



Article

Preparing TVET Instructors in Nepal: Challenges and Way Forward

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Abstract

Instructors of the Technical and Vocational Education and Training (TVET) play a crucial role in developing skilled human resource for the country by transferring market relevant skills. However, some instructors face challenges to give best in their roles. Therefore, removing the barriers before instructors and keeping them motivated with a conducive environment is imperative. The purpose of this research article is to investigate the challenges and considerations in preparing TVET instructors in Nepal. This study was conducted using a qualitative research methodology. It focused on four provinces of Nepal with Human Development Index (HDI) values. Both primary and secondary sources of information were collected. A total of ten participants, including TVET instructors and principals and managers from both public and private institutions, were purposefully selected. Qualitative information was collected by using online Google form, and thematic analysis was used to assess the information. The findings of this study uncovered several significant challenges in preparation of TVET instructors in Nepal. The challenges include lack of industry relevant curriculum to address the need of real world scenario, absence of instructors' contribution in curriculum designing, inadequate professional development opportunities to the instructors, particularly beyond the constituent schools, insufficiency of practical knowledge of emerging technologies, lack of proper training need assessment of instructors, dearth of industry experience, absence of systematic performance management system and low motivation to instructors. The findings demonstrate the strong need to address the challenges and increase motivation to the instructors.

Keywords: professional development, challenges, TVET instructors, motivation

Introduction

The Technical and Vocational Education and Training (TVET) plays a pivotal role in equipping individuals with necessary skills and knowledge to meet the demands of the

ever-evolving labor market (UNESCO, 2022). Central to the success of TVET initiatives are instructors who serve as the backbone of the system, shaping the learning

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experiences and professional development of students (Adhikari et al., 2023). The quality and proficiency of TVET instructors are critical factors that influence the overall effectiveness of TVET programs. As TVET continues to gain prominence in Nepal's education and economic development agenda, enhancing the capacity and proficiency of TVET instructors become a strategic imperative (Lamsal & Bajracharya, 2023).

TITI offers Occupational Skills Upgrading (OSU) training programs to instructors by placing them in business and industries for real work exposures. The quality of training programs and services depends on the ability and willingness of instructors (Bhandari, 2023a). Professional expertise does not happen on its own; one needs to invest in it to grow as a professional instructor. The efficiency and effectiveness of TVET programs are measured by the volume of employment and self-employment of graduates (Subedi, 2012). Thus, instructor management, which is essential to its functioning, faces many difficulties. These include low training standards, insufficient credentials, and unstable employment for instructors, which ultimately leads to significant employee turnover and a reliance on part-time labor that lowers the quality of teaching. Due to the lack of authorized teaching positions, TVET institutions are forced to use temporary contracts, which further worsen turnover problems (Ministry of Education, Science and Technology [MoEST], 2022).

The quality of TVET programs depends on the quality of the instructors. However, preparing and supporting these instructors pose significant challenges in Nepal due to various systemic, institutional and contextual factors (Bhandari, 2023b).

The majority of instructor training programs currently in place attach more emphasis on instructional skills than on workplace-based and OSU. In addition, lack of a licensing system for instructors erodes their credibility and professional status, which further contributes to apathy toward the field. The undervaluation of TVET instructors' efforts and the uncertainty surrounding their career prospects are the results (MoEST, 2022).

These challenges not only hinder the effectiveness of TVET programs but also impact the employability and competitiveness of graduates in the job market. Understanding the complexities surrounding the preparation of TVET instructors in Nepal is crucial for developing comprehensive strategies to address these challenges and improve the overall quality of vocational education.

This paper aimed to explore the specific obstacles and reasons that affect the preparation of TVET instructors in Nepal. The following sections of this paper will examine the existing literature on TVET training in Nepal and provide an overview of the challenges faced by TVET instructors, and discuss the considerations and strategies for improving their preparedness.

Research Questions

To achieve the purpose of this study, the authors formulated the following research questions:

1. What are the key challenges faced in preparing TVET instructors in Nepal?
2. How can training and professional development program for TVET instructors in Nepal be enhanced?

TVET Instructors Preparation in Nepal

The Council for Technical Education and Vocational Training (CTEVT) was established in 1989 as a national autonomous apex body for production of the technical and skilled human resources required for the nation. The CTEVT Act 1988, Section 16, mandated the establishment of the TITI as a semi-independent institution, which was established in November 1991. TITI's main objective is to train TVET educators, like principals, instructors, curriculum developers, and community facilitators. Its purpose is to enhance the quality of technical education and vocational training in Nepal (CTEVT, 2024).

