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Editorial

Dynamics of Student Failure in Skill Tests: Navigating the Path Forward

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Introduction

The National Skill Testing Board (NSTB) of the Council for Technical Education and Vocational Training (CTEVT) has been conducting skill tests of individuals from different occupations and providing them with certificates of different levels since its inception in 1983. It has been certifying skills from several occupations based on defined competency standards. The skill

test certification system is for individuals who have acquired vocational skills from formal, informal, and non-formal settings. It offers candidates an assessment based on the occupational skill standard and official certification of competencies (National Skill Certificate), irrespective of where and how gained (NSTB, 2022). This certificate is valuable because it provides an identity to the bearer and facilitates their vertical mobility in the TVET system – aligning with the national qualification framework.

The NSTB webpage clearly illustrates that the skill testing process has a series of activities such as classification of occupation, Occupational Skills Standard (OSS) development, test items development, verification of applications, and conducting skill tests and certifications. Skill test requirements for each skill level have been explicitly outlined in the NSTB webpage. The following figure illustrates the overall skill testing process.

Figure 1: Overall Skill Testing Process

(Source: http://www.nstb.org.np/skills-test/)
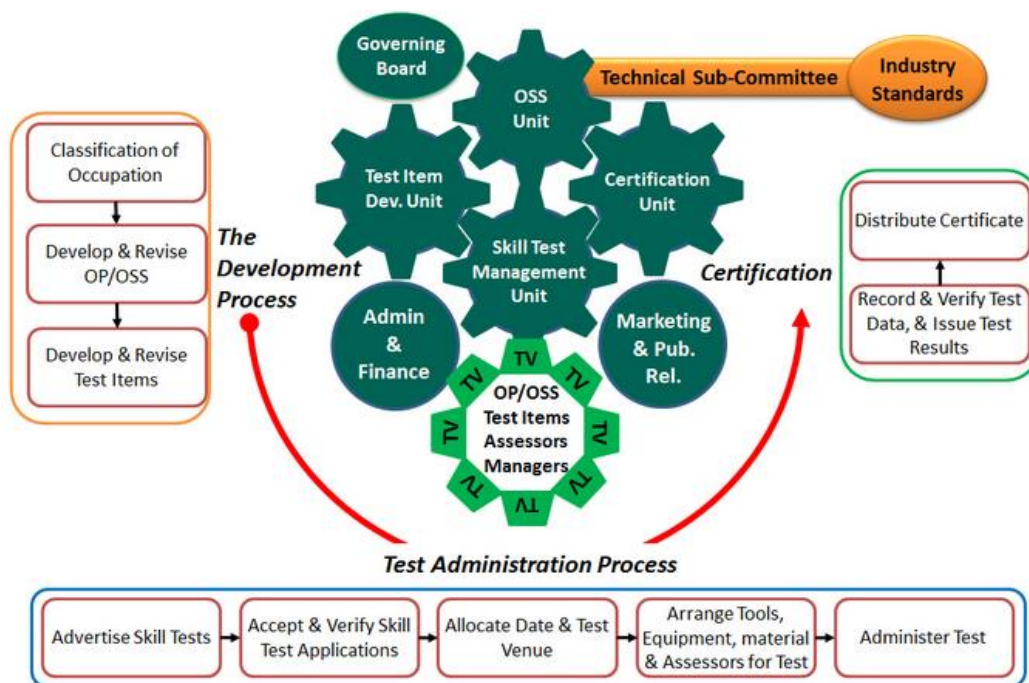
Besides, there have been clear guidelines and tools (in the Quality Assurance Manual, 2016) on test management process, test item development process, duties and power of the skill test assessors, code of professional practice for assessors, code of conduct for candidates, guiding principles of competency-based assessment (validity, reliability, fairness and flexibility), testing centre and test administration monitoring tool, feedback forms for candidates and assessors, result publication and certification process and so on (NSTB, 2016).

As updated on the NSTB website, till April 2022, a total of 593386 candidates applied for skill tests, but 563894 appeared in the tests. Out of those appearing in the test, 417395 have been certified. Likewise, NSTB has developed national occupational skill standards (NOSS) in 304 different occupations as per market demand and industries' need. The skill testing can certify different levels of skills (i.e., Elementary, Level – 1, Level – 2, Level – 3, Level – 4). NSTB has observed that the pass rates of the candidates for Level II and Level III have constantly low over the years (a total of 19,672 candidates failed the skill test of Level II and III from July 2016 to June 2020) (as cited in Dhakal et al., 2022). This situation warrants a careful investigation into the factors leading to low pass rates, especially in the Level 2 and Level 3 skill tests.

Causes of Low Pass Rates

Many factors play a role in determining a candidate's performance in an examination. The current literature concerning student success and failure in technical skill tests sheds light on key factors contributing to student outcomes.

