

#### Article

# **Augmenting Enrolment through Integration of TVET and General Education**

Hari Pradhan\* TVET Expert

#### **Abstract**

Nepal has made a significant progress in the Technical and Vocational Education and Training (TVET) sector. However, the declining trend in student enrolment, which has led to even the closure of TVET institutions, poses questions over these achievements. The Ministry of Education, Science and Technology (MoEST) has explained in detail the TVET problems and issues in its TVET Sector Analysis Report (TVET SAR) 20791, the Technical and Vocational Education and Training Reform Strategic Plan (TRSP) 2079 and the TVET Sector Strategic Plan (TSSP) 2079. Avoiding repetition, this article focuses on the integration between TVET and general education, and of qualifications within the TVET system to facilitate its vertical expansion as a means to boost enrolment. It addresses issues such as social stigma and systemic disarray; explores policy efforts in the international practices; chronicles Nepal efforts; and examines challenges like policy-implementation gaps, rigid teaching methods, poor internal efficiency, and subpar employment outcomes. The paper concludes that Nepal must continue preparing competent and competitive TVET graduates for both domestic and international markets. Achieving this requires restructuring the education system, particularly through integration mechanisms. By taking references from the proven international models, Nepal can transform its TVET system into an attractive choice not only for Nepali students but also for international learners.

Keywords: integration, recognition, pathways, credit, multi-exit and multi-entry

#### Introduction

The importance of TVET cannot be overstated, as it has the proven capacity to prepare a competent and competitive workforce for industrial and entrepreneurial markets. Both developed and developing countries have been investing significantly in

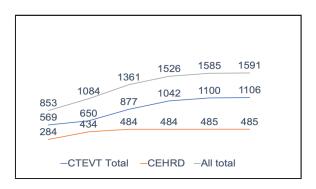
TVET systems, and Nepal is no exception. Provisions for Pre-Diploma and Diploma-Level qualifications and short-term training initiatives taken by the Ministry of Education, Science and Technology (MoEST) through the Center for Education and Human Resources

<sup>\*</sup>Corresponding author. Email: drharipradhan@gmail.com

<sup>&</sup>lt;sup>1</sup>Except for international references, all dates presented in this paper are in Bikram Sambat (BS).

Development (CEHRD) and the Council for Technical Education and Vocational Training (CTEVT) are noteworthy. The government's commitment to open one CTEVT-approved school at each local level<sup>1</sup> is evidence of its emphasis on TVET. As a result, according to TVET SAR 2079, altogether 1,591 schools with 107,411 intake capacity were established by 2078 (Figure 1) which facilitated TVET access to 85% of the local levels (Pradhan et al., 2079a).

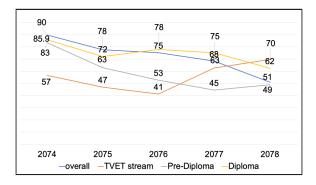
Figure 1: Growth in TVET School Numbers (2073-2078)



Apart from these long-term courses, a large number of short courses are offered by the government, and national and international development partners (IDPs).

Despite these achievements and potentials, challenges persist. The TVET SAR 2079 revealed, despite increase in number of schools (Figure 1), a declining trend in enrolment, with CEHRD and CTEVT programs utilizing only 51% of intake capacity in 2078 (Figure 2). With only 43.1% enrolment in 2079 (CTEVT 2081), the situation with CTEVT got further poorer.

Figure 2: Reduction Tendency in Enrolment Rates (2074-2078)



An ADB study in 2077 reported that, due to insufficient enrolment, not even all the scholarship places were filled in and as a result, annually a large number of these scholarship quotas remained vacant (Pradhan 2077a). Referring to the CTEVT, Kilambu (2080) reported that 50% of schools were on the verge of closure due to the lack of students which led to an increased number of applications for closing schools. Recent media reports stated that several CEHRD and CTEVT schools were closed or facing difficulty to operate due to insufficient enrolment (Maharjan, 2081). All these evidences suggest waste of precious resources from an economy in crisis. On the other hand, as the national development depends on a competent and competitive workforce as envisioned in the Constitution, addressing factors behind these enrolment challenges is imperative.