TITI has a rich history of serving the nation by imparting instructional skills training. TITI is committed to addressing the comprehensive training requirements of technical human resources, managers, and curriculum developers within the TVET sector nationwide. Known for its expertise, TITI's influence extends across many

countries in Asia and beyond. Renowned for their excellence, TITI's instructional materials are widely acclaimed and have been embraced by numerous countries across Asia and beyond. Operating under the mandate of CTEVT Act, TITI delivers training to trainers, technical instructors, managers, occupational curriculum development specialists, and community development specialists (TITI, 2024a). It develops instructional training frameworks and modules for both pedagogical and occupational skills to implement at national and provincial-level institutes, aiming to develop quality instructors aligned with industry demands. Functioning as a central hub of technical knowledge, TITI plays a vital role in advancing instructional expertise. By deploying chief and consultant master trainers from TITI, this initiative could effectively enhance the competency of instructors (MoEST, 2022).

Role and Significance of TVET Instructors

The role of TVET instructors is crucial; thus, effective training plays an important role in enhancing the quality of education. Well-trained instructors not only provide support to school management but also serve as catalysts for enhancing relationships within the school. Moreover, trained instructors exhibit a willingness to embrace innovation, leading to the adoption of improved study habits. Additionally, they demonstrate enhanced utilization of textbooks and curricula, employing teaching methodologies that are conducive to the learning needs of

children (Subedi, 2014). In the Southeast Asian region, TVET teachers have been a significant concern in most ASEAN member countries due to both a shortage in numbers and challenges in teacher quality (SEAMEO VOCTECH, 2024).

Existing Challenges in Preparing TVET Instructors

Several issues and challenges face Nepal's TVET sector. These include a lack of industrial experience among instructors, insufficient training opportunities, and insufficient refresher training programs as per market needs. Paryono (2015) points out that insufficient equipment further hinders effective training delivery. Sharma (2019) also emphasizes the critical issue of a shortage of qualified teachers, which leads to poor quality training. There are vacancies not fulfilled for long, low remuneration, insufficient teaching-learning materials, inadequate monitoring and supervision mechanisms, and a lack of performance-based incentives and rewards are other pressing concerns. Addressing these multifaceted issues will be critical to improving the quality and efficiency of Nepal's TVET workforce.

The competence and dedication of instructors and managers within training institutions determine the quality of program and service delivery. Professional competence is not acquired overnight; it requires perseverance and deliberate development. The commitment of these instructors has a significant impact on their ability to provide skills and secure job placements for

program graduates. This is critical because the effectiveness of TVET programs is measured by graduates' employment or self-employment rates. Thus, the quality of TVET programs and services is determined by factors such as accessibility, equity, efficiency and relevance (Subedi, 2012).

Methods

This study adopted a qualitative research method as the primary method of data collection and document analysis for the secondary data (Creswell & Poth, 2018). The study was conducted in four provinces in Nepal: Madhesh Province, Bagmati Province, Gandaki Province, and Karnali Province. These four provinces were selected based on the HDI value, which also varies across the provinces, and the selection of instructors is done from the lowest two provinces to the highest two provinces to get a deeper understanding of the issues faced by TVET instructors (UNDP, 2020). In total, 10 participants were purposefully selected from different TVET institutions to capture a broad spectrum of perspectives and experiences related to TVET training across different types of institutions in Nepal (Creswell, 2016). This consists of seven TVET instructors and two principals and one general manager of a TVET institute. The participants were drawn from a diverse range of TVET institutions, including five constituent schools of CTEVT and three private TVET institutions affiliated to CTEVT.

The qualitative data were collected through open-ended questionnaire, using an online

Google Form to gather insights into the challenges faced by TVET instructors in preparing for their roles, as well as the considerations and strategies that could enhance their professional development (Maxwell, 2012). The questions were designed to explore key themes such as the training and qualifications of TVET educators, the support and resources available to them, the pedagogical approaches used in TVET programs, and the broader contextual factors influencing the effectiveness of TVET training in Nepal. Thematic analysis was used to identify key themes and patterns emerging from the study data, providing a deeper understanding of the issues faced by TVET instructors (Clandinin & Connelly, 2000). It helps to identify key challenges and considerations in preparing TVET instructors in Nepal (Creswell & Creswell, 2018). During the data interpretation and analysis, the interviewees were contacted through phone calls for clarification and confirmation as needed. Besides, the findings from the study, the existing literature on TVET instructors, training and professional development were reviewed to enrich the analysis and provide a nuanced perspective on the subject matter (Olsen, 2004).