Some of the key causes of candidates failure in skill tests can be listed as follows:

- Training materials and lectures, lack of reference materials and equipment for practice, different setting of the exam hall
- Access and quality of training
- Change in the curriculum and examination system
- Lack of clarity of instruction in the test item,
- Test anxiety in the candidates,
- Poor time management when doing examinations
- Differences in curriculum and testing

- Long gap of taking formal tests and writing practice
- Health issues, learning gaps, inter-personal relationship issues with co-workers, test anxiety and even personality clashes
- Theoretical tests in skills assessment

An interesting finding was reported by Spayde et al. (2020) that pass rates for Certified Solidworks Associate (CSWA) exams increased by 45% with the introduction of Computer-Aided Design (CAD) in teaching and evaluation. This can provide us with significant learning in terms of using computer tools to test and evaluate at least the objectives items. Some studies have highlighted practical problems on the side of the testees, such as a long gap in taking formal tests and no more writing practice, which might cause them to perform slowly and fail (Maric, 2020). Maric further states that the testees fail also because they are not aware of the test difficulty levels nor do they fully know the evaluation criteria. Besides, adequate preparation based on the specific curriculum or scope of services is lacking for the testees. These reasons seem logical in our context as well, where adult learners, after years of gap in their academic practice or sometimes professional practice, appear on the skill test.

Another study by isoTracker (2022) underscores that the most typical root causes for candidate failure are a lack of skill or will. This study highlights that a lack of clear goals and motivation affects a candidate's performance on a test. At a practical level, there can be many other reasons that candidates may not do well during competency assessments. A simple bad day can cause poor results if attention is not focused. Health issues, learning gaps, interpersonal relationship issues with co-workers, test anxiety and even personality clashes all have their place in bad results, too. Therefore, such factors may also lead to candidates either not appearing in the tests or failing the tests if they take them.

Bajaj (2021) becomes critical of the theoretical tests in skills assessment and claims that multiple choice, true or false, and the occasional long answer are favoured for their simplicity even in so traditional skills tests. Unfortunately, they prove nothing other than an ability to memorise a vastness of material in a time-boxed manner. For him, this is not a skills assessment; this is barely a knowledge assessment. This suggests

that knowledge assessment can be eliminated in skills tests.

Looking through a Nepali 'sociological microscope' (Dhakal, 2019) may yield more nuanced ideas on why more candidates fail in higher-level skill tests. A recent study in the Nepali context was conducted by Dhakal et al. (2022), which also clearly outlines candidate-related factors, test item-related factors, assessor-related factors, test-centre-related factors, training quality-related factors, testing norms and system-related factors. The study highlights that many candidates are not fully aware of the skills tests, meaning 'awareness' of skills tests is yet not as effective as it should have been. The study specifically points out that a majority fail in the theoretical test (58%), followed by practical (22%). More so, many participants are still not fully aware of the test process. Overall, candidates themselves are largely responsible for their failure – because they are not fully aware of the skills standards and testing processes (33% of Level III candidates and 24% of Level II candidates are not informed of the skill test process) and do not have adequate preparation and practice of either or both theory and performance tests before appearing in the actual tests.

Way Forward

In the pursuit of enhancing skill testing certifications, a multifaceted approach is essential. The urgency lies in creating widespread awareness about the necessity, scope, and purpose of these certifications. To achieve this, comprehensive dissemination efforts can be undertaken, ensuring that all stakeholders—especially those aspiring to get into the formal labour market—grasp the significance and implications of the skills test.

Mitigating biases during evaluations is crucial. One effective measure involves involving at least one external assessor. By doing so, we can counteract biases arising from familiarity or halo effects, thereby fostering fairer evaluations. However, addressing the format of subjective questions is equally critical. Ideally, subjective elements can be replaced with objectively measurable criteria wherever feasible. Policymakers, skills experts, assessors, and practitioners need to engage in a national dialogue to thoroughly review the question formats, mediums, objectivity, and pass marks.

Creating separate handouts for each skill level is a practical step. These

handouts may meticulously outline test requirements, standards, and evaluation rubrics. Such clarity benefits both candidates and assessors, ensuring aligned expectations. Moreover, flexibility in assessment procedures is essential. Here, flexibility means clarifications on technical terms and provisions for local language equivalents; which would empower candidates and enhance accessibility.

The detailed result should reach the candidate directly so that they can prepare likewise for the next round of skill tests. There could be a provision for a candidate to enter their registration number and check the results online.

Also, aligning skills training more closely with skill standards, particularly the National Occupational Skill Standards (NOSS), is imperative. Training centers have to move beyond relying solely on sample questions. Instead, they could offer intensive, skill-focused training to better equip candidates for success in skills tests.

In this holistic approach, fairer evaluations, greater transparency, and more effective training systems would collectively enhance the quality and reliability of skill test certifications, benefiting both individuals seeking skills certification and the broader workforce ecosystem.

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Editor Biosketch

Rashmi Pandey is a Program Coordinator at the Sustainable Development and Empowerment Forum (SDEF) Nepal, where she channels her passion for addressing social issues and spearheading sustainability-focused initiatives. With a keen interest in educational and social science research, Rashmi also serves as a versatile freelance researcher. Her commitment to understanding and tackling pressing societal challenges is evident in her multifaceted engagement across various domains. Rashmi brings a wealth of experience and expertise to her role, leveraging her academic background and practical insights to drive meaningful change. Through her work at SDEF Nepal and beyond, Rashmi strives to contribute to the advancement of sustainable development agendas and empower communities.

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