### **Objective**

This paper aims to contribute to Nepal's effort on TVET reform. Specifically, it aims at initiating discussion on vertical integration

<sup>&</sup>lt;sup>1</sup>The then PM, K P Oli's inaugural speech on 12 October 2015.

and expansion of TVET qualifications, and horizontal integration with general education, thereby increasing student attraction to and retention in the TVET system.

### Methodology

This paper relies on desk review resources including the Constitution 2072, CTEVT Act 2045 (amended version), 13<sup>th</sup> to 16<sup>th</sup> national periodic plans, the government's strategic plan, the UNESCO-UNEVOC website, articles published on the internet, and relevant news articles. It attaches importance on the integration, beginning with issues affecting TVET enrolment, followed by examples of international practices and the Nepalese efforts made so far. The next two sections are on challenges and conclusions.

## **Key Issues Contributing to Reduced Enrolment**

Nepal's TVET challenges are extensively analyzed in the MoEST prepared TVET SAR 2079 and TRSP 2080-2089 (Pradhan et al., 2079a). Therefore, in order to reduce repetition, this article focuses on social stigma and misconceptions, disarray in the TVET system, and limitations with short-term training.

## Social Stigma and Misconceptions

In Nepal, TVET is often perceived as a secondary option for students deemed academically weaker. For instance, it is considered the only pathway to furthering education for non-graders of school education examination (Taskforce on Curriculum

Reform, 2081). Pre-diploma and Diplomalevel TVET programs under CTEVT are often viewed as training, not education. Surprisingly, the government's periodic plans lack clarity on the difference between 'skills training' and 'technical and vocational education'. As an example, the budget speech, 2079/80 point no. 168 mentions, 'CTEVT will be restructured and developed as two separate bodies: regulatory agency for quality training and implementing agency for skill-based training program' (MoF 2079). It should have plan to develop CTEVT as TVET sector's quality assurance body rather than targeting it to make a regulatory agency only for quality training. Further, CTEVT's intake capacity for 2080/81 shows the predominance of engineering (43%), health (22%), and agriculture sector programs (31%) (CTEVT, 2081) proves that even the TVET leaders and stakeholders appear to have an incomplete understanding of TVET concept. Over emphasis on these few study areas also suggests that the TVET managers have overlooked the potential in other areas. For instance, achievements in ophthalmology by Tilganga Institute of Ophthalmology, and the uniqueness in forestry and tourism resources that could help diversify study areas are noteworthy. Study programs in these areas could help Nepal TVET even attract international students.

Evidence suggests raising the question of whether education ministers properly realize the capacity and capability of TVET. For instance, one of the education ministers, speaking in the parliament, said,

'CTEVT, TEVT is vocational training..., if someone joins Bachelor's (Degree course) after vocational training, it is a failure' (Nepsal, 2081). Does such an understanding give the right message to the TVET students, parents, and aspirants? What kind of legislative instruments and systems will the parliament develop with such conception? The consequences of an incomplete understanding of a complex system such as TVET has already been reflected in Education Policy 2076. Unless the 'employment first' as the core TVET principle is followed through proper market research, even the Medical Education Commission's mandate on deciding intake seats for CTEVT (GoN 2076) may not be completely agreeable. These instances also question whether policymakers sincerely listen to expert organizations and individuals.

According to TRSP 2079. such misconception-triggered social stigma has not only contributed to reduced enrolment (Pradhan et al., 2079b) but also overshadowed graduates' potential to reach the highest academic qualifications. This bias persists in Nepal, while the international practices such as in Germany, Australia, and India are showcasing TVET's academic and professional value.

### Systemic Disarray

Lack of integration of TVET programs even within CTEVT and that between CEHRD and CTEVT has created confusion among students and parents (Pradhan, 2078a; Pradhan, 2078b) (Figure 3). For instance,

