

A peer-reviewed open access journal indexed in NepJol; ISSN 2542-2596

Published by Molung Foundation, Kathmandu, Nepal

Article History: Received on 26 February 2022; Accepted on 19 May 2022

DOI: <https://doi.org/10.3126/mef.v12i01.45898>

An Analysis of Student Assessment Practices in Higher Education of Nepal

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Abstract

Student assessment is an integral part of the teaching-learning process of the formal education system. It is collecting, evaluating, analyzing, and documenting students' progress using various assessment devices, tools, and strategies. Various assessment practices in higher education, such as oral test, paper-pencil test, practical test, project work, group work, and other non-testing devices, but paper-pencil test seems to be the most commonly used tools in Nepali higher education. Most of Nepal's universities do not seem to have adopted assessment tools other than the traditional paper-pencil test. So, the assessment in higher education has now become an issue of discussion and debate. This paper attempts to analyze student assessment practices and their problems in higher education in Nepal. For this purpose, data were collected from both primary and secondary sources. Primary data were collected from the media's teachers' opinions, cases, and issues coverage. Secondary data were collected from the reviews of both archive and digital documents. The major findings of this paper indicate that there are so many problems in the assessment system. As a result of the inappropriate assessment system, higher education quality has been deteriorating day by day compared to developed countries. It is mainly due to lack of accountability (examiner, examinee, and exam authority), time allocation, lack of digital technology to assess student progress, lack of item analysis, and lack of the alternative use of the paper-pencil test. The present assessment system is not liable for ensuring the quality of higher education. This paper explores some issues related to assessment practice which could be the starting point for the assessment reform.

Keywords: student assessment, paper-pencil test, item analysis, assessment quality, quality of education

An Analysis of Student Assessment Practice in Higher Education of Nepal

The term '*assessment*' derives from the Latin word '*assess*', which means 'to sit beside'. Its *root* meaning is deeply integrated with teaching and *learning*. In education, the term assessment refers to the wide variety of methods or tools that educators use to evaluate, measure, and document the academic readiness, learning progress, skill acquisition, or educational needs of the student (The Glossary of Education Reform, n.d.). More specifically, higher education is intended to provide broader skills and knowledge to the students for the job market and academic degree. The main objective of higher education is to help students become more professional and lifelong learners with a wide range of skills. So, the assessment process of higher education needs various tools and approaches. In this case, the assessment supports whether the purpose of higher education has been fulfilled. The debate about student assessment practices in higher education has expanded over the past decades and has emerged as a hot issue after COVID-19.

It has been recognized that universities play a pivotal role in promoting sustainability principles, contributing to the paradigm shift to develop more suitable assessment tools that can be applied in higher education institutions (Caeiro et al., 2013). But during the COVID, most the higher education institutions faced pathetic problems. The traditional paper-pencil test is insufficient to contribute to making quality higher education and faces emerging challenges like the job market. In addition, Bryan and Clegg (2006) discuss problems with traditional assessment methods and rationales behind different kinds of innovation in assessment practices in higher education. Similarly, Sullivan et al. (2012) attempt to analyze institutional behavior related to the incentives embedded within measurement systems in higher education institutions. Coates (2018) mentioned that it is surprising that much assessment in

higher education has not changed materially for a very long time. Technology innovation provides numerous opportunities to change, transform or adopt the different assessment approaches, but the scenario seems not to change significantly, especially in Nepali higher education.

Furthermore, Boud and Falchikov (2007) argue that assessment affects students' academic lives. Largely, the students' future directions depend on university assessment frames, such as formative assessment provides several fruitful directions for choosing a career and learning. Hogan (2020) presents two valuable opportunities for educators from assessment; gaining a deep understanding of trends and instructional strategies for enriching students' strengths and applying multiple approaches to assessing the student. In this context, formative and summative assessments can be applied to evaluate academic achievements during and after instructional activity. The formative assessment practice is almost absent in Nepali higher education (B. K. Adhikari, personal communication, May 30, 2021). Sekolsky and Denison (2018) reveal some common issues related to student assessment practices in higher education, such as standard-setting, placing the appropriate passing score, bias in test construction, item writings, item analysis, reliability, validity, and developing appropriate measures of student learning outcomes. Thus, the assessment has played a vital role in the higher education system's effectiveness and efficiency.

