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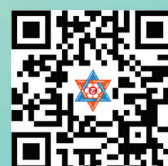
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Tribhuvan University

TU Annual Day Publication 2026

Tribhuvan University

Annual Day Publication - 2026

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Editorial

TU Annual Day Publication – 2026

TU Annual Day Publication 2026 marks the 67th anniversary celebration of establishment of Tribhuvan University in Nepal. The journal features eleven researched articles from seasoned scholars renowned professors with experience of executive positions in TU. In this issue, authors have shared with readers their ideas and opinions on policies, activities, future programs and recommendations for the betterment of the university. As Tribhuvan University is the largest and oldest university of the country with its accommodation of around 78% of higher education enrollment, it has both responsibility and opportunity to continue serving citizens and the world communities, preparing high-skilled human resources and visionary leaders, and producing knowledge and formulating blue prints for academic excellence and overall development. In this issue, the articles are organized in order of the university's past experience and future prospect, including restructuring and quality enhancement agenda.

Moreover, restructuring of the university from its conventional centralized system to regional and local level autonomy in the model of the California University system, as defined by the 1960 California Master Plan for Higher Education, a landmark reform that organized public colleges and universities into a distinctive three-tier “tripartite” system. The restructuring process involves development of community colleges, performance-based funding and mission-based institutions. Similarly, specialization-based campuses/colleges adhere to international practices consistent with Vision 2030.

Times Higher Education (THE) and World University Ranking (WUR) databases contain different parameters. Varying position of Tribhuvan University in Global Ranking from 2019 reveals factors affecting changes in its position annually until 2026. Upward movement in the global ranking flashes substantial progress of the university in the global university ranking.

The working procedure of TUSC for recommending appointments and career development of the staff and faculty need to be upgraded. TU has to recruit and promote staff and faculty regularly, at least once a year, so that competent candidates for jobs, teaching and non-teaching, can be retained. Specific measures to investigate challenges in policy and executive level for the university commission need to be identified.

An apparent gap between employee potential and employer requirement for specific jobs can be filled in when life skills competency and research excellence respond to labor market requirements. Moreover, those graduates also operate business to create jobs for prospective career seekers. Advanced communication, teamwork and problem-solving attitude are the fundamental prerequisites that the job-providers are searching for.

Over the course of 7 decades, TU has persistently resolved several genuine challenges, such as inconsistent internal assessment practices, delays in publishing results, limited resources, and insufficient faculty training have remained unsettled. To address these problems, the university has introduced various initiatives, including guidelines for internal and external assessment, professional development programs, quality assurance mechanisms, and inclusive assessment practices, in order to make both internal and external assessment more reliable, valid, objective, fair, and transparent. On that front, the proposed restructuring agenda can be of a great relevance.

TU's initiatives have helped the staff and faculty advance the quality of teaching, research, and publication. TU has made strides in strengthening research at a global scale. Such a remarkable progress can be seen in high-quality publications, a stronger focus on national priority areas, application of innovative pedagogy, and capacity-building opportunities for staff and faculty. Together, these efforts have contributed to elevate TU's position in global rankings and expand its international recognition.

Along with research, faculty enhancement has become equally relevant for the overall development of the university. The initiatives TU has undertaken in ICT-integrated pedagogy and assessment, along with the strategic actions needed for ICT- and AI-supported governance in higher education, particularly in pedagogy and assessment. Drawing on institutional documents (TU Vision 2030, ODEC Guidelines), national policies (ICT Policy 2015, Digital Nepal Framework 2019), international frameworks (UNESCO, OECD 2023), and peer-reviewed articles, TU has accelerated tremendous transformation in information technology, through the use of Microsoft Teams (around 1.5 million user accounts), Moodle as its official learning management system, automated and flexible assessment tools, and the training of around 8,000 faculty members, along with induction and capacity-building training for over 1,000 additional faculty. TU's digital transformation, in both infrastructure and governance, needs to be further enhanced in order to strengthen academic quality and educational equity.

Relevance of academic audit for quality enhancement has already been realized. Introducing components involved in this self-evaluation process, namely academic audit, including continuous quality improvement, institutional accountability, and resource management, the authors describe the objectives, rational, goals and key areas of evaluation. Equally indispensable is the process of internalization of Tribhuvan University. Policy and institutional provisions, institutional capacity, academic programs and curricula, and international movement with partnership can navigate the future course of the university.

TU Annual Day Publication 2026 not only presents the status but also past experience and future prospective of Tribhuvan University. Despite several obstacles, including financial constraints, TU has become the first choice of the majority of students for their higher studies. The university has exceptional records of scholarship and research enhancement. However, TU has to seriously rethink how it can maintain its glorious history while striving for standard knowledge production and enhanced scholarship in global standards.



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Restructuring Tribhuvan University: Lessons from the California Model for Building a Coherent Higher Education System in Nepal

Tirth Raj Khaniya*

Abstract

Founded in 1959, Tribhuvan University (TU), Nepal's first and largest university, has served as the main higher education institution for producing scholars, professionals, and leaders. However, the sprawling growth of the university over the decades has also left it burdened by systemic internal and external challenges. The internal challenges include affiliating traditions, delayed exam results, uneven quality across campuses, bureaucratic inefficiency, weak research output, and limited international competitiveness. The external challenges include political interference from the government and political parties. Drawing on policy documents, TU's reform initiatives such as TU Vision 2030, and lessons from the California Master Plan for Higher Education of 1960, the study employs a qualitative and analytical research design to trace TU's historical evolution, identify its emerging challenges, and explore viable pathways for reform. The findings propose a gradual transformation from TU's centralized, uniform structure toward a differentiated, autonomous, and decentralized framework prioritizing quality and research productivity. The article recommends several reforms such as greater institutional autonomy, development of community college pathways, performance-based funding, regional decentralization, mission-based institutional differentiation, and stronger quality assurance mechanisms. The paper contends that TU's systemic problems cannot be resolved through incremental measures alone, and that Nepal requires a comprehensive restructuring transforming TU from a centralized affiliating university into a research-oriented institution within a diversified national system. This restructuring agenda extends beyond academic reform, serving as a strategic blueprint central to Nepal's broader goals of economic development, democratic strengthening, innovation, social mobility, and global competitiveness.

Keywords: Tribhuvan University, higher education reform, California model, decentralization, institutional autonomy

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Introduction

Higher education plays a central role in the social, economic, political, and intellectual development of modern societies. Universities are expected to generate knowledge, promote innovation, strengthen democratic values, and contribute to national competitiveness in the world. In a country like Nepal, the role of higher education in national development, social mobility, and modernization of institutions is very important.

Nepal witnessed a rapid expansion of higher education during the last 4 decades. Universities have been established in different regions across the country, and student enrolment has gone so high that TU has become one of the largest universities in the world. Despite these significant accomplishments, Nepal still does not have a coherent and distinctive higher education system led by a clear vision.

Being the first university of Nepal, TU remained the country's almost exclusive provider of higher education. Almost all of those who served as civil servants, academics, political leaders, professionals, intellectuals, and scientists were from TU. Even after the establishment of several universities in Nepal, TU is considered not only an academic institution but also a brand of the country's higher education system at large.

However, the enormous size and national coverage turned TU into a university in institutional crisis. Now, it has to look after 64 constituent campuses and hundreds of affiliated community and private colleges. Because of its centralized administrative structure and governing authority, it is blamed for creating genuine problems related to governance, academic quality, efficiency, accountability, productivity in research, and the way it responds to the developmental needs of the nation.

In Nepal, there is a growing realization of the urgency of a coherent model of higher education. In 2019, TU Vision 2030 was developed in consideration of the perspectives of the California Master Plan for Higher Education, a successful model, to restructure Tribhuvan University (TU). In contrast, the TU authorities, since then, because of frequent changes, did not have much time to work on this line of institutional reformation. They kept talking about it, but it has been seven years since its publication; nothing has materialized so far (Khaniya, 2025). Perhaps they did not have adequate time for getting into it.

Instead of restructuring TU, the government established new universities without any colleges or students and without following any coherent system or model of higher education, let alone the idea of following the Vision 2030. Another example of this sort is the long-awaited Higher Education Act (Umbrella Act), which was prepared some 15 years ago. It has been a nice game to play for the Ministry of Education, which does not have a stable policy framework for the development of the higher education sector.

The point of argument is that TU is confronting systemic problems that cannot be resolved through incremental reforms. Thus, Nepal needs a comprehensive restructuring of its higher education system in which TU transforms from a centralized affiliating university into a competent research-oriented university within a diversified national framework.

For acquiring insights, the California model of higher education has been taken into account, which is broadly recognized for its institutional differentiation, decentralized governance, transfer pathways, and balance between excellence and access. It is believed that the Californian experience and vital lessons can be relevant to bring about necessary reforms in Nepali higher education for restructuring TU and finally restructuring Nepal's higher education system.

The article begins with an overview of the historical evolution of higher education in Nepal and the development of TU. Then, the present structural and institutional challenges facing T.U. are analyzed. The sections then discuss reform pathways and examine lessons from the California model relevant to Nepal's higher education restructuring. The article, finally, proposes a strategic direction for reforming TU and Nepal's system of higher education.

Historical Background of Higher Education in Nepal

The origins of higher education in Nepal can be traced to the establishment of Tri-Chandra College in 1918. Before the establishment of TU, higher education institutions in Nepal operated largely through affiliation with Indian universities, particularly Patan University. As can be understood, this historical relationship meant that Nepali higher education evolved initially under strong Indian and British academic influences.

The establishment of TU in 1959 marked a major turning point in the history of Nepal's higher education. Following the death of King Trivhuvan Bir Bikram Shah Dev, the benign initiative taken by the Monarch's two queens for establishing a national university received support from the royal family, the government, political leadership, and international development agencies. Technical and financial assistance from the US, including support from the Ford Foundation, contributed to the institutional development of TU.

Nepal's higher education system emerged through the combined influence of British, Indian and American traditions (Khaniya, 2024). This mixed inheritance produced a centralized affiliating university model, which attempted to serve as a university, examining body, affiliating authority, and research institution. In its early decades, this centralized structure appeared functional because Nepal possessed limited educational infrastructure and institutional capability. TU expanded access to higher education across the country. In both urban and rural areas, constituent campuses and affiliated colleges were established to democratize educational opportunities.

This process continued without any evaluation. Over time, the system expanded beyond manageable limits. Increasing student enrollment, changing labor market demands, frequent political transitions,

globalization of higher education, and technological advancement placed growing pressure on TU to continue covering more geographical areas and students. Frequent political interference further complicated institutional governance and weakened long-term planning, resulting in what TU is today.

Major stakeholders, including leaders and professionals, have realized that TU has become too large to manage its administrative facets and academic components because of its size and national coverage. The historical structure that once facilitated expansion has become gradually incompatible with the requirements of modern higher education governance.

The present situation of TU

TU is the dominant higher education institution in Nepal. According to the University Grants Commission (2023/24), it has 491299 students, nearly 78% of the total students' weightage, through its constituent campuses and affiliated colleges. It manages its programs through 62 constituent campuses, 536 community colleges, and 517 private colleges scattered throughout the country. Moreover, TU ranks among the top 5 largest world universities in terms of student enrollment. One wonders whether a country like Nepal should continue with such a large university when the quality aspect of the institution has been in question. For Nepal, TU is not just a university; it has become a system of higher education as other universities adopt several of its programs. The gigantic size has created serious challenges in management and quality. The large size has become both an institutional strength and a structural burden for the university itself.

Centralized Governance Structure

As argued earlier in this paper, the governance structure of TU remains highly centralized. The central bodies, such as the Senate, Executive Council, Academic Council, Curriculum Development Centre, and Office of the Controller of Examinations operate major academic and administrative decisions.

Campuses located across the country depend on centralized decision-making processes for curriculum approval and academic policy. So far, the constituent campuses are concerned; they depend on the center for staffing, examinations, and financial management. Such a centralization of authority has created bureaucratic inefficiencies, delayed responses, procrastination of proposed tasks, and weak institutional innovation. All of these decisions made by the central administration involve operational and procedural issues, leaving little institutional capacity for strategic planning, internationalization of the university, research development, and academic reform.

Academic and Quality Challenges

In recent years, TU has been criticized for its deteriorating academic quality and global competitiveness. The coexistence of annual and semester systems further reflects institutional

inconsistency. In this light, there are relevant questions about the university's operating systems and whether TU has transitioned into a modern semester-based academic structure. Delays in curriculum revision, examinations, and publication of results have become recurring institutional problems. Research productivity is low because of insufficient funding, heavy teaching loads, weak incentives, and inadequate research infrastructure.

In general, the absence of a strong independent quality assurance mechanism has weakened institutional accountability. Although efforts were initiated in 2016 AD to strengthen quality assurance processes through the designation of a separate directorate, the implementation has remained fragmented and largely insufficient. It is also realized that a centralized evaluation system is hindering institutional autonomy for effective evaluation and prompt delivery.

Financial Constraints

TU generates a substantial proportion of its annual budget independently, primarily through fees and affiliations, when it is said to be publicly funded. Nevertheless, financial shortages have continuously been affecting infrastructure development, digital systems, research funding, laboratories, libraries, and faculty development. In addition, many campuses suffer from inadequate physical facilities and limited technological capacity necessary for modern teaching and research.

Declining enrollment and global competition

At present, the national higher education systems that fail to remain competitive globally face increasing challenges in retaining students. Globalization has fundamentally transformed the landscape of higher education. Students today have access to a wide range of opportunities for higher education in reputed colleges and universities at home and abroad. Moreover, they can also pursue job opportunities in the global job market. Besides, in today's highly globalized world, university graduates would be able to operate their organizations, collaborate with industries, and share their business ideas with people and companies in different parts of the world. Consequently, prospective students may intend to pursue higher education at home and beyond. In brief, they will be increasingly willing to pursue studies abroad when they perceive better academic quality, career prospects, and learning environments elsewhere.

According to Khaniya (2024), the number of students obtaining approval for foreign study and the corresponding outflow of financial resources has been immensely increasing. Nepal has witnessed a substantial rise in student migration for higher education during the past decade. Between 2018 and 2024 A. D. (2075 and 2080 B.S.), tens to thousands of Nepali students left the country annually for higher education, resulting in the transfer of billions of rupees abroad. The number of students studying overseas increased from approximately 63,251 in 2075-76 to more than 117,000 in 2029-80, while the annual financial outflow rose from about NRs. 46.24 billion to over NRs. 100 billion.

Even conventionally popular and competitive programs have experienced declining demand. This growing emigration has had a direct impact on enrollment in Nepali universities, including TU. The Institute of Engineering (IOE), for example, witnessed a reduction in entrance applicants from around 18,761 in 2018 to below 10,000 by 2024. The Faculty of Management's Common Management Admission Test (CMAT), which serves as a gateway to BBA and related programs, experienced a decline in applicant numbers after reaching a peak in 2020. By 2023, CMAT applicants had fallen to below 12,000 before showing a modest recovery in 2024.

The challenge is further reflected in the international standing of Nepal's universities. TU accomplished a significant milestone in 2019 when it entered the top 250 universities in Asia and the top 1,000 universities globally in Times Higher Education rankings. However, its position has subsequently declined, falling beyond the 1,601+ category globally and below the top 650 universities in Asia.

The declining enrollment trend reflects growing concerns about the relevance, quality, employability outcomes, and international recognition of Nepali higher education. As students and families compare domestic institutions with international alternatives, universities are under mounting pressure to improve academic standards, student services, research opportunities, and graduate employability.

According to KC (2024 unpublished), both push and pull factors contribute to the growing trend of student migration. Pull factors abroad include the perception of higher-quality education, opportunities to combine study with work, stronger career pathways, greater availability of scholarships, advanced research facilities, and the international reputation of foreign universities.

At the same time, push factors within Nepal include concerns about educational quality, examination-centered teaching and learning, limited financial support for students, weak integration between educators and employment, inadequate opportunities for experiential learning, and uncertain job prospects after graduation.

It is argued that unless Nepali universities undertake substantial reforms to improve quality, relevance, international competitiveness, and graduate outcomes, the outflow of students is likely to continue, placing additional pressure on domestic enrollment and the long-term sustainability of the national higher education system.

Major Challenges Facing TU

From both national and international perspectives, TU is facing several challenges. Some major challenges are briefly discussed.

Over-centralization

Over-centralization is one of the most significant structural weaknesses of TU. As has been argued, the university governs a large number of institutions under a single administrative framework. Decision-making processes are concentrated at the center, creating delays, inefficiencies, and bureaucratic overload. Campuses have limited autonomy to respond to local realities or innovate academically. Despite major regional and contextual differences, a uniform administrative approach is applied across institutions. The result is a system that is administratively heavy but strategically weak.

Unmanageable Institutional Size

TU has expanded far beyond a manageable scale. Almost all districts of Nepal have TU's constituent or affiliated colleges covering the whole country, putting aside a couple of districts. Its enormous student population and vast affiliating responsibilities make effective monitoring and quality control very difficult. It is almost impossible for a centralized university like TU to monitor and manage such a large structure and population. A campus in the east and a campus offering the same subject in the far west will have to have the same question paper in the final exam. If something goes wrong with the exam in the east, all the students in the west will also have to suffer.

Administrative expansion has not been matched by institutional modernization or governance reform. Monitoring mechanisms remain weak, and centralized supervision cannot ensure quality across hundreds of campuses. Therefore, all accept that TU is too large to effectively manage.

Poor Institutional Differentiation

Most of the constituent campuses operate under similar mandates and academic structures regardless of their strengths or missions because the country lacks a differentiated higher education framework involving research universities, teaching universities, community colleges, technical institutes, and vocational pathways. This absence of differentiation encourages institutional uniformity rather than specialization and excellence. For example, there are more than 500 campuses that offer the BBS course. All the students taking these courses on these campuses will have to follow the same exams.

Governance crisis and political interference

After the restoration of democracy in 1990, one of the biggest problems that has imperiled the TU governance is unwanted political interference in the university programs' operation and administrative affairs. It is heavily criticized for its leadership appointments, which are said to be shaped by political considerations rather than academic merit, leadership excellence, and managerial competence. That is why, when there is a change in the government, obviously there will be pressure on the appointees to quit, allowing again those who are close to the government

to come in. These pressures come through different channels such as political parties, professional organizations, and student unions. There is an absence of the notion of academic leadership that involves administrative, academic, and political leadership. The leadership in the government does not understand the complexity of university governance.

To avoid such criticism, a new approach to the Vice-Chancellor's appointment has been adopted in the name of meritocracy. However, this has just been a drama. Nepali people understand all of these ill-intent missions, no matter how they respond. Another problem is that there are frequent leadership changes, which create policy discontinuity and weaken the institutional stability of the university. External political pressures undermine academic autonomy, accountability, and long-term planning. Student politics and partisan interests often dominate university administration, affecting academic culture and institutional professionalism. Disobeying political signals may lead to encountering different hassles involving harassment.

Weak Student Pathways

Boggs and Calizio (2021) offer substantial insights for working on student pathways for higher education. The California model is popular for this part of higher education dynamics. Unlike many modern higher education systems, Nepal lacks a well-developed structure that allows students to move easily between different levels and types of education. It is said that opportunities for academic mobility between institutions, disciplines, and qualification levels remain very limited. Students who are unable to continue in traditional university programs often have few alternative routes for continuing their education or acquiring employable skills. This rigidity creates barriers to access, progression, and lifelong learning.

Another problem is that the current system also remains examination-oriented and focused on conventional degree completion. Opportunities for adult education, continuing education, and lifelong learning remain underdeveloped. In a rapidly changing global economy where workers must continue updating their knowledge and skills, Nepal's higher education structure has not yet adapted sufficiently to support flexible and continuous learning pathways. Academic success, unlike elsewhere, is measured primarily through standardized examinations rather than practical competencies, critical thinking, creativity, or professional skills. Applied education and technical training receive less emphasis, despite growing demand for such competencies in the labor market.

Poor Quality and Weak Research Culture

A major concern within Nepal's higher education system is the gradual decline in academic quality and the weak development of research culture. Curriculum revision processes are often slow and bureaucratic, resulting in academic programs that remain disconnected from changing technological, scientific, and labor market realities. Many of the courses continue to rely on

outdated content, traditional teaching methods, and rote learning approaches that fail to prepare students for contemporary professional and intellectual challenges.

Due to inadequate funding, insufficient infrastructure, and weak institutional incentives, research productivity within universities also remains limited. Many of the faculty members have heavy teaching and administrative workloads with limited support for training and research activities. The case of laboratories, libraries, digital resources, and research facilities in that they remain underdeveloped. There is an absence of a mechanism that encourages and rewards innovation, publication, interdisciplinary and inter-university collaboration, or applied research that addresses national development needs.

As a result, TU could not sustain its once-achieved strong international visibility and academic competitiveness. It was within 1000 world-ranked universities (THE) until some years ago, which has now been lowered to 1600+. Global research collaboration remains limited, and only a small number of institutions participate actively in international academic networks. The absence of a strong research ecosystem not only weakens university rankings and reputation but also limits the contribution of higher education to national innovation, policy development, and economic transformation. On most occasions, there is an absence of efforts to bring in international students and faculty to enhance the global rankings of TU.

Weak Link between education and employment

University education remains predominantly theory-oriented, with limited integration of academic learning and practical application. Many of the academic programs continue to emphasize conceptual and disciplinary knowledge while providing insufficient opportunities for internships, field-based learning, industry engagement, entrepreneurial training, and skills development. Consequently, many graduates enter the labor market without the competencies, experiences, and professional skills increasingly demanded by employers and emerging sectors of the economy. As noted by KC (2024), one of the persistent challenges confronted by Nepal's higher education is the weak linkage between education and employment. Precisely, the university-industry collaboration is indispensable in higher education in a changing global context. On that front, TU has already established an Incubation Center to support students with start-up funds.

Higher education institutions have also established only weak connections with entrepreneurship promotion initiatives and mechanisms that integrate learning with earning. The relationship between universities and industry remains similarly underdeveloped. Collaboration in curriculum design, applied research, technology transfer, and workforce planning and innovation development is limited. Thus, universities have yet to evolve into dynamic centers of innovation capable of nurturing startups, supporting technological advancement, and contributing to local and national economic development.

In relation to this idea, a notable effort to address this gap was initiated in 2018 with the establishment of the Institute for Innovation and Entrepreneurship (IIE) at TU in collaboration with Singapore Management University (SMU). The initiative began with considerable promise. However, following a change in TU leadership in 2019, the development of the IIE was discontinued without any formal review, evaluation, or institutional deliberation. This can be a lesson for TU's leadership to realize the fact that leadership is just an institutional continuity of the processes that demand gaining insights from the past and sharing with the future. This experience illustrates a broader governance challenge within Nepal's higher education system: the discontinuity of promising academic and institutional initiatives resulting from leadership transitions. The absence of mechanisms to protect strategic reforms from administrative and political changes often undermines institutional learning and long-term development. Universities should, therefore, establish clear policy frameworks and continuity mechanisms that safeguard innovative programs and ensure their sustainability beyond individual leadership tenures. What is sad is that those who underwent their process for training in Singapore also did nothing to share the importance of it with the authorities concerned.

Many graduates face difficulties securing employment relevant to their qualifications, while employers frequently report shortages of practical, technical, and problem-solving skills. The weak linkage between higher education and employment, of course, has contributed to growing graduate unemployment and persistent skill mismatches within the labor market. At the same time, increasing numbers of educated young people continue to seek educational and employment opportunities abroad, contributing to brain drain and the underutilization of domestic human capital. Therefore, strengthening the connection among higher education, employment, entrepreneurship, and innovation is essential for Nepal's future development. TU must move beyond its traditional role as a major provider of academic credentials and become the most active contributor to workforce development, technological innovation, and economic transformation. Thus, building stronger partnerships among universities, industry, government, and local communities will be critical for improving graduate employability, enhancing institutional relevance, and supporting Nepal's long-term social and economic progress.

Reform Pathways for TU

The challenges confronting TU cannot be addressed through minor administrative adjustments or short-term policy interventions alone. The scale and complexity of the institution require a broader structural transformation capable of responding to the changing demands of higher education in Nepal and the global knowledge economy. Over-centralization, bureaucratic inefficacy, weak institutional differentiation, political interference, and declining academic quality and research productivity are systemic issues that demand comprehensive reform. Nepal's higher education system must therefore move beyond the traditional model of a single dominant university toward a more diversified, decentralized, and accountable framework. TU Vision 2030 was developed to address these concerns.

Federalization and De-concentration

TU governs a large number of constituent and affiliated campuses across the country, making centralized management more and more ineffective. The university's central administration is often overwhelmed with routine administrative tasks, leaving little space for strategic planning, academic innovation, and institutional reform. One of the most important reform pathways for TU is the gradual de-concentration and federalization of its structure. It is believed that a more decentralized structure would allow regional institutions to respond to local academic, economic, and social needs.

Large constituent campuses, such as Prithiv Narayan Campus, Pokhara, and Mahendra Morang Campus, Biratnagar, could evolve into autonomous regional universities with greater academic, financial, and administrative autonomy under a federalized model. It was the main idea behind the Higher Education Project (HEP) funded by the World Bank for the last 3 decades. It was thought that these institutions would retain broad national coordination while exercising substantial local autonomy in areas such as curriculum development, faculty requirements, research priorities, and financial management. It was believed that regional governance structures could strengthen responsiveness and reduce bureaucratic delays that now hinder institutional efficiency.

This shift would align Nepal more closely with successful differentiated higher education systems prevailing in several European countries and the US. In such a transformed system, TU at the center would function primarily as Nepal's flagship research university and coordinating institution. Rather than directly managing hundreds of campuses, it would focus on advanced research, postgraduate education, national academic standards, and international collaboration.

Institutional Differentiation

It should be noted that a modern higher education system requires mission-based institutional differentiation. What it means is that not all institutions should attempt to perform identical academic functions or pursue the same objectives. At present, many institutions within Nepal's higher education sector operate under similar structures and expectations regardless of their capacity, regional context, or educational mission. This lack of differentiation has contributed to duplication of programs, inefficient resource utilization, and uneven academic quality.

Nepal must move toward differentiation from uniformity in higher education. Learning from the Californian model, Nepal should progressively develop a diversified system consisting of research universities, teaching universities, community colleges, technical institutions, and vocational or applied education centers. Research universities would prioritize advanced scholarship, innovation, doctoral education, and international research collaboration. Teaching universities would focus primarily on undergraduate and master's level education with a strong emphasis on instructional quality. Technical institutes and vocational education centers would prepare students

for employment in specialized sectors of the economy, while community colleges could provide accessible and flexible higher education at the local level and address the needs of the community it represents.

Institutional differentiation would encourage specialization and excellence while reducing unnecessary duplication of programs. It would also help align educational offerings with labor market demands and regional development priorities. Such diversification is essential for creating a more efficient, equitable, and responsible higher education system in Nepal.

Governance Reform

Reform in governance is another critical requirement for the transformation of TU. Institutional autonomy must be strengthened alongside transparent accountability mechanisms. Universities function most effectively when academic decisions are guided by scholarly priorities and professional expertise rather than partisan political influence. However, political interference in appointments, administration, and student affairs has long weakened institutional stability and academic culture within TU.

Appointments of university leadership should therefore prioritize academic merit, managerial competence, integrity, and long-term institutional vision instead of pseudo-meritocracy. The Prime Minister and Education Minister must understand that university leaders must possess not only scholarly credentials but also the administrative capability to manage large and complex academic institutions. The need to take note that TU witnessed 6 Vice-Chancellors within the last 6 years. It can be argued that behind frequent changes in TU's leadership, there is an absence of transparent selection processes and clearly defined governance responsibilities. Considering these attributes while selecting TU's leadership would help build institutional credibility and reduce politicization. But what has so far been observed in the last couple of years is a sort of ill-intent orchestra performed by political and bureaucratic leaders under the camouflage of meritocracy.

It should be noted that stable governance structures are essential for long-term institutional development. Frequent leadership changes, policy discontinuity, and political intervention undermine strategic planning and weaken institutional performance. A modern university system requires professional administration, participatory governance, and evidence-based decision-making supported by strong institutional accountability.

Reform in Community Colleges

Community colleges are a major part of Nepali higher education as well as TU's strength. Nepal should also consider establishing a government-supported comprehensive community college system as part of broader higher education reform. Community colleges have played a transformative role in expanding educational access and workforce development in countries

such as the US and Canada. Nepal government has not fully understood the value of community colleges. Such institutions could provide flexible, affordable, and accessible postsecondary and graduate education to a wide range of students.

Community colleges in Nepal could offer degrees, diploma programs, and vocational certifications tailored to regional economic needs. They could also provide flexible entry and exit pathways, enabling students to continue towards university education or directly enter the workforce. Applied and employment-oriented education would be valuable in addressing youth unemployment and skill shortages in emerging sectors of the economy. A community college needs to take into account what can make its community productive and offer the necessary skills and education accordingly. This approach would contribute a lot to the introduction of the ideas of learning and earning in Nepal. Community colleges could support regional workforce development through partnerships with local industries, municipalities, and community organizations. By expanding access to practical and affordable higher education, these institutions would reduce excessive pressure on large universities such as TU while contributing to balanced regional development. Competent Community colleges should be allowed to offer, as per needs, higher-level degrees as well.