Findings and Discussion

We delve into the findings and discussions of this study to bring to light important insights revealed through a qualitative examination of this relevant issue. This section is concentrated on grasping the present practices and challenges facing the

TVET instructors in Nepal, and has discussed potential approaches to improve the standard of training and professional growth of TVET instructors in the country.

Findings

Current Practices and Key Challenges in Preparing TVET Instructors

As per findings of the study conducted among the principal/head of the institution of private sector and constituent schools, they have a practice to provide instructional skill training to the fresh instructors and OSU training as well as management and leadership training.

From this perspective, a principal mentioned:

School provides different trainings, targeting to new and existing staffs such as instructional skill training tailored for new staff that focus on facilitation skills to enhance their ability to deliver the course effectively. Likewise, OSU training is provided to the existing staff to equip with advanced competencies. The instructors are also provided with management and leadership training to nurture managerial competencies and leadership qualities.

This illustrates the emphasis on professional development opportunities within the school. In other words, the provision of tailored instructional skill training for new staff highlights the commitment to ensure that employees have the necessary skills to effectively carry out their roles. Additionally, offering the OSU training to the existing staff demonstrates a focus on

continuous learning and growth within the organization. Moreover, the investment in management and leadership training for instructors underscores the school's dedication to supporting the development of managerial competencies and leadership qualities among its staff. This indicates a strategic approach towards building a skilled and capable workforce that contribute to preparing competent human resource for the labor market.

Furthermore, some private technical schools adopted an authentic learning method where students are trained based on the labor market needs. In this regard, a general manager at a private technical school expressed:

The school keeps students and instructors intact to the industry relevant and current standards. Key trainers for different subjects are from the industry who hold the positions as working professionals; they bring the industry experience, expertise and exposure together.

This acknowledges the school's commitment to keeping both students and instructors connected to industry-relevant and current standards. The practice of having key trainers from the industry who are working professionals themselves is highly beneficial as it brings real-world experience, expertise, and exposure into the classroom. By having industry professionals as instructors, the school enhances the relevance of its curriculum and ensures that students are receiving up-to-date knowledge and skills

that are directly applicable to the workplace. This approach not only adds credibility to the learning experience but also provides students with valuable insights and perspectives from those actively engaged in the industry.

Sharma (2019) highlights the issue of a shortage of qualified teachers, which results in subpar training quality. Contributing factors include vacancies left unfulfilled for a long time, unattractive salary structures, inadequate investment in teaching-learning materials, insufficient monitoring and supervision processes, and the lack of performance-based incentives and rewards. Tackling these complex challenges is essential for enhancing the quality and effectiveness of Nepal's TVET workforce.

Additionally, while several institutions have made commendable steps in adapting effective practices to enhance the quality of TVET programs, they continue to face numerous challenges. These obstacles, which range from inadequate funding and insufficient infrastructure to a lack of skilled instructors and limited industry partnerships, significantly hinder the successful implementation and delivery of training programs. As a result, many aspiring learners are unable to access the high-quality education and practical skills necessary for thriving in today's competitive job market.

In exploring the challenges associated with the delivery of TVET programs, an instructor from a constituent school provided valuable insights. The observations

highlight several critical issues that impact the effectiveness of training initiatives, emphasizing the importance of addressing communication barriers among trainees, updating curricula to meet industry needs, overcoming infrastructure limitations, and ensuring access to necessary raw materials for practical instruction. In this regard, an instructor stated:

The delivery of TVET programs faces several challenges. One key issue is ensuring effective communication as participants come from diverse linguistic backgrounds. This diversity makes it difficult for instructors to teach students within same classroom. Additionally, lack of industry relevant curricula hinders the practical application of skills, necessitating regular updates to align with industry demands. Infrastructure limitations, including inadequate facilities and equipment, further impact the learning experience.

This excerpt illustrates that there is a relevant issue of effective communication and comprehension among trainees from diverse linguistic backgrounds - a crucial issue that can impact learning outcomes and overall program effectiveness. It is imperative for the institutions to implement strategies such as language support services or cultural sensitivity training to address this issue and ensure all students have equal opportunities to succeed. The instructor pointed out that although some curriculum

is revised periodically, the updates do not include the current market demand. It largely follow the old methods that focused more on theoretical knowledge than on practical aspects. This creates a challenge to provide up-to-date knowledge and skills and prepare students for today's rapidly evolving job market. Regular updates to the curriculum with the meaningful involvement of industry and guarantee of public participation are essential to align with industry demands and ensure that graduates are well-prepared for the job market.