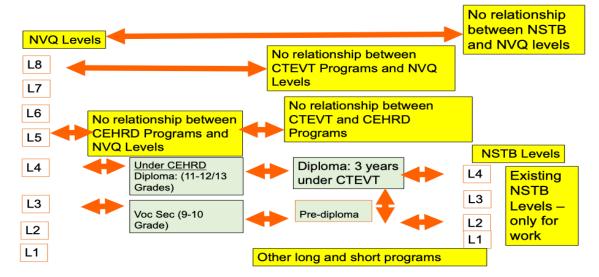
the study duration for the technical stream under CEHRD is two years, while it is three years for CTEVT Diploma programs. Yet, both programs are recognized as having the same qualification. This raises the question as why students should opt for programs that require a longer duration to complete while there is a time-efficient option. The MoEST's task force on curriculum development considered the technical stream in Grade 9 and 10 inappropriate and recommended the ministry for its closure (Taskforce on Curriculum Reform, 2081). A serious question appears as to why the MoEST has to be engaged in TVET implementation, while the legislation has mandated CTEVT with this responsibility. Another relevant question in this context is why CTEVT has mandates for both the implementation and quality assurance responsibility. The MoEST even implemented two big loan projects by itself. The conflicting arrangements do not stop here. The National Examination Board (NEB) with the responsibility to assess Grade 12 students is also mandated to assess CTEVT students with 13 years of education 2076). (GoN/MoEST. NEB's current examination system may also not be fully capacitated to assess CTEVT's competencybased framework.

Disarray also continues within CTEVT itself, as Pre-Diploma graduates must spend another three years to complete a Diploma despite completing 1.5 to 2 years of study (Nepal et al., 2074; Pradhan, 2077b). The MoEST's task force on curriculum development considers this a waste of

students' time (Taskforce on Curriculum Reform, 2081). As both qualifications have the same entry criteria, integration of these two qualifications could rather become a beautiful advantage for students but remains so far. On top of all these problems, the TVET graduates lack seamless further educational opportunities (Pradhan et al., 2079a, Pradhan et al., 2079b; Pradhan et al., 2078c).

Figure 3: Disarray within the TVET system

Similarly, short-term training programs also suffer from several limitations. The foremost is that they are designed solely for employment. Recognition of Prior Learning (RPL) is predominantly limited to Levels 1 and 2. In any case, the credentials earned lack academic recognition. Although both the TRSP (2079) and TSSP (2079) have stipulated credit provisions for stacking



Source: Pradhan 2077b,c; Pradhan 2078a,b; Pradhan et al., 2079a.

these credentials for vertical progression, implementation remains distant. This limits further education opportunities for short-term training graduates and contributes to reduced interest in TVET programs (Pradhan et al., 2079b).

## Policy and Advocacy Efforts towards Integration

#### **International Practices**

UNESCO-UNIVOC Country Profile shows

even if TVET qualifications are up to the International Standard Classification of Education (ISCED) 3 or 4, most of the countries have integration between the TVET and general education. For instance, Singapore has TVET opportunities for diploma and advanced diploma qualifications beyond Level 4, but it allows further education through general education provisions. On the other hand, the Republic of Korea has a clear pathway from ISCED 4 to junior college, opening the path to a Master's Degree in

general education. Provisions of Japan are almost similar to Korea. Sri Lankan and Bangladesh TVET systems terminate at ISCED 4 with some exceptions for the Bachelor's level. Chinese system does not have a pathway beyond ISCED 4.

Unlike the above systems, some countries have flexible education systems. For instance, the Dutch provision has even professional qualification at the Bachelor's level and graduates can pursue a Master's degree. The Swiss ISCED 3-level TVET graduates could move to higher-level general education through preparatory courses under ISCED 4. The Switzerland education system has two pathways for ISCED 3 graduates to

further education under only professional qualifications or go to the applied university which can lead to a Master's degree. India enables TVET graduates to pursue Bachelor's degrees in TVET facilitating transition to higher education. Such provision makes TVET an attractive alternative for students seeking both skills and pathways for academic advancement (Figure 4).

Similarly, 13% of Australia's universities are dual-sector in that vocational and general education are integrated allowing TVET graduates to transition into Bachelor's programs which ensures greater flexibility for students pursuing higher qualifications. These universities with significant enrolments

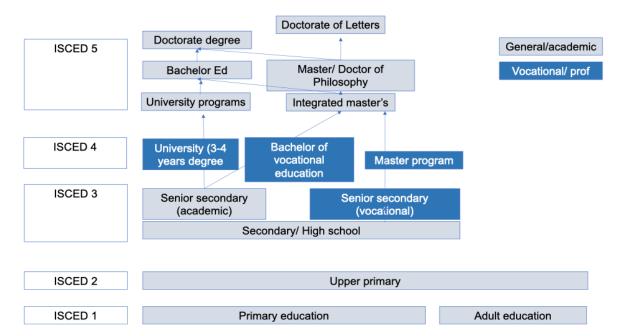


Figure 4: Indian Formal Education System

Source: UNESCO-UNEVOC Country Profile 2024 (with author's minor modification).

