

#### Article

# **Exploring Stakeholders' Insights into TVET Curriculum in Nepal: A Qualitative Inquiry on Relevance and Practice**

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#### **Abstract**

This study explores the insights of various stakeholders into the relevance and practice of the Technical and Vocational Education and Training (TVET) curriculum under the Council for Technical Education and Vocational Training (CTEVT) in Nepal. How TVET stakeholders see the existing situation of TVET curricula in Nepal, and how they see the solutions were major two research questions to capture the perspectives to assess the appropriateness of existing curricula in relation to labor market demands. This qualitative study integrates poetic expressions with key informant interviews to evoke deeper emotional and contextual understandings. Findings reveal that graduates perceive the curriculum as an overburden, while industry representatives highlight a significant disconnection between curricular content and actual job requirements. Similarly, TVET providers advocate for a balance between theoretical knowledge and practical application. This study stresses the urgent need for a TVET curriculum that not only aligns with labor market needs but also integrates relevant educational theories and streamlines educational processes. By addressing the concerns of diverse stakeholders through a creative lens, this research contributes to enhancing the effectiveness and relevance of TVET curricula in Nepal, thereby supporting the country's economic growth and development.

Keywords: TVET, curriculum relevance, labor market demand, poetic inquiry, stakeholder's perspectives

#### **Background**

The Technical and Vocational Education and Training (TVET) is a vital component of educational system worldwide which encompasses education, training, and skills development across various occupational fields. It focuses on equipping individuals with practical skills and knowledge

necessary for specific trades and occupations, thereby playing a crucial role in enhancing employability and fostering economic development (UNESCO, 2016; Lamsal, 2021). In the underdeveloped contexts, the significance of TVET is amplified because it addresses the urgent need for skilled labor

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which is essential for driving industrial growth and reducing poverty. It is equally important to address the globalized labor market (Acharya, 2023). In Nepal, the evolution of TVET has been marked by various reforms aimed at improving the quality and relevance of training programs (Dakshata, n.d).

The Council for Technical Education and Vocational Training (CTEVT) is an apex body to oversee all major functions of TVET, including the development of curricula that caters to a wide range of sectors. Despite numerous efforts, the existing curricula often fail to meet the skill demands of the labor market, both nationally and for foreign employment opportunities. The research conducted by Adhikari et al. (2023) indicates that a significant number of employers in Nepal believe that workers require additional training to enhance their workplace performance. Besides, there is a need for improvements in various aspects of TVET education, including industrial attachments and on-the-job experience. This misalignment has led to a persistent issue of unemployment and underemployment among graduates with the curriculum frequently blamed for these outcomes. Understanding the relevance of existing curricula in formal long-term TVET programs (such as prediploma and diploma courses), non-formal short-term training programs (generally up to six months duration), professional training (extended duration with more practical opportunity), and apprenticeship schemes (training in the workplace) is critical because

research in TVET serves as a foundation for developing relevant curricula that align with labor market needs (Colombo Plan Staff College [CPSC], 2024).

This research identifies gaps in the current curriculum and assesses its alignment with job market demands based on diverse TVET stakeholders' insights. It addresses the following questions: 1) How do TVET stakeholders see the existing situation of TVET curricula in Nepal? and, 2) How do they see the solutions? By investigating these aspects, the study contributes to the ongoing discourse on enhancing the effectiveness of TVET in Nepal and ensuring that it meets the evolving needs of the economy.

#### Literature Review

In this section, first, we present some curriculum development approaches in TVET sector together with their merits and limitations. Then, we focus on curriculum development approaches and review process in CTEVT. We conclude the section with a brief discussion on quality control in curriculum development.

## Curriculum Development in TVET: Prevailing Approaches

The development of TVET curricula has evolved significantly over the years with various approaches emerging to address the dynamic needs of labor market. The most commonly adopted methods are competency-based, modular, and outcome-based approaches (Boahin, 2018; Mulder & Winterton, 2017; Saha et al., 2023).

The competency-based approach focuses on developing specific skills and knowledge essential for successful job performance. It emphasizes mastery learning, allowing learners to progress at their own pace until they demonstrate proficiency in each competency (Mulder & Winterton, 2017). This approach is particularly well-suited for TVET, as it aligns with the practical and industry-oriented nature of vocational training. The advantages of this approach include ensuring that graduates possess necessary skills for employment, allowing for flexible and self-paced learning, and promoting collaboration between TVET institutions and industry stakeholders. However, it also presents challenges such as the need for extensive resources to develop competency standards and assessments, difficulties in maintaining consistent quality across different TVET providers, and the potential for overemphasizing specific skills at the expense of broader knowledge and critical thinking (Bajracharya, 2022).

In contrast, the *modular approach* divides the curriculum into smaller, self-contained units or modules, each focusing on a specific set of skills or knowledge. This structure allows learners to progress through the program at their own pace while earning credits for completed modules (Boahin, 2018). Advantages of this approach include providing flexibility for learners to customize their learning paths, enabling TVET providers to offer targeted training based on industry needs (Ministry of Education, Science and Technology [MoEST], 2023), and facilitating

the recognition of prior learning and credit transfer. However, it also requires robust systems for credit accumulation and transfer, poses risks of fragmentation in learning if modules are not well-integrated, and presents challenges in ensuring consistent quality across different TVET providers.

