one's potential for them to continuously improve their professional skills and knowledge (UNESCO and ILO 2002).

Based on existing research, this *Policy Note* provides a snapshot of the country's TVET, largely drawing from Orbeta and Paqueo (2022) and examining recent data collected by the Technical Education and Skills Development Authority (TESDA). It discusses some issues on the regulation and implementation of TVET programs that need to be addressed so that the country's labor force can keep pace with the changing labor market environment.

Salient Points:

- Enrollment and graduates of TVET had been rising over the years, but this was hampered by the COVID-19 pandemic.
 Community-based training is popularly sought, while participation in enterprise-based training remains low. The value of TVET for upskilling and retooling, not just employment, is increasingly recognized by TVET clients.
- Issues and concerns surround the regulation and implementation of TVET. There is greater focus on equity than attaining TVET's goal of producing graduates equipped with skills responsive to the rapidly changing demand of the labor market.
- The policy objectives of TVET can be achieved by (1) promoting its responsiveness to industry needs,
 (2) balancing its equity and efficiency objectives without sacrificing the other, and (3) developing training providers' capacity for flexible delivery while recognizing the different capacities of TVET clients.

Where are we now?

The COVID-19 pandemic hampered the rising enrollment, graduates, assessment, and certification in TVET.

Data on enrollment, graduation, assessment, and certification before the COVID-19 pandemic showed continued progress until 2019. However, this progress was interrupted at the onset of the pandemic in 2020, wherein a significant decline in the statistics was recorded (Figure 1). Nonetheless, the disruptions to training seem temporary, as a moderate increase in the statistics was observed in 2021.

Furthermore, a significant proportion of TVET graduates have not taken competency assessments to secure certifications (Figure 1). In 2021, only 55 percent of TVET graduates were assessed. This could likely be attributed to the lack of training regulations that prescribe clear and specific guidelines on the conduct of training and how competency assessments should be done. Not all training programs have training regulations, especially those delivered through the community-based mode, where only around a third of the TVET graduates are from courses with training regulations (Orbeta 2022).

The proportion of graduates from community-based training has become significant over time, while that of enterprise-based training remains small.

There are four modes of delivering TVET: institution-based, enterprise-based, community-based, and "monitored".¹ The dominance of institution-based training in the distribution of enrollment and graduates has been evident in the past decade (Table 1).



Figure 1. Number of enrollment, graduates, assessment, and certification, 2005–2021

Sources: TESDA (2011, 2013, 2016, 2019, 2020, 2021a)

¹ Orbeta (2022) defines the different TVET training modalities as follows. Institution-based training is delivered in TESDA technology institutes, private technical vocational institutes, state colleges and universities, local colleges and universities, and training centers established by local government units (LGUs). Enterprise-based training is primarily conducted in the enterprise. Community-based training primarily targets the poor and marginalized groups that are not served by formal training provisions. "Monitored" training is a recently added category, which includes skills training programs conducted by other national government agencies.

	2010		2015		2021	
	Number	Proportion (%)	Number	Proportion (%)	Number	Proportion (%)
Enrolled	1,568,617	100.0	2,281,389	100.0	1,240,099	100.0
Institution-based	860,919	54.9	1,166,613	51.1	570,688	46.2
Enterprise-based	86,978	5.5	63,625	2.8	84,057	6.8
Community-based	620,720	39.6	1,051,151	46.1	472,791	38.1
Monitored	-	-	-	-	110,563	8.9
Graduates	1,344,371	100.0	2,129,758	100.0	1,157,289	100.0
Institution-based	671,488	49.9	1,036,290	48.7	526,357	45.5
Enterprise-based	73,352	5.5	57,002	2.7	86,004	7.4
Community-based	599,531	44.6	1,036,466	48.7	440,969	38.1
Monitored	-	-	-	-	103,859	9.0

Table 1. TVET enrollment and graduation by mode of delivery

TVET = technical and vocational education and training

"-" = no data available Sources: TESDA (2011, 2016, 2021a)

Community-based training is also generating a large share of enrollment and graduates, which possibly reflects the increasing emphasis on the equity objective of TVET (Orbeta and Paqueo 2022). A pressing concern about the community-based mode is that the training programs are of poorer quality and largely supply-driven, as these are usually underresourced and have limited linkages with industry (ADB 2021). On the other hand, enterprise-based training (EBT) is widely considered the most responsive to industry needs, as it tends to be practical, exhibits close linkages with enterprise requirements, and provides means for continuous learning and adaptation to new technologies (ADB 2021). However, EBT continues to account for a small proportion of enrollment and graduates.