in both vocational and higher education admit about twice the proportion of students transferring from vocational education than other universities (Moodie & Wheelahan, 2009). In banking and accountancy over 50 percent of vocational education diploma graduates aged under 25 proceed to study at degree level, which shows that these students were using their vocational education qualification primarily as a pathway to higher education. According to Castillio (2024), to achieve long-term success, the Australian VET system must embrace a harmonized education framework tertiary where vocational and higher education are more closely aligned. Such a system would enable smoother transitions between VET and higher education, foster collaboration and reduce duplication. Further, the Qualification Reform Design Group (2024) suggests 'the qualifications-first approach to integrate pathway credit logic, which is instrumental in supporting career mobility and lifelong learning, including into higher education.

The Royal Melbourne Institute of Technology (RMIT) is one specific example of a dual-sector university ensuring integration. RMIT offers vocational education, also known as TAFE (Technical and Further Education), including hands-on training to help learners enter their first job, upskill, and even change careers or transition into university. As a dual-sector university, its certificates, diplomas and advanced diplomas provide the skills and knowledge for a seamless pathway into learners' desired degree or graduate with an internationally recognized career-ready

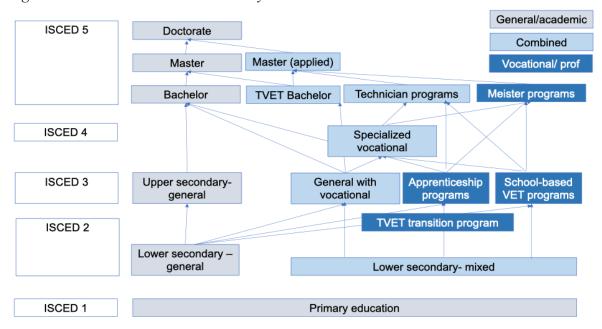
qualification. Under its vocational education sector, the RMIT offers study opportunities in 16 study areas, including art, business, and fashion. The courses are co-designed with industry partners. Students who are studying in another university or institution can apply to study at RMIT and may be eligible to receive credit for previous study.

India has an emphasis on higher education opportunities for TVET graduates which is conveyed by the establishment of skills universities. As in Australia, it also appears to move toward a dual-sector education system. As evidence, the Indian University Grant Commission foresees 'aligning higher education with the evolving needs of industry and society, and this vision is aligned with India's National Education Policy (NEP) 2020 (Government of India, 2020). The NEP with vocational education contents under the higher education chapter has laid the fundamental principle that there will be no hard separations between vocational and academic streams in order to eliminate harmful hierarchies among, and silos among different areas of learning. The overall higher education sector is aimed to be an integrated higher education system that includes both professional and vocational educations. The NEP also plans 'to integrate vocational education into all school and higher education institutions' and envisions the latter 'to offer vocational education either on their own or in partnership with industry and NGOs'. According to NEP, the Bachelor's level vocational degrees introduced in 2013 will continue to exist and will also be available to the students enrolled in all other Bachelor's degree programs, including the 4-year multidisciplinary Bachelor's program.

With a mixed education system, Germany not only provides an opportunity for TVET

students to reach the doctoral level, but it also provides multiple pathways for vertical progression together with lateral movement (Figure 5).

Figure 5: German Formal Education System



Source: UNESCO-UNEVOC Country Profile, 2024 (with author's minor modification)

## **Chronicles of Nepal Efforts**

Nepal's commitment to the preparation of a competent and competitive workforce has been promised in its constitutional provisions, periodic plans, and strategic plans. For instance, Nepal's Constitution 2072 has a policy 'to prepare human resources...while making education scientific, technical, vocational, empirical, employment and people-oriented. This Constitutional provision is aligned with the CTEVT mandate to 'make necessary

arrangement for producing basic, midand high-level technical human resources' (CTEVT Act, 2045). It is also worthy to mention that almost all major political parties have emphasized on skills development in their election manifestos.