Quality Assurance and Performance-Based Funding

Nepal should strengthen an independent accreditation and quality assurance authority capable of evaluating institutional performance according to transparent academic standards. Quality assurance should not be limited to procedural compliance but should focus on measurable educational outcomes, research productivity, institutional effectiveness, and student learning. Improving academic quality requires stronger quality assurance mechanisms and more effective funding models. In the existing system, the University Grants Commission performs both task-granting funds and accrediting quality assurance, involving a sense of conflict of interest. Perhaps establishing a separate institution, for example, the Council for QAA, would be better to go ahead with this idea.

It is often argued that funding allocation should increasingly incorporate performance-based criteria. The idea is that institutions demonstrating strong academic performance, higher graduation rates, research productivity, innovation, and community engagement should receive greater financial support. It is believed that such an approach would encourage accountability, efficiency, and continuous improvement across the higher education sector.

To ensure quality, curricula should also undergo regular revision and international benchmarking to enhance relevance and competitiveness. Many academic programs within TU remain outdated and insufficiently aligned with contemporary knowledge, technological advancement, and labor market

demands. Therefore, systematic curriculum reform, combined with faculty development and research enhancement, is essential for improving educational quality and graduate employability.

Internationalization

Internationalization is emerging as a very important phenomenon in higher education. TU must pursue a stronger strategy of internalization to enhance academic quality, global visibility, and research capacity. In an increasingly interconnected world, universities cannot remain academically isolated. International engagement provides opportunities for knowledge exchange, collaborative research, faculty development, and institutional innovation. According to KC (2024), one of the major reasons for the exodus of Nepali students to foreign universities is that they are not assured that the quality of our higher education is on par with international universities.

TU should therefore strengthen international research collaboration, faculty exchange programs, joint academic initiatives, and partnerships with reputable global universities. Expanding international student recruitment and developing English-medium postgraduate programs would also help position the university within regional and global academic networks. It is therefore necessary for Nepal to work on this aspect of higher education and do as much as it can to bring foreign students to Nepal. Internationalization is not merely a matter of prestige; it is essential for improving academic standards and exposing students and faculty to global perspectives and emerging knowledge systems. Greater global engagement would enhance TU's competitiveness, strengthen research culture and contribute to Nepal's broader educational and developmental aspirations.

In conclusion, meaningful reform of TU requires a long-term vision grounded in structural transformation rather than incremental administrative adjustments. De-concentration, institutional differentiation, governance reform, development of community colleges, quality assurance, and internalization together provide a comprehensive framework for rebuilding Nepal's higher education system. It is argued that if implemented thoughtfully and gradually, these reforms could help transform TU from an overburdened centralized institution into a modern, diversified, and globally connected university system capable of serving Nepal's future social and economic needs. Implementing these activities and bringing international students and faculty into TU's classrooms will enhance its global rankings as well.

Learning from the California Model: Relevance for Nepal

The California Master Plan for Higher Education, adopted in 1960, is widely regarded as one of the most influential frameworks for organizing a large and diverse higher education system. The higher education system of the state of California is widely regarded as one of the most influential

and successful models of modern higher education organization. Through the California Master Plan for Higher Education, the state developed a differentiated and coordinated system designed to balance educational access, academic quality, research excellence, and workforce development (California Master Plan Survey Team, 1960). The model created three major public higher education segments- three tier system; the University of California system, the California State University system, and the California Community College system. Each segment was assigned distinct institutional missions and responsibilities within the broader public higher education framework.

While Nepal cannot and should not attempt to replicate California's model in its entirety, several of its foundational principles provide a useful analytical framework for rethinking the future of TU and Nepal's broader higher education sector. Although developed within a specific historical and socio-economic context, its underlying principles continue to offer valuable insights for countries seeking to balance educational access, quality, institutional diversity and economic relevance. The significance of the California model lies not merely in its organizational structure but in the coherent philosophy that guides the relationship among different institutions within the higher education system.

The lesson for Nepal is that the California model demonstrates how a large and diverse higher education system can function effectively when institutions are assigned clear and complementary roles. The University of California system focused primarily on advanced research, doctoral education, and high-level scholarly activity. California State University (CSU) concentrated mainly on undergraduate and professional education, while the community college system provided open-access education, vocational training, lifelong learning opportunities, and transfer pathways to four-year institutions. Some community colleges offer higher degrees, such as Cyprus Community College, as well depending upon the situation. This carefully differentiated structure reduced institutional duplication, improved coordination, expanded educational access, and protected academic excellence.

Mission Differentiation

TU attempts to perform too many functions simultaneously. It serves as a research university, teaching university, affiliating body, examination authority, and administrative coordinator for a vast number of campuses and colleges across the country. This concentration of responsibilities has contributed to administrative overload, declining academic quality, and institutional inefficiency. One of the most important lessons for Nepal from the California model is the importance of mission differentiation.

A differentiated higher education framework would allow institutions to focus on specific missions aligned with their capacities and national needs. Research-intensive institutions could prioritize

advanced scholarship, doctoral education, scientific innovation, and international collaboration. Teaching-oriented universities could concentrate on undergraduate and professional education with greater emphasis on instructional quality and student learning outcomes. Community colleges and technical institutions could focus on workforce preparation, applied education, vocational training, and transfer pathways for students seeking further education. Such differentiation would help Nepal create a more balanced and efficient higher education system. Institutions would no longer compete to perform identical functions but would instead specialize in areas where they can contribute most effectively. This would encourage excellence, improve resource allocation, and strengthen the overall coherence of the higher education sector.

Decentralized governance

It is important to reiterate the importance of autonomy, both academic and institutional, for a university to grow. In Nepal, many education Ministers and the bureaucrats seemed to have the idea that universities are their branch offices. They do not hesitate to come to the university and give instructions to the university authorities for doing this and that. Similar is the case that TU authorities witnessed. They need to appreciate the autonomy that the local institution should enjoy. This is an area where Nepal can learn from the Californian model. The important lesson from the Californian model is the value of decentralized governance combined with coordinated public oversight. Institutions within California's higher education system possess substantial academic and administrative autonomy while remaining part of a broader statewide framework. Universities and colleges are able to make many decisions related to curriculum, faculty recruitment, research priorities, and institutional management without excessive central interference.

In contrast, TU remains centralized, with many decisions concentrated at the central administrative level in Kathmandu. This excessive centralization has created bureaucratic inefficiencies and weakened institutional responsiveness to regional and local needs. Campuses often lack sufficient authority to make timely academic and administrative decisions, limiting innovation and institutional flexibility.

Nepali politicians and TU authorities should understand that greater campus autonomy and stronger regional governance structures could improve institutional responsiveness, accountability, and efficiency in Nepal. Decentralization would allow institutions to address local development priorities, strengthen community engagement, and develop academic programs relevant to regional economic and social conditions. At the same time, a national coordination mechanism could ensure consistency in academic standards and policy direction.

Transfer Pathways

This should be an important lesson for TU. The Californian model demonstrates the importance of strong transfer pathways and academic mobility. The Californian community college system has developed effective articulation agreements and credit transfer arrangements that enable students to move easily from two-year institutions into four-year universities. This flexibility expands educational access, reduces costs for students, and creates multiple pathways for academic progression.

Nepal lacks a comprehensive national credit transfer and qualification framework. Students often face difficulties transferring credits between institutions or moving across different educational streams. Nepal must realize that the absence of flexible pathways limits educational mobility and creates unnecessary barriers for learners.

Developing a national qualification and credit transfer framework is therefore essential for Nepal's higher education reform. Such a system would facilitate academic mobility, support lifelong learning, and create more flexible educational opportunities for students from diverse social and economic backgrounds. It would also help integrate universities, technical institutions, and community colleges into a more coherent national system.

Balancing Access and Excellence

As has been argued several times, TU expanded access to higher education at the cost of excellence. This is another important feature of the Californian model, which is its ability to balance mass educational access with academic excellence. California did not place the entire responsibility for expanding higher education access on its research universities alone. Instead, the community college and state university systems absorbed much of the demand for undergraduate and vocational education, allowing research universities to maintain high academic standards and focus on advanced scholarship.

Nepal can learn an important lesson from this approach. At present, TU carries an overwhelming burden of affiliation, examination management, and administrative coordination for a massive number of colleges and campuses. These responsibilities consume institutional resources and attention that could otherwise be devoted to research, postgraduate education, innovation, and academic quality enhancement.

It can be argued that reducing TU's excessive affiliating and administrative burdens would allow it to evolve into a stronger research-oriented institution capable of contributing to national development. A differentiated system with multiple institutional types could expand access while simultaneously improving quality and academic specialization.

Implications for Nepal

If put together, the principles of universal access, transfer pathways, decentralized governance, public accountability, mission differentiation, and quality enhancement provide a coherent framework for restructuring Nepal's higher education system. They offer valuable guidance for addressing many of the structural challenges currently confronting TU and the broader higher education sector.

The lesson from California is not that Nepal should replicate a foreign model. Rather, it is that successful higher education systems are built on clear institutional missions, coherent governance structures, strong accountability mechanisms, and pathways that balance access with excellence. Adapting these principles to Nepal's unique social, economic, and political context could help create a more responsive, equitable, and internationally competitive higher education system capable of supporting the country's long-term development aspirations.

Why Nepal needs a coherent higher education model like California

As has been discussed, Nepal's higher education sector now suffers from fragmentation, institutional overlap, and lack of systemic coherence. Universities and colleges often operate without clear differentiation of mission or long-term strategic coordination. As a result, the system faces inefficiencies, uneven quality, duplication of programs, and weak alignment with national development needs. Learning from a coherent national higher education model such as the California model is, therefore, essential for the future development of TU and the sector as a whole.

Ensuring systemic coordination

A coherent framework of higher education would help clarify institutional missions and reduce unnecessary duplication across the higher education system. Different institutions would be assigned complementary roles based on their strengths and responsibilities, creating a more coordinated and efficient structure. Such coordination would improve resource allocation, planning, and policy implementation while reducing institutional confusion and competition for identical functions.

Strengthening quality assurance

In the Nepali case, rapid expansion of higher education without adequate quality assurance mechanisms has weakened public confidence in many institutions. A national framework, as has been suggested, would establish clear academic standards, accreditation systems, and accountability mechanisms to ensure educational quality across the sector. Stronger quality assurance would help improve teaching, research, governance, and institutional performance while protecting the credibility of higher education qualifications.

Linking higher education with national development

Globally, universities are regarded as development partners of the countries in which they are situated. There are countries that have asked their universities to present a development framework for the country. Learning from elsewhere, therefore, Nepal's higher education institutions must contribute more directly to Nepal's broader social and economic transformation. Universities should not function merely as degree-granting institutions but also as centers of innovation, knowledge production, and workforce development. A coherent higher education model would strengthen the connection between universities and national priorities such as economic modernization, employment generation, technological advancement, regional development, and entrepreneurship promotion.

Aligning higher education more closely with development priorities would improve both graduate employability and the contribution of universities to national progress. Universities can play a critical role in addressing national challenges through research, innovation, professional training, and policy support.

Improving global competitiveness

Internationalization, research collaboration, faculty mobility, and participation in global academic networks require long-term strategic planning and institutional specialization. A coherent higher education framework would allow institutions to develop clearer academic identities and pursue international partnerships more effectively. In a globalized academic environment, Nepali universities must also improve their international competitiveness.

Nepal must accept that improved global competitiveness would enhance research visibility, attract international students and scholars, and strengthen Nepal's participation in the global knowledge economy. Without strategic reform, Nepali universities risk remaining isolated from major international academic developments.

Policy stability

The main argument is that a coherent national higher education framework would provide long-term policy direction and institutional stability. Higher education policy in Nepal has often been shaped by short-term political considerations and unplanned institutional expansion. Frequent policy shifts and politically motivated decisions have weakened institutional development and undermined strategic planning, which are responsible for causing problems in reforming TU and the higher education sector of Nepal.

It is believed that a clear and stable national model would reduce uncertainty, strengthen governance, and provide a consistent framework for future reform. Long-term policy stability is essential for building strong academic institutions capable of serving Nepal's evolving educational, economic, and social needs.

Conclusion

By now, it should be clear that TU stands at a historic crossroads. The centralized and monolithic university structure that once enabled Nepal to expand higher education is increasingly unsustainable in the demands of a modern knowledge society. The challenges confronting TU are centralization, weak governance, and declining quality. Excessive size, limited differentiation, weak accountability, uncertain funding, and poor integration with national development needs are interconnected structural problems. It must be noted that incremental administrative reforms are unlikely to resolve these systematic contradictions. Nepal therefore requires comprehensive restructuring of its higher education system guided by a coherent national vision.

The California model offers valuable lessons regarding institutional differentiation, transfer pathways, decentralized governance, and the balance between access and excellence. While Nepal cannot replicate the California model directly, important principles can be adapted to Nepali realities. The future of TU should not depend on how long it can continue carrying an impossible institutional burden. Rather, its future should depend on how effectively Nepal can redesign higher education around specialization, autonomy, accountability, flexibility, and public purpose.

The thrust is that TU should evolve into Nepal's flagship research university and intellectual leader rather than remain an over-burdened centralized affiliating authority. Its central leadership changes when there is a change in the government. How can such a university serve the country in such a competitive age? Restructuring TU is therefore not simply an academic reform agenda. It is central to Nepal's broader aspirations for economic development, democratic strengthening, innovation, social mobility, and global competitiveness.

Nepal now stands at a critical juncture in the development of its higher education system. The challenge is no longer one of expansion but of transformation. TU, which once served as the cornerstone of national higher education development, must now evolve into a research-intensive and internationally connected institution within a differentiated and coherent national framework. Drawing appropriate lessons from successful international models such as the California model, Nepal has an opportunity to build a higher education system that balances access, quality, innovation, accountability, and relevance. The future competitiveness of the nation will depend significantly on whether it can successfully undertake this transformation.

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Reforming Tribhuvan University: Reorganization of Academic Programs and Specialization-based Schools or Campuses

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Abstract

Tribhuvan University (TU), established in 1959 by the act of Parliament with amendments in 1993, is a statutory institution under a multi-tier governance structure, with the goals of promoting, developing and disseminating advanced learning, timely creation of knowledge in science technology & vocation, prioritizing research, producing competent human resources necessary for the country's holistic development, protecting national culture and tradition. In last 7 decades, TU produced knowledgeable, skillful graduates contributing to country's development and generating scientific evidence through research. In recent years, TU has been facing newer challenges in developing newer market driven courses generating graduates for industry, quality & innovation in research with global and national policy implications, retaining faculties with advanced knowledge and skills, updating infrastructure and rationale distribution of scarce financial resources. Global and country experience suggests the need re-align specialization & location focused semi-autonomous schools / institutes / colleges in Medicine, Engineering, Science & Technology, Agriculture / Food, Management, with rationale distribution of the scarce resources. Realignment (with knowledge retrofitting) could further strengthen university capacity, regain country's think tank status, and contribute to nation building in the long run.

Keywords: Tribhuvan University, Reorganization, Academic Programs, Specialization-based Schools or Campuses

Introduction

Establishment of Charter and Governance Structure

Tribhuvan University established in 2016 BS (1959 AD), under the act of Parliament as an autonomous, academic institution with perpetual succession and its own seal, is Nepal's first university with the goals of promoting, developing and disseminating advanced learning, timely creation of knowledge in science technology & vocation, prioritizing research, producing competent human resources necessary for the country's holistic development, protecting national culture and tradition. The 1992,

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Tribhuvan University Act restructured the university's legal framework. The university operates as an autonomous, government-financed institution. The Act dictates a multi-tier governance structure dividing ceremonial leadership from executive administration. The Prime Minister of Nepal serves as the ceremonial head and chancellor of the university. The Minister of Education assumes this position of Pro-Chancellor. The Vice-Chancellor (VC) is appointed as the chief executive officer and academic leader responsible for overall active operations. The Rector is tasked with managing academic programs, while the Registrar handles financial and administrative operations (TU-Act-1993). The University has been designated as an autonomous university since its inception. However, in view of its close linkage with the government on its policy and funding, it is widely perceived as a **“State University”** garnering high expectations from the people. The amendments of the Tribhuvan University Act and Tribhuvan University Rules in 1993 (TU-Rule-1993). have made improvement in the governance and structure of the University, making it a statutory institution and the legal framework granted it a fully autonomous status (TU-Vision 2030-2019). It has contributed to nations development through development of qualified, knowledgeable and skillful personalities in different sectors of the governance: from technocrats, bureaucrats, policy planners to politicians including current president of the country.

There are 5 technical institutes and 4 general faculties. It has a wide range of course offerings in Bachelor's and master's levels. TU offers M.Phil. and Ph.D. degrees in different disciplines both at the Technical Institutes and Faculties. In current scenario, TU has a total of 15425 staff: 8,122 teaching faculty and 7,303 non-teaching staff (Planning directorate-2026, TU).

The Act divides governance across specialized councils and bodies.

- University Assembly (TU Senate): The supreme decision-making body comprising 49 members. It sets broad policies, approves budgets, and passes regulations.
- Academic Council: Led by the Vice-Chancellor, this 50-member body determines curricula, sets examination parameters, sets research policy, and fixes student eligibility criteria.
- Executive Council: A 7-member operational team that executes Senate decisions, processes grants, and makes senior administrative appointments.
- TU Service Commission: Created under Chapter 6 of the Act to manage impartial, merit-based recruitment and promotion of both teaching and non-teaching staff.

Challenges in Recent Decades

Despite its development in last 67 years, with more than 450,000 new students enrolled every year in different faculties/subjects in 1,117 (64+1053) constituent and affiliated colleges (Planning directorate, TU), the university is facing newer challenges these years including innovation and market driven courses, quality education, research with global and national policy implications, low student interest for enrollment in some subject / disciplines and efficient management of the scarce human, infrastructure and financial resources, when the university is facing budgetary deficit and

negligible expenditure in infrastructure developments even in most rewarding areas in 21st century (e.g.: IT, AI, Biotechnology, etc).

Vision 2030 for Structural Reform

Tribhuvan University Vision 2030, developed during 2018-19, identified the need for early initiation of the reform to further strengthen the quality of graduates and its governance. It has also proposed two major departures:

- Multiple Tribhuvan Universities in the Provinces, like University of California in different areas of California, USA, with subject-area specific expertise and concentration; and
- Subject/discipline specialization based Semi-Autonomous Schools or Constituent Colleges.

Experience of Specialization-Based Campuses

On one hand, Tribhuvan University since its establishment has been effectively running with globally recognized specialization-based campuses. Maharajgunj Medical Campus under **Institute of Medicine** (in-housing university's medical education comprising Graduate, Post-Graduate and Doctoral Level Medical and Allied-health courses in Medicine, Surgery, Nursing, Public-Health and Ayurveda). Pulchowk Engineering Campus under **Institute of Engineering** (in-housing university's engineering education in graduate-post-doctoral level) have been providing deep, career-focused training and research opportunities with the focus on a single academic discipline or related group of subjects in engineering. Pokhara Campus under the **Institute of Forestry** is another example of specialization-based campus running under and post graduate courses in Forestry and related Discipline. Rampur Campus, under **Institute of Agriculture and Animal Science** used to be another good example of specialization-based campus running under and post graduate courses in Veterinary and Agriculture Science, which is now taken up by AFU and the institute moved to University Campus at Kirtipur. **Central Campus of Technology** under Institute of Science & Technology, established in eastern Nepal with the objectives of developing knowledgeable and skillful food-technology graduates for the food industry based in Morang-Sunsari corridor has lost its credibility of a good example as it has expanded its scope including various other subjects in majority minimizing core expertise in Food Technology.

Faculty of Law is efficiently operating **Nepal Law Campus**, completely devoted to Law education, research and trainings. Most of the lawyers and judges are graduates of the college.

Faculty of Management runs **Shanker Dev Campus**, completely devoted to Management education and Training. The MBA graduates of the college hold management positions in banking and financial institutes.

Central Departments under **Institute of Science & Technology** are producing master graduates and doctoral scholars with advanced knowledge and research skills available as per with the global level in specific subject areas (Physics, Chemistry, Microbiology, Statistics, Botany, Zoology etc), who are recognized globally in scientific fronts and are employed in senior positions globally in renowned universities and research institutes.

Graduates from **Central Departments** under **Faculty of Humanities and Social Sciences** are also recognized at national/regional and global levels, with positions in national planning commissions, national government bureaucracy, and universities abroad.

Some of the university colleges have been offering broad & multiple curriculums from FOHSS, FOM, IOST, FOL etc in multiple campuses of the University (Tri-Chandra College, Padma-Kanya College, Prithvi Narayan College or Birendra Multiple Campus) since universities establishment with some expansion in its post-graduate level courses. These colleges are educating hundreds of thousands of graduates every year for the job market at national, provincial and local level and directly contributing to national development with major challenges in quality (knowledge and skill) in the graduates.

Global Experience of specialization-based Institutes/Schools/Colleges

Single-specialization bases institutes/colleges

Globally, there are universities and colleges which have concentrated on their programs and have been able to come/retain their top-notch status. Some of those universities / institutes / colleges with their specialization-based colleges are mentioned below for easy reference:

Medicine and Life Sciences

- Karolinska Institute (Sweden): One of the world's foremost medical universities, focusing solely on the broader medical and health sciences and awarding the Nobel Prize in Physiology or Medicine.
- London School of Hygiene & Tropical Medicine (UK): A specialized postgraduate research institution focusing entirely on public health, global health, and tropical medicine.

Science, Technology and Engineering

- Massachusetts Institute of Technology (USA): Often considered the global benchmark for STEM education, specializing heavily in physical sciences, engineering, and technology.
- Indian Institute of Technology (India): A prestigious network of autonomous public institutes specializing primarily in engineering, technology, and applied sciences.
- Tsinghua University (China): Widely known globally for its intensive specialization and research expertise in engineering, computer science, and architecture and compared with MIT-USA due to its dominance in engineering, hard sciences, and applied technologies.

Agriculture and Veterinary Sciences

- Royal Veterinary College (UK): The largest and oldest veterinary school in the English-speaking world, dedicated strictly to veterinary medicine and biological sciences.
- Wageningen University & Research (Netherlands): Globally recognized as a leading institution focusing specifically on agriculture, forestry, and environmental sciences.

Business and Economics

- London School of Economics and Political Science (UK): A globally renowned center dedicated entirely to the study of social sciences, economics, and public policy.
- ESCP Business School (France/UK/Germany/Spain/Italy): World's first business school, operating across multiple European campuses. Recognized for its highly ranked master's in management.
- Rotterdam School of Management, Erasmus University (Netherlands): A top-tier European business school renowned for its research and specialized postgraduate programs.

Arts, Design, and Performance

- Royal College of Art (UK): A premier, entirely postgraduate institution universally recognized for art, design, and fine arts education.
- Juilliard School (USA): A world-famous performing arts conservatory in New York City specializing exclusively in music, dance, and drama.

Institutes with Multiple Disciplines in one place:

Globally, there are universities and colleges which have been effectively operating colleges with multiple disciplines with Global Reputation. Some of them worth to mention include

- Harvard University: a private Ivy League research university in Cambridge, Massachusetts, United States. Founded in 1636 and named Harvard College in 1639 in honor of its first benefactor. Its medical and business schools are globally renowned.
- Peking University: China's premier public research university, founded in 1898. It is consistently ranking among the top universities globally, for humanities, sciences, medicine, and engineering disciplines, compared to Harvard University for its strengths in humanities, social sciences, and pure natural sciences.

Single University with Multiple Specialized Campuses

The University of California (UC) is a premier public land-grant research university system in California, USA with over 299,000 students across **10 campuses**. Nine campuses serve undergraduates, while UC San Francisco is dedicated strictly to graduate and professional health sciences.

- UC Berkeley (UCB)
- UC Davis (UCD)
- UC Irvine (UCI)
- UCLA (University of California, Los Angeles)
- UC Merced (UCM)
- UC Riverside (UCR)

- UC San Diego (UCSD)
- UC San Francisco (UCSF)
- UC Santa Barbara (UCSB)
- UC Santa Cruz (UCSC)

UC Berkeley (UCB) has an incredible reputation. 107 Nobel laureates, 19 Pulitzer Prizes, 207 Olympic medals. Simply it's one of the most prestigious academic institutions in the world.

UC San Francisco (UCSF) is dedicated entirely to health science and life science. It conducts research and teaching in medical and biological sciences.

UC Davis is a premier public research university located in Davis, California. Ranked 9 among U.S. public universities, globally renowned for its programs in agriculture and veterinary science.

UC Irvine (UCI) is renowned for its programs in computer science, Machine Learning, biological sciences, and medicine.

UC Los Angeles (UCLA) is Known globally for academic excellence, it offers world-class programs across 12 professional schools, serving approximately ~33,000 undergraduate students. It is continually ranked as a Top 20 National University and generally No. 2 among Top Public Schools. The university's legacy features 16 Nobel Laureates, 123 NCAA championships, and a multitude of successful alumni.

Conclusion

Global and even Tribhuvan University's 67 years of experience clearly indicates that specialization-based schools/institutes/colleges with a specific focus on development of subject specific expertise and located in specific areas of need (Medicine in highly populated cities, Engineering in industrial area, Agriculture/Food near farm land & food industry and forestry near forest areas), could further strengthen the university capacity and can come under national and global radar of expertise, recognition in terms of academic achievement and also able to contribute in nation building in the long run.

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Beyond Numbers: What Eight Years of Ranking Data Reveal About Tribhuvan University?

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Abstract

Times Higher Education World University Ranking (WUR) database of Tribhuvan University (TU) has been studied and analyzed. This database includes total number of students, faculties, student-staff ratio, teaching, research environment, research quality, industry income and international outlook of last 8 years (2019 to 2026). Database are provided by TU and cross-validated by Times Higher Education. It is found that the university's varying global rank is because of several lapses in the policy and implementations. The data shows a steady increase in student population and encouraging improvement in research quality and female participation. The weakness are challenges in effective teaching, research ecosystem development, internationalization, and industry collaboration. This article further discusses the implications of these trends for the future direction of higher education in Nepal. In addition, we propose strategic policy recommendations aiming academic excellence, research productivity, institutional governance, and global competitiveness. The study provides an evidence-based recommendations on how Tribhuvan University can transform from a large national university into a more research-oriented visible institution in the future.

Background

After 67 years of establishment of Tribhuvan University, it is on a crossroad. With over half a million students, 64 constituent campuses, and more than 1000 affiliated colleges distributed across the nation, the university represents not only an academic institution but a national pride for knowledge. In the last decade, the access of higher education has been widened, from University's classroom to Cousera's platform. Therefore, global landscape of academia is rapidly shifting - from enrollment-driven models to research-intensive, innovation-led ecosystems.

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In this context, international benchmarking frameworks such as the Times Higher Education (THE) World University Rankings, QS World University Ranking, Education Ranking (EduRank), etc. provide valuable institutional performance database. THE provides indicators including teaching quality, research environment, research impact, industry collaboration, international outlook, gender balance, and student–staff ratios of universities. These database offer insight into both structural strengths and systemic gaps of the Tribhuvan University (TU).

This year is the 8th consecutive year of placement of Tribhuvan University by THE. Tribhuvan University’s performance over the past eight years has not been studied and analyzed. THE system follows a method: at first, universities are offered to enter their data in the THE portal maintaining the format. After this, THE cross-check the reliability of data worldwide using their method. If any discrepancies are noticed, THE ask several queries to university official. For example, let’s suppose, TU has filled ‘N’ number of students are studying MBBS in TU colleges. THE generally checks the website of all medicine colleges of TU to verify the number. If it is not verified, then THE add a low score on this category. In this article, 8 years verified database of Tribhuvan University has been analyzed using plots with a trend line which is linearly fitted with datapoints. Finally, on the basis of trend lines we present general recommendation for the improvements.

THE-WUR Database of Tribhuvan University: 2019 to 2026

Table 1 shows the performance indicator of Tribhuvan University (TU) in the Times Higher Education (THE) World University Rankings over the period 2019–2026. The first and second column lists the year and the THE rank of TU. The next two columns show total number of enrolled students and student-staff ratio during the corresponding year. Here, the staffs include academic faculty as well as supporting staffs. The fifth column represents the percentage of female students enrolled, highlighting gender balance. The next three columns are the major three indicators: (a) “Teaching” score measures the quality of the learning environment, including reputation, staff strength, and institutional effectiveness, (b) “Research Environment” evaluates the university’s research productivity, funding, and academic reputation in research activities and (c) “Research Quality” reflects the influence and impact of published research, mainly through citation performance and scholarly visibility. The last two columns show the industry link (measures collaboration with industry and the university’s ability to generate knowledge transfer and innovation income) and, international outcome assesses the international outlook of the university.

Table 1: Times Higher Education World University Ranking (THE-WUR) database of Tribhuvan University (TU) of last 8 years (2019-2026). The world rank of TU is given in the second column followed by total number of students, female students in percentage and five specific indicators. (source: <https://www.timeshighereducation.com/world-university-rankings/tribhuvan-university>)

Year	Rank (THE-WUR)	Total Number of Students	Student-Staff Ratio	Female Students (%)	Teaching (in 100%)	Research Environment (in 100%)	Research Quality (in 100%)	Industry Link (in 100%)	International Outcome (in 100%)
2019	974	359377	44.6	44.0	9.2	6.6	35.7	34.0	45.2
2020	1126	418053	36.0	45.0	11.4	6.9	30.8	34.4	45.8
2021	998	422690	31.1	51.0	12.1	7.2	50.4	33.4	45.5
2022	855	428485	31.4	50.0	12.4	7.9	67.8	34.8	45.6
2023	893	460632	30.9	50.0	12.8	7.9	71.2	37.0	45.4
2024	1401	482541	30.9	52.0	11.3	8.2	49.5	15.9	46.7
2025	1562	483765	31.9	52.0	10.8	8.0	48.6	17.5	46.7
2026	1673	499671	19.6	52.0	13.6	7.8	46.7	18.1	45.7

The THE-WUR database of Tribhuvan University between 2019 and 2026 reveal a mixed but informative trend in institutional performance. It can be seen in the database that the university ranking has been improved significantly from ‘Rank 974’ in 2019 to its best position of ‘Rank 855’ in 2022, indicating gradual enhancement in academic visibility and research influence during the early years. However, after 2023 the ranking declined sharply, reaching 1673 in 2026. It suggests two facts: either increasing global competition or loosing our own standard. Despite this, student enrollment has been consistently increased from about 359,000 in 2019 to nearly 500,000 in 2026, reflecting the university’s national responsibility and its growing demand. At the same time, the student–staff ratio generally improved from 44.6 to around 31 during 2020–2025 and further decreased to 19.6 in 2026, which may indicate expansion in academic staffing or changes in reporting methodology. Female student participation steadily increased from 44% to 52%, demonstrating notable progress toward gender balance.