The sectoral distribution of graduates suggests that trainees are attracted to the fast-growing sectors of the economy.

Agriculture, forestry, and fishery; tourism; and social community and development show the largest number of graduates (Figure 2). One notable development during the COVID-19 pandemic is the sudden rise of graduates in agriculture, forestry, and fishery. This could be attributed to the resiliency of agricultural employment during the pandemic, as it is both an essential and low-contact sector (Debuque-Gonzales et al. 2023). Furthermore, Lucero (2021) notes that the first lockdown in March 2020 caused city workers to return to their provincial homes and rely on farming for income, thus potentially increasing demand for agricultural training. In contrast, the information and communications technology sector held the top position in the number of graduates around a decade ago (Orbeta and Esguerra 2016) but has now shifted to the tenth place. This is despite the importance of digital skills for job markets in the Philippines (ADB and LinkedIn 2022).

TVET graduates mostly seek local employment.

In 2020, the employment rate of TVET graduates was nearly 80 percent, with more than 90 percent of the employed obtaining jobs within their localities (Figure 3). This figure is a notable development compared to the situation in 2013, wherein less than 80 percent of the employed TVET graduates found jobs within their provinces. Relatedly, an online survey conducted by Jobstreet.com Philippines in 2016 saw that 3 out 4 Filipinos prefer to work in their hometowns, citing "family, working environment and culture, and work-life balance" as main reasons (Uy 2016).

Figure 2. TVET graduates by sector, 2021



Figure 3. Location of work of employed TVET graduates, 2020 (% of total)



There is a shifting composition of TVET graduates and reasons for taking TVET.

The traditional targets of TVET are high school graduates who do not intend to go to college (Orbeta and Paqueo 2022). There is also a public perception that enrolling in TVET is the last choice for students who cannot afford university expenses (TESDA 2010). However, this is no longer the case in recent years. In 2020, nearly a third of TVET graduates are college graduates, followed only by high school graduates and college undergraduates (Figure 4).

Most TVET graduates took their respective programs to upgrade/enhance their skills (Figure 5). This

differs from the pattern found by Orbeta and Esguerra (2016) in 2012, wherein employment is the top reason for enrolling in TVET. Another interesting observation that can be gleaned in Figure 5 is that the proportion of students who enrolled in TVET for "personal use/interest/hobby" has grown from only 2 percent in 2012 to as much as 17 percent in 2020. The significant development in reasons for taking TVET seems to indicate that TVET graduates are increasingly putting emphasis on skills expansion and not just employment. Expanding one's skill set might be a response to a more dynamic labor market where technological innovation and digitalization of work have changed the demand for skills at a faster pace.



Figure 4. Distribution of TVET graduates by highest educational attainment, 2020 (% of total)





Source: TESDA (2021b)

Why are we here?

Orbeta and Paqueo (2022) identified three factors that contributed to the current situation.

Enterprise-based training is not promoted enough, and the issues surrounding it are yet to be resolved.

As emphasized in the preceding discussions, EBTs, such as apprenticeship and dual training systems (DTS), are the most responsive to the needs of industries. While there are laws on apprenticeships, training, and internships, the lack of progress in increasing participation in EBT suggests that the right solutions are not being proposed. How to incentivize firms to participate in such training and how it should be financed are some questions that need to be addressed.

Emphasis is put on the equity objective to the neglect of the efficiency objective of TVET.

Much focus is given to community-based training, as shown by the large proportion of graduates under this mode. While this should be commended since the primary targets of such programs are the vulnerable groups, there is a need to also pay attention to training in cutting-edge technologies. This training is essential to increasing productivity and addressing the skill needs for emerging highly productive activities. Both objectives must be equally promoted and financed not only to uplift the quality of life of the vulnerable but also to respond to the country's economic needs for a highly skilled workforce and higher-value production activities.