Nepal's vision on further education for TVET pursuers and integration between TVET and general education was envisioned through periodic plans as well. For instance,

the 13<sup>th</sup> periodic plan stated to 'create opportunity to students from various fields of study and levels to higher education through the preparation of the National Vocational **Qualification** Framework' (GoN/NPC, 2070). The 14th periodic plan provisions 'opportunity for expansion of TVET (technical stream) up to higher education' (GoN/NPC, 2073). Similarly, the 15th plan had its working policy as 'permeability between general education and technical and vocational education and skills development' (GoN/NPC, 2077) which is relevant in the integration context.

Aligned with the efforts mentioned above, the government approved the National Vocational Qualification Framework (NVQF) (GoN/CTEVT, 2077) (Figure 6) in 2077; and following this decision, the CTEVT/National Skills Testing Board (NSTB) prepared an implementation roadmap in 2077 (Pradhan, 2077). As such, NVQS apparently was considered as an instrument for translating policy and plan provision on integration into practice.

Giving continuation to the previous work on integration and opening vertical pathways for TVET graduates, the government prepared the TVET Reform Strategic Plan (TRSP) in 2079 with a very clear proposal for restructuring the educational system (Table 1). Later, this structure was included in the government-prepared TVET Sector Strategic Plan (TSSP) 2080-2089 (GoN/

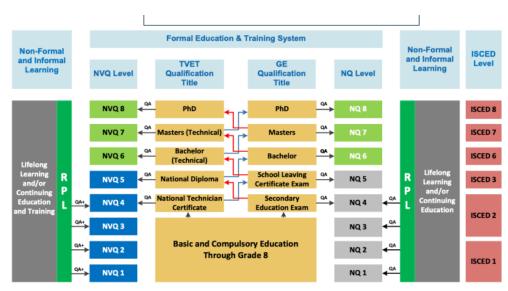


Figure 6: National Vocational Qualification Framework (NVQF)

TVET: Technical and Vocational Education and Training
(+): Indicates additional technological and practical components as required for each level of NVQF
QA: Qualification Assessed as per the set criteria by National Qualifications Authority (NQA)
GE: General Education RPL: Recognition of Prior Learning.
ISCED: International Standard Classification of Education

Source: GoN/ CTEVT, 2077

MoEST, 2080). This development has been reflected well in the 16<sup>th</sup> plan which is currently under implementation and has set a plan to 'install a mechanism to avail an opportunity for vocational qualification up to higher (level) education' (GoN/NPC, 2081) which is completely aligned with the CTEVT Act Article 6.16.

All these pieces of evidence suggest that massive policy efforts have been made focusing on opening the higher-level TVET qualifications and their integration with general education.

Table 1: Educational Qualifications Reform Structure

Age	Education Levels	General Education		Governance		TVET	NVQ Level	Long-short Linkages
24-26	Tertiary	Doctoral Level		Federal and		Doctoral Level	L-8	
23 22	Education	Master Level		Provincial Level		Master Level	L-7	
19-21		<b>Bachelor Level</b>		(Schools also be with Diploma and Pre-Diploma programs)		Bachelor Level	L-6	
18	Post- Secondary Education		Bridging Inputs			Advance Diploma	L-5	
17 16	Secondary Education	Grade 11 to 12	Bridgi	Local Level		Diploma	L-4	
15 14		Grade-9 to 10				Pre-diploma	L-3	L-1 & 2 and RPL
11-13	Basic	Grade-6 to 8				Preparatory TVET		
6-10 5 4	Education	Grade-1 to 5 ECD (kinder Garten)				Elementary/Lite racy TVET		

Source: TRSP 2079; TSSP 2079

### **Advocacy on Integration**

Aligning with the constitutional vision, CTEVT Act, and NPC's plans, several advocacy activities were conducted by CTEVT and the Parliamentary Committee focusing on higher-level educational pathways for TVET graduates and their

seamless recognition as graduates of general education. Of them, presentations made for:
i) provincial workshops on TVET reform held across the country during 2078 (Pradhan et al., 2078c); ii) parliamentarians including the ex-education minister in 2078 (Pradhan,

<sup>&</sup>lt;sup>2</sup>According to the TVET SAR 2079, the cycle completion rate is defined as share of students who graduated their study within curriculum specified duration. Survival rate under CTEVT was calculated as share of students who graduated within curriculum specified duration and those who graduated until the time of this report writing.