Another pressing concern is infrastructure limitations such as inadequate facilities and equipment, which can hinder the learning experience and practical skill development of students. Addressing these challenges may require investment in improving infrastructure, upgrading equipment, and expanding resources to create a conducive learning environment. This will enhance the quality of TVET programs and better prepare students for success in the workforce. These factors collectively undermine the efficacy of TVET initiatives, emphasizing the necessity for comprehensive reforms to enhance their impact on skill development and employability. Thus, collaboration among educational institutions, industry partners, and policymakers is key to overcoming these obstacles and fostering a more effective and responsive TVET system.

Quality and Relevance of TVET Program

In examining the quality and relevance of TVET programs in Nepal, this section

highlights key insights gathered from various stakeholders, including managers of private technical school, principals and instructors from constituent schools. They brought up a number of important issues. It is found that instructors have less experience and exposure to industry, less familiarity with current and updated tools and technology for the practical and inadequate awareness about the ways of addressing the needs of diverse learners. Another major challenge is a skill mismatch. TVET programs' failure to pay attention to the current need and relevance is another key issue which creates a gap in linking education to employment. Based on that, a principal mentioned:

The existing curriculum does not sufficiently reflect the needs of the market, as it gives more weight to higher education than world of work. The instructors do not have the industrial exposure or experience which, however, is crucial to have real-world experience in order to guarantee that instruction is applicable and efficient. Additionally, the eligibility criteria for the enrolment should be reviewed.

This acknowledges the critical points raised regarding the alignment of the curriculum with market needs and the importance of instructor qualifications in vocational education. The observation that the existing curriculum may prioritize higher education over the practical skills needed in the workforce highlights a key issue that must

be addressed to better prepare students for employment. Likewise, reviewing the eligibility criteria for enrollment is essential to ensure that students entering vocational programs have the necessary skills and aptitude for success. By reassessing and potentially revising these criteria, institutions can better match students with programs that align with their career goals and industry requirements. The lack of industrial exposure or experience among instructors is a significant concern, as real-world experience is invaluable in providing relevant and practical instruction to students.

To this end, instructor training programs, partnerships with industry professionals, and opportunities for instructors to gain practical experience can help address this gap and enhance the quality of instruction in technical and vocational education. These measures are vital for improving the relevance and effectiveness of vocational education programs and better preparing students for successful careers in the workforce.

This highlights that partnership and linkage with industry is essential for improvement of quality and relevance of the TVET program. The study shows that the career path for the students is so uncertain in Nepal. One of the principals of a technical school from Bagmati province stated: “*Due to the absence of TVET Act, there is lack of clear direction for the leadership positions in TVET.*”

The principal’s view illustrates that the Act is the first and the foremost to improve the quality of the TVET program to link with

market needs. There is a critical need to prioritize research in the TVET sector to ensure its continuous improvement and relevance. Emphasis should be placed on demand-driven subjects that align with labor market needs. Updating the curriculum regularly is essential to keep pace with industry advancements and emerging trends. Moreover, technical education must be made accessible to all, fostering inclusivity and equity in skills development.

Essential Skills and Competencies for TVET Instructors

The skilled and competent instructors play a crucial role not only in supporting school and student but also in fostering stronger relationships within the school community. This section highlights the necessary skills and competencies required for the TVET instructors. Wagiran et al. (2019) highlights three competency domains for effective instructors: technical expertise in their field, pedagogical skills for designing and delivering impactful learning experience and personal and social skills, including emotional intelligence and communication, to foster a positive learning environment for diverse learners.

In Nepal, various trainings are designed to achieve different objectives with focus on instructional skill, occupational skill, Occupational Skill Upgrading (OSU), Training of Trainers (ToT), governance, etc. with the aim of augmenting individual job performance, which is necessary for the achievement of the organization's goal (TITI, 2024a).

Regarding the essential skills and competencies of TVET instructors, one of the principals from a technical school stated:

Technical expertise, instructional skill, training of trainer, OSU training, familiarity with current instruments of laboratories and industries, effective communication, adaptability to diverse learners, and staying up-to-date with industry developments are essential qualities of instructors. Furthermore, course delivery should incorporate industrial exposure to make it compatible with updated technology and market dynamics, while specialization within specific departments or courses can enhance skill development.

The well-trained instructors are open to embracing innovative practices, which facilitates the development of better study habits among students. They also make more effective use of textbooks and curricula, employing teaching methods tailored to meet the diverse learning needs of children (Subedi, 2014).