The Teaching score showed a minor improvement, rising from 9.2 to 13.6 despite fluctuations, while the Research Environment score remained relatively stable around 7–8 throughout the period. These scores are very less if we compare with Top 500 ranked universities. To be within Top 500, this score should go above 25. In spite of this, a remarkable increase was observed in Research Quality, which was from 35.7 in 2019 to a peak of 71.2 in 2023, indicating substantial increase. The name of this category was renamed in the year 2023 from ‘Research Citation’.

We know that the academia-industry link is rather poor in TU. Therefore, the scores for ‘Industry Link’ remained moderate, improving gradually until 2023 before dropping sharply in 2024 and then slightly

recovering. International Outcome is very important indicator, connecting TU globally. This score found to be good and stable around 45–47 across all years. It suggests consistent but limited international engagement. Overall, the data indicate that Tribhuvan University has experienced considerable growth in enrollment, gender inclusion, and research impact, while other indicators show a poor scenario.

Discussion: Trend line Analysis

Figure 1 shows growth of total number of students and female students in the corresponding year, indicating a positive growth. The total number of students is found to be increased steadily from nearly 355,000 in 2019 to about 490,000 in 2026, showing a substantial expansion in student enrollment. If trendline is projected for next 7 years, it touches 600,000 marks. Although the growth was moderate between 2020 and 2022, Covid-19 pandemic period, a sharper rise can be seen after 2022. The percentage of female students also shows a gradual improvement over the same period. Female participation in the higher education increased from 44% in 2019 to nearly 52% by 2024–2026, indicating significant progress toward gender balance in TU. The trend line shows a continuous rise in female enrollment.

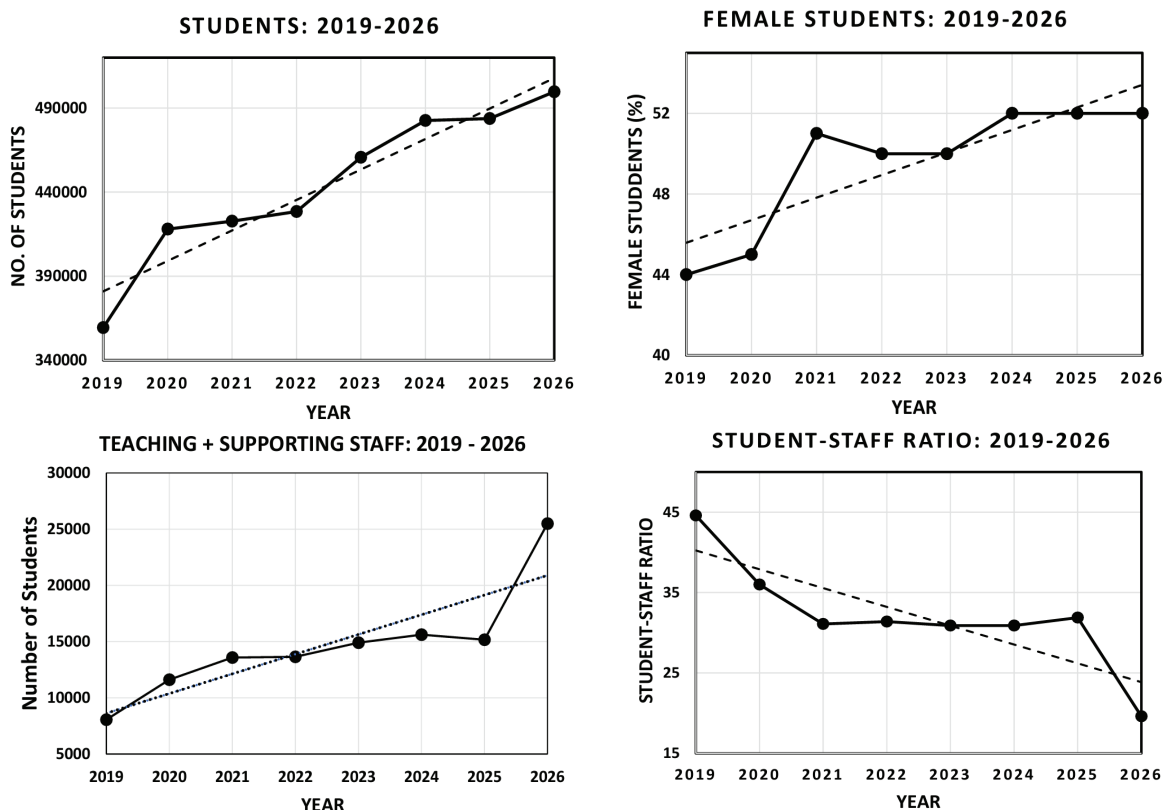


Figure 1: Plot showing total number of students (upper left), female students (upper right), teaching and supporting staff (lower left) and student-staff ratio (lower right) of last 8 years. The dashed lines show best fitted (linear) trend line.

Similarly, the number of teaching and supporting staff demonstrates an overall increasing trend. Staff numbers rose from approximately 8,000 in 2019 to more than 25,000 in 2026 <https://www.timeshighereducation.com/world-university-rankings>. An increase of more than 10,000 faculties and staffs in a single year actually do not justify the grand-based data. Probably, something is missing while submitting data from TU side. According to TU (Staff Administration Division), total available position of teaching and non-teaching staffs are 15425. While the growth remained relatively stable between 2021 and 2025. If we skip the last data, the trend line would be rather flat, indicating urgent need of academic human resources to match growing student population,

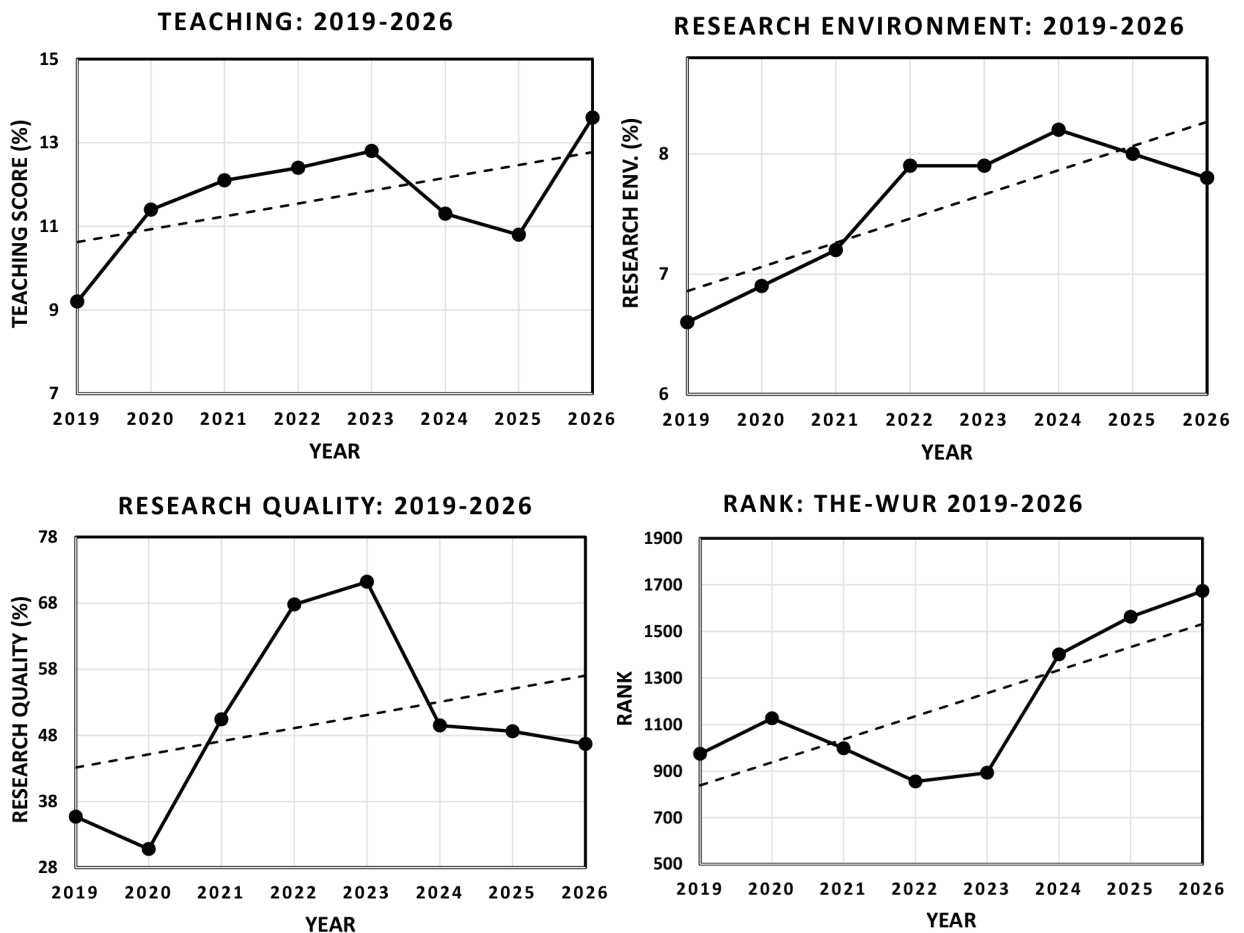


Figure 2: Plot showing teaching score in % (upper left), research environment score in % (upper right), research quality score in % (lower left) and overall rank of the University (lower right) in last 8 years. The dashed lines show best fitted (linear) trend line.

Figure 2 shows Teaching, Research Environment, and Research Quality of TU over the last eight years. These three indicators are obviously the major academic indicators for higher education.

Their contribution is about 67% for fixing overall rank of the university. The Teaching score remains comparatively low throughout the period as mentioned above, although the trend line shows a slow but positive improvement. This improvement is not sufficient. The major reason for low scoring are poor pass-rate, no use of learning management system, teacher centered learning and poor and rather traditional evaluation system. Therefore, the challenges persist in areas such as teaching pedagogy, faculty development, student–teacher interaction, and learning infrastructure.

The Research Environment score (Figure 2) is also weak and fluctuates over the years, suggesting weak research funding, lack of laboratory facilities, minimal institutional support, inactive international collaborations, and weak research culture. The modest upward trend nevertheless indicates that the university has begun strengthening its research ecosystem, though the pace of improvement remains slow. Therefore, it can be concluded that TU still needs to work hard on appropriate teaching pedagogy and research infrastructure as well.

Interestingly, the Research Quality score is noticeably better than both Teaching and Research Environment indicators. This is something interesting! TU has been included in the global ranking because of this indicator and the last indicator, i.e., international outlook. The consistently higher values and positive trend line suggest that the published research articles of the university has gained better visibility, citation impact, and scholarly recognition at the international level. This implies that individual researchers and research groups are producing impactful work even within constrained institutional conditions.

The comparison among the three indicators highlights an important institutional characteristic of the university: research productivity and citation impact appear stronger than the overall teaching pedagogy and research support system. In other words, the dedication and capability of researchers have helped maintain respectable research quality despite weaknesses in teaching practices and institutional research infrastructure. I should mention one thing here. Faculties are doing impactful research work, but their teaching pedagogy is rather poor. There are two reasons behind this: First – either the faculties are doing those research works which do not harmonize their teaching. Second – lack of regular faculty capacity enhancement program. Both reasons are true in TU.

For the improvement, TU should focus on modernizing teaching pedagogy through outcome-based education. This could significantly improve the low pass-rate as well and hence the Teaching indicator. Similarly, increasing research grants to both students and faculties, laboratory facilities, interdisciplinary collaboration, and support for research activities would help improve the Research Environment. A balanced investment in both teaching excellence and research infrastructure could ultimately translate the university's strong research quality into overall institutional academic advancement.

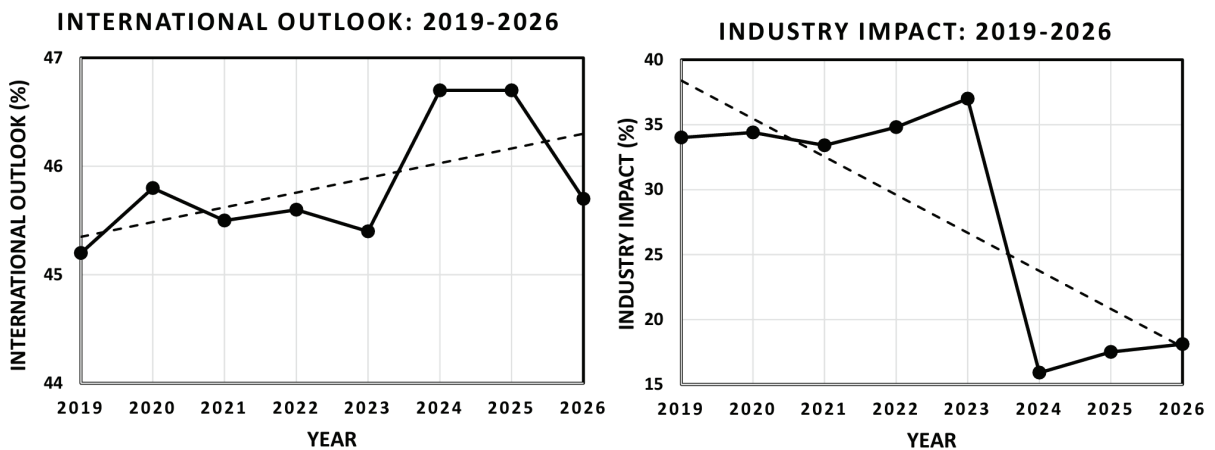


Figure 3: Plot showing international outlook in % (left) and industry impact in % (right) in last 8 years of TU. The dashed lines show best fitted (linear) trend line.

The two plots given in Figure 3, indicate contrasting trends in the performance indicators of TU in the THE rankings during 2019–2026. For International Outlook, the score is average and remains relatively stable with a marginal positive trend. It shows moderate improvement especially after 2023, reaching its highest values around 2024–2025. This suggests gradual strengthening in international visibility. The positive slope of the trend line indicates that TU is slowly moving toward internationalization, although the growth rate is still modest.

In contrast, the Industry Impact indicator shows a declining trend despite reasonable performance between 2019 and 2023. The downward trend line suggests structural weakness in technology transfer, poor innovation commercialization, ineffective consultancy services, poor patent culture, passive startup incubation, and lack of or limited industry-funded research activities. This may also reflect limited collaboration between academia and Nepalese industries.

Therefore, the trend-lines shows that TU is gradually improving its global academic engagement; however, translating research into industrial innovation and socio-economic impact remains a major challenge. Future policy should therefore balance internationalization with innovation-driven, industry-oriented research ecosystems.

Policy Recommendation

On the basis of the eight-year performance trends of Tribhuvan University in the Times Higher Education World University Rankings, the following *eight policy recommendations* should be considered for long-term institutional improvement:

- **Strengthen Teaching Quality and Pedagogical Reform**

TU should modernize teaching pedagogy through outcome-based education, digital learning platforms (e.g. MOODLE), continuous curriculum revision (this is must), and faculty

development programs (should be on regular basis) focused on innovative and student-centered teaching methods. Recruitment of qualified faculty members, teaching assistants, and technical staff is essential to improve academic supervision and classroom effectiveness.

- **Enhance Research Infrastructure**

Research Environment has remained nearly stagnant over the years. TU should establish competitive internal research grants, invest on advanced laboratories, interdisciplinary and multidisciplinary research centers, and better administrative support for project management. The sharp rise in Research Quality until 2023 hints a strong research potential of the faculties of TU. This momentum should be maintained by quality publication in high-impact journals, promoting international collaborations, strengthening graduate research training, and supporting citation visibility through research networking.

- **Promote Internationalization Aggressively**

The International Outcome score has remained almost constant. TU should make a plan to increase international student enrollment, faculty exchange programs, dual-double-degree programs, collaborative research projects, and participation in global academic networks to improve global visibility and ranking competitiveness. To ensure this, biannual academic audit should be made mandatory for all faculties and staffs.

- **Strengthen University–Industry Collaboration**

The sudden decline in Industry Link scores after 2023 indicates weak institutional connection with industry and innovation sectors. TU should establish technology transfer offices, active incubation centers in each college, industrial internship programs, startup incubation centers, and research partnerships with industries and government agencies.

- **Develop Research-Oriented Graduate Education**

Graduate and doctoral programs should be redesigned to emphasize high-quality research, innovation, and interdisciplinary problem-solving. Effective mentorship and compulsory research ethics training to the faculties are also necessary for sustainable academic growth.

- **Improve Data Management and Public Reporting system**

Global rankings depend heavily on accurate institutional data. TU should establish a centralized institutional data management system to maintain reliable records on publications, citations, faculty achievements, international collaborations, graduate outcomes, and research funding. An active 24/7 ‘News Portal’ as well as official social media platforms should be used for the regular dissemination of each and every achievement.

- **Increase Interdisciplinary and Societal Research**

TU should encourage research addressing national priorities such as climate change, public health, sustainable development, energy, agriculture, and technological innovation, connecting SDG goals. Such research can improve societal impact and attract international collaboration.

- **Create a Long-Term International Ranking Strategy**

Rather than focusing only on annual ranking positions, TU should develop a 10 to 20-year strategic roadmap aligned with global ranking indicators incorporating national educational priorities, and institutional strengths.

Therefore, the data suggest that Tribhuvan University possesses strong potential in research visibility and national educational reach, but sustained policy reforms in teaching quality, research ecosystem, internationalization, and governance are essential for achieving long-term global competitiveness.

Conclusion

In conclusion, the eight-year trend of Tribhuvan University in the Times Higher Education World University Rankings demonstrates that the university has made notable progress in research quality, gender inclusion, and institutional expansion. There are a few serious challenges in teaching effectiveness, research environment, internationalization, and industry collaboration. TU possesses a moderate academic potential but requires systematic and long-term policy reforms to sustain global competitiveness. Future strategies should therefore prioritize strengthening teaching pedagogy, expanding research infrastructure and funding, improving faculty capacity, enhancing international collaboration, promoting innovation and industry linkage, and establishing efficient governance and quality assurance mechanisms. With a clear strategic vision, evidence-based policy implementation, Tribhuvan University can gradually transform itself into a research-oriented university in the coming decades.

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Quality Assurance, Global and National University Rankings, and Implications for the Development of Tribhuvan University

Narayan Prasad Adhikari*

Abstract

For over half a century, university rankings have dictated how students choose their future. Every student in undergraduate or graduate levels prefers to get admission to in higher ranked university. Before getting admission, students would like to know what type of university they are pursuing their career as after completing the desired degree actually it is rank of university which is one of most important factor to get jobs. Further, the perspective students choose their university/college not just by name but by going through a deep search of ranking of university and ranking of subject they would like to pursue as their career. Naturally, one would like to improve the ranking of university. In this short communication we would like to point out the Rank of Tribhuvan University in different Ranking systems like Times Higher Education (THE) World University Rankings, the SCImago Institutions Rankings, and the US News Global Rankings focusing on THE. Even though their criteria overlap in many parameters the weight they provide for different parameters of a university like teaching reputation, citation impact, research quality, international outlook vary for these different systems. This means ranking of university by different organizations is not universal. For 2026, TU is ranked at 1501+ on THE, 1054th on SCImago Institutions Rankings, and 919th on U.S. News. We analyze why the massive gap for the same university. We identify the main limitations of TU has been facing to be ranked within top 1000 of world university ranking systems. Further we suggest immediate tasks needed to be implemented by TU.

Keywords: University rankings, Tribhuvan University, THE World University Rankings, SCImago, quality assurance, research impact, citation index, higher education Nepal, internationalization, academic policy

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Introduction

Various ranking systems used worldwide as key indicators to measure the level, impact, and international recognition of universities. Nowadays, all the students are influenced by the direction of tertiary education. It has been influencing the direction of higher education today. Actually, formal ranking of universities is relatively new even though the concept of comparing institutions is centuries old. Before 20th century, informal reputational hierarchies existed, particularly in Europe, where institutions like Oxford, Cambridge, Bologna, and Paris were considered the high ranked elite universities in terms of their institutional legacy and reputation they have maintained. The formal ranking of universities originated in the United States in the 1950s, which was primarily based on an institution's research reputation, has been relevant in recognition of their credibility in knowledge production and their graduates' contribution to societies. However, the first widely recognized, systematic university ranking - which initially focused solely on American institutions—was not published until the 1980s. The university ranking introduced the idea of quantifying academic quality for public consumption. The primary aim of university rankings is to evaluate the rigor of teaching and learning, the quality of the research environment, research impact, societal service, patent output, and the overall contribution to the advancement of knowledge. They help students make informed choices, guide policy and funding decisions, and increase global visibility of universities. Rankings also encourage competition and improvement among institutions while attempting to assess academic quality, innovation, and overall contribution to the advancement of knowledge.

Since it is important to be in the top of the university rankings, there are many research organizations which specialize in higher education data analysis, analytics, and ranking services. Among them Quacquarelli Symonds Limited (QS) World University Rankings, Times Higher Education (THE) world university Ranking, Academic Ranking of World Universities (ARWU / Shanghai Ranking), U.S. News & World Report – Global Rankings, Webometrics Ranking of World Universities, CWUR (Center for World University Rankings), Leiden Ranking and SCImago Institutions Rankings are well recognized companies to provide rankings of universities across the globe. All of these research organizations focus their attention in different ways to rank universities and institutes even though some of their criteria may overlap in some cases. This variation means the ranking of same university in the same year may differ in the view of different ranking organizations. In any case, it is believed the worldwide that university ranking companies/organizations judge quality assurance (QA) of any university. To ensure all the campuses/central departments of Tribhuvan university (TU) adhere to the required minimum quality assurance, it has established a separate body “Quality Assurance and Accreditation (QAA) Centre” to look after QA of the university. The center is very active to ensure quality assurance in all the campuses of TU.

Among so many organizations which rank universities the worldwide, the Times Higher Education (THE) World University Ranking is considered the most prestigious. In this ranking, Nepal's largest and oldest university—Tribhuvan University (TU)—has been ranked in the 1501+ group this year (2026) (THE <https://www.timeshighereducation.com/>). Meanwhile, in the SCImago Institutions Ranking by Research (<https://www.scimagojr.com/>), TU is ranked in 1054th securing the first quartile (Q1) position. Similarly, US News Global ranked Tribhuvan university in 919th position (<https://www.usnews.com/education/best-global-universities>) for the year 2026. The different results shown by these three international indicators for the same university naturally raises the question—are the rankings themselves different due to different criteria. The fact is that different ranking organizations consider different parameters to rank the universities globally. TU, therefore, has different positions in different ways of ranking which is natural as such results happen for any institution.

Why do the rankings look different? All these three systems THE World University Ranking, SCImago Institution Ranking and the US News Global are reliable systems, but the metrics are very different. That is the reason why we got different position of an Institution for the same year. THE Ranking gives high weight to indicators such as teaching environment, research quality and impact, collaboration with industry, and internationalization. Here, technologically equipped classrooms, research infrastructure, proportion of international students, and global citations are the primary criteria. In particular, the indicator of how many research articles are cited plays a crucial role. The SCImago Ranking, on the other hand, focuses primarily on indicators such as research output, patents, and website impact, based on the Scopus database. Likewise, the US news Global considers, publications, books, conferences, Total citations, global research reputation to provide ranking of an academic institution. It does not weigh teaching quality or internationalization. So, it is not surprising to see 1501+ in THE and 1054th in SCImago (institution research ranking) and 919th by US News Global. At this point, we considered Research ranking by Scimago and also by US news global, so the position is also very close in comparison to THE. These measurement systems look at different aspects of a university. However, these three ranking systems share one point in common—our university needs a lot of improvement, especially in research quality and international competitiveness.

Rank of TU in THE in 2026

Times Higher Education World University Ranking System takes into account of various factors to rank a university. Figure 1 shows various parameters of any university/institute considered by THE to any university (<https://www.timeshighereducation.com/>).

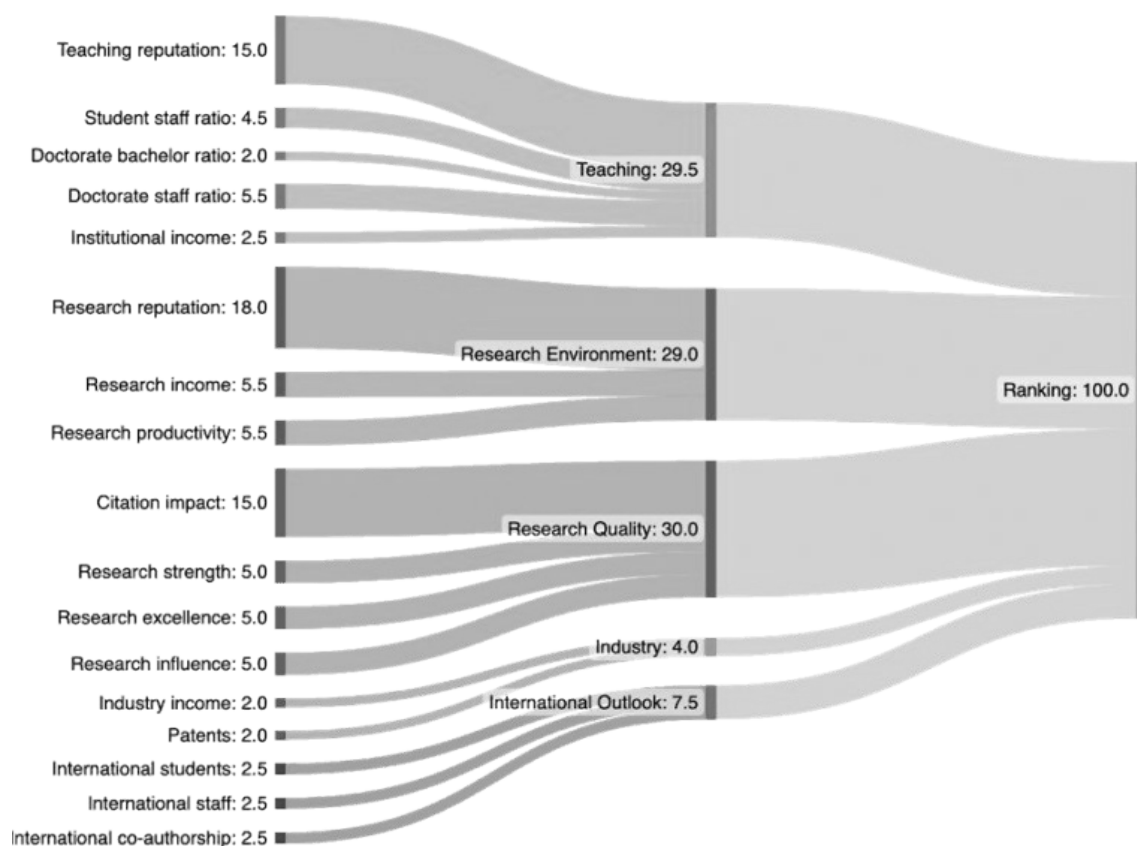


Figure 1: Various factors of an Academic Institute considered by THE to provide its rank globally (<https://www.timeshighereducation.com/>)

From Figure 1, it can be seen that the research quality of a university is the most important factor for being ranked in a top position, as it carries 30.0 points out of 100.0. Research quality includes: (i) Citation impact, which measures how frequently a university's published research papers are cited by other scholars globally; (ii) Research strength, representing the 75th percentile of field-weighted citation impact; (iii) Research excellence, which is the share of a university's publications that fall within the top 10% globally; and (iv) Research influence, a metric that weighs citations based on the academic importance of the citing papers.

Another important factor is Teaching. The teaching score is 29.5%, which is divided into five different sub-categories. These include (i) Teaching reputation, which carries a 15% weight; (ii) Doctorate-to-staff ratio, which carries 5.5% weight; (iii) Student-to-staff ratio, which carries a 4.5% weight; (iv) Institutional income, which carries a 2.5% weight; and (v) Ratio of doctorate to bachelor's students, with a 2% weight. Third important factor for a university to be ranked in THE is Research environment. It carries 29.0 points out of 100.0. The weight 29.0% is divided in three sub-categories. The most influencing

factor in Research environment is Research reputation carrying weight of 18%; the remaining 11% weight is equally divided into Research Income (5.5%) and Research Productivity (5.5%).

Another factor which influences rank of a university in THE is International Outlook with weightage of 7.5%. Out of this 7.5% (i) International Students (ii) International staff and (iii) International co-authorship. Studying abroad does not carry any score. Similarly, Industry carries 4% weight and it is divided into two sub-categories equally to (i) Industry income and (ii) Patents. Any university which would like to be ranked in THE world university ranking program must improve all the parameters. Among them the most influencer three are Research reputation, Teaching Reputation and Citation impact. TU secured 13.6 in Teaching, 7.8 in Research environment and 46.7 in Research quality. While individual score could be considerably higher in comparison to many universities the overall score matters. TU was ranked in 1501+ group in 2026.