2078b); iii) workshop on curriculum reform in 2077 (Pradhan, 2078a); and iii) CTEVT Directors in 2080 (Pradhan 2080) are noteworthy. Apart from these efforts, MoEST organized a large number of workshops during the TVET SAR and TRSP preparation process where Nepal's NVQS was presented as a major instrument of reform.

## **Challenges in Nepal's TVET System**

## Policy Implementation Gap

Despite policy provisions, including CTEVT's legislative mandate on higher education and advocacy activities, no or very minimal progress has been made around integration. Instead, the government continued to develop contradictory policies. For instance, the National Education Policy 2076 (10.11.2) restricted TVET programs up to the Diploma level (MoEST, 2076). Apparently, no thoughts are in place as yet on skills universities as in India and Pakistan. Instead, formation of recent Nepal University indicates government's continued emphasis on general education.

Although a large number of stakeholders, including international development partners (IDPs), have been collaborating with the government, by far, most of such cooperation is on short-term training. There is no evidence showing that IDPs have played a key role in the preparation of higher-level TVET graduates as envisaged by the Constitution, CTEVT Act, and NPC periodic plans.

As such, despite many policy-level provisions on integration, it's hard to understand what, besides bias against the TVET system, might have prevented the government from implementing its own policies and plans. The relevant question is how a thoughtful government capable of putting vision, legislation, and forwardlooking plans and strategies in place could fail in implementation. Could it be because of education ministers' misunderstanding of TVET or indifference to the national vision? In such circumstances, it is unwise to imagine ministers taking action against inactions or mis-actions. The continued policy-implementation gap could be because of technical limitations with bureaucracy or projects distracting the country's vision on TVET. Or whether the efforts made were insufficient or not aligned with national vision, plan, and strategies despite a long history of IDP collaboration equally draws attention. Such incidents also question CTEVT leadership and how far they serve as a policy advisor to the government as mandated by the CTEVT Act or have the technical capacity to contradict the MoEST policies and priorities.

Therefore, addressing the gap in TVET understanding, policy development, and implementation remains a highly challenging action to accomplish.

## Rigid Teaching-Learning Methods and Duration

The TVET SAR 2079 (a) points out the lack of a modular approach and credit system that could help graduates earn credentials

and facilitate multi-exit from, and entry to the TVET system. Therefore, a student is required to complete the course in one go, which is particularly challenging for economically disadvantaged students.

## Poor Internal Efficiency of TVET Programs

Using CTEVT and CEHRD administrative data, the Cycle Completion Rate (CCR) and the Survival Rates (SR) for 2072 and 2076 intakes were calculated for TVET SAR 2079<sup>2</sup>. The findings revealed weak performance of both CTEVT and CEHRD. The CCR and SR data reveal difficulties in completing TVET courses within the specified timeframe or even within extended durations. Such educational inefficiencies discourage students from pursuing TVET.

## Subpar Employment Outcomes

**Employment** outcomes and income improvements are key indicators of TVET success. However, as revealed by TVET SAR 2079, with an employment rate of only 49%, Nepal's TVET system falls short. This is one of the reasons why the TEVT system is criticized for preparing unemployed graduates (Maharjan, 2081). Poor employment prospects deter students choosing from TVET over general education, which is perceived to offer better long-term career and income prospects. The TVET SAR 2079 shows the employment outcomes of the technical stream are poorer than CTEVT results. Then a question naturally arises as to why one should enrol in TVET programs when the employment potential is low. Further, studies conducted in various countries on the importance of general education at higher levels show that despite encouraging immediate employment outcomes, higher academic education yields higher earnings compared to TVET. This finding implies that graduates must pursue higher education for better income. Then, it is natural on the part of students to prefer the general education system which is easy to complete and has better recognition compared to TVET. This situation also develops distaste for TVET among students.