Higher education providers are responsible for ensuring equitable access to education, integrating higher education with skills, and ensuring excellent educational quality by increasing opportunities for technical and scientific education. There are currently 17 universities (including six deemed universities) operating in Nepal. However, about 78 percent of students study at Tribhuvan University (University Grant Commission, 2021). On the other hand, National Planning Commission (2019) estimated that about 15 percent of students have enrolled in higher education, which will be expected to be 22 percent in 2022. So,

higher education issues and challenges are more related to Tribhuvan University. In many cases, other universities also practice the same curriculum, examination system, and teaching-learning process adopted from Tribhuvan University except Kathmandu University.

With the pace of globalization and liberalization, higher education providers have not been able to produce skilled manpower to compete in knowledge, skills, and technology (UNESCO, 2018). Therefore, most of the manpower produced from higher education is far from access to the labor market, and they have only theoretical knowledge. To ensure the quality of higher education by making the curriculum time-relevant, conducive to the purpose of higher education, research, innovation, and a wide range of student skills, the examination system also plays a vital role.

Teaching is not successful unless student assessment is conducted correctly. Learning is incomplete if students do not acquire the knowledge, skills, and competencies they need and are expected by the curriculum and job market. An incomplete learning experience cannot develop a student's full personality (Pandey, 1994). Therefore, higher education institutions need to make the examination system standard and flawless. Various assessment strategies like project work, mini-research, case study, term paper, group work, field work, presentation, portfolio, and learning profile can advance student learning. However, few scholars have researched this issue in Nepal. In this context, this paper attempts to analyze the present assessment practices, weaknesses, and issues in Nepali Higher Education. Most universities lose their academic year just the cause of not being able to take student examinations. Acharya (2020) states it is not acceptable to wait to end the COVID before taking the examination.

Methods

This paper is prepared based on document analysis using primary and secondary data sources. Primary data were collected from the discussion of selected teachers and students. Moreover, secondary data have been analyzed. Few quantitative data have been presented, and other qualitative information has been collected and analyzed. Various journal articles, books, reports, and publications were thoroughly reviewed to obtain secondary data. Thus, the paper has used the mixed approach to collect data and analysis as well.

The paper has been prepared based on journal articles, newspaper manuscripts, monographs, personal experience, examination question papers, informal and formal conversations, reports, and books. Individual discussion has been made with some teachers and students from higher education institutions. Some news, reflection, and cases are also analyzed. Various question papers and items of the examination are also reviewed and analyzed. Working in the field of student assessment and being a faculty member in higher education, I have also mentioned my reflection and observation. To collect the primary data, open-ended questionnaires were asked to the university teacher and students. To collect the secondary, I went to the library, searched online, and collected the publication from various organizations.