The THE actually ranks university in different subjects also. THE ranks in different eleven subject areas. The subjects in which THE provides ranking in case the concerned university provides data are Arts and Humanities, Social Science, Business and Economics, Education Studies, Life science, Physical Science, Computer Science, Law, Engineering and clinical & Health. For World University Ranking in 2026, THE team TU provided data for all the 11 different subjects. In some subjects ranking the performance of TU is extraordinary. In many cases, in certain subjects rank within/around 1000 universities of the world. In Medical and Health Tribhuvan University ranked in the range of top 601-800 whereas in Social Sciences it ranked in the range of 801-1000. Similarly, it ranked 801+ in Education Studies, 1001+ in business and Economics, in the range of 1001-1250 in Engineering, 1001+ in Life Sciences, whereas it ranked 1251+ in Physical Sciences. In other subject categories such as Arts & Humanities, Computer Science, Law and Psychology if we work a bit we will be within top 1000 of universities across the Globe.

The process of Ranking by THE

TU must be within the rank of 1000 top universities of the world. It can be achieved if it works with proper planing to be there. As mentioned before we must focus to improve (i) teaching reputation (ii) citation impact and (iii) research reputation.

We must focus not only on teaching but also to improve the research quality and its impact. Times Higher Education calculates a university's teaching reputation through an invitation-only Global Academic Reputation Survey. To improve this TU must be seen across the globe by scholars in the various fields. THE carried out the survey in 108,000 persons. This numerical consideration is one of the important factors to be considered by TU to improve its ranking. For this status, our alumni should be thankful towards their former institute. I am sure there could be many Nepalese who are alumni of TU among 108,000 scholars. Anyway, we must be able to improve the quality of ways to disseminate knowledge to provide good impression of TU so that our alumni always can appreciate it. We must

use Learning Management Systems (LMS) to our classrooms. The courses in all the levels and all the subjects must be updated according to labor market driven policy (LMDP). In many cases, the courses have not been updated for more than a decade in Masters level. We must adopt a policy to change the syllabus according to new developments in the subject/course area.

Another front to be focused by TU should be citation impact as it carries 15% weight. Citation Impact measures a university's role in advancing knowledge by looking at how often its work is cited worldwide. Essentially, it serves as a strong indicator of both the quality of their research and their global influence. Times Higher Education (THE) partners with Elsevier Scopus to analyze a five-year window of a university's published work. Rather than simply counting raw citations, THE levels the playing field using a metric called Field-Weighted Citation Impact (FWCI). The Field-Weighted Citation Impact is a way to compare a university's citations to the average for the subject area, publication year and document type. The global average gets a score of 1.00. This means that a score of 1.00 is the average so a score of 2.00 means that the research is cited twice as often as the global average. The quality of research is very important to any university ranking system so this "citation impact" alone makes up 15% of a university ranking score.

You might think that a university can get a ranking just by producing a lot of research papers or getting a number of citations. This judgement in number is obviously not realistic. Just having a lot of research articles does not mean that a university will get a score in "Research Impact". The Times Higher Education World University Rankings uses a smart way to measure a university's substantial contribution to knowledge production and research enhancement. They work with Elsevier Scopus to look at data over a five-year period. Instead of just counting every time, a paper is referenced they use a metric called the Field-Weighted Citation Impact (FWCI). In fact, FWCI makes citation impact fair by using a normalization process. Basically, it compares citations of research work produced by universities to the average. Not only it considers averages of citations of an institute but also it controls three major factors. The first is Subject Discipline. Just by comparing citation impact only with a given subject ensures physical sciences are compared to physical sciences whereas Arts and Humanities is compared to Arts and Humanities. In this ranking mechanism, THE takes into account of proper subjects to develop idea of citation impact. The factor THE considers is Publication Year. Another point to be noted is comparison of citation of research papers for a given particular year. The last factor THE considers is Document Type. This means it differentiates research articles, reviews and conference papers.

Research Reputation is another major factor that The Times Higher Education considers when ranking universities. It is one of the important factors and it makes up 18% of a universities total overall ranking score. The Research Reputation is estimated by THE by taking a survey to research scholars across the globe. This means it is not easy to obtain score on Research Reputation as it depends upon what other scholars think about an institution like TU. The procedure of providing

scores in Research Reputation by THE is following. THE first selects research scholars who take the survey. They choose them randomly from Elseviers Escopus database to make sure they are researchers. Then the selected researchers are asked to name up to 15 institutions that they think are the best in their field. After that The Times Higher Education makes sure that the responses are spread out evenly across regions and disciplines so that no one country or field has too much influence.

How to improve current Ranking/Score of TU

Tribhuvan University is currently ranked in the 1501+ tier in THE's World University Rankings. While its local medical and social science divisions do well its research reputation is not as good because of problems with data, administration and visibility. TU can use some targeted strategies to improve its standing and try to get into the top 1,000.

One of the genuine problems that Tribhuvan University faces is that many of its professors and researchers do not list "Tribhuvan University" in their author profile when they publish papers. To address this issue, the university needs to have a policy for naming the institution. For example, it could be "Central Department of Physics Tribhuvan University" OR "[Campus Name] a college of Tribhuvan University" OR ["campus name, Tribhuvan University ... name of places"]. If Scopus cannot find these papers under Tribhuvan University profile then global scholars will not know that the research is from the university. Because the survey relies on peers naming Tribhuvan University external scholars need to know who Tribhuvan University researchers are. Tribhuvan University should encourage its faculty to work with researchers on papers. When a scholar from another country works with a Tribhuvan University professor on a paper they are more likely to know about Tribhuvan University's capabilities. Might choose it in a survey.

Similarly global reputation follows visibility. If a scholar searches for a Tribhuvan University researcher and finds a website it can hurt the university reputation. The university websites need to be updated with the names of all the faculty, staff, PhD scholars and students. All of the researchers should have profiles on ORCID, Google Scholar and ResearchGate. Tribhuvan University should also encourage its faculty to organize conferences on its premises not just in Kathmandu but also in other campuses. Furthermore, Tribhuvan University should have a policy to encourage its faculty to publish in high-impact journals even if it means paying for article processing charges. There should be a unit to handle these charges.

So, where does Tribhuvan University actually fall short? Tribhuvan University is an institution with a large number of students and campuses across the country. Being a big academic institution does not mean it will get a good ranking. What international measurement systems care about is quality, research impact and global reach. On these things, Tribhuvan University faces some challenges: it does not have many high-quality research publications its papers are not cited much it does not have many international partnerships its research facilities are not good and it does not have strong ties with industry. Its digital presence is also not good.

To solve above mentioned problems TU can take some steps. Like following.

- **Focus to Research Also:** Traditionally TU was only disseminating knowledge and not gave much attention to research work. The research is still the interest of faculties. Very little support is there by TU to its faculties. However, we must give ample effort to improve research work to improve its reputation as well as to produce human resources to meet the demands of 21st century. It needs to invest on research. Nothing improves rankings like high-quality research output. Tribhuvan University needs to have money and a clear plan that prioritizes publishing in top journals not only from Faculties but also by Graduate students and undergraduate students.
- **It should build research groups:** We must strengthen graduate programs. Tribhuvan University should invest in forming research groups around disciplines and expand its PhD and post-doctoral programs. The number of PhD students must increase from less than 1000 to more than 2000 in five years, and 3000 within 2033. Further, the criteria to award PhD degree should be standardized in terms of enrollment and completion of requirements for the degree. For an instance, faculties and institutes should include foreign university reviewers and publication of articles in research journal, including national and internal. PhD students' degree completion period should be upgraded. The number of publications in web of science listed journals must be doubled within three years and should be three times within five years. These plans look very ambitious. But, from our experiences, we can affirm that these requirements are realistic if we adopt the policy to encourage Grad students providing them fellowship. This means we must develop descent laboratories, more equipment and actively looking for international research grants and partnerships. Faculties should be provided "Faculty capacity enhancement" training to start research for some new faculties. They must be encouraged to start research work in remote campuses also no matter however small the research work may be. All the faculties must involve in research.
- **It needs to work on getting citations.** This means working with researchers publishing in open-access high-impact journals and hosting conferences that put Tribhuvan University scholars in front of a global audience.
- **It should make internationalization a real priority.** This means having joint degree programs with universities exchanging faculty and students offering more English-medium courses and making it easier for international students to come.
- **It needs to modernize its teaching/Learning system.** This means having a teacher-to-student ratio using more technology in instruction and redesigning curricula around research-led learning.
- **TU should work more with industry.** Tribhuvan University should develop partnerships with industry. Invest in a start-up incubation center and technology transfer programs that show the real-world value of its academic work.

- **It needs to build a digital presence.** Tribhuvan University website should show its research activity with updated faculty profiles, project descriptions and publications that make its work discoverable to the academic community.

In the end, a university true worth is not measured by number of students enrolled in respective levels. It is measured by the quality of knowledge it produces the effectiveness of its teaching its standing in the academic community and the difference it makes in society. If Tribhuvan University makes planning, investment, international collaboration and research its priorities it can become a respected university in the world within a few years. Only if Nepal's top universities become stronger, on the stage can Nepal's higher education become credible, competitive and future-oriented.

Conclusions

Ranking of a university has attracted a great deal of attention in current decades as students prefer to get admission in the university with higher Ranks. There are many ranking systems but we considered only times Higher Education world university Rankings (THE), SCImago Institution Rankings and US News Global. Tribhuvan University has been ranked 1501+ group for the year 2026. Its ranking is much lower than it actually deserves in international arena. With proper digitization of actual data of TU, focusing to improve teaching/learning environment, improvement in research work, increasing graduate (PhD) students, making the criteria for PhD a bit higher standard like requirement of publications of two research papers in Clarivate Web of Science listed journals we can easily increase the ranking of TU.

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Role of the Tribhuvan University Service Commission: Human Resource Management and Work Ethics

Ajaya Bhattarai *

Abstract

This study examines the function of the Tribhuvan University Service Commission (TUSC) in human resource management and the promotion of professional work ethics among its staff. It identifies the TUSC as the main institution responsible for recruitment and promotions. In which merit-based hiring practices are successfully implemented. However, the study indicates a necessity for enhanced speed in appointments and better coordination with modern work culture. These improvements are crucial for enhancing institutional accountability and performance. Ultimately, this indicates that while TUSC operates effectively, adjustments are still essential for it to meet current operational demands.

Keywords: Human Resource Management (HRM), Professional Work Ethics, Recruitment and Selection, Merit-Based Hiring, Institutional Accountability

Introduction

TUSC is an independent body tasked with the recruitment, evaluation, and promotion of teachers and non-teaching staff within Tribhuvan University (TU). It was established under the TU Act of 2049 (1992) and authorized on January 6, 1993. TUSC serves as a vital component of TU's human resources (HR) management. It maintains transparency, meritocracy, and superior professional standards throughout its constituent campuses.

TUSC is comprised of three members: a chairperson appointed by the chancellor, a member from the Public Service Commission, and a professor from among the university's teaching staff, all of whom make recommendations regarding the appointment and promotion of TU teachers and employees. The Chancellor (Prime Minister) is tasked with forming a committee led by the Pro-Chancellor (Education Minister) to recommend the appointment of the chairperson and members of the Service Commission. These appointees will serve a three-year term, with the chancellor

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making the final appointments based on the committee's recommendations. Hence, from the beginning of TUSC's establishment till now, the appointment of the chairman of TUSC has followed the traditional way. For the hiring of TUSC member, the new system was announced by the government of Nepal through an open competition on April 3, 2024.

TUSC plays a vital role in the centralized advertising of academic positions such as professor, associate professor, and assistant professor, as well as administrative roles (Shrestha, 2019). TUSC manages the development of syllabi and conducts competitive written examinations with the help of the Public Service Commission. According to Article 243 of the Constitution of Nepal, the functions, duties, and powers of the Public Service Commission (PSC) include the following: Although the definition of organized institutions in the explanatory section of Section 2 states that universities and teaching services are excluded, there is a provision that the PSC shall be the second member after the chairman of the commission to be formed under the TU Act. In the case where the PSC had previously facilitated the general process, there was a general demand to improve the quality of education and ensure the selection and recruitment of professors and employees based on fair competition in the university. In this context, the PSC has interacted and discussed with the universities, the Grants Commission, the vice-chancellors, and the senior officers of the PSC on how to make the representation of the PSC in the University Service Commission meaningful. As a result, the PSC has decided to conduct the written examinations of TUSC. As per the decision of the TUSC, the main work related to the examination is divided among the officials of the PSC, including preparing the paper; revision; numbering the answer sheets first and second; checking the answer sheets in secrecy and preparing the results; sending the names of the selected candidates to the TUSC for interview in alphabetical order; adding the interview marks; and publishing the final results only after the written examination part is prepared. The admission of qualified and competitive candidates to the TU has made a significant contribution to enhancing the quality of education.

The reason to take help from PSC for the written examination by TUSC is that part-time teachers regularly padlocked the office of the TUSC and the examination halls of the lecture exam 2077 B.S. After managing the exam at 2082 B.S. by PSC, there are no such problems observed. Nowadays, TUSC is getting fairness, preventing political interference, and utilizing the PSC's robust examination infrastructure. Now, TUSC is minimizing nepotism, and public trust is increasing (Ghimire, 2025). By law, one sitting member of the PSC is also a board member of TUSC.

Hence, the legal integration of PSC criteria into TU's recruiting practices is guaranteed by this structural link. In the case of non-teaching and administrative staff, the exam syllabus, security protocols, and marking criteria closely align with standard civil service guidelines. PSC manages specialized exam centers, like Anamnagar as its main facility, and Kathmandu area's reliable,

secure places designed for competitive exams. For the purpose of paper moderation, answer script coding and decoding, and objective grading methods, the PSC maintains databases of subject area experts. By tightly implementing a merit-based marking system, using the PSC guarantees that examiners reviewing lecturers' or administrative officers' papers have no visible applicant identities (Ghimire, 2025). That is the reason that nowadays qualified manpower is coming from PSC via written exam to TUSC.

An interview will be mandatory for all posts as per the advertisement of the TUSC. Information regarding the interview shall be published in a brief notice in a national newspaper and in a detailed notice on the website of the TUSC or a national newspaper or both at least fifteen days before the date of the competition. Interviews for the positions of professor, associate professor, and assistant professor will not be conducted without the presence of the chairperson of the commission, at least one member, and at least 3 experts. While allocating the seats for the interview, twenty percent of the seats shall be allocated for the chairperson and members of the TUSC, and eighty percent for the experts. Provisions relating to experts (1) As per the decision of the Academic Council, a TUSC shall be formed from among the experts on the roster. The expert will be appointed. If the experts on the roster are not available, the TUSC may decide and appoint other experts as required. While selecting experts in the interview, the senior-most people in the concerned field will be selected on the priority list until they are available. If an expert in the concerned subject is not available, the TUSC may decide and appoint up to one expert in the closest subject. In addition, the TUSC may decide and appoint foreign experts for the interview for academic posts as required. Considering the situation, the TUSC may also make arrangements to conduct interviews remotely (online). After the online interview, the chairperson, members, and experts involved in the interview will have to provide the scores of the candidates to the TUSC immediately by signing on the backside of the score sheets as well, and the result will be published on the same day as far as possible. Following a thorough assessment of candidates' academic competence, professional experience, and administrative capabilities, TUSC makes formal recommendations to the university's executive body regarding the most suitable candidates for appointment. The selection process of human resources from the TUSC was explained in detail in the literature (Shrestha, 2020). Hence, a teacher's appointment or promotion is based primarily on the academic qualifications and experience of the candidate, while the emphasis is placed on the staff's administrative skills and experience. However, due to the political pressure, recommended candidates from TUSC are not placed in the needed places by the university's executive body. Everyone wants to stay in Kathmandu instead of going far from Kathmandu. Such placements should be given to the TUSC to ensure a fair placement of the selected candidates.

In terms of recruiting, training, developing, and promoting faculty members and staff, TU faces multiple problems. It takes about 1–2 years for the recruitment process to complete. An

announcement of a vacancy is sometimes made as a result of external pressure, but it is not based on a requirement. Additionally, the current teacher recruitment provisions are not adequate to attract and retain better human resources. Teaching staff and non-teaching staff do not have access to training facilities. There are very few opportunities to participate in foreign programs and visits. The notification of the promotion is made years later than it should, and the present promotion criteria may not fully recognize the candidates' qualifications (Leader, 2019). Soft choices and oversimplified tactics won't help the university get out of this predicament and establish a presence in the international arena. Complete transformation of the recruitment procedure of staff and faculty is essential to address the problems via TUSC. For that, we need to make strategies related to the impartiality, neutrality, quality, and enhancement of the service commission's competence in establishing a center of academic excellence at the university. Therefore, TUSC is responsible for human resource management and the promotion of professional work ethics among its staff.

Human Resource Management Functions of TUSC

Human resource management in a massive university ecosystem requires standardized procedures to maintain quality and equity. TUSC executes several core HRM functions designed to sustain the university's vast network of constituent campuses.

TUSC oversees a systematic approach to staffing in higher education by organizing nationwide competitive examinations, interviews, and practical evaluations specifically designed to recruit both teaching faculty and administrative personnel. This process emphasizes an open competition framework, aiming to attract and select top-tier talent for the public higher education sector. By focusing on unbiased competitive assessments and practical tests, TUSC ensures that the evaluations are appropriately aligned with the specific requirements of technical, administrative, and medical faculties, thereby enhancing the quality of educational institutions.

TUSC is responsible for overseeing the internal promotion systems within TU, focusing on the balance between performance-based metrics, research publications, and years of service. This management aims to facilitate the advancement of staff to higher institutional tiers. The process involves merit-based scaling, which is strictly conducted in accordance with the regulations set forth in TU's statutory guidelines.

TUSC is responsible for establishing and revising the baseline criteria, educational requirements, and experience necessary for different academic positions, ranging from teaching assistants to professors, as well as for various administrative roles. This includes setting clear standards that guide the qualifications expected for faculty and staff at different levels within the academic hierarchy.

Roster management is essential for maintaining an official pool of qualified personnel, which is crucial for aligning personnel deployment with the evolving curricular and administrative requirements across the diverse faculties of the TU. This process ensures that the right personnel are available and deployed effectively, adapting to the changing needs within the institution.

Institutionalizing Work Ethics

The Government of Nepal's Commission for Investigation of Abuse of Authority (CIAA) filed a corruption case against six people of TUSC. Accusations of tampering with examination results and malicious intent have been brought against them (MyRepublica, January 6, 2025). So, we need to promote a culture of ethics and integrity within the TUSC and among university staff. This includes adhering to ethical standards in recruitment practices, maintaining confidentiality, and avoiding conflicts of interest. By implementing these improvements and empowering the TUSC, TU can enhance its ability to attract and retain qualified teachers and staff, ultimately contributing to the overall excellence and reputation of the institution. To keep the massive university structure running professionally, TUSC incorporates standard ethical frameworks directly into its operational model. Beyond recruitment, TUSC is heavily tasked with fostering an environment anchored in professional ethics, transparency, and accountability. In a large public institution like TU, maintaining high ethical standards is crucial to preserving public trust and academic integrity.

The primary ethical mandate of TUSC is to eradicate nepotism, favoritism, and any form of political interference in the hiring process. This commitment ensures that all positions are allotted purely based on individual merit, thereby promoting a fair and equitable selection process for candidates. TUSC's approach aims to uphold integrity and transparency in employment practices, reinforcing a culture where qualifications and competencies are the sole determinants for hiring decisions.

TUSC's selection and promotional criteria are designed to align with the university's overarching code of conduct, emphasizing a cultural commitment to punctuality, research integrity, and professional responsibility among its faculty and staff. The organization actively collaborates with internal departments, such as the TU Personnel Administration Division, to implement corrective measures against individuals who fail to adhere to these professional conduct standards.

By institutionalizing clear guidelines for examinations, answer-sheet evaluations, and interview scoring, the Commission works to provide an equal playing field for all candidates. Preventing nepotism and ensuring equal development opportunities regardless of caste, creed, or background.

TUSC is charged with the responsibility of establishing and enforcing stringent checks and balances to ensure that examiners, interviewers, and administrators do not allow their personal or professional biases to interfere with hiring outcomes. This involves implementing policies

and procedures aimed at maintaining objectivity and fairness in the hiring process, thereby safeguarding the integrity of personnel selections and ensuring equal opportunity for candidates. Through these measures, TUSC aims to create a transparent and accountable hiring environment.

High organizational ethics are fundamental in cultivating a healthy workplace dynamic. They serve not only to minimize legal disputes but also to enhance overall job satisfaction among employees. A strong ethical framework fosters trust and integrity within an organization, thereby contributing to a positive academic environment. With high ethical standards, organizations can expect a greater commitment from their staff, leading to increased productivity and a collaborative atmosphere. Furthermore, the focus on ethical practices can improve the organization's reputation, attracting talent and creating a more robust community. Overall, the implications of maintaining high organizational ethics extend beyond immediate legal and job satisfaction concerns, influencing the broader educational and operational landscape.

Challenges in HRM and Ethical Enforcement

Despite its vital mandate, TUSC operates within a complex socio-political landscape that presents persistent challenges to its HRM and ethical frameworks.

Chronic politicization of TU spaces often pressures the TUSC, threatening its autonomy and testing its commitment to pure meritocracy. Bureaucratic hurdles and administrative backlogs from the executive body of TU frequently delay the recruitment and promotion cycles, leading to prolonged staff shortages in critical academic departments.

Slow adoption of modern, automated HRM software and online examination management tools hampers the speed, security, and transparency of TUSC operations.

Legal disputes regarding exam fairness or promotion criteria occasionally stall TUSC activities, affecting its institutional reputation and operational momentum.

To address the structural and administrative bottlenecks within the TUSC, a series of targeted, actionable reforms must be implemented. In public administration, overcoming delays requires transitioning from archaic, paper-based workflows to automated, time-bound legal frameworks.

Here are the critical remedies for mitigating bureaucratic delays in faculty promotions at TU:

The most fundamental remedy is removing the unpredictability of vacancy calls by establishing a legally mandated schedule, that is, the implementation of a strict academic calendar for promotions.

TUSC must enforce a strict, recurring timeline where promotion applications open exactly twice a year, i.e., bi-annual promotion windows.

TUSC must introduce internal statutory limits specifying that the duration between the initial

vacancy application deadline and the final interview publication must not exceed 90 days. i.e., legally bound processing limits.

The manual processing of physical files, certificates, and research papers is the single largest contributor to procedural delays. TUSC must build an integrated digital Human Resource Management System (HRMS) where every faculty member maintains a verified digital profile containing their service duration, educational history, and leave records.

Instead of manual file verification by TUSC staff, the digital portal should automatically calculate a candidate's baseline points for qualifications and seniority upon submission.

Research papers and journal submissions required for higher ranks (Associate Professor and Professor) should be securely routed to external subject matter experts via an encrypted online evaluation system.

Political interference, union negotiations, and administrative lockouts frequently freeze TUSC operations for months. Ensure the appointments of the TUSC Chairperson and members are fully insulated from changing national political coalitions, allowing the commission to maintain operational continuity. Standardize the appointment of commission members based on strict, transparent academic criteria rather than political consensus. Verifying the validity and quality of research journals manually creates a massive backlog during the promotional evaluation phase. TUSC should eliminate ad hoc journal evaluation committees. By integrating API databases like Scopus, Web of Science, or the UGC Nepal-approved list, the application system can instantly verify whether a candidate's publication meets institutional standards. Allow faculty members to submit their published papers for ethical and technical vetting to their respective central departments on a rolling basis throughout the year, rather than waiting for the formal promotion window to open.

Create a specialized administrative and IT wing within TUSC that is distinct from standard university personnel transfers. This ensures that the staff handling promotions are deeply trained in modern public administration, digital data management, and swift file processing techniques.

Conclusion

The TUSC remains a foundational pillar for the academic and administrative viability of TU. By managing the life cycle of the university's human capital and striving to uphold stringent work ethics, TUSC directly impacts the quality of higher education in Nepal. Overcoming contemporary challenges requires reinforcing the Commission's structural autonomy, digitizing its HRM processes, and maintaining an unyielding commitment to transparency. Ultimately, a robust, ethical, and efficient Service Commission is indispensable for transforming TU into a globally competitive center of learning.

Research-oriented knowledge is possible through qualified manpower. In the western culture, qualified manpower's involvement in research activities is more because, with the help of research projects, they sustain themselves. In this aspect, we also need to hire qualified manpower for the enhancement of research activities. We propose the expert from outside TU, i.e., either other Nepalese universities or even foreign universities, which is possible because Tribhuvan University has already launched the TU Digitalization Strategy Plan, 2023, for a 5-year plan (2023-2027), as well as the Information Technology Policy, 2023, to digitalize TU. The university introduced centralized plagiarism-checking software across all campuses to ensure consistency and adherence to academic integrity standards. Thinking so, we propose to hire highly qualified brain-drained manpower via online interview by strictly checking plagiarism and predatory journals. We also propose to use the discussion paper and working papers for the evaluation of the candidate. The evaluation for the first author of the article needs to give 100% to the first author and 75% marks to the corresponding author if the corresponding author is from the first author's institute. If not, then the rest of the authors, including the corresponding author, will get marks by division. Needs to see the SJR journal ranked Q1 to Q4. The star-rated journals (Nepjol) need to get the minimum marks in comparison with SJR journals.

Future Prospectives

Reform in university recruitment systems, particularly for teachers, has become a critical concern for stakeholders in higher education, including government and universities. The Higher Education Reform Project (HERP 2015–2020), implemented by UGC Nepal and supported by the World Bank, highlights the urgency of improving teacher recruitment services. As part of this initiative, TU has piloted a new teacher recruitment system aimed at attracting highly meritorious and competent individuals. This new approach prioritizes academic merit, focusing specifically on candidates' research and publication records to enhance the quality of its teacher service, and this approach should be continued (Bajracharya, 2021).

The High-Level National Education Commission Report, 2075 B.S., along with the Higher Education Policy, 2072 B.S., has initiated discussions regarding the creation of a single university service commission. This commission aims to replace the current fragmented system of individual service commissions managing faculty and staff recruitment for each university. The proposed unified body seeks to standardize hiring practices, enhance transparency, and diminish political interference prevalent in individual university appointments. The need for such a commission is also noted in the Public Service Commission's report. However, this proposal is met with criticism from some academics and stakeholders who express concerns that centralization may compromise university autonomy and overlook the distinct academic needs and governance structures of individual institutions. Currently, universities in Nepal enjoy a fair degree of independence as stipulated by Article 243, sub-article 2 of the Constitution of Nepal, which keeps

them relatively detached from the central Public Service Commission (Baral, 2021). Establishing a centralized University Service Commission (USC) in Nepal is widely debated. Proponents argue it is necessary to curb political interference, ensure fair and merit-based faculty recruitment, and optimize financial resources by consolidating scattered commission expenses across multiple universities (Nepalnews, November 3, 2025; The Himalayan Times, September 26, 2025).

UGC Nepal, with the backing of the Ministry of Education, Science and Technology, has been actively working on rolling out the National Eligibility Test (NET). The NET is being implemented to standardize and elevate the academic quality of higher education in the country. Its primary goal is to ensure that only competent, qualified individuals enter the teaching profession and secure assistant professor positions across universities and colleges. This initiative is part of broader, systemic reforms (such as the NEHEP project) aimed at making higher education more market-relevant, capacity-driven, and rigorous (Annual Report, 2023-2024).

UGC approved the National Eligibility Test Operation Guideline to establish a structured system for testing the pedagogical, research, and general knowledge competencies of individuals entering the university teaching profession. The UGC formally gazetted and mandated the qualification test for all new applicants and temporary/contract professors wishing to join or continue teaching at the university level.

The TUSC interview was delayed due to various reasons, like case files against the advertisement of various posts, a tedious article classification and evaluation system, a lack of a parallel interview system, and making small shifts for the interview. The Chairman and members of the TUSC receive extra incentives—referred to as interview allowances or meeting fees (Baithak Bhatta)—during interview hours, even when they fall within standard office time, because of specific administrative rules and institutional practices. This is not fair. Under the Tribhuvan University Act and Service Regulations, conducting candidate evaluations, examinations, and structured oral interviews is classified as a distinct, specialized task. Instead of being treated as standard daily desk work covered by their base salary, these sessions are structured around a set "per-interview" or "per-meeting" rate. While legal under university bylaws, this practice is a major source of public and regulatory criticism in Nepal. Government watchdogs, including the National Vigilance Centre and the Auditor General, frequently argue that taking additional cash incentives during official hours is a form of double payment, as officials are already drawing a full-time government salary during those exact hours. Critics and student bodies often point out that the leadership sets their own arbitrary internal criteria to maximize perks, leading to ongoing governance and financial disputes within the university framework. The correction of taking double payment should be encouraged in the coming days.