#### Conclusion

Nepal's policy on higher-level TVET qualifications and their integration with general education have been well communicated by the CTEVT Act, national planning documents, and strategic plans. These policies and plans are aligned with the Constitutional provision on TVET. These coherent and consistent policy and plan provisions on higher-level TVET qualifications and education cannot be inadvertent. However, there is a policyimplementation gap, contributing to steady reduction in enrolment, thereby leading to even the closure of programs and schools. Such reduction tendency, on the part of TVET enthusiasts, appears logical as who would like to pursue a study that is difficult to complete and even if it is accomplished, there is neither possibility for satisfactory employment nor an ensured pathway for further education.

Despite several successful models for educational structures, authorities entrusted with responsibility for actions are inactive or taking wrong actions for nearly two decades is worth mulling. Will any policymaker and/or leadership take responsibility for the ramifications on enrolment the country is facing today? How would government justify the continued TVET investment managed with the scanty resources? Similarly, how would IDPs justify their tax payers' money when TVET has been passing through such an immense difficulty? In view of mandates entrusted to it and international practices, by now, CTEVT should have been established as a strong TVET sector quality assurance body with some responsibility of managing the centers of excellence and research. However, there is no time to get entangled in debate, rather the need is to work at high speed, particularly focusing on integration between TVET and general education with the purpose of facilitating further education for TVET graduates as envisioned in the Constitution, CTEVT Act, periodic plans and government's TSSP. This situation calls for a performance review of responsible agencies and also putting TVET principlesaligned TVET Act in place. Perhaps IDPs too would like to review their past works and design future interventions aligning them with people's expectations expressed through the documents mentioned above. In order to help the government take effective moves, the IDPs could collaborate to build CTEVT and MoEST staff capacity, focusing on the operationalization of the integration process.

Nepal's move towards this direction could benefit from the lessons from successful and relevant international models. Due to the mixed education system and clear pathway up to the Master's level for TVET graduates, the German model is relevant for developing the education structure for Nepal. Similarly, it will be useful to refer to Australia's proven dual-sector education system. Due to geographical proximity and similar socio-cultural context, review of Indian practices will also be helpful. Knowledge on these models could help Nepal develop an integrated education system that could ensure pathways for educational progression while also facilitating better employment outcomes. This would make TVET an attractive choice to Nepali students, thereby augmenting the TVET enrolment. Moreover, the potentials of some fields of studies suggest that Nepal's TVET system could even attract international students.

#### References

Advice from the Qualification Reform Design Group. (2024). Unlocking the potential of VET. Improving the relevance and transferability of vocational education and training qualifications. Final report. https://www.dewr.gov.au/download/16685/qrdg-final-report-december-2024/38976/qrdg-final-report-december-2024/pdf

Castillo, J. A. (2024). *VET qualifications* reform: The end of training packages as we know them [LinkedIn page]. Retrieved

- December 15, 2024, from https://www.linkedin.com/pulse/vet-qualifications-reform-end-training-packages-we-amarocastillo-hxy3c/
- Council for Technical Education and Vocational Training. (2077). *National qualifications framework Nepal*. CTEVT/ Swisscontact/ NVQS Project.
- Council for Technical Education and Vocational Training. (2081). *Integrated training management system*. Retrieved on December 15, 2024, from https://itms.ctevt.org.np:5580/
- Government of Nepal. (2072). *The Constitution of Nepal*.
- Government of Nepal. (2045). Council for technical education and vocational training act, 2045.
- Government of Nepal. (2076). *National medical education act, 2018.*
- Kilambu, N. (2080, Bhadra 06). CTEVT deprived of students. The Kantipur News. https://youtu.be/vloaJz4bW5g?si=p6FSssi4wD79oaVK.
- Maharjan, B. (2081, Ashoj 09). *Due to a lack of students, two schools in Salyan have stopped teaching technology.* The Kantipur Daily. https://ekantipur.com/en/pradesh-6/2024/09/25/due-to-lack-of-students-two-schools-in-salyan-have-stopped-teaching-technology-31-13.html