The outcome-based approach, on the other hand, lays emphasis on defining clear learning outcomes that learners should achieve by the end of their programs. It emphasizes demonstratingknowledge, skills, and attitudes through performance-based assessments. This approach ensures alignment of learning with industry expectations and standards while promoting learner-centered teaching strategies and facilitating the measurement of program effectiveness (Saha et al., 2023). Nevertheless, it requires extensive planning and resources for developing learning outcomes and assessments, faces challenges in ensuring consistent interpretation across different providers, and may lead to an overemphasis on measurable outcomes at the expense of broader educational goals.

In the context of Nepal, CTEVT has primarily adopted a competency-based approach in developing its TVET curricula of short-term, professional and apprenticeship programs. Perhaps, this is also one of the reasons why curricula of short-term training programs are criticized less than long courses (i.e. academic technical education). For long-term programs, an expert driven mixed approach has been adopted. Mainly, implementation of curricula faces significant challenges such

as outdated curricula, insufficient industry involvement, and inadequate resources for training delivery (Bajracharya, 2022; Baral, 2024). Addressing these limitations could contribute to enhance the relevance and effectiveness of TVET curriculum development in Nepal.

### Curriculum Development Practices in CTEVT

The development of TVET curricula in CTEVT follows a process established by the guidelines to ensure relevance and quality. TVET curricula are developed by the Curriculum Development and Equivalence Division of CTEVT. The personnel involved in developing the curriculum include technicians. supervisors, and experts from business and industry associations, academia, instructors, and representatives from professional councils on the related fields. The curriculum standards are based on competencies and abilities that graduates should develop during their course of study. In long-term programs, assessment methods include formative and summative evaluations for semester and yearly programs and external final examinations that separately assess theoretical knowledge and practical skills (CTEVT, 2024).

The Curriculum Development and Equivalence Division of CTEVT is responsible for designing all types of TVET curricula. A team of subject matter experts is formed based on the specific trade or occupation being addressed. This team determines the subjects to be included in the

curriculum while considering references from other institutions. They also allocate weekly hours for theoretical instruction, practical classes, and on-the-job training components. Once a draft curriculum is prepared, it is submitted to the concerned committee for review. The first draft is shared with the subject committees for review. After refining the first draft from the subject committee, it is shared with the Technical Sub-Committee (TSC), composed of experienced experts in the relevant fields who give final shape to the curriculum. Following review, the curriculum is presented to the Curriculum Development Committee chaired by the Vice Chairperson of CTEVT for approval.

Diverse types of TVET curricula in Nepal reflect the country's efforts to address the skills gap in the labor market and enhance employability among youths. While formal long-term programs (diploma and prediploma) provide comprehensive training opportunities focusing on both skills and knowledge, the non-formal shortterm programs offer skills for immediate employment. Similarly, professional courses contribute specialized training and hands-on experience necessary for various occupations. Understanding the characteristics features of these curricula is essential for assessing their relevance to current labor market demands and identifying areas for improvement within the TVET system. CTEVT's curriculum development practices are characterized by a systematic approach that involves stakeholder engagement, needs assessment, and continuous review processes

although the practice is being blamed as "cosmetic" to some extent (Bajracharya & Paudel, 2021). It indicates the vitality of mobilizing business and industry support in reality.

institution **CTEVT** claims that the collaborates with various stakeholders, including industry representatives and government agencies, to ensure that curricula are relevant and responsive to market demands. Industry advisory boards (known as Sector Skills Committees) are established to facilitate ongoing dialogue between CTEVT and employers, allowing for the integration of real-world insights into the curriculum development process (Caves & Renold, 2024). This collaborative engagement is crucial for aligning educational outcomes with the skills required in the job market, thereby enhancing the employability of graduates. As highlighted by a recent research, effective curriculum development requires not only stakeholder input but also a commitment to praxis - an informed and committed action that integrates theory and practice to empower students (Mahon et al., 2020). This is vital in developing TVET curriculum. However, generally, till now, industry representatives are "just invited for their inputs into the curriculum" (Bhandari, 2023). It means obtaining full potential from business and industry sector is yet to improve.

A critical component of CTEVT's curriculum development, theoretically, is conducting thorough needs assessments to identify

skills gaps in the labor market. This process involves analyzing current employment trends, consulting industry experts, and gathering feedback from employers about the competencies they seek in potential employees. By understanding the specific skills and knowledge required by various sectors, it is possible to design curricula that better prepare students for the workforce. The application of methodologies such as the Develop-A-Curriculum (DACUM) process in short-courses curriculum allows for a structured approach to identify competencies and develop relevant training programs. Furthermore, addressing how industries have evolved over time is essential; questions regarding changes in occupations over the last five years and anticipated future changes help inform curriculum relevance (Boahin, 2018). Thus, frequent needs assessment is imperative.