Therefore, prioritizing technical knowledge, occupational skill training, occupational skill upgrade training, pedagogical skill, communication skills, and problem-solving abilities is essential for both instructors and learners alike. It illustrates that along with technical skills, soft skills are equally essential for TVET instructors to be more practical in the world of work.

Staying Updated for Enhanced Training Delivery

Participating in industry professional exchange programs, both within the institute and with external instructors, emerges as the most efficient means to remain updated on the latest technologies, techniques, and industry best practices. These programs empower instructors to readily adapt to the evolving industry trends and advancements. Additionally, actively engaging with new technologies and seeking information from various sources further enhance one's knowledge base. One of the instructors from Bagmati province stated: *“Instructors from the TVET institutions are capacitated and updated through industrial collaborations, attending workshops offered by CTEVT, I/ NGOs, and access to online resources.”*

This highlights the importance of participation in professional exchange programs within the industry and with external instructors. It illustrates the crucial strategy for staying updated with the latest technologies, techniques, and industry best practices. This helps instructors adapt to the evolving industry trends and equips them with the practical knowledge and skills necessary for effective training delivery. Similarly, collaboration with industries, participation in the workshops provided by organizations like CTEVT or other institutions, and use of online resources contribute significantly to stay informed. These activities are further linked to improvement of professional skills.

In the dynamic landscape of education and industry, continuous growth and adaptation

are vital. An instructor from Madhesh province emphasizes this necessity by stating, *“Gaining industrial exposure, participating in OSU training, honing instructional skills, and conducting research are essential components of staying well-informed of developments.”*

This insight underscores the importance of practical experience and ongoing professional development in ensuring that instructors remain at the forefront of their fields. The diverse aspects of professional development in the TVET sector are also stressed in it. While there might not be a specific process, it is crucial for individuals to proactively seek learning opportunities whether through formal training programs or self-directed learning via internet resources and peer interactions. To this end, personal initiatives such as attending seminars, conferences, and free web-based training courses also play a vital role in continuous professional development.

With this, it appears when there is lack of a standardized process for professional development, individual initiatives count much in pursuing learning opportunities. In short, it signifies that professional development in the TVET sector is multifaceted where collaboration, innovation, and individual efforts are essential in preparing instructors to meet the evolving demands of the industry.

Support and Resources for Enhancing TVET Instructors' Skills and Competency

The general practice is such that TITI sets the

competency standard for instructors. Also, TITI conducts blended learning programs such as comprehensive ToT for Master Trainers and Instructional Skill for TVET instructors to ensure all of the instructors are proficient in the current technology and techniques (TITI, 2024b).

The primary areas where TVET instructors can enhance their skills encompass online learning platforms, digital literacy, and training delivery competencies. These facets are pivotal for staying current in an increasingly digitalized world and for ensuring effective knowledge dissemination to students. Research participants mentioned that support systems such as appreciation, motivation, and access to continuous training are crucial for nurturing conducive environment for the professional growth. In the pursuit of excellence in technical education, the role of effective teaching techniques cannot be overstated. A principal from a technical school articulated:

To maximize learning results, instructional skills development focuses on providing instructors with efficient teaching techniques. The training of trainers to the instructors guarantees that individuals dispensing knowledge have a strong grasp of the subject matter and can successfully convey practical skills to students. Occupation specific skill upgrading is essential for keeping professionals up-to-date with emerging technologies and industry norms. An example is

Tungsten Inert Gas (TIG) and Metal Inert Gas (MIG) welding procedures in the field of mechanical engineering. TVET institutions can better train their instructors to meet the demands of the modern industry and promote ongoing professional growth by giving priority to these areas.

This perspective highlights the critical connection between instructor training and student success in today's rapidly evolving job market. In other words, this brings to light several key points on the importance of instructional skills development, training of trainers, and occupation-specific skill upgrading in the field of technical education. The principal emphasizes the need for providing instructors with efficient teaching techniques to maximize learning results. This implies that effective pedagogy plays a crucial role in students' achievement and overall educational outcomes. By focusing on improvement of instructional skills, the school aims to enhance the quality of education delivery. Similarly, the principal underscores the significance of training instructors who are responsible for imparting knowledge and skills to students. Ensuring that these individuals have a strong grasp of the subject matter is essential for effective teaching and learning processes. By investing in the professional development of instructors, the institutions have prioritized the continuous improvement of teaching practices. Moreover, the principal acknowledges the importance of keeping professionals up-to-date with evolving technologies and industry

norms. This proactive approach aligns with the growing technical fields and the need for continuous learning. Additionally, the principal emphasizes the role of TVET institutions in training workers to meet industry demands and promote ongoing professional growth. By giving priority to occupation-specific skill development, these institutions contribute to bridging the skills gap and ensuring that graduates are armed with relevant competencies. By focusing on these areas, the technical school aims to enhance the quality of education, equip students with practical skills, and support their transition into the workforce.