- Ministry of Education, Science and Technology. (2076). *National education policy 2076*.
- Ministry of Education, Science and Technology. (2080). *TVET sector strategic* plan 2080-2089.
- Ministry of Finance. (2079). Budget speech of fiscal year 2079/80.
- Ministry of Human Resource Development, Government of India. (2020). *National Education Policy 2020*. https://www.education.gov.in/sites/upload\_files/mhrd/files/NEP Final English 0.pdf
- Moodie, G., & Wheelahan, L. (2009). The significance of Australian vocational education institutions in opening access to higher education. Retrieved on Dec 04, 2024, from https://www.academia.edu/311229
- National Planning Commission. (2070). *The 13<sup>th</sup> plan (2012/13-2015/16)*.
- National Planning Commission. (2073). *The 14<sup>th</sup> plan (2016/17-2018/19).*
- National Planning Commission. (2077). *The 15<sup>th</sup> plan (2019/20-2023/24)*.
- National Planning Commission. (2081). *The 16<sup>th</sup> plan (2024/25-2028/29).*
- Nepal, A. (2024, April 04). Sumana Shrestha: Politics in education - Answers to MPs in parliament about her effort in education

- [Video]. YouTube. https://youtube.com/watch?v=kmdgGHA7qng
- Nepal, J., Sharma, M., & Pradhan, H. (2074). Policy dialogue: A participatory review of TVET policy 2012. Report submitted to Policy Coordination Committee, Ministry of Education and United Nations Development Programme.
- Pradhan, H. (2077a). Assessment of TVET courses (TSLC and diploma). Report submitted to Asian Development Bank. TA-8521 NEP: Supporting education and skills development.
- Pradhan, H. (2077b). Roadmap on development and operationalization of NVQS in Nepal. Report submitted to CTEVT/NSTB-Swisscontact, Bhaktapur, Nepal.
- Pradhan, H. (2077c, Chaitra 12).

  Conceptualizing TVET system adjustments
  for learners' educational progression
  and employment [Paper presentation].
  Seminar on TVET Sector Reform for
  Nation's Prosperity, Kathmandu, Nepal.
- Pradhan, H. (2078a, Chaitra 07). *Curricula reform: context, challenges and way forward* [Paper presentation]. Workshop on 'TVET Curriculum Reform, Kathmandu, Nepal.
- Pradhan, H. (2078b, Push 26). Overview of the current challenges and opportunities in the TVET sector [Paper presentation].

- Workshop on Interaction with Parliamentarians on Technical Vocational Education and Training (TVET) Reform, Dhulikhel, Nepal.
- Pradhan, H. (2080, Bhadra 04). Aligning level 4 and 5 with pre-diploma and diploma [Paper presentation]. Workshop on 'Aligning level 4 and 5 with pre-diploma and diploma', CTEVT, Bhaktapur, Nepal.
- Pradhan, H., Neupane, N., Paudel, S., Shrestha, S.R., & Koirala, S. (2079a). *Technical and vocational education and training sector analyses report (TVET SAR)*. MoEST/European Union (EU)/The British Council (BC)/Dakchyata/Center for Public Policy Dialogue (CPPD).
- Pradhan, H., Adhikari, R., Shrestha, C.B., Paudel, S., Chalise, B., Shrestha, S.R. and Shrestha, N. (2079b). *TVE reform strategic plan (TRSP) 2032-2032*. MoEST/EU/BC/Dakchyata/CPPD. https://planipolis.iiep.unesco.org/sites/default/files/ressources/nepal TRSP.pdf
- Pradhan, H., Nepal, P., & Shrestha, S. (2078c, Ashad 21). *Overview of Nepal's TVET system* [Paper presentation]. Online Interprovincial Workshop on Provincial Workshop on TVET, Organized by Swiss Agency for Development and Cooperation, Lalitpur.
- RMIT University. (n.d.). *About RMIT*. https://rmit.edu.au/about

Taskforce on Curriculum Reform. (2081, Ashoj 06). Report of Taskforce on TVET Curriculum Reform 2081. Report submitted to Chairperson of CTEVT and Honourable, Minister, Ministry of Education, Science and Technology. Kathmandu. Nepal.

The New Indian Express. (2024, December 18). UGC to introduce guidelines for skill-based courses, micro-credentials in higher education institutions. Retrieved

from https://www.newindianexpress.com/nation/2024/Dec/18/ugc-to-introduce-guidelines-for-skill-based-courses-micro-credentials-in-higher-education-institutions#:~:text=NEW%20 DELHI%3A%20The%20University%-20Grants,in%20the%20rapidly%20 evolving%20job

UNESCO-UNEVOC. (2024). *TVET country profile*. https://unevoc.unesco.org/home/tvet+country+profiles