Similarly, CTEVT employs a systematic periodic review process to ensure that its curricula remain current and effective. This involves regular evaluations of existing programs and curricula to assess their relevance and effectiveness in meeting job market demands. The review process incorporates feedback from stakeholders including students, graduates, and employers - to identify areas for improvement. Additionally, CTEVT conducts research to stay informed about emerging trends and technological advancements that may impact the skills required in the labor market. This proactive approach to curriculum review helps maintain the quality and relevance of TVET programs in Nepal (Lamsal, 2021; MoEST, 2023). However, it is happening less frequently in practice.

Quality assurance is essential in CTEVT's curriculum development practices (Sharma, 2021). CTEVT establishes criteria and accreditation, standards for program ensuring that institutions offering TVET programs meet defined minimum quality standards. However, Baral (2024) examined the decreasing numbers in long-term engineering programs offered under the CTVET framework and identified several underlying factors contributing to this decline and offered recommendations, including curriculum revision, strengthening connections with industry, and enhancing the overall perception and quality of TVET programs.

### Existing CTEVT Curricula: Types, Durations, and Main Features

The TVET system in Nepal incorporates a diverse range of curricula designed to meet the varying needs of learners and the labor market. Similarly, the CTEVT curricula are divided into three main categories: Diploma programs, Pre-diploma programs, and short-term vocational training (including professional and apprenticeship courses). Each category has distinct characteristics, durations, and features that cater to different segments of the population (CTEVT, 2024). Diploma programs are structured educational pathways that typically lead to recognized qualifications in specific vocational fields. These programs range from 18 months to 3

years in duration, depending on the level of the diploma and entry criteria. Major features of diploma programs include a curriculum that combines theoretical instruction with practical training conducted in both classroom and workshop settings. Graduates receive certificates that enhance their employability in the formal labor market.

Pre-diploma programs focus on providing foundational education and practical training for students who may not yet meet the requirements for diploma-level study. These programs typically last from 18 months to 2 years, depending on the specific curriculum and entry criteria. The structure of pre-diploma programs emphasizes skill development through a combination of theoretical learning and hands-on practice (CTEVT, 2024). Graduates from these programs are prepared for entry-level positions or further education at the diploma level programs.

Short-term vocational training includes various courses designed to provide quick skill development for individuals, seeking immediate employment or skill enhancement. The duration of these programs ranges from 40 hours to 1696 hours, allowing for flexibility based on the specific skills being taught. These courses are characterized by their practical focus, targeting unemployed youths, women, and marginalized groups who require immediate skills applicable in the workplace.

#### Research Gap

Literature review highlighted the industrypractice gaps in TVET, emphasizing the importance of transversal skills and the need for curriculum development to align with industry demands (Abd Samad et al., 2018). It is also found that the integration of technology in TVET education significantly impacts current trends in industry demand, which is crucial for enhancing student participation and access to quality education (Tshong & Yasin, 2023). Similarly, the studies also identified several challenges in the TVET sector, including the need for regular updates to the curriculum to keep pace with technological advancements and market needs (Rijal, 2021).

The curriculum development process in TVET involves diverse conceptualizations and approaches aimed at ensuring that the TVET courses meet the needs of both learners and the labor market. For this, different phases of curriculum value chain (including needs assessment to curriculum development and implementation) should function well (Renold et al., 2015). Various scholars have identified four primary approaches to understanding curriculum: as a body of knowledge to be transmitted, as a product to be achieved, as a process involving interactions in the classroom, and as praxis - an informed and committed action that empowers students (Smith, 2000; Mahon et al., 2020). In the context of TVET, the narrower view often equates curriculum with a document outlining content and objectives, while a broader perspective recognizes it as

both planned and implemented practices. Competency-based curricula are particularly relevant in this field, focusing on equipping students with the necessary skills and knowledge to perform effectively in their respective occupations. This approach emphasizes outcomes over inputs, requiring curriculum developers to define competencies clearly and align them with industry needs (Boahin, 2018). Despite these established frameworks, there remains a notable gap in understanding stakeholder perspectives on CTEVT's curriculum and its implementation, particularly in the changed global context, including extensive dimension of foreign employment of Nepali youths and adults (Acharya, 2023). Engaging stakeholders such as graduates, industry representatives, and educators is essential for assessing the relevance of the curricula and identifying areas for improvement. This study aims to address this gap through qualitative research methods, specifically utilizing a poetic inquiry, as provided in the next section, to capture the nuanced experiences and insights of these key stakeholders.

#### Methodology

The research methodology for this study is based on a qualitative approach, which includes poetic inquiry. The poetic inquiry is particularly suited for exploring the complex and nuanced perspectives of various stakeholders involved which "recognize, acknowledge and appreciate diverse ways of knowing, being and doing" (Cooms & Saunders, 2023; p.1). Particularly, this

approach is suitable in this research to obtain research participants' views, grievances, and their recommendations.

The research utilized both primary and secondary data sources, ensuring a comprehensive understanding of the subject matter. Main component of the data collection process was a thorough literature review. This review encompassed existing academic articles, policy documents, and reports related to TVET in Nepal, providing a foundational context for the research.

Further, in-depth interviews with seven purposefully selected research participants (Table 1), including TVET practitioners, experts and graduates also played a significant role in this research. The major criteria for selection of these research participants under different category were their understanding of TVET curriculum development practices

and its present status. This selection allowed for a rich exploration of their experiences and perspectives regarding the present status and desired conditions of TVET curriculum. The qualitative data collected from these interviews provided valuable insights into the challenges and opportunities within the current TVET framework.