Before the interview, the article classification and evaluation are essential for the teaching staff. We need to include the following guidelines in the Regulations on Recommendation for Appointment of Teachers of Tribhuvan University, 2075 B.S., in which the work submitted by the candidate through the online system will be considered official. Once submitted online, no changes can be made to the level, type, or category of the work to publish the work and other documents. However, if a document confirming the success of the work already submitted is desired, such a document may be submitted. The candidate shall verify and keep a record of the list of works submitted by him/her in the prescribed format along with the application form and publish it on the website of the office for the information of all concerned before evaluating the works submitted by the candidate. In case of any dissatisfaction in publishing the details in this manner, at least seven days shall be provided to file a complaint. The committee formed shall conduct a necessary investigation and take action on complaints received within the time limit regarding published works. Before evaluating the works submitted by the candidates, a committee consisting of at least three members shall be formed as per the recommendation for appointment of university teachers to classify the works submitted by the candidates.

The functions, duties, and powers of the committee shall be as follows. (a) To determine which works are eligible for evaluation and which are not, based on complaints received, (b) To get rid of journals and books published by predatory scam publishers, (c) To determine whether the grounds and evidence submitted in writing are sufficient or not, (d) Verify whether the ISSN, ISBN, and DOI numbers listed in the work are accurate or not. (e) Whether the national and international journals in which the work is published are peer reviewed or not, (f) The journals in which the work was published are not SCImago Journals or Impact Factor Rated Journals, and to determine the Quartile (Q1, Q2, Q3, Q4) of SCImago, (g) To determine the group of the submitted documents, (h) If any candidate is found to have committed plagiarism, dishonesty, fraud, or other irregularities, such candidates will be recommended for action as per the rules. (i) Other functions assigned by the TUSC.

The committee shall complete the work and submit a report to the TUSC. TUSC shall publish Predatory Scam Publishers on the website. If the candidate is not satisfied with the works published in this manner, he/she may file a complaint with the TUSC within seven days. The complaint shall be referred to the committee for reconsideration. The committee shall reconsider. The decision of the committee in this regard will be final.

Only works submitted by the committee as eligible for evaluation will be evaluated.

The titles of the works submitted by candidates applying for the posts of professor, associate professor, and assistant professor will be proposed to divide into two sections and evaluated by separate expert committees in which Section "A" contains a textbook/reference book on the relevant subject,

Research reference books on related topics, Research report on the related topic and doctoral research supervision or postgraduate research supervision, whereas Section "B" contains articles published in thematic international journals, research articles published in thematic journals, thematic simple articles, and articles published in the impact factor rated journal.

The function of the evaluation committee is to evaluate the works submitted by the candidates; the TUSC shall constitute a committee consisting of two expert members. Before forming a committee, the TUSC shall evaluate the expertise of the experts on the roster. TUSC shall prepare a priority list of experts other than co-authors of the work to be evaluated from the experts on the roster. In preparing the priority list, the publication of the work and work experience of the expert shall be taken as the basis. From the same list, the members shall form the committee after discussing with the chairperson and members of the commission on the basis of honesty, efficiency, and evaluation of the expert's other works. While forming the committee, nominations may also be made from experts on the roster of the Public Service Commission, the University Grants Commission, or other universities. However, if sufficient subject experts are not available in a given subject, the committee shall also be formed by including co-authors. Office bearers of the Nepal Teachers' Association and the Tribhuvan Teachers' Association, office bearers of the Central Committee of the Teachers' Professional Ideological Association, persons certified as members of any political party, and persons who have been candidates in any of the advertisements currently held by TUSC shall not be included. Separate expert committees shall be formed for each section, and evaluation shall be conducted as far as possible. However, an expert included in the evaluation committee of one section may be repeated in the evaluation committee of another section. In such a case where an expert is repeated, the evaluation of section 'A' and section 'B' shall be conducted at different times.

The evaluation committee will evaluate each work and assign marks. The total marks for each section and the total marks for each section under each title will be calculated. However, the work of calculating the total marks for the parts of both sections will be done by the employee designated by the commission at the time of publication of the results.

The functions, duties, and powers of the article evaluation committee shall be as follows: (a) To remove from the evaluation works related to predatory scams publications and other works not included in the evaluation, based on the bylaws, the grounds prescribed by the TUSC, these guidelines and the report of the classification committee, (b) to assign marks by jointly evaluating the works based on the regulations, the criteria prescribed by the TUSC, these guidelines, and the report of the classification committee, (c) If any candidate is found to have committed plagiarism, dishonesty, fraud or other irregularities, such candidates will be recommended for action as per the rules, (d) To take minutes of the committee, to verify whether or not the parts have been provided for each evaluated work, to verify whether or not each page has been signed by both

members of the evaluation committee, to seal and submit the evaluated forms, and (e) other functions assigned by the TUSC.

The committee shall be accountable to the TUSC. The committee shall perform the work of evaluation under the direct supervision of the chairperson and members.

Code of Conduct for Experts: (1) Experts shall adhere to the following code of conduct: (a) The candidate concerned shall declare that he/she has no vested interest. In the declaration, the expert shall at least state the following: The following things need to be determined: No close relatives. I have not directly supervised the writing of the master's, MPhil/PhD thesis. Has not co-authored any books, articles, or research works. The concerned candidate has no departmental or professional sense. (b) Confidentiality shall be maintained in relation to the activities related to the TUSC. In matters related to evaluation, you should never give information to anyone. (c) The expert shall evaluate the rules and criteria set by the TUSC. Provided for the review. The expert shall have full responsibility for the evaluation. (d) It shall be the duty of the expert to maintain complete dignity regarding the evaluation. Experts should not take photos or keep records of the notes, and should not hint. Experts who do not comply with the prescribed code of conduct may be excluded from the activities of the TUSC for a specified period or may be blacklisted. If a serious violation of the code of conduct is found, a letter may be sent to the concerned body for departmental action, or action may be taken in accordance with the prevailing law.

Experts shall evaluate the work based on the rules, regulations, standards, and the criteria specified in the guideline. No work deemed eligible for evaluation shall be given less than 50% of the prescribed total marks.

Basis for special evaluation of works for the posts of professor, associate, and assistant professor:

(1) Books (textbooks/reference books on related subjects and research reference books): The following categories will be given to books based on the level of the publisher, depth of language of the subject matter, originality, use of evidence and sources, level of printing, etc.

Publishers affiliated with the Association of University Presses (<https://aupresses.org>), International Association of Scientific, Technical, and Medical Publishers (<https://stm-assoc.org/>), published by Nepal Academy of Sciences will be proposed in the first category; the second category for other national and international book publishing organizations, professional societies, universities or colleges, and government publishing houses, whereas the third category for other publishers. Marks will be awarded based on the number of authors in a book.

(2) While evaluating the research report on the relevant subject, the following grades will be awarded based on the prestige of the donor organization, duration of the project, research

amount, and the level of the report (importance and usefulness of the research, research methodology, analysis of the findings, writing style and level of language, etc.).

Research project received from domestic or foreign donor organizations for more than 1 year will be proposed first category; second category for research project received from a domestic or foreign donor organization for a period of 6 months to 1 year, whereas third category for research projects received from domestic or foreign donor organizations for less than 6 months, and research projects received from organizations other than donor organizations that is organizations that provide research fellowships on a competitive basis by inviting proposals, such as the UGC, NAST, TU Research Directorate, Nepal Academy of Sciences, national and international governmental and non-governmental organizations, and other organizations of similar nature. In a research report with multiple researchers, full marks will be awarded to the principal researcher and proportional marks to others.

Articles published in thematic international journals and articles published in impact factor-rated journals will be given the following categories based on the level of the journal. For the article published in the Nature-indexed Q1 journal: first category, Q2 journal: second category, Q3 journal: third category, Q4 journal: fourth category, 2 and 1 Star-rated articles included in the Journal Publishing and Practices Standards (JPPS): fifth and sixth categories, respectively. For articles published in all other international journals: seventh category.

The following marks will be awarded to research articles published in thematic journals-Nature indexed, SCImago Journal Ranking, Journal Publishing and Practices Standards (JPPS) Star-rated journals: first category; league of articles published in non-existent journals: second category; for articles published in other journals: third category. For general articles, marks ranging from 50 to 100 percent will be awarded based on the level, relevance, and usefulness of the article.

The following will be more guidelines for article evaluation:

- Summary
Summary of the study's purpose, research questions, research methodology, and expected research findings.
- Introduction
Background of the study, importance of the topic, contribution of previous work, justification, and importance of the study.
- Review of the work:
Critical review of previous works: Theoretical, Methodological, Empirical
- Research methods
Clearly defined research topic and research objectives. An appropriate research framework to solve the research problem. Appropriate research methodology, study area selection, sample selection method, and use of correct materials to validate facts. Clear theoretical or conceptual study framework.

- Analysis and Conclusion

The conclusion or attainment has not been confirmed by its sources. Whether the applied theory is consistent with the research findings. Whether the correct statistical analysis method has been adopted for the remittance of funds. Clarity in presentation: Whether tables, maps, graphs, or charts have been used as required. Whether the conclusions have created any new knowledge. Whether the selection of quotations and references is correct and in an established format. Clarity of conclusions.

- Overall Assessment: Originality, relevance, Effect, logical analysis, Use of AI, Researcher bias in fact analysis, Journal's standard and reputation, Subject matter expertise of the researcher.

- Additional bases for evaluating research/reference books:

The dates of the first edition and the latest edition are mentioned. The name and address of the publisher and printer are clearly stated. Copyright information is mentioned with an introduction and a chapter-wise table of contents. Research introduction, review of previous work, research methods, fact collection, and analysis.

The summary and conclusions of the research are mentioned. The last section of the work contains a list of references and an appendix. Originality and relevance of the work. Analytical and logical. Contribution or impact that can be made in the field of knowledge.

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Advancing curriculum, pedagogy, research and publication at Tribhuvan University: Pathways to Academic Excellence

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Ishwar Koirala**

Abstract

The academic excellence in higher education has been widely discussed and debated in relation to institutions' curriculum, pedagogy and quality of research. This paper explores how initiatives taken by Tribhuvan university have promoted at advancing quality of teaching, research and publication, the core pillars of academic excellence. The University has made significant efforts have been made in the past decade regarding the upliftment of the quality of higher education through investment in research and development, curricular reforms and infrastructure management for promoting opportunities for students and teachers to achieve academic excellence. Drawing on findings from previous research, review of the vision paper, plan document, global developments in higher education, institutional policy guidelines, and review of research funding from research centers within the University, this paper concludes that Tribhuvan University has accomplished several milestones for uplifting the strength of research to a global scale evidenced from high-quality publications, prioritizing research in national priority areas, embracing innovative pedagogy and providing capacity development opportunities for staff and faculty members, all of such efforts have contributed to promoting TU's position in global ranking and expanded its international recognition.

Keywords: Academic excellence, curriculum reform, research and innovation, Tribhuvan University, internationalization of higher education

Introduction

Higher education institutions have the responsibility for co-creation of knowledge and innovation for overall development of the country. It is the backbone for the production of qualified and skilled human resources for any country. A quality higher education is essential for sustainable

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development of any nation. UNESCO (2022) mentioned that higher education relates to meaningful research in areas of national and global citizenship, social justice, peace and prosperity, research, development and innovation. These institutions are responsible for developing knowledge, values and create discourses that broadly contribute toward transforming contemporary societies. In this sense, the higher education institutions such as universities play a pivotal role in bridging the past and the future, where they build on what the past provided to the society and aim for creating innovations for a better future. They draw an imagined path for the future of a country. Therefore, universities should adopt a forward-looking principle. They aim to “preserve humanity’s collective understanding while pioneering new ways of thinking and doing” (UNESCO, 2026, p. 9). As there is a trending growth in the technological innovation across the globe, especially in the areas such as e-governance and use of artificial intelligence, it is important for universities to learn and plan how the pedagogy, research and development initiatives of the universities can capitalize those trends for the overall benefit of the students in higher education. This paper aimed to explore the efforts made by Tribhuvan University in areas of research, curriculum development, teaching and publications.

In line with the global educational changes, since its inception in 1918 with the establishment of Tri-Chandra College, Nepal’s higher education landscape has also adopted innovative practices in pedagogy, curricular reforms and research, as a result, Tribhuvan University in Nepal has reached a new height with its ranking as Nepal’s only university to be ranked in 1500+ range as per the Times Higher Education Global University Ranking database in 2026. More importantly, the medical and health sciences, and Education Sciences of this university have been ranked at 600+ and 800+ respectively in their subject-wise ranking. Figure 1 illustrates the indicators and TU’s achievement for its rank in Times Higher Education University ranking in the year 2026.



Figure 1: Tribhuvan University in THE ranking in 2026

Figure 1 illustrates TU's journey in global ranking since 2019 to 2026. It shows that substantial improvement in teaching, research environment, research quality, industry and international outlook is to be emphasized to further upgrade TU's ranking. However, it is to be noted that TU's ranking in 1500+ in global scale is already a good status.

The participation in higher education is increasing globally. UNESCO (2022) writes, "The past decade has seen significant growth in enrolment, yet millions around the world are still denied their right to education, and learning opportunities continue to be equally distributed" (p. 8). Studies have also revealed that in the two decades between 2000-2020, the enrolment in higher education has doubled from 100 million to 235 million in 2020. In that enrollment in South Asia was the highest representing 21% of global higher education in 2020 (UNESCO Institute for Statistics database, 2021). Regarding the nature of higher education institutions that take enrolments, Williams and Usher (2022) mentioned that comprehensive universities were at the top followed by specialized universities, short-cycle HEIs, hybrid universities and university colleges.

The primary goal of higher education is to contribute towards poverty elimination and deepening of sustainability for the holistic development of the country. It is through the higher education system that a shared humanity would be promoted by integration of the global and local knowledge systems. Currently a large portion of discourse pertaining to higher education centres around the issues of quality and relevance of programs run by universities and higher education institutions. Such discourses emerged primarily due to the inefficient educating practices as per the rapidly changing global knowledge. In Nepal, these issues have been much discussed in relation to the programs of Tribhuvan University in particular as it covers approximately 78% of Nepal's higher education (UGC, 2025). Although the university, through its several plans and initiatives, has envisaged several strategies for restructuring the traditional program modalities, enhancing quality of teaching, and promoting innovation and research, substantial changes are yet to be found.

Enhancement of quality education is one of the key milestones of Tribhuvan University (TU). The quality enhancement endeavours taken by TU continue to "face challenges like lack of individual and institutional needs, program development, pedagogic interventions, execution of academic calendar, quality standards setting, performance monitoring" (Tribhuvan University, 2019). Since Nepal Government's decision on promoting TU as the Central University, TU developed a 5- year plan 2014-2019, a vision 2030 plan for 2018-2030, and the sitting Vice-Chancellor's plan (2024) for TU reform, all of which aspired to address these challenges. Challenges have also been realized in developing and diversification of market-relevant programs that can meet the need of the changing contemporary society. TU, which still covers roughly 80% of higher education in Nepal needs to work more on the above-mentioned challenges. This is one of the national priorities given the situation that TU covers the largest portion of Nepal's higher education.

Research and Development Initiatives at Tribhuvan University: A Glance

Tribhuvan University, organized in 1956 and incorporated in 1959, is the oldest and the pioneering university in Nepal. It was possible with the recommendation of National Education Commission in 1952 that paved the foundation for advancing higher education in Nepal. In the post-establishment phase, this university served as the prime institution for preparation of qualified human resources necessary to contribute to holistic development of the country. Now, with its more than 1000 affiliated colleges and constituent campuses, this university serves students from well-off families to the poorest, providing equal opportunities to attain higher education. Among more than a dozen national level universities in Nepal, TU serves more than 78% of higher education enrollment (UGC, 2024), standing as a core pillar of higher education. Since its establishment, TU has envisioned nation-building as its core mission.

Along the changing global landscapes of human resource needs and employment market, TU has to function as a role model institution that can capture the market trends and provide necessary research and development support to the Government of Nepal. To meet those goals, TU, through its several initiatives aimed at reforming, upgrading the curricula and program implementation modalities. In this direction, enhancement of the quality of research remained one of the challenges for higher education institutions like TU, mainly due to inadequate investment in research and development. In addition to resource constraints, employability of the graduates, professional skills of the faculties, and infrastructure and participation in the global higher education were other important concerns.

The quality enhancement endeavours taken by TU continue to “face challenges like lack of individual and institutional needs, program development, pedagogic interventions, execution of academic calendar, quality standards setting, and performance monitoring” (TU, 2019). Since Nepal Government’s decision on promoting TU as the Central University, TU developed several key policies and plans to strengthen its institutional capacity. For this, TU developed a 5- year plan 2014-2019, a vision 2030 plan for 2018-2030, and the sitting Vice-Chancellor’s plan (2024) for TU reform, all of which aspired to address the systemic as well as institution-specific challenges. Addressing these challenges is an urgent need as the university has to move along with the diversification of market-relevant programs.

TU initiatives and activities have shown that this university has made a gradual shift from a traditional teaching university to a modern techno-friendly, research-oriented university. It can be evidenced from the establishment of Information and Technology Innovation Center and provision of National Priority Area Research (NPAR) grants provided to the faculty members of the university. Since its start in 2022/23, TU has awarded several research grants of national importance to the faculty members. Figure below provides a brief illustration of the grants and their distribution across several disciplinary areas.

In this regard, research centers under faculties and institutes in TU have been conducting innovative and impactful research works that have provided policy inputs for Ministry of Education, Science and Technology, Government of Nepal. For instance, Research Center for Educational Innovation and Development (CERID) carried out several research works on the themes such as family literacy and intergenerational learning, research in sports, higher education need analysis, strengthening pro-poor target scholarships, integrated curriculum, online learning, implementation of midday meal program, effectiveness of community learning centers, effectiveness of multi-grade teaching, effectiveness of audio-visual materials, status of libraries and labs, etc., all of which provided input for the government agencies to develop their future policy and plans.

There is a substantial growth in research and development, as well as publication at Tribhuvan University, especially in the areas of national development priorities. Figure 2 illustrates the distribution of research grants/awards starting since 2022/232 (2077/78 BS) to 2024/25 (2080/81). These grants were funded by the University Grants Commission (UGC) Nepal from a total amount of 36.1 crore Nepalese rupees since 2022 to 2024. From this grant, as of now, 99 research projects have been distributed for faculty members from research centers, central departments and constituent campuses in all disciplinary areas. These figures obtained from RCDC-TU do not only reveal the gradual growth of research grants, but also distribution of the research and development opportunities across faculty members from institutes and faculties.

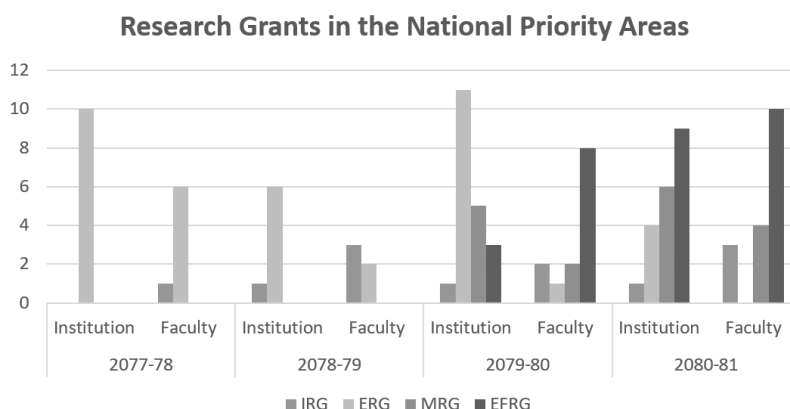


Figure 2: Figure 1: Distribution of NPAR grants to university faculty members (Academic year 2022/23-2024/25)

This investment in research is not only a continuation of TU commitment for research and development, but also a great move towards contributing to national development and policy-making through the selection of most recent and cross-cutting research issues for Nepal.

This grant is not limited to research alone, rather has increased Nepali scholars' publications in international journals, ultimately enhancing TU's global university ranking. As per the data available from RCDC-TU in the year 2082, the data for publication is also quite encouraging.

The research topics included in this word cloud (Figure 4) shows that they cover issues of educational and development significance, and contribute to national priority areas that deserve research attention. More specifically, these research areas cover the

Tribhuvan University has established an endowment fund, and has supported research and development activities for the TU faculty and students. From the interest of the fixed deposits of the Endowment Funds, the university provides support for collaborative research, doctoral study, MPhil and Master's degree thesis writing. Figure 4 illustrates the support provided.

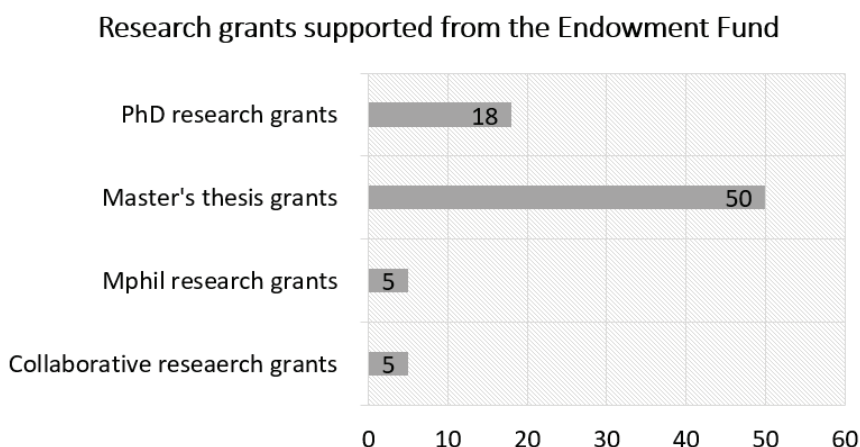


Figure 5: Research support provided from Endowment Fund in the year 2024/25 (Source: RCDC-TU)

Faculty Capacity Development for Curriculum and Pedagogical Reform

The TU Vision 2030 policy theme ‘Capacity Development Program (CDP) in its strategy item 2.11 has clearly articulated that continuous professional development of the faculty members would be a regular system intervention. This policy aims to train the teaching staff (in areas such as pedagogy, curriculum design, evaluation and grading of students, research methodology, publication process and ethics, review and editing, and identification of predatory journals) and non-teaching staff (in areas such as information and communication skills, accounting and auditing, website maintenance, laboratory maintenance, procurement processes, and examination administration). This shows that TU keeps skills development of the staff as one of the priorities. Although several faculty development activities have been taking place in campuses, funded internally or through UGC support, they have been quite dispersed and fragmented, needing a coordinated, focused and system-enabled policy-driven practice. Recent examples of Faculty Development Program can be referred to the 60–75-hour training organized by several institutes and faculties in TU. For instance, the Faculty of Education completed 5 cohorts of training to 150 teaching staff from constituent campuses and community colleges in the year 2025, and has been organizing capacity

enhancement phase II training (2 cohorts to train other 60 teaching staff) in the year 2026. Similar accomplishments have also been made by institutes and faculties. A synthesis data regarding the capacity development programs are yet to be available.

Internationalization of Tribhuvan University

The Center for International Relations of Tribhuvan University (CIR-TU) serves as the primary institutional mechanism to promote TU's international engagement, establish academic collaboration and exchanges and foster global connectivity. As of now, based on the information available from CIR-TU, the university has established official collaboration and network of partnerships with more than 225 higher education institutions globally. With such expansion of the network, there is an increasing in-bound and out-bound mobility of students and faculty members across countries. In order to promote academic internationalization, TU and its faculty members have reached out to several prestigious universities through collaborative research undertakings, exchange programs, participation in conferences, training and seminars, that have all enhanced TU's position in teaching and research.

Higher education now can no longer be viewed solely in a national context since the goal of this education is the production of high-level human resource for local as well as global marketplace (Qiang, 2003). Higher education institutions also need to contribute to national development through the promotion of shared humanity and development of sustainable mechanism for social harmony as well as transformation. The very goal of higher education institutions is to enable their graduates to meet the demand of nationally and globally competitive markets, including teaching and research. Although there are emerging discourses regarding low employability of graduates, due to changing market demands which the conventional curricula have not been able to address the changing employment landscape, it is important that higher education institutions align their market in relation to the new employment market. Internationalization includes the policies and practices undertaken by academic systems and institutions—and even individuals—to cope with the global academic environment that has given rise to academic freedom as well as academic capitalism (Altbach, 2004; Altbach & Knight, 2007). Universities have aimed to take commercial advantage, knowledge production and transfer, curricular updates through internationally appropriate content, integration of technology in pedagogy and linking higher education with the emerging industries, through the process of internationalization. In order to engage in the internationalization of their programs, the universities globally are taking several initiatives such as updating their curricula according to the changes in knowledge-based societies, have established cross-border collaborations, enrolment of international students, conducting English-medium programs and hiring internationally established researchers and academics. Some scholars argue that internationalization is a consequence of globalization, as there is high academic mobility enabled by global connectedness, aspirations for quality higher education and

expanding global job market (Choi et al., 2026). Internationalization can take place at level in the form of several programs. The campus-based internationalization initiatives include study-abroad experiences, curriculum enrichment via international studies majors or area studies, strengthened foreign-language instruction, and sponsorship of foreign students to study on campus.

Reforms Desirable at Tribhuvan University

Establishing academic excellence has remained on of the partially achieved educational goals for TU. Although TU has a long and dignified history and has proved itself as the only university with high-quality education offered with its largest national coverage, as per the changing national and global context of higher education landscape, it awaits systemic as well as disciplinary reforms to strengthen its academic excellence and capability to cater to the needs of the global employment market. While ensuring rights to quality higher education as one of the human rights components, as also declared by UNESCO, countries in the global south have long been struggling to update their institutional capacities as per the global trends. In most cases, such institutions have been facing issues in system-level governance and financing. This conceptual paper presents the key changes that TU has to aim for to strengthen its capacity as a university with stronger global recognition.

Structural changes to curricular design and institutional organization

Innovation in curriculum and pedagogy is one of the key concerns of universities. While TU has made several key changes in program design, curriculum development and institutional growth, inadequacies have been realized in areas of curriculum design and institutional strength in capturing the market trends in teaching and research. As Nepal is one of the important strategic regions and can benefit from connecting global economies, TU has the potential to play key role in offering opportunities to carry out research in areas of natural and social sciences. In creating such opportunities and environment, it is crucial for the university to expand internationalization efforts and develop the curricula that can best address the learning needs and expectations of students and researchers from abroad. As of now, there are programs commonly designed for national and international students. However, such ‘one size fits-for-all’ programs may not cater to the needs and expectations of the international students. In recent years, the international students have been the key components of the universities’ internationalization efforts. To put it differently ‘international students are becoming a design category’ (Khan, 2026, April 1). To make the programs attractive for international it is important to revise the curricular contents, pedagogical expectations and assessment mechanism, all of which to be linked with the latest technological advancement that can create interactive as well as segregated learning platforms. To better accommodate the international students, institutions might work towards developing differentiated pathways so that students from home context and those from international contexts can get diversified opportunities to learn. For this to happen, international faculty members should be recruited or invited as visiting scholars.

Improving performance

In most cases, universities face criticisms in terms of graduation rate, low performance in terms of research and development and production of skilled human resources for the changing employment market. In recent years, supported by the UGC, TU has conducted professional development training for faculty members to enhance their awareness, understanding and skills in designing courses for changing global markets, especially targeting the skills in developing labour-market driven programs in their respective disciplinary areas. One of such examples can be taken from the initiatives taken by Faculty of Education of TU that trained 150 teaching faculties in the year 2081/82 and 60 faculty members in the year 2082/83 aiming to develop skills in competency-based curriculum development, research and publication, pedagogical innovation, assessments and use of technology for teaching and learning (data obtained from FoE, TU, April 2026). Similar programs have been organized by Faculty of Humanities and Social Sciences, Faculty of Management, Institute of Science and Technology, among others. Such professional development initiatives are useful for improving faculty performance in areas such as pedagogy, research and development.

It is to be noted that faculty performance is directly related to students' academic performance.

Promoting Entrepreneurship Education

There is a persistent tension between the knowledge and skills required in the employment market and the skills that university graduates bring with them while entering the workforce. Although universities also claim that ensuring the job for the graduates is not their primary responsibility, there is no counter argument regarding universities' responsibility in skilling the graduates with the most recent market-based employability skills. Ansarey's (2017) study reported that 75% of employed graduates lack skills demanded in a professional working environment. Universities and colleges are Development of programs for enhancing entrepreneurship skills is one of the core concerns of current higher education. In Cambodia, for example, the weak foundational learning and misaligned higher education constrained the national growth, and STEM programs that integrated foundational learning to employment led to improved quality of education and brought excluded children back to school and continued learning (World Bank, 2026). It should be the guiding principle of policy architecture of any university. By establishment of university-industry partnership, that provides opportunities for students to learn real-life entrepreneurship skills, the growing graduate unemployment can be reduced. It can further encourage the graduates to aim for start-ups businesses, that can strengthen graduates' economic well-being.

University-industry collaboration is fundamentally important for economic development of the country (O'Dwyer et al., 2022; Rossoni et al., 2024). While several universities aim at establishing such collaboration, they also continue to suffer from issues of integrity and fear about potential leakage of information. Industries benefit from high-end technology labs of the universities that

are used for knowledge construction. If universities do not work efficiently in areas of research and development, they may lose their trust from industries so that the latter do not keep interest in the university works. In such cases, the university missions for establishing collaboration with industries and the evolving market may not be successful. Realizing the need for such collaboration, TU established Tribhuvan University Business Incubation Center (TUBIC) in 2080, and has encouraged the campuses and departments to start their entrepreneurship development program to promote innovation and design thinking, start-up scaling, business certification and development of business models. As per O'Dwyer et al. (2022) university-industry collaboration evolves through four phases; embryonic, initiation, engagement, and established. Based on recent developments in TU regarding establishment of incubation centers, what we understand is TU is at the initiation stage of collaboration that further demands intensive engagement with industries in several disciplinary areas such as medicine, engineering, management, social sciences and applied sciences. While there have been series of conversations between TU and development partners (e.g., World Bank, Asian Development Bank, Nepalese entrepreneurs, and so on), results are yet to be visible on how such collaborations would reduce unemployment and link university programs with industries, as knowledge sharing activities and results of the partnerships are yet to be observed.