Results and Discussion

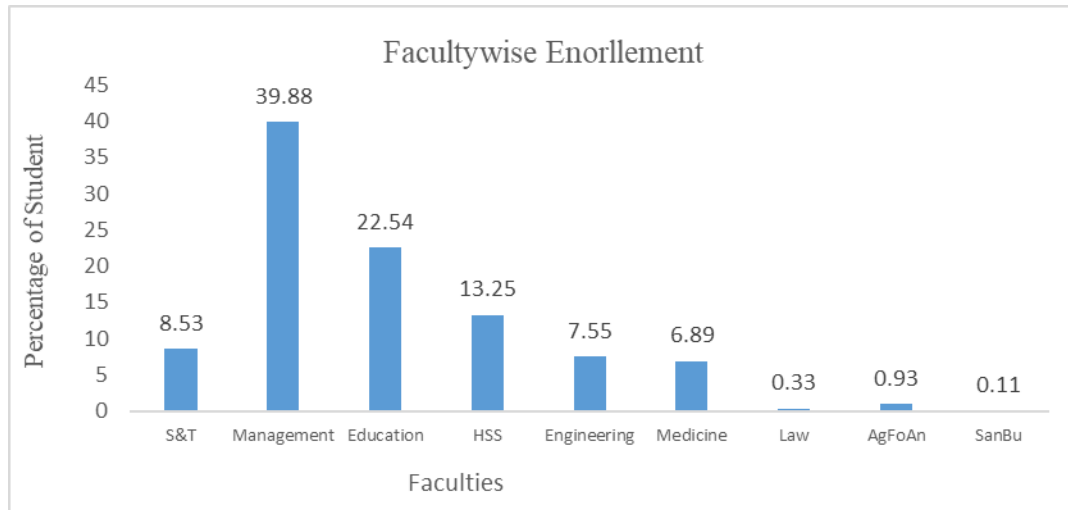
This section presents the results of the various cases, data, and document analysis. Similarly, the current student assessment practice in higher education has been discussed. Before analyzing the assessment practice in higher education, it is important to explore the university autonomy and teacher autonomy regarding the student assessment. Teacher autonomy is a very important factor in improving the assessment system in higher education. Teacher academic autonomy can enhance the formative assessment during the teaching-learning activity, which improves student learning and skill development. It is almost

impossible to reform the present assessment system without teacher autonomy and capacity development.

Student assessment systems have a pedagogical, administrative, and technological legacy. The concept regarding assessment for learning and learning can only be applied in the true sense by the teacher. So, the teachers' capacity, empowerment, teacher-student ratio, and academic autonomy are affecting factors in implementing an effective assessment system. Similarly, the university governing body and academic council have to change the existing norms and procedures to provide autonomy for the teacher. In the past and present Nepali higher education examination system, many problems and gaps are prevailing. So, the reform in the assessment system influencing by multifaceted factors.

Higher Education Status in Nepal

Over the period, priority has been given to access rather than quality in higher education. Not only the government but other stakeholders of higher education were/are more interested in establishing a new university rather than improving the quality of the existing university. The establishment of a new university has become political agenda rather than an academic one. The new education policy 2019 mentioned research base higher education broadly but did not state how the higher education reform initiatives move toward research and innovation (MOEST, 2019). Numerous criticisms have been seen about the quality of higher education in Nepal. The main criticism is that university graduates do not have the knowledge and skill per the labor market requirement. The employers are not convincing graduate students they have a skill as their requirement. Student enrollment in general subjects was higher than in technical subjects. The student enrollment in science and technology was found to be less than in the other general subject stream. The enrollment trends in different faculties are presented in figure 1.

Figure 1*The Enrollment Trends in Different Faculties*

(Source: MOEST, 2075)

Enrollment in general education like management, humanities, and education covers 75 percent of the total enrolment. The nature of the course, the subject teacher, and the other various aspect of the course has low employability skill and market demand. It is of utmost known that general education objective and essence is not providing the employability skill specifically but in general knowledge. The oldest and largest university Tribhuvan University offers general education all over the country (more than 1100 campuses) with inadequate infrastructure and teachers. Access to higher education has increased only in general education.

Some courses offered by the faculty of management can be considered professional courses. Though, the newly established university is also concentrating on offering general education. It is a known fact that general education has not been able to develop qualified human resources. Lumbini Bouddha University was established with the prime objective to educate the people of Nepal and enrich the global learning community through applying core

Buddhist values and promoting World Peace. However, they have only 142 students on the faculty. Nepal Sanskrit university has only 251 students in Sanskrit faculty, but they have more students in Education, 950 students.