All interviews and discussions conducted in Nepali were translated into English. This translation occurred concurrently with transcription, allowing for immediate contextual understanding and preserving the nuances of the original language.

The analysis of the qualitative data involved coding, clustering, and thematic analysis. These methods helped structure the findings and identify key themes that emerged out of the data. Furthermore, taking poetic inquiry as an established research method to capture

*Table 1 : List of Research Participants* 

Research Participants (Pseudonym)	Description of the Research Participants
RP Sharma	Currently a high level official at Hotel Association of Nepal, was in influential positions at the Association in Gandaki Province for more than a decade.
Hari Prasad	A graduate of CTEVT diploma working as a Civil Engineering Instructor at a community technical institution located in Bagmati Province.
Chandra Mani	Working as a Program Coordinator at TECS (Technical Education in Community School) school, Bagmati Province.
Sashi	TVET Expert and Managing Director of a TVET institution running short-term training courses in Kathmandu Valley.
Umesh	Managing Director of a private institute running training in culinary arts and hospitality sector in the core area of the Kathmandu Valley.
Binayak	TVET practitioner and Project Coordinator at an NGO working in the sector of TVET in Madhesh and Koshi provinces.
Sunil	Principal of a constituent CTEVT school located in the Kathmandu Valley.

the feelings of research participants (towards TVET curriculum), we tried to compose poetic creations and presented them in the research report (Prendergast, 2009). While doing this, we made efforts to capture the emotional expression of the research participants.

Quality assurance of the research featured cross-checking information from multiple sources to enhance the credibility of the findings. The information obtained from the seven key research participants was also verified with the information obtained from another parallel study conducted by a Task Force formed by the Ministry of Education, Science and Technology (MoEST) to review the present status of TVET curriculum in which more than 150 stakeholders were met and discussed (MoEST, 2024) in CTEVT headquarters and five different educational institutions.

Ethical considerations were also strictly adhered to, including obtaining (verbal) informed consent from all participants, using pseudonyms to maintain confidentiality, and being considerate of participants' schedules when planning discussions. Approval of the venues and timing of the discussions were also sought to ensure a respectful and conducive environment for the participants.

## **Existing Situation and Necessary Actions: Stakeholders' Insights**

The findings from different interviews conducted with seven research participants as TVET stakeholders reveal critical insights

into the current state of the TVET curriculum (focusing on CTEVT programs) in Nepal. The perspectives of industry representatives and educators highlight existing problems and challenges, as well as potential solutions identified by these stakeholders.

## Existing Situations: Problems and Challenges

It is found that TVET system of Nepal is facing significant challenges in the field of curriculum. The challenges included outdated curriculum that often failed to reflect present labor market needs and the lack of meaningful stakeholder involvement in curriculum reform (Rauner, 2009; Bajracharya & Paudel, 2021). One major issue is the disconnection between the curriculum and labor market needs. Multiple reasons were prevalent in such types of mismatches. RP Sharma (all participants' names are used as pseudonyms), a high-level official at Hotel Association of Nepal, noted that graduates from private training centres tend to perform better than those from CTEVT institutions. He emphasized that CTEVT graduates often seek certification primarily to work abroad, which creates high turnover and a lack of engagement with local industry. Additionally, he pointed out that there is a minimal interaction between CTEVT and industry representatives, leading to a lack of awareness regarding curriculum content and industry needs. During our interview he shared:

CTEVT graduates come and work in the organization for a very short

period; they just try to acquire an experience certificate and go abroad. Additionally, CTEVT interacts very little with us and, resulting into a lack of clear understanding of the curriculum content.

From the statement of the representative from business and industry sector, it is clear that the leading government organization in the sector of TVET (in this particular case, CTEVT) has to strengthen its linkage with private sector (Shrestha, 2021) to reduce the gap on skills and labour market demand.

Another challenge highlighted by Hari Prasad, a Civil Engineering Instructor working at a community technical institution located in Bagmati Province, is the declining enrolment in CTEVT institutions. He mentioned that many students are slow off the mark in foundational subjects like science and math, which are essential for their progression in technical fields. This situation reflects a growing disinterest among students, further exacerbating the challenges faced by the TVET system. During an interview, he expressed his anxiety this way:

It is challenging in deed to address the needs of students who have received low grades or no grades in the Secondary Education Examination (SEE). To take up the technical education, subjects like Science, Math, and English are necessary. However, my feeling is that CTEVT should concentrate more on providing practical skills. Some of these students might pursue higher

education, while others can remain in the workforce, utilizing the practical skills they have acquired.

The insights shared by the civil engineering instructor indicate that there is a prompt need of addressing foundational subject related challenges in the TVET curriculum (Baral, 2024). Particularly, it is more critical to support students with lower academic performance. Addressing such challenges requires a dual focus on enhancing students' applied theoretical understanding while simultaneously prioritizing practical skill development.