Furthermore, the provision of resources including tools, laboratory facilities, and industry coordination further fortifies the training process. Augmented industrial partnerships, ongoing skills upgrading programs, stakeholder engagements, well-planned infrastructural developments and motivation are essential for aligning training programs with industry needs. In this regard, one of the instructors from Karnali province mentioned:

Appreciation and motivation play critical roles in boosting morale and commitment among instructors, acknowledging their efforts and encouraging continuous improvement. Comprehensive training programs ensure they are resourceful to deliver high-quality education in line with industry standards. Lastly, fostering strong partnerships and coordination

with industry stakeholders make sure that educational programs remain relevant and responsive to evolving industry needs; thus, these should be considered to boost quality of the TVET education in Nepal.

This quote finely speaks several key factors that are key to quality TVET in Nepal. First of all, recognizing and appreciating the efforts of instructors is crucial for boosting their morale and commitment. When instructors feel valued and motivated, they are more likely to be dedicated to their work and continue improvement. Likewise, equipping instructors with the necessary skills and knowledge through training programs is imperative for making sure that they can deliver high-quality education that meets industry standards. Continuous professional development is equally vital for making instructors up-to-date with the latest trends and practices in their field.

Additionally, instructors emphasized that offering incentives or facilities to temporary instructors should be the same as permanent ones that can also serve as strong motivators for the staffs to excel roles and contribute positively to the TVET sector. It underlines the importance for organizations to prioritize relevant training opportunities and attractive benefits to retain skilled staff members.

Similarly, effective HR practices such as recruitment, retention, and talent development are significant to build a skilled and motivated workforce. By investing in the development of staff and creating a supportive

work environment, educational institutions can attract and retain talented individuals. Furthermore, collaborating with industry partners has a role in keeping educational programs relevant and responsive to the growing industrial needs. By fostering strong partnerships and coordination with stakeholders, educational institutions can increase employability of student (Mitiku, Zeleke, & Adem, 2021). Besides, it ensures that their instructors are prepared and well aware about the skill needed by industries. Resourceful industry and collaboration between government and industry are found crucial to enhance skills and capability of TVET instructors.

Assessing Effectiveness of Instructional Methods and Approaches

The study shows that instructors' assessment practice involves different approaches, including observation of training delivery, self-evaluation, students' performance evaluations, analyses of students' results, and collection of feedback from students and industries, and tracking of employment rates of graduates. These contribute to a comprehensive understanding of training outcomes. One of the instructors of Madhesh province remarked:

The schools adopt different ways to assess the effectiveness of teaching and learning. Feedback surveys play a crucial role in obtaining firsthand information about skill improvement, satisfaction levels, and learning experiences. Practical evaluations

provide a concrete assessment of how successfully learners can use recently learned information and abilities in real-world situations, insights on applicability and efficacy of the training. Tracking of employment graduates is a vital sign of training effectiveness because it is the result of training.

This provides an insightful perspective on various methods used by schools to evaluate the effectiveness of teaching and learning, including instructional skill. In fact, feedback surveys are mentioned as a crucial tool for obtaining firsthand information about skill improvement, satisfaction levels, and learning experiences. This aligns with best practices in education where feedback from students can help instructors understand what is working well and what areas need improvement. Meanwhile, the quote mentions the importance of practical evaluations to gauge how successfully learners can apply their recently acquired knowledge and skills in real-world situations. This is essential for determining the applicability and efficacy of the training provided, as it focuses on the practical application of learning outcomes. That is why, monitoring the employment status of graduates is highlighted as a vital sign of training effectiveness which further prepares instructors based on the result. All in all, the instructor emphasizes the importance of utilizing a combination of feedback mechanisms, practical assessments, and employment and self-employment tracking to comprehensively evaluate the

effectiveness of teaching and learning initiatives within educational institutions. Moreover, it underlines the significance of the instructor's preparedness and readiness in delivering impactful sessions.