Nepal's higher education development is mostly focused on providing affiliation to the college/campuses. The affiliated college was increased from 2001 to 2012 is 475 percent (University Grant Commission, 2001 and 2012). The weightage of affiliation is more in TU than other, but the other new university is also more interested in providing affiliation for the college. Mid-western, Far-western, Purbanchal, and Pokhara universities are providing the affiliation east to west in the country to the college without any rationale. They have followed the almost same assessment system practiced by Tribhuvan University. Thus, it can be concluded that most of the university's priority is not providing quality and innovation in the sector.

Assessment and Teaching Learning Status in Higher Education

Assessment is an integral part of the teaching-learning process at all levels of education. The structured, reliable, and valid assessment is the basic condition of higher education quality. To support the student's deep learning, various assessments can contribute in various ways. Bloxham and Boyd (2007) emphasize the importance of assessment in higher education as a learning activity. Without integrating the formative assessment practice in the teaching-learning activity, the high education quality cannot be assured. The assessment practice can help the teacher and student both engage in the lesson and teaching activity more. According to Marton and Saljo (1997), students' learning approaches consistently emerge surface and deep. The assessment practice can encourage students to take a deep approach to learn in any course. If the assessment practice does not demand deep learning, the students only engage in surface learning. The surface learning results and the assessment use short notes, "guess papers", and a guide to passing the exam. While analyzing the exam question paper, our higher education

assessment system demands only surface learning. The majority of the questions have asked only the definition. As blooms domains of learning, the questions have only focused on the lower order thinking skills (Bloom, 1956). A big issue has been observed about the validity of the test as well.

To enhance the student's deeper learning, analytical skill, and higher-order thinking skill, the diverse assessment practice could contribute to it. Higher education is not only the learning; after graduation, the attained knowledge and skills should be used in the world of work. So only certifying the knowledge of the students cannot show higher education effectiveness and quality. In many cases, employers blame the education system and are not getting the right person for the job. While the higher education institution assesses the student's knowledge and skill perfectly, the job market just screens the other factor. However, the job market has not trusted the higher education assessment system, so they again take the exam, checking their knowledge and skill. It is the kind of challenge for the higher education institution and assessment system.

Assessment Practice in Higher Education

The assessment system in higher education in Nepal largely follows the paper-pencil test. Various models and tools have been developed in the field of assessment, but the paper-pencil test is the oldest, less practical, and easiest assessment method and tool. Using the paper-pencil test in assessment, it is not necessary to give more attention to the assessment activity by the teacher. From the teacher's perspective, it is mostly the easy assessment approach to student evaluation. Yorke (2003) argued that the significant problem of assessment in higher education is that measurement instrumentation is often ad hoc and lacks a theoretical base. The concern about the quality of higher education is always criticized, but nobody is interested in reforming the assessment and exam system. The global development of education is shifting from paper-based to electronic media/e-assessment. During the covid pandemic, the transformation of the

assessment system is highly demanded. The classroom teaching-learning practice is going narrow only to certify the student knowledge and provide the certificate. In this regard, Bennet (2002) stated rapid change in the mechanisms, nature, and organization of education must also come with changes in educational assessment. Without changing the assessment system, learning quality cannot be ensured in any form. Changing in assessment demands changes in curriculum and pedagogy simultaneously. So, it has not been prioritized by the higher education institutions in Nepal.

The semester system has followed the same pattern as the yearly examination system. Questions about the assessment and quality of the Faculty of Education have been critiqued. Similarly, the faculty of Humanities/Management has been asking questions from unauthentic cheap notes and have repeated the same questions from the previous year. Various assessment issues are similar in TU and other universities as well. The newly established universities, such as Purvanchal University, Pokhara University, Mid-western university, and Far-western University, have not yet developed new courses and assessment modalities. So, the assessment system and issues are similar to the TU.

Assessment Practice

The practice of formative assessment and providing feedback to the students seems almost absent in Nepali higher education. Up to the Master's level in general education, students never get the chance to prepare any report, or term paper and present the idea in a group, project work, or paper presentation. They only take the lecture class and sit in the exam. They buy a different textbook, guide and guess paper, and old question solutions to prepare for the exam. Some of the students prepared for the exam only one week before the exam by purchasing photocopy notes and guess paper from university premises. The researcher asked book shops on university premises questions: Which materials

will buy all students? They replied, "no doubt, guess paper and old question solution" (N. Aryal, personal communication, June 1, 2021).