Implementation issues also pose significant barriers to the effectiveness of the curriculum. Chandra Mani, working as a Program Coordinator at a TECS school, mentioned that while reforms are being initiated, there is a lack of monitoring mechanisms to ensure that the practical components of the curriculum are effectively implemented. He noted that cheating during examinations is prevalent, further undermining the integrity of the educational process. He expressed:

There is no monitoring mechanism to maintain the practical part of the curriculum, and there is a lack of sincerity towards examinations. Cheating is practiced much in almost all types of schools, which further undermines the integrity of the educational process.

The experiences shared by Chandra Mani highlight critical weaknesses in the

implementation of the TVET curriculum, particularly concerning the absence of effective monitoring system. (Sharma, 2021). In the similar tone, Sashi, Managing Director of a TVET institution running short courses, stressed that "the curriculum itself is not the problem; the issue lies in its implementation." Further, he mentioned that participation from the side of business and industry in providing suggestion on market needs is not genuine, and stated that "although they claim they are not getting appropriate human resources, they rarely specify what they actually need." These issues not only compromise the quality of TVET but also erode trust in the whole system, making it difficult for students to acquire the skills necessary for employment. It becomes essential to explore potential strategies for enhancing accountability and integrity within the educational framework in general and TVET sector in particular.

Umesh, Managing Director of a private institute running training in culinary arts and hospitality in the core area of the Kathmandu Valley raised concerns over the quality of training - compromised by profit-driven motives of some training institutions. He indicated that many instructors merely demonstrate practical lessons while students passively observe, which fails to develop essential skills. During our conversation, Umesh expressed his dissatisfaction in a high pitch:

The major problem in the hospitality sector is that short-term courses conducted by projects are becoming 'byapar' (business-

#### Box 1: Poem

#### **Piles of Problems**

In the corridors of learning-Shadows intertwine, Where aspirations blink like distant stars. Yet, whispers of discontent wave in the air, As dreams of skill clash with harsh realities.

A ravine widensBetween need and creed,
The labor market's silent plea, unheard.
"I am a TEVT graduates," a youth cries,
"Chase certificates, then vanish in the thin air."
Attracted by a foreign dream and gleam,
Classrooms tell not to be dim,
Employers' call falls on deafened ears,
Uff!! Potential HR are in doubt and fears.

Struggles for foundational subjectsPressing heavily on young minds,
Science and math for them like demons.
Practical skills are taught on the boards,
Bridging skills gap in the words.
Yet amid hopeful plans,
Cheating thrives in unseen hands.
Without true checks to guide the way,
Integrity fades; trust slips away.

Profit-driven motivesShadow the skills development scene,
Where quality fades in pursuit of green.
Amid the crowd of stakeholders, a voice cries out,
"Training's lost in business intent."
Curriculum burdens those who strive,
With content too vast to truly thrive.

"We must condense," TVET leaders plead,
To spark a passion, to sow a seed.
So here we stand at this crossroad wide,
With voices echoing from every side.
To mend these gaps and heal these wounds,
A call for change everywhere sounds.

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oriented). If we consider the number of trained youths, I think half of our people would already be trained, but there is no serious training. There is a very big problem in training implementation; however, on paper, everything seems fine. Even during the verification process, those training institutions cheat by arranging false candidates.

The concern mentioned by Umesh shows an upsetting trend in the hospitality training sector, where profit-driven motives takes a toll on quality of TVET programs. The emphasis on short-term business-oriented motives can lead to a superficial approach to training, where students receive certificates without acquiring the essential skills needed for successful careers. Such problems are well accepted in the global TVET sector (UNESCO, 2016). This situation calls for a critical examination of the training programs offered by institutions.

Besides, the participants expressed that the current curriculum is overly complex and burdensome for majority of students. Sunil, a principal of a constituent CTEVT school located in the Kathmandu Valley, expressed his concern that majority of students joining TVET courses have comparatively weak educational foundation. However, "the diploma level curriculum covers contents equivalent to bachelor's level in certain subjects", which ultimately leads to higher failure rate. Chandra Mani also pointed that the vastness of the curriculum that contributes to high failure rates, leading many students to drop out or seek alternative educational paths

such as joining 10+2 courses. He suggested that the duration of diploma programs could be shortened to enhance student retention and success. Similarly, Binayak, a Project Coordinator at an NGO working in the sector of TVET, echoed this concern, stating, while the curriculum is not basically defective, it should be more concise to prevent students from feeling overwhelmed. The poetic expression on problems and challenges in TVET curriculum is presented in Box 1.

#### How TVET Stakeholders See the Solution

Together with the challenges identified, stakeholders also proposed some solutions to enhance the effectiveness of the TVET curriculum. In general, it was shared that revising curriculum is necessary to foster practical skills. Hari, a civil engineering instructor, suggested that CTEVT should concentrate on providing practical skills that align with job market demands (Mulder & Winterton, 2017). He also stressed the importance of initiating curriculum revision processes to ensure that the content remains relevant. Chandra Mani, a program coordinator of TECS School highlighted the need for ongoing reforms in curriculum. As an example, he indicated the need for inclusion of on-the-job training (OJT) provision in the Civil Engineering Diploma Program to better prepare students for realworld challenges. "We have already started the reform in curriculum by adding OJT in Civil Diploma," he shared. Although there is no provision of OJT in curriculum, from the school's own effort, it is already practiced in their institution.