Obtaining employable skills and securing protection from changing labor market needs have encouraged college students and graduates to participate in TVET.

To keep up with the rapidly changing demands of the labor market, it appears that college graduates and college students sought to enroll in TVET to gain employable skills. This development implies that a college diploma might no longer be a sufficient advantage in employment and that college-educated workers are fully aware of the importance of acquiring new skills.

What must we do to move forward?

Promote responsiveness of TVET to industry needs.

First, the EBT should be promoted given its demand-driven nature, making it the preferred mode of delivery among industries and a solution to the job-skill mismatch in the labor market (Orbeta and Paqueo 2022). At present, the EBT is not attractive enough for the private sector, even if this mode of delivery responds to their skills requirements. The low proportion of enrollment and graduates in EBT means that it must be rigorously promoted, and the issues surrounding it must be addressed. It is important to examine the EBT and its respective issues, starting with how EBT programs should be financed to increase incentives for the training providers. For example, ADB (2021) recommends that TESDA's efforts in expanding EBT be intensified by (1) enhancing the training modality of EBT to be aligned with Industry 4.0, (2) conducting a thorough review of the Dual Training System Act of 1994 (DTS Law) and the Apprenticeship Bill, and (3) exploring means to incentivize private sector's participation to increase the number of EBT graduates.



Second, 21st-century (or transversal) skills should be integrated into the TVET curriculum. The World Economic Forum (2020) argues that transversal skills are essential for individuals and organizations to thrive in the current and future economy. These skills are becoming more important than traditional technical skills in many industries (Manyika et al. 2017). Also, Mahmud and Wong (2022) stressed the importance of 21st-century skills for better employability, wherein among the most important skills for employability are communication, critical thinking, and interpersonal skills.

Third, TESDA needs to develop its capacity for regulating and testing training modalities to entice private sector participation in TVET programs (Orbeta and Paqueo 2022). It needs to enhance its regulatory functions, which have become complex over time due to rapid technological developments that have substantial impacts on the labor market (Orbeta and Paqueo 2022). Organizational reforms in TESDA must also be put in place, including establishing a public financial management system and further strengthening its quality assurance system (ADB 2021).

Fourth, a labor market information system for TVET must be developed to collect timely and relevant data that could help TESDA identify current in-demand skills and anticipate future skills needs. The present Labor Force Survey does not fully capture the extent of TVET as it only includes those who took their training in technical and vocational institutions and does not cover those from enterprise- and community-based training (Orbeta and Paqueo 2022).

Fifth, it is important to monitor the training progress of TVET learners. This will help in identifying skills that are stackable for employment. Monitoring will help understand how learners perceive their employability through their enrollment and participation in different TVET training programs.

The twin objectives of TVET on equity and efficiency must be balanced without sacrificing the other.

Cutting-edge technology skills, as well as digital skills, should be consistently promoted. Forging a partnership with the private sector could be a good initiative to promote said skills, especially in the case of EBT, wherein skills acquired from this training are needed by the private sector. Additionally, it is important to closely monitor the implementation of community-based training, given its significant representation, to ensure training quality (Orbeta and Paqueo 2022).

Develop capacity for flexible delivery of TVET while recognizing the differing capacities of potential TVET clients.

Learning and training, including access to TVET, should not be impeded by emergencies or crises experienced during the COVID-19 pandemic. Hence, alternative modes of delivery, such as flexible learning modalities, must be developed (e.g., TESDA Online Program) to mitigate the disruptions to learning and training. Further, harnessing digital technologies to develop new approaches in the assessment and certification of TVET trainees should be considered (KRIVET 2020). Alternative delivery methods require building the capacity of teachers and trainers in developing content appropriate for these platforms. Due consideration should also be given to the capacities of intended clients. For instance, Orbeta et al. (2021) found that limited financial resources, information, and access to the internet for online learning prevent the youth from participating in TVET. Therefore, flexible delivery of TVET will only be successful if both the effective delivery in alternative platforms and the equitable access to learning resources are met.

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Ma. Christina F. Epetia is a research fellow, while Ivan Cassidy F. Villena is a consultant at PIDS. The views expressed in this publication are those of the authors and do not necessarily reflect the views and policies of PIDS or any of the study's sponsors.

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