Further questions why? Oh! Can students get pass marks only by reading the guess paper and old questions a week before the exam? They replied, "Students who want more grades buy both the textbook and guess paper. The next question was asked to the students, Are there different textbooks in the same course, and how do they select them? It was also a straightforward answer by the student; if the textbook written by the central department teacher's priority is given to them, if not, then the book writer from the valley has prioritized. Then, the followed question was asked? Why? They elaborate that it is known that the teacher who teaches in the central department is mostly involved in the question-making process. Very rarely do the chances get by the other teacher to make a final question. For these reasons, some books are written by other teachers, but they just insert the teacher's name from the central department. Responded teachers opined they never experienced different assessments in the university when they studied, so they are not ready to change it now by own initiation.

The opinion of the book shop confirmed the incident, which occurred in 2075 B.S. All questions were asked from the textbook written by a professor in the Foundation of Education. The practice is that each textbook mentions the sample question in the last part of the book. The examinees were blamed for the politics of selling textbooks and earning as well as no accountability of the professor. Similarly, the issues were found asking the question in Educational Psychology from the Educational Foundation. These kinds of incidents are frequent and normal incidents for the TU. Likewise, Gaulee (2014) stated that cheap course notes in the market could be sufficient for passing the exam. Some senior students and teachers have been involved in making the short note, and the photocopied note has been sold on university premises.

On the subject Administrative System of Nepal, all the 50 marks questions were asked from questions were asked in 2074 B.S. In 2076 B.S., the questions were asked from the previous year in Master of Public Administration. They only change the year at the top of the questions. Nobody is accountable and responsible for this. The lethargic so-called professors are involved in this activity, said one young teacher from the university (P. Khanal, personal communication, March 8, 2020).

When TU started the semester system, the teaching-learning and assessment practice had not been improved. In the year 2074 B.S., the questions were asked Master of Public Administration (Planning and Project Management), only changing full marks of the question. The questions asked in semester ten full marks are the same ones in the yearly system (private) 20 marks. Questions asked for 15 full marks in the semester, and the same question asked for 25 marks in the yearly examination system. Tribhuvan University had also allegedly repeated the same questions of 2020 in 2021 in the exam of Economics at the master's degree level (Acharya, 2022).

The internal assessment system has been practiced in various courses and semesters. There are so many issues regarding the internal assessment in the semester as well. Lack of strong guidelines and procedures, the student sits for the written exam for the internal marks as well. Without any theoretical base, the paper-pencil test is practiced in the semester for internal assessment. Without any study and rationale, the internal assessment system was applied in 2007 in the Master's Degree course. So many malpractices have been seen in the assessment practice. There was no clear direction and procedure. Teachers are independent in providing the marks to students. Due to the lack of an accountability system in higher education, particularly in TU, it had not implemented after three years.

Assessment Issues

Any assessment system has essential characteristics like objectivity, reliability, validity, and relevancy. In higher education, the reliability and validity of the assessment are most crucial. The reliability of the assessment represents the consistency of the measurement. It is focused on how accurately the tools measure the knowledge. Reliability is necessary for validity, but validity is not necessary for reliability. At the same time, the validity concern is measurement tool quality. The measurement tools are succeeding or not to measure supposed to measure.

It is already stated that the paper-pencil test largely dominates the assessment practice. One of the respondent assistant professors from TU (P. Acharya, personal communication, March 7, 2021) argued that our teaching-learning practice has focused on only passing the exam. We start each class with the importance of content from an exam perspective. We learned this from our professor, so we have followed it till now. If the content is not most important for the exam, the students are not attentive, and we are not focusing on the content. Another respondent (R. Parajuli, personal communication, March 10, 2020) says there is no difference between the assessment system school and university; both are focused on getting the pass mark rather than learning. In this regard, Koirala (2020) mentioned that teacher teaching and student learning have been focusing on the exam. It takes a long time to publish the result, and the pass percentage of the student shows system inefficiency and poor learning.