#### **Box 2: Poem**

#### **Measures for Mitigating Misery**

Amidst the shadows of doubt and despair, Voices rise with visions to share. "Revise the curriculum," they call with might, "To weave practical skills into the light."

An urgent plea for relevance is there, "Let us align with what jobs hold dear!" Practical training has real worth,
To prepare our youth fit for work,

Ongoing reforms are needed, people say,
To bridge the gap in a meaningful way.
On-the-Job Training must be a key,
To equip our students for real-world decree.
Yet beyond the walls of classrooms confined,
An urge for leaders: remind, remind, remind!!

"Greater interaction," voices implore, Industry-education linkage: more and more, Participation of employers is often claimed, But, the depth of insight remains unframed. "Experienced hands must shape our fate, Or else we're left with a curriculum late."

Questions arise on implementation galore, How can we thrive if we don't explore? Outdated courses may hold us back, So, to the real updates, make no lack. Awareness blooms as a vital seed, To inform young minds indeed.

A model that blends earning with learning, Can spark a fire of passion, ever-burning. Flexibility emerges as a guiding light, Dreaming in this fast-paced fight.

For those who aspire to reach beyond shores, Training must open all possible doors. TVET stands at this pivotal hour, To blossom a vibrant competent flower. To mend what is broken and heal what is torn, In unity lies hope - a new dawn reborn.

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Intensified stakeholder engagement was also emphasized as a crucial step toward improvement of the present situation. R.P. Sharma, a business industry representative from hospitality sector, called for "greater interaction between CTEVT and industry representatives" to ensure that curricula reflect the needs of employers. Such engagement could help bridge the gap between education and employment (Bajracharya & Paudel, 2021). Sashi, Managing Director of a TVET institution running short-term vocational training who has a long experience in TVET, pointed out that when industry representatives participate in curriculum development, they often do not send experienced professionals who can provide valuable insights. Once, he shared:

There is always a saying that CTEVT courses are very old, even dating back to 1980; however, that is only partially true because those curricula that are not in use have not been updated....In the curriculum development process, there is always the participation of people from business and industry, but they rarely send truly experienced individuals for this purpose. So, 'Tauko Ganne Kam Matra Bhayo' (only head-counting is being done).

The insights shared by Sashi in this quotation reveal a critical detachment between the perception of CTEVT courses and the realities of curriculum development and implementation (Boahin, 2018). In the similar tone, Sunil, a constituent CTEVT school

principal, questioned how a curriculum can be effective when there is no assurance of proper implementation?

While some curricula may be outdated, the underlying issue lies in the lack of effective updates and the unreal participation of industry representatives in the development process (Bajracharya & Paudel, 2021). This highlights a broader systemic challenge where mere attendance of industry stakeholders does not translate into meaningful contributions which ultimately leads to a curriculum that fails to meet the contemporary needs of the labor market. To address these challenges, there is a pressing need for more meaningful involvement from industry experts in the curriculum development process Stakeholders recognized the need to better support students in their learning journeys, ensuring that the education provided is relevant, practical, and aligned with industry demands.

Besides making curriculum more relevant, there were also concern for informing and making people aware regarding TVET programs (Baral, 2024). Binayak, Project Coordinator at an NGO working in the sector of TVET advocated for awareness programs in general schools together with developing more skills focus curricula emphasizing the need for a model that combines earning and learning to enhance practical training. He sees the need to inform potential students and guardians about the opportunities available in TVET sector. Similarly, Umesh suggested that flexibility in training schedules and approaches would help accommodate the needs of students, particularly those

preparing for international opportunities.

A poetic synopsis of findings as shared by the research participants regarding the solutions to the existing problems is illustrated in Box 2 under the title of "Measures for Mi Misery".

### Challenges in TVET Curriculum: A Discussion

The findings from this study highlight significant challenges within the TVET Nepal, curriculum in including disconnection between the curriculum and labor market needs, implementation issues, and the complexity of the curriculum itself. Addressing these challenges requires a multifaceted approach that involves curriculum revision, increased stakeholder engagement, and enhanced support for students. Utilizing the Curriculum Value Chain (CVC) framework (Renold et al., 2015) allows for a more structured analysis of these issues and potential solutions.

The CVC framework posits that effective development involves curriculum series of interconnected stages, including needs assessment, curriculum design, implementation, and evaluation. disconnection between the TVET curriculum and labor market demands highlights a critical gap in the needs assessment phase. Adhikari et al. (2023) emphasizes that existing curricula often fail to meet dynamic labor market demands, leading to unemployment and underemployment among graduates. To address this, CTEVT must enhance its needs

assessment processes by actively engaging with industry stakeholders to gather insights on required competencies and skills.