Government Policies and Priorities

Government policies and regulations play a crucial role in promoting the recruitment, training, and retention of the qualified TVET instructors. Effective monitoring, evaluation, and implementation of policies are necessary to achieve these goals along with the guarantee of competitive salaries and benefits for both pre-service and in-service training programs. Additionally, preparing effective plans and policies for TVET, improving the work environment, allocating proper funds, providing professional development and career advancement opportunities, setting certification standards, supporting research and innovation are other essentials to pave way for quality TVET. It emphasized the preparation, capacity enhancement and satisfaction of the instructors through different opportunities. Job assurance should be in the government's policy and program, and implementation.

The principal of the TVET school underlined how significant the TVET Act is to implement the TVET program smoothly. Most of the respondents, including TVET instructors and principals, highlighted the need for instructor license. One of the instructors from Karnali province stated:

For promoting the recruitment, training, and retention of qualified

TVET instructors, government policies and regulations are in place which plays crucial role through effective implementation, monitoring and evaluation to achieve the goals. The monitoring and evaluation should be more systematic and effective. The quality assurance and innovation unit should establish and work for the constant quality education and training.

This means that government policies and regulations are described as pivotal in this process. This emphasizes the need for effective monitoring, evaluation, and implementation of policies and regulations. It also suggests that simply having policies in place is not sufficient; there must be mechanisms to assess their impact and ensure compliance for achieving the intended goals. Thus, the ultimate objective is to achieve the goals related to TVET training, which include enhancing the quality of education, meeting industry demands for skilled workers, and supporting economic development. By prioritizing the recruitment, training, and retention of qualified instructors, governments can contribute significantly to the advancement of vocational education and the overall socio-economic well-being of a nation.

In other words, respondents shared that there is a gap in licensing for the instructors to enter the service. The licensing provision could be a step to ensure the quality of the instructors. Additionally, they emphasized government

investment in research, timely update of the curriculum, and everyone's access to technical education. Further, respondents threw light on job security by recruiting permanent instructors and providing facilities to the temporary instructor similar to the permanent ones, promoting continuous skill upgrade training, and rewarding good performers. The motivation to the instructors through career development and financial planning was also seen crucial.

Discussion

The findings of this study emphasize the vital role of TVET instructors in delivering quality education because they are in the frontline to shape the future of students by providing quality education. Preparing TVET instructor is a continuous process with the CTEVT offering various trainings programs targeting to new and existing staffs as the findings suggest. These programs include instructional skill training, management and leadership training to nurture managerial competencies and leadership qualities. However, some respondents from beyond constituent schools reported that they had not received such trainings. This raises a question where other instructors were delivering the program effectively. One of the instructors stated that professional development of instructors had no uniformity which had direct impact on the quality of program offered. Additionally, training programs are based on standardized package, which are inadequate to meet the need of industry. Therefore, gaining practical industry experience is crucial for professional

development that meets the evolving need of industries.

It is crucial to conduct periodic need assessment to identify gaps, categorize them and provide professional development according as the findings suggest. The focus of the training efforts should adopt a bottom up approach to ensure relevance and effectiveness.

The respondents mentioned they applied different approaches and methods in delivering content; however, the student enrolment and pass rate have been declining every year which shows that TVET was slow off the mark to attract students. Baral (2024) highlighted a concerning trend in his study of diploma-level-engineering programs, revealing a 16% decrease in enrolment from 10,450 registered students in the 2021/2022 academic year to 8,744 in 2022/23.

The data raise a serious question about quality and relevancy of TVET programs. If market-relevant content and effective delivery methods are being utilized, TVET should ideally attract more students and meet industry needs. Another important inquiry about how the training received is being applied in teaching practices. To address this, a post training evaluation is necessary to assess behaviour change and impact of training on instructors.

In this era of evolving communication and technology, TITI has been providing skill upgrade training to the instructors. However, many instructors feel that these efforts are

insufficient. While there are many resources available to learn and upgrade for self-improvement, the question is how they are using these resources for their professional development. The instructors also need to put greater efforts to upgrade their knowledge and skill and stay relevant in their field.

According to the respondents, curriculum is not in line with industry needs, lacking to address current market needs, which has resulted in graduates struggling to get the employment opportunities.

In the context of Nepal, curricula have not been effectively aligned with current need of industry. It is essential to design and update periodically and timely which can be further supported by research and need assessment (Bagale, 2018).

Lack of meaningful engagement of employers and limited public participation in curriculum development process contributes to the relevance gap in the curriculum (Bajracharya & Paudel, 2021). The situation indicates that engagement of employers in the curriculum development process is insufficient. Besides employers, another key actor is instructor who implements the curriculum, and knows in detail about the needed task, time, methodology and required practical sessions for particular task. These findings show that relevancy of curriculum is integral to quality TVET. The instructor's input and feedback can play a crucial role while designing and updating curriculum to make more effective and industry relevant. By focusing on these areas, TVET programs

can better equip instructors to apply their training effectively, leading to the improved educational outcomes and a more skilled workforce.