To scrutinize the student's answer sheet, each teacher's judgment can be found to be different; scoring rubrics are not practiced in the higher education system in paper-pencil tests.

The question pattern is unrealistic from the perspective of full marks and content reliability. From researchers' own experiences, there is no item for measuring the higher-level thinking skills. Questions are asked defining the terms

with 15 marks. It is a kind of noise to asking the definition of higher education and marks allocation. Faculty of humanities and management have practiced asking the definition (low order skill) with 20 marks. The pattern of the question framework is also very irrelevant and illogical. The single questions carry 25 marks and are unreliable and less valid.

Many scholars and writers have mentioned that Nepal's higher education big problem is that the curricula have not changed for decades. While the curricula have not been changed in decades, it would be wrong to expect reform in the assessment system. Simultaneously, if the assessment system has not been changed, then no need to change the curriculum from time to time. The assessment system incorporated the new and changed concept in the teaching-learning process rather than only taking the assessment.

Cheating is another most prominent issue in higher education assessment. The media have raised some issues during the time of examination every year. If we visit the exam center, we can easily find cheating practice in the exam each time. While the questions asked from the textbook, guess paper and note, then it is the apparent practice by the students. Researchers have seen cheating practice in a Master's Degree in private courses in different years. As a private examinee, I felt the cheating practice increased yearly.

Reliability and validity are challenging issues regarding assessment. Reviewing the questions of the Master's level, the quality of the questions is similar to basic education. The long questions having 25 marks asked for definition, concept, and character. For example, what do you mean by social theory? Elaborate. This kind of question cannot evaluate student learning and analysis skill. Bloom's taxonomy is popular in cognitive science, but university teachers do not care about it. Almost all the questions asked from lower-order thinking skills.

Similarly, asking fewer questions with full high marks can always not cover the content and curriculum objectives. Our education system as a whole not only focuses on lower-order thinking skills or rote learning. Definition, characteristics, concept, and understanding are the knowledge that has to measure but is given less priority.

Implications

Assessing the student's knowledge and skill in a particular subject matter is complex. Although various assessment tools and procedures could help the teacher assess student learning. The assessment system is a core part of any educational program. It should have maintained the quality standard and fair judgment. Similarly, it should be reliable, valid, and trustworthy.

The assessment system has big questions about reliability and validity. Only asking the 4 or 5 questions with 25 full marks is a kind of meaningless idea that exists till now in Nepali higher education. So many reforms are needed in the assessment system to make it reliable and valid. There is some debate among scholars regarding prioritized assessment or learning. Certainly, assessment and learning are interrelated. Assessment can boost effective learning. Kathleen (2010) opined that if you have time, resource and system reform should start from classroom learning, if not reform in assessment, the assessment itself drives the classroom learning improvement.

To establish a strong and systematic assessment system, the formative assessment (assessment for learning and as learning), rubrics as assessment tools, deep learning, research, and innovations are the things to consider. Similarly, the autonomy should be not only for the university, but it should have to the teacher. In the same way, providing the responsibility to the teacher will create more accountability. Reform is a complex phenomenon through which the assessment system should reform to survive the university in today's tech-led education. The rapid advancement of new technology demands new approaches to assessing

knowledge, skills, and abilities. New assessment practices should help students compete with the 21st-century global workforce. It is already delayed reform in assessment practice in Nepali higher education. That is why the covid pandemic affects university exams and assessments.

Reform in the assessment system in higher education, mainly Tribhuvan University, demands re-engineering the course design, student enrollment, course delivery, and assessment policy. The assessment system should reform, as recommended by Bearman et al. (2020), in three ways; "reimagining the status quo, reimagining the assessment design to take into account the digital world, and reimagining the assessment for new ways of knowing" (p. 9). Higher education is facing big challenges now due to the COVID-19 pandemic. The Nepali higher education assessment system should be reformed without delay to address these problematic circumstances and compete with the global market.