Adopting a competency-based approach in curriculum design is essential for ensuring that training aligns with industry requirements, focusing on developing specific skills and knowledge crucial for successful job performance (Mulder & Winterton, 2017). This approach emphasizes the need for effective monitoring mechanisms to ensure practical components of the curriculum are implemented, aligning with the Curriculum Value Chain's (CVC) emphasis implementation trustworthiness. By applying a competency-based framework across all types of curriculum development, CTEVT can enhance employability by directly linking curricula to industry needs (Lamsal, 2021), which should include integrating On-the-Job Training (OJT) for hands-on incorporating experience. Additionally, a modular approach allows learners to progress through the smaller, self-contained units while earning credits for completed modules, facilitating recognition of prior learning and enabling targeted training based on industry needs (Boahin, 2018; MoEST, 2023). However, this requires robust systems for credit accumulation and transfer to prevent fragmentation in learning. Similarly, the outcome-based approach plays a vital role in defining clear learning outcomes that learners should achieve by program completion, emphasizing the demonstration of knowledge, skills, and attitudes through performance-based assessments (Saha et al., 2023). This alignment with industry expectations promotes learner-centered teaching strategies while facilitating program effectiveness measurement. Nevertheless, it necessitates extensive planning and resources for developing learning outcomes and assessments. Thus, the complexity of the curriculum, which contributes to high failure and dropout rates among students, can be addressed through targeted support and simplification of the curriculum. This aligns with the CVC's focus on evaluation and feedback mechanisms. Observations of the research participants regarding the overwhelming nature of the curriculum suggest that CTEVT should consider revising the curriculum to focus on essential subjects that directly contribute to employability (CPSC, 2024). Simplifying the curriculum and reducing its duration may help improve student retention and success rates as supported by the literature.

#### Way Forward and Implications

In order to effectively address the challenges identified within the TVET curriculum in Nepal, it is essential to prioritize comprehensive needs assessments that actively engage industry stakeholders. This collaboration will ensure that the curriculum aligns with current labor market demands, adequately preparing students for successful careers. By fostering a strong connection between educational institutions and industry representatives, TVET can bridge the existing gap between education and employment, ultimately enhancing the relevance of its

programs. In addition to improving needs assessments, TVET should focus on designing a curriculum that emphasizes practical skills. Adopting a competency-based approach and integrating On-the-Job Training (OJT) will create a curriculum that not only meets industry requirements but also provides students with valuable hands-on experience. Regular reviews of the curriculum are necessary to keep content relevant and upto-date, ensuring that students acquire the skills needed to thrive in their chosen fields. Strengthening implementation mechanisms through robust quality assurance processes will further enhance the effectiveness of practical training components and uphold academic integrity. Supporting student learning is equally crucial for improving retention rates and overall educational outcomes. Implementing awareness programs in schools will inform students about the opportunities available within TVET, while simplifying the curriculum will make it more accessible to those with foundational challenges. Providing targeted support for struggling students will help them build essential skills, thereby leading to a greater success in their educational journeys.

The implications of these recommendations are significant for both program development and future research. Programmatically, enhancing needs assessments and focusing on practical skills within the TVET curriculum will create a more responsive educational framework that meets industry demands. This shift can lead to improved employability for graduates, addressing issues of

unemployment and underemployment. From a research perspective, further studies could explore how collaboration with industry could be enhanced, ensuring that participation is meaningful rather than merely cosmetic. Additionally, researchers could investigate how skill acquisition is balanced between component and possibilities for further educational progression, thereby informing future curriculum development strategies.

#### Conclusion

This study explored stakeholders' insights on the TVET curriculum in Nepal, revealing significant gaps in its alignment with actual labor market demand. Timely curriculum revision is essential for enhancing the effectiveness of TVET. While efforts have been made to revise the curricula, these initiatives appear insufficient in meeting the needs identified by stakeholders. The stakeholders highlighted the need for a focus on practical skills and a collaborative approach to curriculum development. By prioritizing these elements, the TVET system can become more responsive to the evolving demands of the workforce. Ultimately, an intensive effort to revise the curriculum, strengthening of stakeholder collaboration, and emphasis on practical training will significantly enhance the relevance and effectiveness of TVET in Nepal, ensuring that it meets the dynamic needs of the economy.

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#### References

- Abd Samad, N., Wan Ahmad, W. M. R., Sern, L. C., Mohd Noor, S. N. F., & Harun, H. (2018). Exploring domains and elements for behavioural competency and employability skills. *Journal of Technical Education and Training*, 10(1). https://publisher.uthm.edu.my/ojs/index.php/JTET/article/view/1515
- Acharya, S. D. (2023). Globalization, global political economy and technical and vocational education and training: A nexus. *Journal of Technical and Vocational Education and Training, 17(1)*, 49-56. https://doi.org/10.3126/tvet. v17i1.52415
- Adhikari, R., Adhikari, S. R., Upreti, D. R., & Adhikari, K. P. (2023). Effectiveness of TVET in Nepal. *Journal of Technical and Vocational Education and Training (TVET)*, 17(1), 35-48. https://doi.org/10.3126/tvet.v17i1.52413
- Bajracharya, A. & Paudel, P. (2021). Employer engagement in curriculum making process in Nepal: Meaningful or cosmetic? *Journal of Technical and Vocational Education and Training (TVET)*, *I*(15). 60-70. https://doi.org/10.3126/tvet.v1i15.45169
- Bajracharya, S. N. (2022). Overview of technical and vocational education in Nepal. Retrieved from https://