Embracing Innovation in Curriculum and Pedagogy

No curriculum is a 'one-size-fits-all' document. So, from an equity in learning perspective, a curriculum developed for a particular grade or level should be able to provide adaptive learning pathways for all learners. While there are a lot of opportunities as well as threats caused by widespread use of Artificial Intelligence in education, the major concern, in this context, is how to develop a human-centric and place-based pedagogy, the pedagogy that links to time, place/ contexts and concerned people. In recent years, universities have started teaching through online and distance mode in several programs. TU has also been doing the same, especially after the COVID-19 pandemic. However, a point to be noted is that the curricula prepared were not aimed at online mode of teaching and learning. Delivery of the physical mode of curriculum from an online mode cannot be compatible in several ways including the length of the contents, nature of the tasks/activities expected, assessments to be undertaken, and resources to be used. Development of a relevant curriculum and innovative pedagogy is what universities like TU need to think about. While TU has been offering several programs for the poorest of the society and for those who are living in remote contexts, and operating online mode of teaching could be a viable path. However, ensuring the quality of the education provided through this mode is also an important concern. A curriculum should consider broader political, cultural, social and psychological facets of learners. In this, understanding of how the curricular practices address socio-emotional learning needs and cognitive flexibility of the students is significant.

Identity Formation through National and Global Competition

Universities usually form their identity through fostering the environments that nurture research culture that promotes creativity, innovation and discovery. Byun et al.'s study (2018) entitled "Effectiveness of entrepreneurship education programs in higher education institutions: A case study of Korean graduate programs" aimed at developing curriculum for entrepreneurship education. Students and graduates who attended entrepreneurship graduate schools were the participants in this study. They conducted paired-sample t t-tested and Importance-Performance Analysis (IPA) for analyzing the results of the questionnaire survey on differences in curriculum courses and their improvement. It was found that there was a difference in the preference for the curriculum and the didactic program documented by graduate students and graduates, which suggested for enhancement of curriculum and didactic programs for the activation of entrepreneurship graduate schools. The findings of this study also imply that the labour-market driven programs that the university has developed should be updated on a timely basis, as per the changes taking place in the social and political context.

Conclusion

Academic excellence in universities is a multifaceted issue. To enhance the excellence in pedagogy and research, TU has, for long, undertaken several initiatives such as capacity development of faculty members and staff, research and study support for staff and students through endowment funds. Besides, the university has received grants for national priority research and studies have been conducted in several areas of social and national importance as illustrated in Figure 4 in this paper. Although quality of teaching and research is affected by several factors related to institution, teachers, communities and students, the policies, plans and programs of the university align with national policies, and show commitment towards strengthening its capacity as a national leading university, both in pedagogy and research. As the excellence can be established through the institution's ability to systematize policies to perform, excel, and enhance scholarship, teaching and publications, recent progress in publication in ScImago ranked journals has proved good and international impact of the works of the faculty members. In addition, TU, through several other initiatives has promoted innovative pedagogy, scholarship, service leadership, development of relevant curriculum, and providing holistic support to students in need. These activities largely contribute to strengthening equity and quality in higher education. As quality of education is a slippery and evolving concept, as its measurement indicators are likely to change across times and scales, efforts for innovation, research and publication, and institutionalization of the university-industry collaborative partnerships should be the continuous priorities of TU.

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Bridging Policy and Practice: A Critical Review of Assessment Systems in Tribhuvan University

Dhruba Prasad Niure *

Abstract

This article aims to analyze policy provisions, practices, problems and prospects of assessment in Tribhuvan University (TU). To achieve the objective, secondary sources of information; articles, reports, curricula, policy documents, etc., were selected by using three criteria namely relevance to the field of educational assessment, publication from 2015 onward, and use of reliable and authentic sources, including their relevance to assessment practices of, for, and as learning. Selected documents were thoroughly reviewed and analyzed by generating different themes, mainly reflecting assessment policies, practices, problems, and ways forward in TU, including Faculty of Education. The findings of review reveal that TU proposes diverse and flexible assessment policies across faculties and programs, combining internal and external evaluations; and then makes a range of efforts to translate the policy provisions at grassroot level. However, various challenges such as inconsistent practice of internal assessment, delay in publishing result, limited resources, insufficient faculty training, etc. are still being observed. To mitigate these problems, different initiatives such as guideline for internal and external assessment, professional development, e-assessment, quality assurance mechanisms, and inclusive assessment practices have been taken by the university to make both internal and external assessments more reliable, valid, objective, fair, and transparent.

Keywords: Tribhuvan University, assessment, policy, practices, quality assurance

Introduction

Assessment is taken as an integral component of formal education system, which serves various functions such as certification, selection, motivation, accountability, and educational management (Kellaghan & Greaney, 2019). Despite these functions, assessment system, especially at university level, is often criticized for its limited capacity to provide meaningful feedback to students to improve their learning and for its poor alignment with everyday instructional activities. Consequently,

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various studies have increasingly raised voices in favor of comprehensive and balanced assessment approaches to integrate both formative and summative methods instead of being limited to traditional examinations (Acharya & Poudel, 2024). This shift reflects a broader reconceptualization of assessment, from merely measuring students' learning to actively supporting and shaping it, through assessment for and as learning, grounded in constructivist theories and taxonomy of educational objectives (Faculty of Education, 2025a). Over the past few decades, global education system, including Nepal, have undergone significant transformation, driven by the growing demand for higher education institutions to equip students with 21st century skills for knowledge-based economy (Marope, n.d.). As a result, there has been a move toward more holistic and student-centered assessment procedures that foster higher order thinking skills – collaboration, analytical thinking, critical thinking, and creativity happen is not same as before-by replacing mnemonic skills, content imposition, and exam-oriented learning (Ross & Rajkoomar, 2024) to develop competent workforce for labor market, including education field.

Assessment appraises students' academic achievement within specific course or program (Areekkuzhiyil, 2019) and provide feedback to students, teachers, curriculum designers, policy makers, etc. for further improvements for quality assurance in higher education. In higher education, Bloom's and revised taxonomies of educational objectives are commonly practiced to construct test for measuring both lower and higher order thinking skills in both formative and summative assessments. While assessments can take many forms (presentations, portfolios, performances, and simulations for examples), traditional invigilated examinations remain a common approach in many countries, including Nepal, due to easeness to administer and suitability for large enrollment courses (Afrifa-Yamoah et al., 2024). However, such exams often rely on paper-pencil tests and measure lower order thinking skills (Schutte, 2024). Due to these reasons, there is growing advocacy for more authentic and alternative forms of assessment (portfolio, observation, self-appraisal, on the site assessment for examples), which promote students' engagement, foster deeper understanding, and constructive feedback for inculcating essential skills for a rapidly changing world. Research indicates that alternative assessments not only enhance content knowledge, research skill, and time management skill, but also improve students' mental wellbeing and reduce stress (Afrifa-Yamoah et al., 2024). Multiple means of expression (Mastropieri & Scruggs, 2018), therefore, needs to be provided to learners to allow them express their knowledge, skills, and attitude in accessible format to make the assessment process inclusive.

In higher education, assessment is increasingly recognized as not only a measure of students' knowledge, skills, values and behaviors but also a mechanism to develop employability, innovation, and a range of twenty-first-century skills (Acharya & Poudel, 2024). Development and utilization of e-assessments, e-portfolios, and AI-driven technologies (automated grading, adaptive testing, instant feedback, plagiarism detection, learning analytics, proctoring for examples) are transforming traditional assessment practices and creating new challenges and uncertainties in higher education.

Priorities such as inclusion, social justice, and personalized learning are reshaping assessment by shifting from assessment of learning to assessment for and assessment as learning, which emphasizes more on improving students' lifelong learning. Modern assessment is increasingly focusing on standardized testing, ensures accountability, monitors progress, and collects feedback to improve learning (Delantar, n.d.; Schutte, 2024). By integrating experimental activities, project works, case studies, portfolios, peer appraisal and self-assessment as core methods of evaluation, the assessment helps educational institutions measure higher-order thinking skills of students in specialized subject area. Such assessment practices also help authorities produce adaptable, employable, critical and innovative graduates equipped with relevant twenty-first-century skills (Ross & Rajkoomar, 2024). Quality assessment thus play a crucial role for ensuring quality education across higher educational institutions, including Tribhuvan University (TU). Despite these advances, a number of challenges (poorly designed exams, over-reliance on rote memorization, and limited focus on higher-order thinking skills) exists in higher education (Schutte, 2024). Therefore, planned and sustainable initiatives should be taken by higher educational institutions to mitigate these problems.

TU, oldest and largest higher educational institution in Nepal, serves approximately 80 percent of higher education students and conducts different types of assessment procedures to appraise students under various programs. The TU, especially Faculty of Education (FoE), relies largely on traditional examination practices with internal and external assessments weighted at 40% and 60% respectively, mainly under semester system (University Grants Commission, 2024). Weightage of external exam under annual programs is higher as compared to semester programs. Conventional paper-pencil tests is dominating assessment procedures by reinforcing textbook-centered teaching and paying more attention on measuring rote learning. Research also indicates that assessments are heavily focused on grading rather than improving students' learning (Acharya, 2022). This overreliance on written annual examinations contributes to gaps between academic performance and professional competence, which cause low pass rates in certification exams. Faculty members, though they have long experience, do not have sufficient understanding of assessment for and as learning (Acharya & Poudel, 2024) and do not practice accordingly. The Faculty is continuously working to address these challenges by emphasizing instructional planning, interactive pedagogy, practice teaching, material development, classroom management, and improvement in assessment system to develop pedagogically competent and responsive human resources as per the demands of educational sector (Information and Public Relation Division, 2023; 2025). Effective assessment, therefore, should be practiced, which does not only measure learning outcomes but also fosters student-centered learning through continuous monitoring and feedback mechanism (European University Association, 2020). Inclusive, transparent and student-centered approaches, therefore, are essential for bridging these gaps.

Assessment practices in M.Ed. program combine assessment of and for learning to create a continuous, supportive and learner-centered evaluation system. With 40% weightage, internal

assessment focuses on enhancing students' engagement, continuous learning, critical thinking, problem solving, creativity and independent learning through curriculum-guided activities and constructive feedback. It is implemented through attendance, classroom participation and periodic assignments, which include diverse tasks like research papers, reflections, quizzes and presentations. Regular feedback and opportunities for revision help students improve and develop deeper understanding and establish assessment as an integral part of the learning process rather than just a grading tool (Faculty of Education, 2025a). Effective assessment facilitates interaction between teachers and students, supports for certification, and provides bases to grasp further opportunities, scholarships for example (Bhusal & Kharel, 2025). At Tribhuvan University, the Office of the Controller of Examinations (OCE) and Dean's Office play a crucial role in planning and administrating exams for assessment. The OCE, under annual system, manages entire exams, including schedule, test formats, questions representing different cognitive levels, and secure and fair administration. Furthermore, the OCE also appoints qualified examiners, maintains transparency, and publishes results, issues transcripts and certificates to successful candidates and organizes convocations (Information and Public Relation Division, 2023; 2025). On the other hand, Dean's Office plays similar role for assessment especially under semester system. Despite these provisions, assessment system at TU faces challenges, including delays in commencement and completion of academic sessions, frequent violations of academic calendar, and prolonged result publication, especially in annual examination system (Higher Education Reform Project, 2019; Karna, 2023; Tribhuvan University, 2024). Nevertheless, the OCE has been continuously attempting to maintain integrity, credibility and quality of assessment system at TU.

Though there are provisions of project work, internship and authentic assessment in different types of curricula prepared under various specialized areas, the currently practiced assessment system remains largely monolithic, which relies heavily on paper-and-pencil test that dominate both annual and semester evaluations (Faculty of Education, 2025b). Such malpractices cause stress and anxiety for students, hinder their academic and professional progression, and impose additional financial and emotional burdens on them with their families. They also create pressure on university staff and minimize public trust in the institution (Bhusal & Kharel, 2025). Additionally, loss of answer sheets, political appointments of officials, profit-driven affiliation of colleges, administrative inefficiencies, and insincere examiners, all of which compromise credibility and fairness of assessments in TU (Karna, 2023). The lack of flexibility, limited use of technology, and over-reliance on a single method of evaluation fail to reflect diverse student needs or foster skills essential for future careers. As global educational practices evolve, there is an urgent need for reform that ensures timely, transparent, and performance-based assessments for supporting students' learning and institutional accountability even during crises such as pandemics (Bhusal & Kharel, 2025). Thus, assessment practices at TU, in many cases, remain outdated, inefficient and overly exam-centric, and reform is required to improve the quality. In this regard, this article intends to critically analyze policy, practices, problems and prospects of assessment system at TU.

Overall, this article analyzes policy provisions, actual practices and prevailing challenges of assessment, and its impact on both educational quality and students' wellbeing. At the same time, it presents prospects for reform through balanced assessment systems, integration of alternative and digital methods and alignment with modern pedagogical frameworks. Overall, the article is expected to serve policymakers, educators and institutions by emphasizing effective, transparent and student-centered assessment for improving students' learning, strengthening institutional credibility, and producing competent human resources suited to the demands of twenty-first century education.

Methodology

This article has been prepared by consulting secondary sources of information, drawing upon peer-reviewed journal articles, books, book-chapters, policy documents, research reports, higher education curricula, and other credible academic materials to analyze assessment policies, practices, problems and prospects in TU, including FoE. The review was guided by constructivism that emphasize project-based and research-oriented assessment practices. In addition, relevant policy documents were analyzed to evaluate ongoing reform initiatives and their impacts on higher education programs run under TU. Additionally, research articles and reports that, published at home and abroad, reflect assessment practices in higher education including TU. A total of 31 scholarly works published between 2015 and onward, 13 were internationally published and 18 were published at national level, were carefully selected, using three criteria namely relevant to the field of assessment in higher education, published from 2015 and onward, and reliable and authentic sources, including relevance to assessment practices of, for, and as learning, and then reviewed thoroughly. These sources were retrieved from academic databases such as Google Scholar, SpringerLink, and Sage Knowledge, along with supplementary repositories like PDF Drive and LibGen, using keywords such as Tribhuvan University, Faculty of Education, assessment policy, assessment practices, problems of assessment in higher education, etc. All sources have been appropriately cited and referenced in accordance with APA 7th edition guidelines to maintain research ethics.

Results and Discussion

Results and discussion of this article reveal that TU employs a diverse and flexible assessment methods and tools, varying across its Faculties, Institutions and programs. The findings indicate that despite ongoing reforms such as development of assessment guidelines, professional development, technological integration, and inclusive assessment practices; challenges like inconsistent implementation of internal assessment, delays in result publication, limited resources, and insufficient faculty training are still existed. Various efforts have been continuously making by the university to improve assessments, either internal or external. This section has been organized by generating various themes and sub-themes, given below, that reflect policies, practices, problems and prospects of assessment system in TU.

Policy Provisions of Assessment

The evaluation system of TU is varied across its academic units, which include four main Faculties and five specialized Institutions, each follows its own policies for student assessment. The Faculties (Education, Humanities, Management, and Law) develop evaluation methods suited to their respective disciplines while the institutions (Science and Technology, Medicine, Engineering, Agriculture, Forestry) prioritize on specialized and professional studies. All of them have their own independent assessment provisions. Generally, the system comprises of internal assessments such as attendance, classroom participation, individual and group assignments, presentations, project work, etc. with external examinations conducted at the end of semesters or academic years. Due to the autonomy of each Faculty and Institute, there are differences in weightage of internal and external assessment, test formats, grading systems, and assessment procedures. This flexibility enables each program to align assessments with intended learning outcomes expected by official curricula.

The FoE is committed to revitalizing quality of teacher education programmes by blending theoretical foundational knowledge with pedagogical professional competence. For this, students need to be engaged in interactive pedagogy, instructional planning, material development, classroom management, and credible assessment system (<https://foe.tu.edu.np/pages/introduction-2153>). The evaluation policy is different across the programmes though they run under the FoE. For B.Ed., especially in annual programs, students have to attend final exams conducted by the OEC. Considering the nature of subjects, they have to involve practical exams; lab works, internships, teaching practice for examples. For the M.Ed. programme, students are evaluated through internal (40%) and external (60%) assessments. While subject teachers are responsible for internal evaluation, the Dean's Office conducts the external exams. The M.Phil. candidates are evaluated by their subject teachers through internal exams (60%) and by the Dean's Office through an end-of-semester exams (40%). Additionally, all M.Phil. and Ph.D. candidates should carry out independent research and defend their thesis for the degree (Information and Public Relation Division, 2024). Such variations can also be observed across other Faculties, Institutes, and respective programs.

Some initiatives have been taken by the OEC to modernize assessment system through integrated software, expecting to ensure accurate and timely publication of results. TU is also working for publishing examination schedules in advance and implementing academic calendar effectively. Additionally, restructuring of the OEC and gradual involvement of regional offices has also been expected to take the responsibility smoothly. The university has introduced annual work plans, adopted a reward and punishment provisions based on performance to publish all exams' results within 100 days (Bhusal & Kharel, 2025). Thus, the University, especially FoE has emphasized a balanced approach that integrates theoretical knowledge with practical teaching competencies, supported by diverse evaluation systems, considering nature and speciality of each program. While assessment methods vary across levels, they collectively ensure academic rigor. Ongoing institutional

reforms and technological advancements are expected further to strengthen assessment system of the University with greater efficiency, fairness, transparency and timely results.

Assessment Practices

Assessment practices at TU comprise of internal and external evaluation, where internal assessment serves both formative and summative functions since result obtained from internally conducted assessment is concomitantly used to improve students' learning, instructional process, and the result is also accumulated for final grading. On the other hand, external assessment primarily serves a summative function to measure overall academic performance of students at the end of each session/semester (Faculty of Education, 2025a). Semester system of the University, including FoE, emphasizes this blended mode of assessment, though the annual system still relies heavily on final examinations. Faculties and subject teachers have a certain degree of autonomy in designing internal assessments, which allow them to adapt appraisal methods based on disciplinary needs. However, the balance between practical and theoretical assessments varies across programs, some disciplines incorporate practical work and field-based assessments, while others remain predominantly theory-oriented, focusing on traditional written examinations.

Administrative, logistic and resource constraints also hinder effective practices of assessments provisioned in curricula (Bhusal & Kharel, 2025). Assessment responsibilities are divided institutionally since Dean's Offices manage semester-based exams and the OCE usually conducts annual exams. Specialized units, the Open and Distance Education Centre (ODEC) for example, practice 60% internal and 40% external ratio of assessment, using diverse tools like attendance, participation in discussion, quizzes, individual and group assignments, online tests, etc. (Faculty of Education, 2019). Similarly, within the FoE, evaluation practices vary by program. B.Ed. mainly relies on final exams, while M.Ed. and semester-based programs use 40% for internal and 60% for external assessments. Furthermore, M.Phil. program emphasizes 60% for internal, 40% for external, and thesis defence, but Ph.D. program only focuses on dissertation defence (Information and Public Relation Division, 2023; 2024). The M.Phil. candidates are evaluated by their subject teachers through internal assessment and by the Dean's Office through semester-end exams. Along these, following assessment practices have been found in TU:

- **Administrative mechanisms for assessment:** The administrative mechanism of assessment at TU is mainly guided by a centralized system led by the OCE, with support from faculty-level Dean Offices (Tribhuvan University, 2024). This structure is expected to ensure effective management, regulation and implementation of examination and evaluation processes across academic programs. The OCE is responsible for planning and conducting examinations under annual system, including exam schedule, test formats, question pattern, and durations. Institutionally, the OCE has responsibility to ensure fairness, transparency, and security by

conducting exams in well-managed centers with qualified invigilators. It also plays a vital role in publishing accurate results through official channels, issuing transcripts and certificates, organizing convocations, and maintaining exams' records securely.

While assessing students' learning, subject teachers are responsible for all internal assessment activities such as maintaining records of students attendance, observing classroom participation, giving assignments, administering test for formative purpose, assigning grades, providing feedback to improve students' learning and submitting result of internal assessment to related departments or exam board. The learning achievement demonstrated by individual learners is also integrated into external assessment to make decision about each student. Overall, while the assessment mechanism is institutionally well-established and focused on maintaining academic integrity, it requires continuous improvement to address operational inefficiencies and ensure a more timely and effective evaluation system.

- **Faculties' competence in designing assessment tools:** Faculties' competence in designing assessment tools plays a crucial role in assessing students' learning by aligning testing process with curricular goals. This competence is generally strengthened through continuous training and professional development, which make them updated with new knowledge and practical skills. The adoption of modern assessment strategies (authentic assessment, formative assessment, performance-based evaluation, and technology-integrated assessment) has become increasingly important to capture diverse student abilities, including those with special learning needs. Considering these factors, TU has reintroduced formative and summative assessment under semester system since 2013 (Faculty of Education, 2025b). Evidence indicates that internal assessment at Tribhuvan University has not been fully effective in enhancing student learning, as it has not been used for providing meaningful feedback and academic support continuously (Acharya & Poudel, 2024). Limited professional development and insufficient training exacerbate these issues, leaving many educators reliant on traditional, exam-centered methods and hesitant to adopt formative practices to strengthen learning (Pageni, 2025).

TU, therefore, has been conducting a series of workshops and professional development events for faculty members to make assessment system more effective (Higher Education Reform Project, 2019). Such platforms equip teachers with both conceptual understanding and practical skills to design valid and fair tests. Under Professional Capacity Enhancement Program (PCEP), different Faculties and Institutes have been conducting a series of workshop to make able to teachers to plan assessment strategies, prepare test specification, and design items across varying cognitive levels through a blended approach of face-to-face and online sessions. The program also strengthens faculty competence in applying appropriate assessment techniques, embedding digital technologies and e-learning resources, and aligning education with labor market needs. The pedagogical focus also includes the use of varied assessment methods for

internal evaluation, the development of answer keys and scoring rubrics for objective and subjective responses respectively, and the provision of meaningful feedback to enhance student learning (Faculty of Education, 2026). However, these attempts are not sufficient to cover all Faculties, working in constituent and affiliated campuses across the country. Therefore, such programs should be continued and scaled up on a required basis.

- **Quality assurance in assessment:** Moderation and validation of exam papers are essential processes to ensure fairness, accuracy and alignment with learning outcomes. Quality assurance bodies, moderation committee for example, play a crucial role in verifying these processes, providing guidelines, reviewing assessment tools, and improving them to achieve academic standards. In TU, including FoE, the OCE (for annual exams) and the Dean's Offices (for semester-based exams) formally request related Subject Committee Head to nominate qualified expert(s) for test construction, and then assigned expert(s) submit assessment tools to the Examination Board (EB). Following the submission, the EB informs to the Head to initiate the moderation process and a moderation committee, usually formed by the related Subject Committee Head, critically reviews and revise the submitted set(s) of questions to ensure reliability, validity, and objectivity in assessment. After successful moderation, the finalized test is administered by the EB for the purpose of students' grading and certification.
- **Technology integration in assessment:** TU has been conducting several educational programs through a blended mode of learning, combining both physical and virtual approaches. Under this provisions, students are required to attend classes through online platforms for learning regardless of locations and circumstances. Instructional activities are conducted virtually using Learning Management System (LMS), digital tools. Student assessments and evaluations are also carried out through virtual modes, including online examinations, assignments, and presentations (Faculty of Education, 2023). Initiatives like the Higher Education Reform Project and efforts by the University Grants Commission aim at improving quality, promote the semester system, and introduce a National Qualifications Framework to standardize assessments. TU is also adopting e-learning platforms, online examinations, and digital systems to enhance efficiency, accessibility and timely result publication (Timalsina et al., 2024). These days, educational institutions, including FoE, are increasingly integrating digital tools such as online examination, LMS and automated result processing systems to enhance efficiency of academic operations. The assessment provisions in the Open and Distance Learning Center are designed to ensure a balanced and continuous evaluation of students' performance. Assessment is divided into internal and external components with 60% allocated for internal and 40% for external assessments. Internal assessment is carried out throughout the semester, using online mode to monitor students' progress and provide necessary feedback and support. It includes attendance, quizzes, discussions, peer work, online tests and assignments as tools of online

assessment. These technologies open up significant opportunities for automation, reduce manual workload, minimize errors and enable faster decision-making for both students and teachers to improve learning.

- **Inclusion in assessment:** Careful attention is required in assessment to be informed about how assessments procedures impact different groups of students, including those with disabilities, for ensuring fairness. Equity can be challenged in assessment when students from marginalized and disability backgrounds face limited access to testing tools and procedures. Additionally, language barriers and cultural differences of students can introduce bias into assessments since their backgrounds are not adequately reflected in the tools and assessment criteria. Addressing these issues involves adopting inclusive and accessible assessment practices to cope diverse linguistic and cultural contexts to provide equal opportunity to all students to succeed. There is an increasing focus on inclusivity in higher education through resource access (Timalsina et al., 2024), including assessment tools. Using dual medium, Nepali and English, except language subjects, while constructing test increase accessibility of students in exams. Adoption of flexible policy in the medium of instruction and provide options for the students to use either English or Nepali language in their exams, especially at Bachelor level, also make assessment system inclusive in TU (Higher Education Reform Project, 2019) to some extent. There is also provision of providing an assistant, a writer for example, if necessary, to the students with disabilities in exams to make the assessment procedures inclusive. Providing orientation to faculty members in designing internal and external assessment tools also helps test developers design fair test items in exams.

The internal assessment practices in M.Ed. program promote equity, inclusion, and accessibility by offering diverse, flexible, and transparent ways for students to demonstrate their learning. The use of varied assessment formats such as research papers, reflective essays, presentations, and quizzes represents different learning styles, abilities and backgrounds of students. Continuous assessment with timely feedback and opportunities for revision allows all learners, including those who may initially struggle, to improve and succeed at their own pace. Clear rubrics and advance communication of expectations enhance transparency and inclusion, and help students understand how they are assessed. Additionally, teacher autonomy enables contextual adaptation of tasks to accomodate diverse learning needs of students. These practices create an inclusive learning environment where every student has a fair opportunity to participate, grow and achieve (Faculty of Education, 2025a). Thus, the initiatives taken by the university seems fruitful to make the assessment procedures accessible and inclusive.

Problems and Malpractices of Assessments

TU has been facing multiple interrelated challenges while practicing varous types of assessments -internal and external. Implementation of internal assessment remains inconsistent and often

reduced to a formality, with limited feedback and academic support (Acharya & Poudel, 2024; Pageni, 2025) despite including it as an integral part of semester system. Political interference further complicates the system by affecting academic decision-making, examination processes, and institutional governance (Karna, 2023). Furthermore, he indicates that examinations are affected by corruption and manipulation, including student mafia networks that allow some students to pass without proper academic effort. In addition, the system has been facing various administrative challenges, particularly delays in examination schedules and result publication, which often disrupt the academic calendar. In some cases, especially in annual system, results are delayed for extended periods (Bhusal & Kharel, 2025). Issues of irregular internal assessments, and weak teaching practices in some campuses also compromise the integrity of evaluation. Moreover, lack of standardized tools, clear scoring rubrics, and sufficient teacher training, sometimes, leads to inconsistent grading and potential bias. Likewise, outdated and theory-laden assessment methods continue to encourage rote learning rather than appraising critical thinking and creativity (Pageni, 2025; Timalsina et al., 2024). Additionally, the frequent use of classrooms as examination halls has negatively impacted regular teaching and learning activities. Overall, the gap between policy and practice, combined with resource constraints and systemic inefficiencies, remains a significant barrier to reliable, valid, objective, fair and student-centered assessment at TU.

Assessment practices at TU face structural and institutional challenges, weak coordination, rigid system, procedural delays, etc. for examples. Limited human, financial and technological resources create difficulty in institutionalizing modern assessment methods in higher education. Political interference, resistance to change and reliance on traditional exams deteriorate the culture of continuous, student-centered and performance-based assessment practices. However, procedural inefficiencies, especially at Bachelor and Master levels, are still existing since result of exam publishes after several months due to limited technological integration and resource constraints (Bhusal & Kharel, 2025). Overall, while TU demonstrates a gradual shift toward diversified assessment methods across its programs, reliance on traditional examinations and ongoing administrative and technological inadequacies continue to undermine overall effectiveness of evaluation activities (Karna, 2023) in higher education. Institutional policies, rigid curricula, and long-rooted conventional academic traditions reinforce assessment of learning, while assessment for and assessment as learning are also essential for promoting deeper engagement, self-reflection, critical thinking, and student autonomy. But such formative assessment practices remain underutilized in education system, including higher education.

The assessment policies in TU reflect a growing recognition of the need for a blended evaluation system, combining internal assessments, formative in nature, with external assessment, summative in nature, to align with intended learning outcomes of official curricula. However, the findings reveal a significant gap between policy provisions and actual practices, as TU, including FoE, still

relies mainly on paper and pencil test, particularly within its annual system (Bhusal & Kharel, 2025). This reliance mirrors global challenges in higher education, where traditional invigilated examination system remains dominant since it is easy to manage for large population though it, in many cases, promotes rote memorization instead of measuring higher-order thinking skills (Afrifa-Yamoah et al., 2024; Schutte, 2024). The literature suggests that such over-reliance on predictable exam patterns limits students' ability to analyze new situations (Ross & Rajkoomar, 2024). In this context, although FoE has attempted to balance theoretical and practical evaluations, institutional constraints and administrative burdens jeopardize the effective implementation of provisioned assessments to appraise intended behaviors of students.