Conclusion

Technological advancement, globalization, and economic liberalization create complexity in student assessment practices. The importance of cognitive knowledge will decrease daily, and skills like collaboration, problem-solving, social-emotional, critical thinking, and communication are in high demand. Technology has undoubtedly changed the curriculum, teaching-learning, and assessment. So, we need to move the paper-pencil to keyboard/tech-led assessment practices. Delaying the reform in our assessment system, we will lag behind the global tech advancement. Our assessment of inefficiency proves by halting the different examinations of higher education in one hear. The University Grants Commission of Nepal can lead the debate about the assessment reform in higher education on a large scale. Similarly, the university itself can initiate the reform activity on its own level. Only the reform is insufficient to make assessment reliable and valid in the tech era; it demands transformation.

References

- Acharya, D. R. (2020, August 28). *COVID: Higher education and examination*.
<https://ekantipur.com/opinion/2020/08/28/159858154366556136.html>
- Bearman, M., Boud, D., & Ajjawi, R. (2020). New directions for assessment in a digital world. In M. Bearman, P. Dawson, R. Ajjawi, J. Tai, & D. Boud (Eds.), *Re-imagining university assessment in a digital world* (pp. 9-21). Springer. https://doi.org/10.1007/978-3-030-41956-1_2.
- Bloxham, S., & Boyd, P. (2007). *Developing effective assessment in higher education: A practical guide*. McGraw Hill Education.
- Boud, D., & Falchikov, N. (Eds.). (2007). *Rethinking assessment in higher education*. Routledge.
- Bryan, C., & Clegg, C. (Eds.). (2006). *Innovative assessment in higher education*. Routledge.
- Caeiro, S., Filho, W. L., Jabbour, C., & Azeiteiro, U. M. (Eds.). (2013). *Sustainability assessment tools in higher education institutions: Mapping trends and good practices around the world*. Springer International Publishing.
- Gaulee, U. (2014). Higher education in Nepal: Opportunities obscured by internal challenges. In T. Karunakaran (Ed.), *English language teaching in the twenty first century: Issues and challenges* (pp. 10-31). Kumaran Book House.
- Hogan, M. (2020). *Analyzing your assessment data: Patterns of need & root cause analysis*. <https://www.illuminateed.com/>
- Koirala, P. (2020, March 5). Crisis in higher education. *Kantipur Dainik*.
- Marton, F., & Saljo, R. (1997). Approaches to learning. In F. Marton, D. Hounsell, & N.J. Entwistle (Eds.), *The experience of learning:*

- Implications for teaching and studying in higher education*. Scottish Academic Press.
- MOEST. (2020). *Shaikshik Suchana 2075 B.S.* Ministry of Science and Technology (MOEST).
- National Planning Commission. (2019). *Fifteenth periodic plan*. National Planning Commission.
- Pahilo Post. (2018, September 4). *Questions paper is out before exam*.
<https://pahilopost.com/content/20180904221103.html>
- Secolsky, C., & Deniosn, B. (2018). *Handbook on measurement, assessment, and evaluation in higher education*. Routledge.
- Sullivan, T. Mackie, C. Massy, W. F., & Sinha, E. (Eds.). (2012). *Improving measurement of productivity in higher education*. The National Academise Press.
- Tattersal, K. (2010). The role and functions of public examination. *Assessment in education, principles, policy and practice, 1* (3), 293-304, DOI: 10.1080/0969594940010305
- The Glossary of Education Reform. (n.d.). *Assessment*. Retrieved May 27, 2021, from <https://www.edglossary.org/assessment/>
- UNESCO. (2018). *The culture of testing: Sociocultural impacts on learning in Asia and the Pacific*. UNESCO.
- Yorke, M. (2003). Formative assessment in higher education. *Higher Education, 45*(4), 477-501. Springer.