- nepaleconomic forum.org/overview-of-technical-and-vocational-education-in-nepal/
- Baral, D. P. (2024). Declining enrollment in long-term engineering programs: Stakeholders' perspectives. *Journal of Technical and Vocational Education and Training*, 18(1), 20-37. https://doi.org/10.3126/tvet.v18i1.62740
- Bhandari, U. (2023). Technical and vocational education and training in federal Nepal: A critical analysis. *Journal of Technical and Vocational Education and Training*, 17(1), 82-92. https://doi.org/10.3126/tvet.v17i1.52425
- Boahin, P. (2018). Competency-based curriculum: A framework for bridging the gap in teaching, assessment and the world of work. *International Journal of Vocational and Technical Education Research*, 4(3), 24-37.
- Caves, K., & Renold, U. (2016). The employer's dilemma: Employer engagement and progress in vocational education and training reforms [KOF Working Papers, No. 423]. http://dx.doi.org/10.3929/ethz-a-010799048
- Colombo Plan Staff College. (2024). Exploring research in TVET: Design and development. https://www.cpsctech. org/2024/06/exploring-research-in-tvet-design-and.html
- Cooms, S., & Saunders, V. (2023). Poetic inquiry: A tool for decolonising qualitative research. *Qualitative Research Journal*. 24(4). https://doi.org/10.1108/QRJ-05-2023-0071

- Council for Technical Education and Vocational Training. (2024). *Curriculum*. https://www.ctevt.org.np/curriculum
- Dakshata (n.d). Strong TVET foundations for a prosperous Nepal: Commitments to support TVET reform. https://www.dakchyata-nepal.org/sites/default/files/Final\_%20Commitments%20 to%20support%20TVET%20reform\_compressed.pdf
- Lamsal, H. P. (2021). TVET reform in Federal Republic Nepal. *Journal of Technical and Vocational Education and Training*, 1(15), 168–180. https://doi.org/10.3126/tvet.v1i15.45178
- Mahon, K., Heikkinen, H.L., Huttunen, R., Boyle, T., & Sjølie, E. (2020). What is educational praxis? Mahon, K., Edwards-Groves, C., Francisco, S., Kaukko, M., Kemmis, S., Petrie, K. (Eds.), *Pedagogy, education, and praxis in critical times*. Springer. https://doi.org/10.1007/978-981-15-6926-5\_2
- Ministry of Education, Science and Technology. (2023). TVET sector strategic plan (TSSP) 2023-2032. Retrieved from https://planipolis.iiep.unesco.org/sites/default/files/ressources/nepal\_TVET%20 Sector%20Strategic%20Plan\_2023-2032.pdf
- Ministry of Education, Science and Technology. (2024). Pravidhik Tatha Vyabasayik Siksha Ra Talim Ko Pathyakram Sudhar Sambandhi Karya Toliko Prativedan 2081 [Report of the Task-Force for Improving TVET Curricula 2024]. Unpublished Report.

- Mulder, M., & Winterton, J. (2017). Introduction. In Mulder, M. (Ed.), Competence-based vocational and professional education: Bridging the worlds of work and education. (vol. 23, pp. 1-43). Springer. https://doi.org/10.1007/978-3-319-41713-4 1
- Prendergast, M. (2009). "Poem is what?" Poetic inquiry in qualitative social science research. *International Review of Qualitative Research*, *I*(4), 541–568. https://doi.org/10.1525/irqr.2009.1.4.541
- Rauner, F. (2009). Overview: TVET curriculum development and delivery. In Maclean, R. & Wilson, D. (Eds.), *International handbook of education for the changing world of work* (pp. 1578–1591). Springer. https://doi.org/10.1007/978-1-4020-5281-1\_106
- Renold, U., Bolli, T., Caves, K., Rageth, L., Agarwal, V., & Pusterla, F. (2015). Feasibility study for a curriculum comparison in vocational education and training [KOF Studies No. 70]. ETH Zürich. https://doi.org/10.3929/ethz-a-010713492
- Rijal, N. (2021). Desktop study: Challenges in curriculum development of technical and vocational education in preparation for the 21st century to Nepal. http://dx.doi.org/10.2139/ssrn.3813005
- Saha, G. C., Akbar, S. M., & Roy, A. (2023). Impact of outcome based education (OBE) on learners' performance in business courses. *International Journal of Professional Business Review*. 8(8). 1-19. https://doi.org/10.26668/businessreview/2023.v8i8.2394

- Sharma, T. N. (2021). An integrated quality assurance system in technical vocational education and training in Nepal. *Journal of Technical and Vocational Education and Training*. *1*(15). 14-29. https://doi.org/10.3126/tvet.v1i15.45165
- Shrestha, R. B. (2021). Practical partnership in the Nepali TVET system: Some innovative initiations. *Journal of Technical and Vocational Education and Training*, *I*(15), 1–13. https://doi.org/10.3126/tvet.v1i15.45161
- Smith, M. K. (2000). Curriculum theory and practice. In *The encyclopaedia*

- of pedagogy and informal education. Retrieved from www.infed.org/biblio/b-curric.htm.
- Tshong, K. P., & Yasin, R. M. (2023). TVET educational learning strategies and their impact on students: A systematic literature review. *International Journal of Academic Research in Business and Social Sciences*. *13*(11). 1790-1813. http://dx.doi.org/10.46886/IJARP/v13-i11/7587
- UNESCO. (2016). Technical and vocational education and training for the twenty-first century.