A critical barrier to practice transparent and fair evaluation system in TU is varying level of faculties' competence in designing formative and summative assessment tools. Evidence indicates that internal assessments at TU fail, except a few examples, to provide continuous, meaningful feedback, educators usually rely on paper-pencil test due to limited professional development (Acharya & Poudel, 2024) and assessment illiteracy. Such practice contradicts to basic purpose of formative assessment, which depends on regular assessment and feedback culture to identify learning gaps of students and support them for long-term cognitive development (Morris et al., 2021). Furthermore, while TU utilizes moderation committees to ensure reliability, validity and objectivity of test, systemic delays and limited time for test construction undermine these quality assurance efforts (Bhusal & Kharel, 2025). These barriers, sometimes, are compounded by a 'culture of convenience' where the use of 'guess papers' and 'repetitive exam questions' undermines authenticity and credibility of assessment, which eventually fail to reflect real-world workplace requirements (Afrifa-Yamoah et al., 2024). Although evidence suggests that informative and corrective feedback is essential for deep learning and addressing student misconceptions, TU relies on end-semester assessment (Pageni, 2025), which leaves little room for continuous feedback necessary for student autonomy and self-reflection (Morris et al., 2021). Thus, without a comprehensive re-engineering, TU will continue to face a widening gap between graduate capabilities and the demands of the global labor market (Acharya, 2022; Randall, 2024).

Initiatives Taken to Mitigate the Problems

Different initiatives, attempts made by the University Grant Commission (UGC) primarily under Higher Education Reform Project (HERP), test construction, exams administration and scoring guidelines developed by the FoE, integration of assessment related contents into formal courses, etc. for examples, taken by TU aim at enhancing education quality through quality assessment practices. TU, including FoE, has begun integrating e-learning platforms, online examinations, and digital systems to improve efficiency, accessibility, and timely result publication. TU has also prioritized reforms such as implementing information technology, restructuring the OCE, publishing exam schedules in advance, and targeting result publication within 100 days (Bhusal & Kharel, 2025).

Additionally, there is a growing emphasis on inclusivity through dual modes of instruction, test construction in both Nepali and English language, providing writer and extended time to the examinees with disabilities, etc. also help the institution make assessment activities inclusive (Timalsina et al., 2024). Thus, the FoE has been playing leading role in improving assessment at TU by introducing various programs (Curriculum and Evaluation for example), carrying out research, conducting professional development programs by using internal and external sources, and also contributing to other Faculties and Institutes to enhance the literacy of assessment for couple of years.

The FoE has been trying to improve assessment policy and practices in order to solve various problems such as subjectivity, overemphasis on measuring lower order thinking skills, undue delay in result publication, etc. Emphasis has been given on maintaining key qualities of a good test such as reliability, validity, objectivity, fairness, transparency, practicability, and comparability through orientations, professional development activities, and improving examination system. Furthermore, preparation and adoption of structured guidelines for the use of Taxonomy of Educational Objectives, item construction, exam administration, scoring and result analysis have also contributed to making assessments more learner-friendly and academically sound. The use of test blueprint further strengthens content validity by aligning curricular content with cognitive processes (intended learning outcomes of curriculum) and test formats. Moreover, the development of item writing matrices and scoring rubrics has enhanced consistency and objectivity in both question construction and overall evaluation. Rubrics, in particular, provide transparent criteria for grading, reduce subjectivity, and offer meaningful feedback to students (Faculty of Education, 2025a). Collectively, these reforms demonstrate a comprehensive approach to mitigate assessment-related challenges by enhancing quality in educational assessment practices. Such practices can also be replicated in other Faculties and Institutes to assure the quality of assessment. These measures not only enhance the credibility of both internal and external examinations but also support for making informed decision and providing constructive feedback to students during instructional process.

To overcome the limitations of traditional evaluation practices, TU, under Master's programs, has adopted semester system as a reform-based academic approach that emphasizes active learning and continuous assessment to develop intended knowledge, values and skills within learners. This system reconceptualizes teaching, learning, and assessment as ongoing and interconnected process, promoting both academic progression and accountability of students. It introduces continuous assessment methods such as attendance, classroom participations, individual and group assignments, presentations, and written test to evaluate students' progress continuously rather than assessing them through a final exam at the end of semester. Learning outcomes are broken down into smaller and manageable units aligned with clearly defined teaching and assessment strategies. Furthermore, student performance is evaluated using a Grade Point Average (GPA) system based on letter grades by offering a more comprehensive and holistic measure of academic achievement (Faculty of

Education, 2025a). Despite of taking a range of initiatives, TU, including FoE, is still struggling to make assessments, either internal and external, more valid, fair and transparent.

Ways Forward for Achieving Expected Quality

The comprehensive list of reforms made by TU, especially FoE, establishes a strong theoretical foundation for both formative and summative assessment. However, ongoing struggle to achieve validity, objectivity, fairness, and transparency of assessment has primarily been seen due to the gap between policy provisions and on-the-ground execution. To bridge this gap, the university must translate proposed provisions at grassroot level, strengthen construct validity, despite focusing only on content validity, by taking departure from lower-order thinking skills (LOTS) toward higher-order thinking skills (HOTS) based on either Bloom's, Revised (Faculty of Education, 2026) or any other Taxonomies, supported by standardized moderation committees. Furthermore, continuous cross-departmental proctoring of internal assessment practices with constructive feedback, especially to teachers, and institutionalizing 'double-blind' scoring with rubrics for external exams will mitigate subjectivity, which make scoring process rigorous and impartial.

Furthermore, technology-integrated transparency and faculty empowerment are also crucial to optimize quality of assessment in higher education by enhancing assessment literacy (European University Association, 2020). Utilizing assessment analytics for item analysis and providing students with granular feedback via digital portals can transform results from mere grades into meaningful learning tools. In addition, the adoption of e-learning platforms, online examinations, and LMS will also be handy to address the demand for adaptable and flexible assessment models highlighted in contemporary research (Timalsina et al., 2024; Schutte, 2024). Concurrently, faculty must undergo mandatory certification in psychometrics and participate in test construction, rubric development, and objective scoring workshops to ensure inter-rater reliability (Vina, 2025) in exams. Haasnoot et al. (2024) also indicated that providing training to faculties in grid development, test construction, rubric development, test administration, scoring and item analysis can also help address malpractices of assessment in higher education. Likewise, practicing multiple means of expression (Mastropieri & Scruggs, 2018) also helps responsible authority/ies make the assessment process inclusive by addressing classroom diversity. Current practices, dual-language (Nepali and English) in test, and time test and setting accommodations in exams for examples, made by targeting students with disabilities also reflect a crucial shift toward inclusive assessment.

Finally, to address current malpractices and problems, systematic reforms such as proper supervision and accountability are also required. Such measures would ensure assessment quality, which finally improve credibility and authenticity of examination system in TU (Bhusal & Kharel, 2025). In addition, 'sustainable assessment' models, which move students away from being passive recipients of grades toward becoming self-assessing lifelong learners through shared dialogue and

institutional transparency (Fletcher et al., 2011). To achieve this, TU must institutionalize formative and performance-based assessment, including project work, internships, and reflective discussion to ensure that assessment practices align with intended learning outcomes rather than procedural convenience (Faculty of Education, 2025a; Faculty of Education, 2025b). Systemic reforms are equally vital; the university must strengthen academic integrity by strictly implementing academic calendars, decentralizing examination authority to regional offices, and implementing reward and punishment system to ensure staff accountability and eliminate political interference (Karna, 2023). Furthermore, TU can reposition its students as active ‘change agents’ within a participatory framework that meets 21st-century academic standards (European University Association, 2020) by fostering a culture of innovation and collaborative feedback.

Conclusions and Implications

This article concludes that TU has established diverse and flexible assessment system combining both internal and external evaluation across Faculties, Institutions and programs. Although recent reforms such as development of guideline, technological integration, professional development, inclusive practices, etc. demonstrate a positive shift toward more credible and authentic assessment practices in higher education, a significant gap exists between policy provisions and actual practices. Overreliance on paper-pencil test, overemphasis on measuring lower-order thinking skills, inconsistent practices of internal assessment, poor alignment of assessment with students’ learning, delays in result announcement, and limited institutional capacity create barriers to effective, reliable, fair, and transparent assessment practices. Planned and sustainable initiatives therefore should be taken by university, faculties, institutions, colleges, departments, and staff to practice assessments as provisioned in policies and specific curriculum.

Review findings suggest a need for reforms in higher education to practice assessment ‘for’ and ‘as’ learning along with ‘of’ learning. Faculties’ competence, for this, should be strengthened through continuous professional development, e-assessment and digital infrastructure should be expanded, and academic calendar should strictly be followed for improving credibility and authenticity of assessment. Promoting formative, competency-based and inclusive assessment practices can better support HOTS and students’ learning. Furthermore, enhancing governance, accountability and resource allocation will also be critical to bridge persisting policy and practice gaps and aligning assessment with 21st century skills and world of work to optimize internal and external efficiency of higher education in Nepal.

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Life Support, Skills, and 21st-Century Competencies for Employability at Tribhuvan University

Rewan Kumar Dahal*

Abstract

The current situation in Nepal shows that higher education institutions fail to deliver essential soft skills, digital literacy skills and practical workplace training needed by the labor market. The study used the PRISMA framework and thematic analysis to examine the existing gap between 21st-century competency requirements and the professional capabilities of Tribhuvan University (TU) graduates. The study shows a major employer-employee gap because employers need employees who possess advanced communication, teamwork and problem-solving abilities, but graduates lack these skills and digital literacy. The study found that self-regulatory competencies like self-control and self-directed learning enable individuals to find jobs because current curricula focus on theoretical content and use memorization-based assessments without industry partnerships. The study shows that employers detect a specific skills gap, while M.Ed. Graduates feel unprepared for their professional work. The type of program determines employment results because vocational programs that use industry partnerships achieve high placement rates, while specific TU-affiliated campuses produce graduates who only get temporary jobs. The research shows that Nepal lacks long-term studies that examine the effectiveness of particular skill-building programs, even though practical training and strong ties between businesses and educational institutions are vital for starting a professional career. The current academic system needs to change its certification methods because it needs better alignment with actual professional standards, which require certification for entry into current job markets.

Keywords: Awareness in Communication Skills, curriculum alignment, digital competencies, industry-academia linkages, self-regulatory practices, TVET.

JEL Classification Codes: I21, I23, I25, J23, J24, L26

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Introduction

The establishment of Tribhuvan University marked the beginning of higher education in Nepal, and the university has functioned as a national development center that trains professionals needed for state administration. The university dedicated itself to expanding degree programs for several decades, but the 21st-century global economy requires practical business skills and full professional abilities instead of theoretical degrees. The educational discussion in Nepal focuses on how TU's traditional academic programs match current demands from the labor market.

Through record-high graduation rates, institutions now understand that traditional degree-based education systems do not prepare students for successful careers in the present digital and globalized employment environment. Employers now consider digital literacy, critical thinking and soft skills as the main criteria for determining whether graduates will find work (Bansal et al., 2022; Sanaullah et al., 2025). TU requires these skills to enable students to compete in the job market while they study in different academic fields that face distinct regulatory and economic challenges (Kadel, 2021; Timalsina & Humagain, 2025). The university now invests greater effort in updating its teaching methods, which date back to its founding, to meet current educational requirements.

It's evident that the challenges TU faces today arise from an extreme academic “evidence-performance gap” that prevents the university from producing graduates who can enter the job market. The existing literature establishes that skill deficiencies exist, but researchers have failed to create longitudinal studies that connect skill development with real-world job results (Dahal et al., 2025; Gupta, 2025; Timalsina & Humagain, 2025; Sharma, 2022). Almost all institutional claims about essential competencies rely on perception-based data, which do not include verified performance indicators such as employment rates, time to first employment and salary trajectories (Khadka, 2025). The “perception trap” that organizations face results from their dependence on cross-sectional data because organizations use subjective assessments to determine curriculum reforms instead of actual labor market results.

The current evidence base shows geographical and demographic biases because it excludes major academic disciplines, which include Management, Law, and Science, while focusing on Education and Engineering (Kadel, 2021; Sharma, 2022). The demographic blind spot exists as a major issue in Nepal's divided society because existing data fails to provide gender and ethnicity breakdowns along with the specific resource limitations that affect provincial campuses beyond the Kathmandu Valley. The university needs to evaluate its teaching methods, industry collaborations and digital literacy programs because these elements require evidence-based

support before the Institution can decide on reform initiatives (Ghimire et al., 2025; Mitiku et al., 2021; Segbenya et al., 2023). The educational system maintains its traditional methods of delivering academic content because the current workforce demands multiple skills which leads people to underestimate the value of academic degrees and block graduates from achieving their career objectives. The research project conducts a systematic review together with a thematic analysis of existing studies to develop a mapping system that explores graduates' employability. The review has the following specific goals:

- To identify and categorize 21st-century competencies and life skills which the labor market needs with evidences which shows the skills and strengths of graduates.
- To examine the thematic intersections between curriculum design, pedagogical strategies, and industry engagement models for employment.

The systematic review presents a framework that connects university academic work with the National Education Policy and Sustainable Development Goals for quality education and decent work. Research findings enable university officials to develop evidence-based planning methods to implement data-driven curriculum reforms. The study holds strategic importance for social equity through its policy recommendations, which may support rural and marginalized students at provincial campuses in overcoming various industrial access challenges.

Materials and Methods

The study employs a systematic review and thematic analysis to synthesize all existing research evidence on graduate employability at Tribhuvan University. It followed PRISMA guidelines, adhering to specific reporting standards. The search process consists of a comprehensive query of major academic databases, including Web of Science, Scopus, Google Scholar and the TU Central Library repository. The researchers extracted bibliographic meta data from electronic databases using the search string described in Table 1. The data export occurred in RIS format to document citation counts, co-authorship networks and keyword co-occurrences. The study used VOS viewer version 1.6.20 to process the meta data and generate visual representations of research trends and thematic clusters.

Flow Diagram

The researchers conducted the search to find all quantitative studies published between 2015 and 2025. The four-stage screening process showed how many records were found, examined, checked for eligibility and selected for the final synthesis.

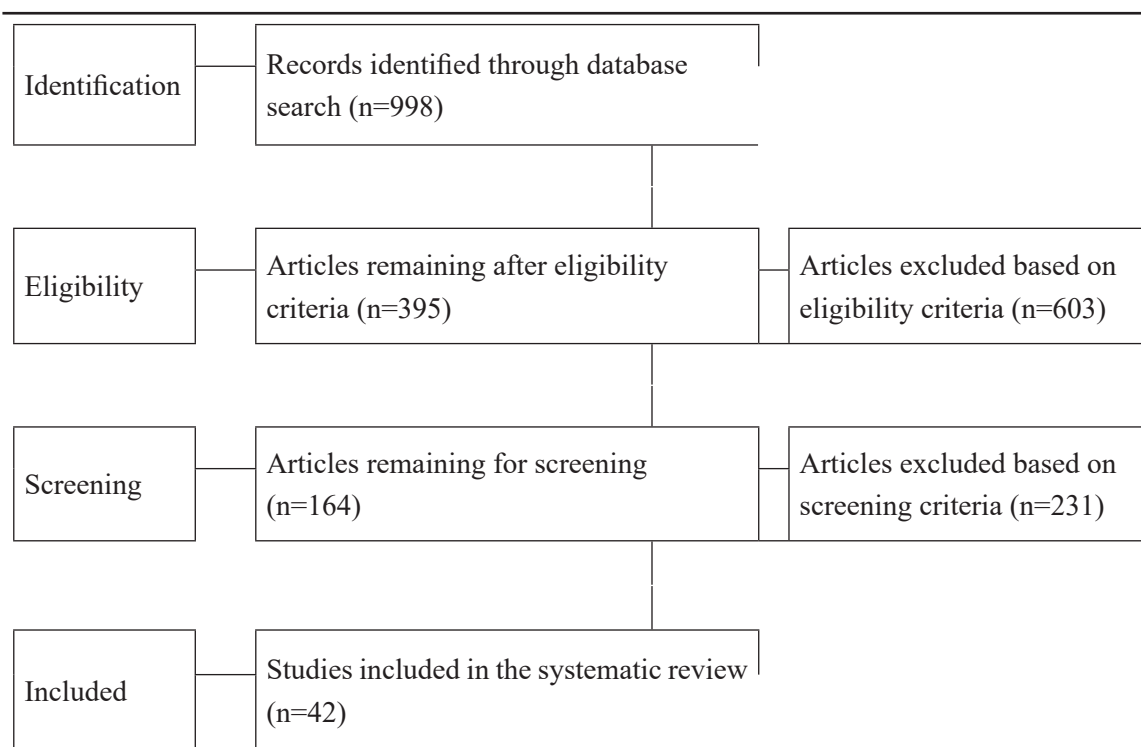


Figure 1: PRISMA Flow Chart

The systematic selection procedure shown in Figure 1 ensured transparent results that could be replicated by other researchers. The first identification stage across five databases, which included Web of Science, Scopus, Google Scholar, NepJOL and Dimensions.ai, produced 142 records. After removing duplicates and conducting an initial title and abstract review, 85 reports entered the eligibility assessment process. The research team applied strict criteria to select 42 studies that examined Tribhuvan University and the entire Nepalese higher education system, conducted between 2015 and 2025, and generated empirical data on 21st-century competencies. The academic community uses this thorough process to conduct thematic analysis, drawing on currently accessible, top-quality research in the field.

Paper Search Strategy

Table 1 shows the search strings applied across academic databases (Google Scholar, NePJol, TU Central Library, and ERIC, JSTOR) and the ensuing number of studies identified during the initial screening phase.

Table 1: Search Strategies and Results Breakdown

No.	Search Strategy (Keywords and Boolean Operators)	Initial Studies Found	Studies Screened In
1	((“Tribhuvan University” OR “TU Nepal” OR “Higher Education Nepal”) AND (“Life Skills” OR “Soft Skills” OR “21st-century Competencies”) AND (“Employability” OR “Career Readiness”))	420	18
2	((“University Graduates” OR “Undergraduate Students” OR “Postgraduate”) AND (“Critical Thinking” OR “communication” OR “Collaboration” OR “Creativity” OR “Digital Literacy”) AND (“Nepal”))	315	12
3	((“Employability Enhancement” OR “Skill Gap Assessment” OR “Job Placement Success”) AND (“Work-based Learning” OR “Internship” OR “Pedagogy”) AND (“Tribhuvan University”))	263	18
Total	Combined Database Search (Removing Duplicates)	998	42

Table 1 focuses primarily on broad institutional competencies and career readiness, though a significant portion of the initial literature was excluded to ensure the final selection aligned strictly with the specific socio-technical and pedagogical landscape of higher education.

Screening

The study screened sources based on eligibility criteria. Table 2 summarizes the criteria used to screen the 998 initial sources to arrive at the final 42 included studies.

Table 2: Inclusion and Exclusion Criteria

Criterion	Inclusion (Screen-in)	Exclusion (Screen-out)
Population	- Undergraduate/postgraduate students, alumni (within 5 years) of TU or Nepal HEIs.	- Primary/secondary students, unaffiliated vocational trainees, non-HEI professionals.
Intervention	- 21st-century skills (digital, soft, life skills), employability or career readiness programs.	- General academic curricula without a specific link to employability competencies.
Outcomes	- Employment rates, job placement, employer satisfaction, skill gaps, or career readiness.	- Non-career related academic outcomes (GPA only, enrollment trends).

Study Design	- Empirical research (Quant, Qual, Mixed), systematic reviews, or meta-analyses.	- Editorials, opinion pieces, theoretical papers, case studies, or abstracts only.
Setting	- Specifically, Nepal, with a primary focus on TU.	- International studies without direct transferability to the Nepal context.
Timeframe	- Published between 2015 and 2026.	- International studies without direct transferability to the Nepal context.

As presented in Table 2, the application criteria ensured a high-quality, context-specific evidence base by filtering out non-empirical or irrelevant literature. By focusing on recent, TU-centered research, the review maintains high internal validity for evaluating the current state of graduate employability in Nepal.

Citation Tracking

The researchers used a two-step citation-tracking to complement the database search and obtain all matching academic materials. First, backward citation tracking was used to assess the reference lists from 42 publications in the initial screening. Secondly, forward citation tracking was conducted using Google Scholar to explore subsequent publications citing the existing research. Such an iterative process helped to verify the saturation of the thematic analysis and ensured that no critical studies were omitted from the final synthesis.

The verification process used bibliometric mapping as its third layer. The co-occurrence analysis from VOS viewer established that ‘Soft Skills’ and ‘Industry-Academia Linkages’ showed centrality, which proved that 42 studies selected through the PRISMA process constitute the core thematic clusters of the present academic discourse at Nepalese Universities.

Data Extraction

Table 3 depicts the seven key domains extracted from the included studies.

Table 3: Data Extraction Framework

Domain	Key Extraction Variables
1. Study Population	Academic level, discipline, sample size, demographics, and TU-specific vs. Nepal HEI context.
2. Life Skills	Technical/hard skills, soft skills (communication/teamwork), digital, critical thinking, and personal/entrepreneurial skills.

3. Development Approach	Intervention type (integrated vs. standalone), duration, pedagogy, trainers (faculty/industry), and assessment methods.
4. Employability Measures	Employment rates, time to employment, placement success, employer satisfaction, and graduate self-assessments.
5. Key Findings	Strongest skill-employability associations, identified gaps, quantitative effect sizes, and qualitative barriers.
6. Study Design	Research methodology (Quant/Qual/Mixed), sampling approach, timeline, and study limitations.
7. Institutional Context	Specific TU campus/faculty, industry partnerships, policy alignment, and labor market demands in Nepal.

As shown in Table 3, the domain extraction process used specific instructions that targeted the time period between 2015 and 2026 to extract both the specific features of the Tribhuvan University system and the general patterns of the Nepalese labor market.

Bibliometric Mapping of the Intellectual Landscape

This research work used bibliometric analysis to create a synthesis and visualization of the intellectual structure that emerged from their examination of 42 chosen studies. The data extraction protocol required typographic data to be extracted from the RIS file meta data, which included information contained in titles and abstracts. In the analysis phase, co-occurrence analysis was used with binary counting methods to map out the main conceptual clusters found throughout the literature. With a 5 threshold point of minimum occurrences, this work identified 77 terms from the 869 initial terms. The final bibliometric network was created by selecting the top 60 most relevant terms, which had a VOSviewer score of 46.

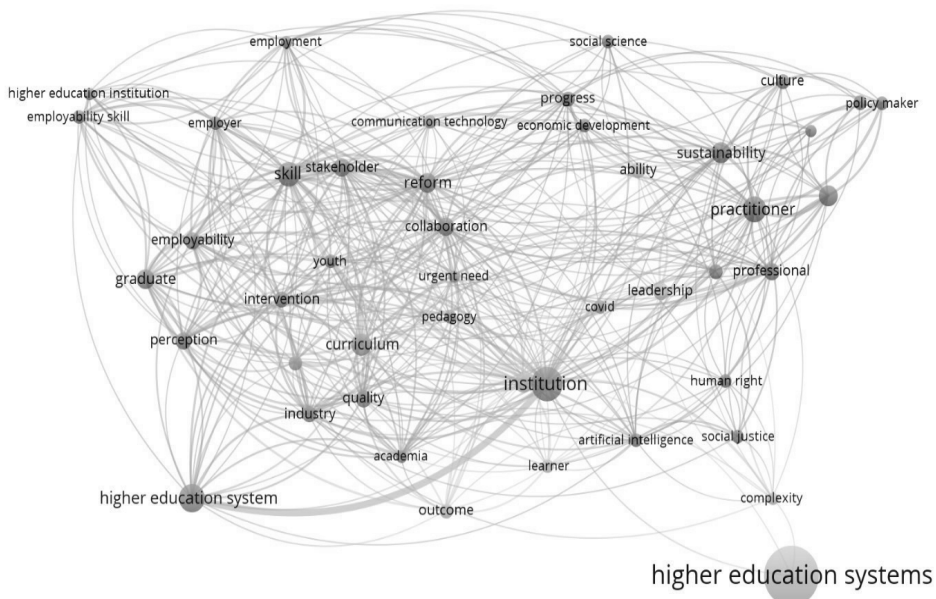


Figure 2: Bibliometric Network Visualization: Term Co-occurrence Mapping of Graduate Employability Literature (n=42)

The bibliometric network (Figure 2) reveals four primary, interconnected clusters that define the current discourse on employability in the TU ecosystem:

- ***Employability Skills*** represents the core theme, heavily emphasizing keywords such as ‘employability skill,’ ‘graduate,’ ‘skill,’ and ‘higher education institution.’ Its high network density confirms that defining skill deficiencies is the key interest of current literature.
- ***Curriculum & Institution*** anchors the implementation theme. It visually links ‘institution,’ ‘higher education system,’ ‘reform,’ and ‘curriculum,’ confirming the systematic review’s result that the focus on domain-knowledge curricula is a primary structural barrier.
- ***Social & Policy*** highlights the macro-environment, grouping terms like ‘policy maker,’ ‘sustainability,’ ‘practitioner,’ and ‘social science,’ reflecting the policy implications for sustainable development.
- ***Systems & Leadership*** (anchored by the prominent ‘higher education systems’) appears as an emerging theme, connecting ‘complexity’ and ‘leadership’ to modern institutional challenges like ‘artificial intelligence’ and ‘COVID.’

The systematic review results are shown in this visualization, which demonstrates the “perception trap” by showing that perception-related terms were used more frequently than actual employment data.

Results

The review explored sources published between 2015 and 2025 and examined various academic disciplines, research methodologies and population groups. The bibliometric mapping identified three research clusters: (i) the pedagogical cluster that studied teacher education and curriculum alignment, (ii) the technical-vocational cluster that focused on TVET and private sector partnerships, and (iii) the professional skills cluster, which was based its work on management and engineering disciplines. The keyword density map demonstrates that research on longitudinal tracking of employment records represents a significant research gap that needs systematic reviews to be conducted on an ongoing basis. Table 4 summarizes the characteristics of all included studies.

Table 4: Thematic Mapping of Included Studies (n=42)

Theme / Discipline	Primary Studies	Key Focus Areas & Shared Evidence
Education & Pedagogy	Adhikary & Acharya (2026); Gupta (2025); Kadel (2021); Kadel (2024); Khanal (2024); Panthee et al. (2023); Sharma & Gnawali (2025)	Curriculum Mismatch: Significant misalignment with Teacher Service Commission standards. Assessment: Failure of the examination system to test critical thinking. Practicality: Inadequate duration of teaching practicums.
TVET & Vocational Training	Bhandari (2019); Bhattarai (2019); Bhattarai (2025); Paudel et al. (2025); Silwal & Bhatta (2017)	Partnership Success: Highest employment rates (up to 84%) linked to private sector engagement. Policy: Calls for a dual-track training system.
Management, Business & MBA	Bhandari et al. (2021); Dahal & Gautam (2026); Devkota et al. (2022); Duwal (2020); Gautam (2016); Gurung et al. (2023); Kathayat (2022); Lamichhane et al. (2024); Ojha (2023); Paudel et al. (2021); Raut & Dahal (2024); Shiwakoti et al. (2024); Subedi & Bhandari (2024); Thapa (2023)	Soft Skills Dominance: High demand for communication and teamwork. Gaps: Deficiencies in Business English and financial literacy. Outcomes: Varied employment rates (27% to 87%) based on institutional links.
STEM, IT & Engineering	Poudel & Upadhyaya (2023); Puri (2024); Sharma (2022); Sharma (2023)	Technical-Interpersonal Blend: Need for “organizational culture fit” alongside coding. Evidence Gap: Skills appearing at “emergence” levels rather than professional mastery.
Humanities, Journalism & LIS	Devkota et al. (2017); Nyoupane & Nyaichyai (2022); Pandey (2020); Pandey (2023); Pandey (2024); Paudel (2022); Timalisina & Humagain (2025); Yadav (2022)	Digital Deficit: Serious lack of ICT and newsroom-ready skills. Writing: Significant focus on arrange-system of university writing centers.
Cross-Disciplinary & Behavioral	Dahal et al. (2023); Gaulee & Bista (2019); Khadka (2025)	Predictors: Self-control and self-directed learning as the strongest predictors of job success.

Where, STEM stands for Science, Technology, Engineering, and Mathematics

LIS stands for Library and Information Science

The research across all 42 studies shows that ‘perception trap’ through which people achieve theoretical knowledge but fail to apply it professionally because of missing industry-based teaching methods. The research used all sources that provided their complete texts for study purposes, including those from TU and its linked institutions. Pokhara University and CTEVT-affiliated programs offer essential reference points that other research studies from Nepalese Higher Education Institutions (HEIs) network. The research uses quantitative surveys, qualitative studies and mixed-methods designs to develop a comprehensive methodological framework. The studies use various sample sizes, which include 4 participants in ethnographic research and 427 respondents in survey-based studies, while employer-perspective research investigates between 127 and 382 employers. The evidence base, which includes studies from management, business studies, education, engineering, IT, journalism, humanities, library science (LIS), and TVET fields, creates a full picture of the current employability situation in Nepal.

The existing research primarily explores perceived competencies, but only a few studies provide actual data about employment outcomes for TU and HEIs graduates. Table 5 presents quantitative evidence that shows employment rates, employer-reported gaps, job stability and psychological factors that predict career success.