In this study, instructors also highlighted that the motivation is the fundamental to their role. Motivated instructors are crucial for delivering effective training, enhancing student's outcome and improving overall effectiveness of TVET program. The support system such as recognition, appreciation, motivation and access to continuous training and professional development opportunities is essential for fostering this motivation.

Research shows that instructors' motivation significantly enhances their performance and overall effectiveness. Consequently, prioritizing instructors' motivation is crucial for improving educational quality and ensuring that instructors are well-prepared to address the evolving need of their students (Layek & Koodamara, 2024).

Moreover, the performance management system should be practiced to track performance targets and goal, and area of professional development. This system recognizes the best performers, and identifies their area of development. This motivates instructors who are doing well and helps them enhance their competencies.

The study findings are aligned with the theoretical lens of Competency-Based Education and Training (CBET). It also points out the critical role of aligning TVET curricula with labor market demands. One

of the recurring challenges highlighted is the inadequacy of curricula to meet industry standards. This gap emphasizes the misalignment between existing educational frameworks and the core tenets of CBET, which advocates for learning modules directly tied to occupational tasks. As emphasized by UNESCO (2022), CBET is grounded in designing learning objectives that addresses specific competencies demanded by the industries. The lack of industry exposure for instructors and delays in updating curriculum with meaningful participation from industry and relevant stakeholders to meet industry need not only hinders development of competencies but also limits the employability of TVET graduates.

Furthermore, professional development of TVET instructors is another area where the CBET principles can be effectively applied. The CBET advocates for iterative learning pathways, allowing instructors to acquire, apply, and demonstrate new skills in a cyclical manner. The current study's findings indicate a lack of continuous skill upgrading opportunities for all instructors. Embedding CBET strategies such as regular industry-oriented certifications and performance-based assessments could foster professional growth while ensuring instructors stay aligned with emerging technological and pedagogical trends (Deissinger & Hellwig, 2005). Additionally, the findings also reveal an emphasis on soft skills like effective communication and adaptability to the diverse learner needs as the essential components for

instructors. These soft skills echo with the CBET focus on holistic learner development. By integrating these competencies into both instructor preparation programs and learner outcomes, Nepal's TVET system could better meet global workforce standards.

Similarly, industry collaboration, as identified in this study, plays a decisive role in enhancing the relevance and quality of TVET programs. The CBET principles strongly emphasize partnerships between education providers and industries to ensure the applicability of skills (Republic of Kenya, Ministry of Education, State Department for Vocational and Technical Training, 2018). The involvement of industry professionals as instructors, a practice already noted in some institutions, aligns with CBET's advocacy for contextual learning. Expanding such collaborations across more institutions would ensure that both students and instructor remain updated on current market needs, thereby improving program outcomes directly. Likewise, the study also underscores the need for supportive policies, including certification and standardized professional development frameworks.

Conclusion

The study acknowledges the decisive role that instructors play in shaping the quality of TVET delivery and student outcomes, emphasizing the need for targeted interventions that help enhance their professional development. It underscores the need for collaborative efforts among key stakeholders, including industries, TVET

institution, instructors and policy makers to address issues.

The preparation of TVET instructors is underway with standardized training package, but it is insufficient to meet the need of diverse instructors and lacks a foundation of thorough assessment and analysis. If the issues are not timely addressed with proper plan, it will adversely affect the quality of TVET and overall TVET system of Nepal. Consequently, there has been a declined attraction and enrollment in TVET sector. Therefore, one of the crucial aspects of TVET is professional development of instructors to deliver quality program.

More importantly, the study calls upon TVET stakeholders to provide unwavering support and empowerment to TVET instructors in view of their pivotal role in the success of the TVET system and to meet the evolving needs of the labor market in Nepal. Additionally, it is imperative to recognize and elevate the status of instructors. They should immerse themselves in real-world skill environments and be equipped with proper session delivery, technology integration, assessment, and feedback skills. Introducing TVET instructor licenses could further improve standards. Balancing pedagogical and industrial knowledge is essential along with constant training to keep pace with evolving industries and teaching methods. All of these efforts can contribute to the sustainable growth and effectiveness of TVET in Nepal and ultimately to ensure that TVET instructors' motivation towards their work.

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