Table 5: Employment Outcomes

Domain	Metrics of Interest	Evidence / Findings	Source (Year)
Employment	High vs. Low Rates	84% (VET) vs. 27.8% (MBS)	Silwal (2017); Ojha (2023)
Gaps	Employer Perception	66% of MBA employers report skills gap	Bhandari (2021)
Stability	Employment Type	70% of working graduates are in temporary roles	Gautam (2025)
Psychology	Success Predictors	Self-control/Self-directed learning explain 89% variance	Dahal (2023)

The data in Table 5 show that different academic fields and program types result in distinct employment outcomes for students. The 72.2 % unemployment rate among TU-affiliated Master of Business Studies (MBS) graduates (Ojha, 2023) contrasts sharply with placement rates of more than 80 % in the Technical and Vocational Education and Training (VET) sectors (Silwal & Bhatta, 2017). The degree of industry-academia collaboration, together with access to practical facilities on campus, is the main reason for these differences. The research shows that 70% of working graduates hold temporary, short-term contract positions (Gautam, 2025), indicating that ‘employment’ does not necessarily equate to ‘career stability.’ The research shows that self-

regulatory competencies (Dahal et al., 2023) explain 89% of job-seeking success, as non-cognitive skills predict professional entry better than traditional academic certifications.

Analysis and Discussion

This section analyzed and discusses themes that emerge from the evidence: (1) the nature and typology of skills demanded for employability; (2) identified skills gaps and deficiencies; (3) curriculum and pedagogical factors; (4) the role of industry engagement and work-based learning; and (5) personal and behavioral competencies.

Skills Demanded for Employability

The current employment market shows increased demand for specific skills which employers require, while educational institutions now recognize the need to assess both academic achievements and non-technical skills of their students (Ghimire et al., 2023; Joshi et al., 2023). Employers and educators in Nepal give equal importance to soft skills and technical skills, but they prefer to hire candidates who possess soft skills. All organizations in Kathmandu Valley MBA programs reported that they need professional skills for their hiring process, while 98 percent of organizations considered communication skills to be their most important requirement (Bhandari et al., 2021; Dahal, 2018). The ordered logistic regression analysis in the companion study showed that communication skills, teamwork, problem-solving skills, and decision-making skills represented the most desired competencies. Employers placed greater value on soft skills than on hard skills, which remained essential for the job because typing and computer skills accounted for 63.21 percent of the computer skills requirement (Devkota et al., 2022).

The essential employability attributes that engineering employers require from candidates include proactiveness, practical skills, enterprising skills, learning aptitude and innovation, according to Sharma (2023). The study identified three essential skills for entry-level IT jobs in Lalitpur, which included learning attitude as a personal skill, basic programming concepts as a technical skill, and organizational culture fit as an interpersonal skill. The assessment results revealed that about 50% of evaluated skills showed both high importance and significant skill gaps, with personal skills exhibiting the greatest assessment discrepancy according to Puri (2024).

A study of 384 Nepal HEI students found that their teamwork abilities, problem-solving capabilities, and practical training experience were the main factors determining their employability, with university curricula ranking second. The TU education students demonstrated “consolidation” level competencies in content knowledge, communication and collaboration and research skills, but their pedagogical knowledge received a lower evaluation (Khanal, 2024). Science education students demonstrated higher perceived employability than students from other academic disciplines (Khanal, 2024). Engineering employers evaluated proactiveness, practical skills, enterprising abilities, learning capacity and innovation as the essential skills needed for employment (Sharma,

2023). The essential skills required for IT entry-level jobs in Lalitpur included a learning attitude as a personal skill, basic programming concepts as a technical skill, and organizational culture fit as an interpersonal skill. Personal skills are seen as both critical and of substantial importance, with the greatest difference.

Skills Gaps and Deficiencies

The terms skills gaps and deficiencies describe the situation in which employees lack the necessary abilities to perform their required job tasks. The result of this problem leads to decreased work performance and productivity. Studies show that graduates do not possess the skills employers require. Research shows that two-thirds (66%) of employers surveyed in Kathmandu Valley reported a distinct skills gap between the attributes MBA graduates possess and those required by their organizations (Bhandari et al., 2021), indicating a mismatch between the skills their organizations require and those MBA graduates possess. The business sector shows skill gaps that extend to M.Ed. graduates from Tribhuvan University (TU), who found serious limitations in their teaching practice, affecting all aspects of their required professional development path. The academic quality perception shows disagreement because only 53.3% of graduates assessed research training and academic relevance positively (Gupta, 2025). Higher education institutions (HEIs) lack the capacity to produce “job-ready” graduates because this challenge affects both professional fields and teaching methods.

The skills gap is particularly acute in specific competency domains:

- *Communication and writing skills:* The BBS students at TU received an assessment from their instructors, who determined that their writing abilities showed performance below the standard. Both students and teachers considered these subskills essential, with a rating of “important” and “very important” (Pandey, 2020). The students of Gauri Shankar Campus encountered obstacles because they had limited access to English language materials, their teaching methods failed to meet their learning requirements, and their motivation levels were insufficient (Raut & Dahal, 2024). The BA graduates from Makwanpur Multiple Campus demonstrated a lack of ability when they were required to perform professional writing and communication tasks (Timalsina & Humagain, 2025). The Technical and Vocational Education and Training (TVET) sector demonstrates this disconnect because industry training programs need strong private sector participation to create job market training that matches existing demand (Bhattarai, 2025). TVET programs exist to bridge employment gaps, but their success depends on their connection to current labor market requirements, according to research.
- *Digital and technological competencies:* The research establishes that various fields show a major shortage of digital and technological skills. KMC graduates specifically identified IT skills training and curriculum applicability as key areas of dissatisfaction (Gautam, 2025).

B.Sc. CSIT students at TU expressed their dissatisfaction because the university did not provide them with essential industry skills, practical training and professional guidance (Poudel & Upadhyaya, 2023). The study found that TU bachelor of arts degree holders from social science programs lacked essential technology and digital competencies (Timalsina & Humagain, 2025). The study found that the MLISc. The curriculum at TU included ICT fundamentals but lacked essential content on library management software, unlike other SAARC programs (Nyoupene & Nyaichyai, 2022). The study results demonstrate that technology-adjacent programs still show a disparity between the academic material and the software tools that industries need.

- *Practical and experiential skills:* The gap extends to these areas because theoretical knowledge fails to prepare people for professional careers. Engineering graduates displayed employability skills at the “emergence” and “presence” levels, according to research, yet their skills remained untested and unproven for workplace use (Sharma, 2022). Engineering employers reported that examination systems created this problem because they rewarded students who could memorize content rather than demonstrate practical skills (Sharma, 2023). M.Ed. program students at TU demonstrated unpreparedness for teaching, as they lacked higher-order thinking, personal and communication skills (Kadel, 2021). Specialized fields such as journalism require modern digital newsrooms, which all graduates lack, so only a small portion of graduates find work in the media industry (Pandey, 2023). The current assessment methods and teaching systems used in higher education need improvement to create the practical skills that employers require.
- *Entrepreneurial and personal skills:* The lack of essential skills goes beyond its effect on employment because it also affects business growth and personal progress. The research results showed that management students used their conceptual and technical abilities to boost their entrepreneurship skills, but their human abilities did not create any measurable effect (Kathayat, 2022). The university-level curriculum delivers a positive impact on entrepreneurial intentions, but its effectiveness depends on teaching methods that combine experiential learning with case study instruction (Subedi & Bhandari, 2024). The current assessment and teaching methods used in higher education institutions fail to develop the practical skills and entrepreneurial thinking required by today’s job market.

Curriculum and Pedagogical Concern

People consider the TU curricula to be overly theoretical, rather than practical. The M.Ed. curriculum demonstrates insufficient alignment with workforce requirements, as it meets only 9% of the Teacher Service Commission standards (Gupta, 2025; Panthee et al., 2023). The centralized examination system performs inefficiently while failing to assess critical thinking skills (Adhikary & Acharya, 2026). The BBS program faces similar problems because only 14.63% of professionals considered Business English vocabulary sufficient for their job needs (Dahal & Gautam, 2026).

The existing problems require implementing three components: mandatory internships, digital pedagogy and problem-based learning (Timalisina & Humagain, 2025; Subedi & Bhandari, 2024). The current practice of excluding employers from TVET sector curriculum development creates a situation that decreases the relevance of educational programs to market needs (Paudel et al., 2025). The short duration of practical training in the M.Ed. program, including a 1.5-month practicum, does not allow students to develop their professional identity or reach mastery levels (Panthee et al., 2023; Sharma & Gnawali, 2025). Students maintain “consolidation” levels of basic content knowledge, but they fail to demonstrate their teaching skills and practical abilities (Khanal, 2024). The research findings demonstrate that academic certificates alone will not lead to professional competence unless educational institutions adopt experiential learning as their primary teaching method.

Industry Engagement and Work-Based Learning

The absence of meaningful industry-academia linkages serves as a recurring barrier to employability. The CTEVT system controls Nepal’s TVET training, which results in inadequate private sector partnership that hinders effective educational programs to meet actual industrial demands (Bhattarai, 2025). Educational institutions maintain excessive authority over curriculum development because, since 2018, about 50 percent of educational organizations have participated in curriculum creation processes while employers have been excluded from design work (Paudel et al., 2025). The absence of formal MoUs and structured internal training systems in journalism and engineering creates identical structural deficiencies that prevent students from gaining practical workplace experience (Sharma, 2022, 2023; Pandey, 2023).

Personal and Behavioral Competencies

The lack of strong connections between industries and academic institutions creates a persistent challenge that limits people’s chances of finding work. The Training and Employment System of Nepal operates through CTEVT, which controls all training activities while providing only limited space for private enterprises to participate, as this structure does not meet actual industrial training requirements (Bhattarai, 2025). Educational institutions still maintain excessive authority over curriculum choices, having formed more partnerships since 2018, but their design process needs employer participation to enhance future review periods (Paudel et al., 2025). The engineering and journalism fields face identical organizational deficiencies because programs lack official MoUs and companies fail to provide proper training facilities, resulting in students missing essential professional experience (Sharma, 2022, 2023; Pandey, 2023). The integrated vocational programs show significant success. The Solar PV Technician program and the Mason program achieved high employment rates of 84.47% and 75.94%, respectively, by establishing industry partnerships (Silwal & Bhatta, 2017). Researchers recommend that institutions create entrepreneurship cells,

startup incubators and dual VET systems to achieve these outcomes (Bhattarai, 2025; Subedi & Bhandari, 2024).

The literature shows that personal attributes, combined with self-regulatory skills, serve as essential predictors of these specific outcomes. The research used a structural equation model to examine 323 graduating students, showing that self-control practices and self-directed learning together explained job-seeking behavior, with non-cognitive competencies serving as the main determining factor (Dahal et al., 2023). Although engineering students highly regard personal and self-management skills, ethnographic research shows that they “hardly practiced” these soft skills in real-world settings despite their theoretical knowledge (Sharma, 2022; Subedi, 2025). Students maintain a balance between practical experience and theoretical knowledge because management graduates make career choices based on financial returns and job market prospects rather than personal preferences (Ojha, 2024). Financial literacy stands as an essential life skill that enables management graduates to approach their job search through proper preparation because successful employment requires both a positive attitude and knowledge of effective work practices. The establishment of required internships along with formal industry-academic collaboration networks needs to occur because these elements will enable the practical conversion of theoretical frameworks into practical systems in competitive markets.

The research topic of ‘Employability Skills’ was developed through academic research that used Figure 2 to link their study with Table 5, which showed that employers reported 66% skills gap. Research has shown that the ‘Curriculum Reform’ cluster operates independently from the ‘Policy’ cluster because only 9% of M.Ed. programs use appropriate curriculum alignment methods. Organizations must create educational programs that fulfill essential skill needs because they currently lack this capability, according to research findings.

Conclusion

The study found different results because the research teams used different study populations and employed different research methods. The existing contradiction between employers needing soft skills and graduates lacking those skills can be explained through multiple mechanisms. The examination systems across TU’s multiple faculties identify students who depend on memorization to handle their theoretical curricula instead of using critical thinking and practical knowledge. The structural feature establishes that assessment systems will not promote the development of actual competency even when curricula include essential skill areas. The TVET context shows that education actors dominate all three curriculum phases, which leads to low employer participation in curriculum development. The skills requirements that employers identify do not match the program content until the industry provides feedback.

The employment outcomes of different studies differ because they include different contextual elements. VET programs, which include structured industry partnerships and hands-on learning experiences, achieve better employment results than general academic programs at TU campuses, which lack those components. The Pokhara University business program produces better results than the JPMC MBS program because of differences in institutional resources, industry links and campus sites. The result shows that temporary employment accounts for 70 percent of the jobs KMC graduates obtain. The employment rate is an inadequate employment measure because it requires assessing job quality and employment duration. Students who major in science education at TU demonstrate higher employment prospects than students in other academic fields. Labor market demand patterns show a greater preference for more structured practical science programs, which require more precise training than humanities programs. People who possess soft skills alongside practical work experience are the strongest predictors of employability, as their skills surpass both academic credentials and personality characteristics. The current TU curricula, which focus on domain knowledge, undervalue metacognitive and behavioral competencies because self-regulatory skills and self-control practices predict job-seeking behavior.

The combination of experiential learning methods through case studies and the implementation of problem-based learning in curricula yielded positive results in developing entrepreneurial mindsets in students. The body of evidence needs more extensive research, as currently there is only a limited number of assessed interventions. The research uses only descriptive, cross-sectional, and qualitative methods because it does not include randomized controlled trials or longitudinal studies that track TU graduates through their skill development programs to measure their actual employment outcomes. The different research findings from various research disciplines and methodologies studying different population groups provide strong evidence that TU students and graduates lack essential soft skills, practical competencies and digital literacy that employers require. Still, they can overcome this gap through curriculum changes, industry collaboration and practical learning experiences.

The employability crisis at TU results from a significant ‘evidence-performance gap’. This paper contributes to recent historiographical debates showing that academic scholars possess a strong understanding of 21st-century competencies. However, quantitative data show that graduates have not achieved professional stability, as 70% continue working in temporary positions. The findings reported here shed new light on self-regulatory competencies, including self-control and self-directed learning, which serve as the main predictors of success.

The university needs continued efforts to make employability more marketable with specific academic fields and theoretical knowledge by adopting a ‘Life Support’ skill framework. Ensuring appropriate systems, services and support for VET-aligned programs may yield better placement outcomes than traditional academic tracks. A reasonable approach to tackle this issue could be through industry-academia partnerships, formalized MoUs and experiential learning components in future policy development.

The current system needs a structural transformation because academic certification fails to meet market needs, leaving graduates unprepared for the complexities of the 21st-century global economy.

Implications and Future Look

Educational institutions need to establish a system for curriculum development through their required institutional reforms. The evidence shows that higher education institutions need to stop using top-down methods to develop academic programs and adopt a co-creation approach that allows industry partners to participate in program development. The existing framework requires structural changes because it currently creates a mismatch between the origination of living theories and ongoing practice, leading to problems with student achievement. The research results on non-cognitive skills demonstrate that teaching methods should develop students' self-regulation and soft skills through practical activities rather than solely providing theoretical knowledge. Most job-seeking success depends on self-control and self-directed learning; universities need to develop programs that combine behavioral coaching with professional role modeling. Educational systems need to implement a dual-track system that combines academic education with extended workplace training, based on evidence from specialized VET programs, because this combination will effectively address current skills shortages. The government needs to create incentives to encourage businesses to join through official Memorandums of Understanding and startup incubators, as these initiatives will help students achieve their career goals by matching them with actual job openings.

The system needs to address its main factors, which currently restrict employees' job opportunities for future success. Future research and policy interventions should systematically test and monitor the following seven variables to transition graduates from "emergence" to "optimized" levels: 1) Self-regulatory practices (specifically self-control and self-directed learning), 2) Curricular compatibility with professional licensing standards, 3) Interpersonal attributes (teamwork and collaboration), 4) Practical application vs. memorization-based assessment, 5) Industry-relevant digital and technological proficiency, 6) Entrepreneurial intentions mediated by experiential teaching, and 7) Depth of industry-academia structural linkages. The organization will develop a workforce that combines theoretical knowledge with practical skills needed to meet international economic changes by studying those specific variables.

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Integrating ICT in Pedagogy and Assessment in Tribhuvan University

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Abstract

Tribhuvan University in Nepal is the country's oldest and largest public university, enrolling approximately 80% of national higher education students. It is currently transforming toward digitalization in curriculum, pedagogy and assessment. Within this context, this paper aims to answer two research questions: (a) what initiatives has TU undertaken in ICT-integrated pedagogy and assessment? and (b) what strategic actions are required for ICT and AI-embedded professional governance in higher education, particularly in pedagogy and assessment? Grounded in the Technological Pedagogical Content Knowledge (TPACK) framework, this study used a descriptive document analysis method integrating positivist, interpretivist, and critical paradigms. The sources used were institutional documents (TU Vision 2030, ODEC Guidelines), national policies (ICT Policy 2015, Digital Nepal Framework 2019), international frameworks (UNESCO, OECD 2023) and peer-reviewed articles. The study found that Tribhuvan University has achieved notable digital transformation by deploying Microsoft Teams (approximately 1.5 million user accounts), Moodle as its official LMS, automated and versatile assessment tools, and training of approximately 8,000 faculty members, followed by induction and capacity enhancement training for 1,000+ faculty. The study concludes that TU's digital transformation in both infrastructure and governance requires further acceleration to strengthen both academic quality and educational equity.

Keywords: ICT integration, Pedagogy, Assessment, Tribhuvan University, Digital Transformation Higher Education, Nepal

Introduction

This 21st century higher education is transforming with use of Information communication technologies (ICT) and Artificial Intelligence (AI). This transformation has been rapid since last decade. This transformation is also evident in Tribhuvan University (TU) Nepal. Tribhuvan University is an oldest

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and largest public university in Nepal established in 1959. It is serving higher education access to Nepal and abroad with 61 constituent campuses, 1400 (+) affiliated campuses and approximately 500000 student enrollment each year, which is around 80% higher education enrollment in Nepal.

The integration of ICT and AI in higher education, particularly in pedagogy and assessment is growing in Tribhuvan University as well. This growth is primarily driven by international developments, national policies and TU's own strategic and policy documents. For example, some of the global enablers include UNESCO and OECD; the national policy include National ICT policy 2015, Digital Nepal Framework 2019, Digitalization Strategy Plan 2023; and TU's own strategic and policy documents include the TU Vision 2030.

The digital transformation in TU higher education, particularly in pedagogy and assessment, is guided and driven by a number of policy frameworks in Nepal. The National Information and Communication Technology Policy 2015 (GoN, 2015) has laid a foundation in its vision stating that “digital transformation is essential to transform Nepal into an information and knowledge-based society” (GoN, 2015). This policy has mentioned that ICT integration should go in all levels of education including the operationalization of online and distance education, blended education and open university infrastructure (GoN, 2015). Another policy Digital Nepal Framework 2019 envisioned that ICT-enabled teaching-learning environments, use and integration of online learning platforms and digitized assessment systems are the roadmaps for sustained higher education. With these policies and guidelines, TU implicitly aligns its teaching learning, pedagogy, assessment and institutional strategies with these national priorities.

Higher education in the international context are largely shaped by ICT intervention. For example, UNESCO's Guidelines for ICT in Education Policies has provided a comprehensive blueprint for designing curriculum pedagogy and assessment, in which the core value is emphasising human-centred technology use (UNESCO, 2023). The UNESCO ICT Competency Framework for Teachers (ICT-CFT) sets out the competencies that educators must acquire to effectively integrate digital tools into their professional work, like curriculum, pedagogy and assessment (UNESCO, 2023). More recently, UNESCO structured this framework around six pillars, the pillars are connectivity, content, competency, governance, inclusion, and wellbeing. This framework is also for digital transformation journeys in higher education context. In addition the OECD Digital Education Outlook 2023 (OECD, 2023) provides a comparative analysis of how universities are integrating effective digital education ecosystems, including Learning Management Systems, and digital assessment platforms.

TU Vision 2030 is Tribhuvan University's institutional document which has shown commitment in digital transformation in TU's curriculum, pedagogy and assessment. Through its strategic direction for a decade, the Vision mentioned that ICT-related educational practices are a central priority in the university (TU, 2023). For example, in this vision document, it is noted that “TU's basic aim regarding AI and ICT integration in curriculum pedagogy and assessment are to enhance quality and

access higher through digital and transformative learning. This initiative also includes automation in examination processes” (TU, 2023). The vision document emphasizes faculties and staff to move toward ‘personalized and interactive learning experiences’ through the deployment of a LMS. This LMS deployment helps to streamline course content delivery, exam automation and student collaboration. It aims to develop a more engaged and better interactive online/onsite/hybrid/blended learning experience within Virtual Learning Environments (VLE). For this the vision document mentioned that TU prioritizes training programs for both staff, faculty and students to equip them with the necessary digital skills (TU, 2023).

The Open and Distance Education Centre (ODEC), established by TU’s Executive Council in 2015, represents one of the major ICT-driven initiatives in TU toward integration of ICT in curriculum, pedagogy and assessment. ODEC was created with an explicit mandate to provide quality higher education to the students who, due to geographic, professional, or socioeconomic constraints, cannot access conventional campus-based programmes (ODEC, 2021). Its target beneficiaries include working adults seeking to upgrade qualifications, students in remote districts without local campus access, and professionals requiring continuing education. ODEC’s institutional goals include establishing and operationalizing a digital-repository of text, images, audio, videos, interactive contents, animation and simulations to support quality learning, training professionals in digital-pedagogy and digital-education. Within the Open and Distance Education Centre (ODEC), MS Teams and Moodle were used as the primary learning environment through which distance and online learners access materials, interact with faculty, and undertake continuous assessments (ODEC, 2021). ODEC’s pedagogical model combines a brief face-to-face orientation with sustained virtual classroom interaction via Moodle asynchronous engagement, and connected by MS Teams for synchronized interaction.

Aligning the aforementioned institutional, national and international standard and globally recognized frameworks provide a set benchmark for integrating and analyzing the tribhuvan university higher education context and terms of ICT integration in pedagogy and assessment. Therefore, with the reference to “Integration of ICT in Pedagogy and Assessment in Tribhuvan University” this article addresses the key questions (a) what initiatives has TU taken in Pedagogy and Assessment? What strategic action should be taken for the ICT and AI integrated professional governance? To answer these research questions, this paper used policy and planning documents in both international, national and TU context; also peer-reviewed research articles related to TU context were reviewed.

Methodology

The paper is grounded in a multi-paradigmatic approach, integrating positivism for quantitative data and interpretivism to capture subjective social realities (Creswell et al., 2018; Denzin & Lincoln, 2018). The Positivist Paradigm is utilized to understand the functional links between TU’s initiative and technical skills of both faculties, staff and students on integration of ICT in Pedagogy

and Assessment in Tribhuvan University. The Interpretive paradigm is used for the context-based understanding of recent beliefs and values on ICT-integrated pedagogy and assessment. The Critical Paradigm is also used to examine the current opportunities and challenges regarding the institutional structures and digital governance regarding the ICT integration in Pedagogy and Assessment in Tribhuvan University. Within this scope, the paper is based largely on document analysis research methodology; therefore, this article is descriptive in nature. The reviewed documents are given below.

Table 1: Documents reviewed for this work

Documents	Focus and Intent
Tribhuvan University	
TU Vision 2030 (2023)	Outlines long-term strategic goals to enhance university quality and global ranking.
Implementation Plan 2024–2028	Provides actionable steps and a roadmap for executing the Vision 2030 objectives.
ODEC Guideline	Establishes the structure for the Open and Distance Education Centre to expand digital learning access.
National (Nepal)	
National ICT Policy 2015	A nationwide framework aiming to transform Nepal into an information and knowledge-based society.
Digital Nepal Framework 2019	A roadmap for digital transformation across eight sectors, including education (the “1-8-80” model).
International	
UNESCO ICT in Education Guidelines	Global principles for human-centered technology adoption, focusing on equity and inclusion.
OECD Digital Education Outlook 2023	Analyzes digital education ecosystems and the governance of digital tools on a global scale.
MathEd537	Online course https://www.bedprasaddhakal.com.np/p/differential-geometry.html

The Technological Pedagogical Content Knowledge (TPACK) is used as theoretical model to evaluate (a) what initiatives has TU taken in Pedagogy and Assessment? What strategic action be taken for the ICT and AI integrated professional governance? This TPACK framework helps to understand how institution and teachers integrate their knowledge of subject matter, pedagogy, and assessment using technology to create effective learning environments (Herring et al., 2014; Koehler et al., 2014;

Mishra et al., 2007). This lens views TU's digital ecosystem as an interconnected network of inputs like infrastructure, processes such as pedagogy/assessment, and outputs such as graduates/results.

For this review based article, the document selection process was systematic. For this a systematic search was conducted across academic databases (NepJOL, ProQuest, Google Scholar, ResearchGate) through TU's official library portal "MyLOFT" using keywords such as "ICT Tribhuvan University, Digital Pedagogy, Digital Assessment, Education Reform TU". The documents published between 2015 and 2025, focus specifically on higher education in Nepal (with a priority on TU), and address either pedagogical practices or assessment/evaluation systems were considered as inclusion criteria. Papers focusing solely on primary/secondary education or technical manuals without pedagogical context were excluded.

The analysis follows a systematic, six-phase thematic approach, the approach were (a) Familiarization: repeated reading of the selected documents to identify key institutional milestones and recurring research findings (b) coding: generating initial codes such as "Infrastructure, Moodle ,Pedagogy, Assessment, Motivation". (c) theme development: clustering codes into broader themes, such as "Shift to Blended Learning" or "Pedagogy Reform" (d) Reviewing Themes: Checking the themes against the original documents to ensure they accurately represent the data (e) defining and naming: Refining the themes to align with the research questions and (f) synthesis and reporting: Integrating findings from documents with evidence from empirical studies.

The Trustworthiness and Reliability of the study were maintained through (a) Triangulation: comparing "official" claims in policy documents with findings. (b) Systematic Search: ensuring a wide range of documents to avoid bias (c) Member Checking: comparing the findings with the high-level recommendations like UNESCO to ensure the analysis is contextually and globally relevant.

This review has used institutional documents and some published research research based on systematic review methodology, therefore, there was no ethical approval from participants. However, this study has maintained academic integrity ensuring accurate facts and references and citations for the information/quotations used.

Results

Based on the review and authors experience while working with the High level Committee, Tribhuvan University (TU) have initiated digital transformation in curriculum, pedagogy and assessment, shifting from a traditional/conventional teacher led instruction based teaching learning practice to a technologically based LMS integrated engaged and interactive learning experiences. The immediate example of this initiative is the scaling of digital infrastructure, through the deployment of Microsoft Teams for over 1.5 million accounts and LMS for digital pedagogy. The major findings of this paper are as follows.

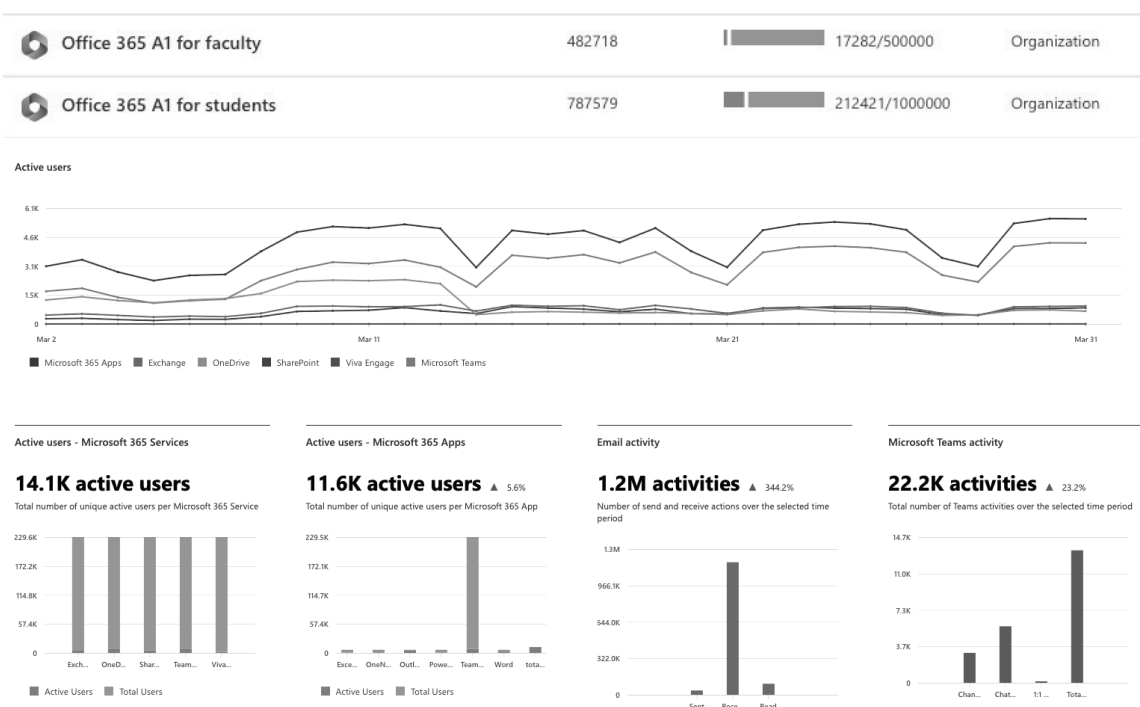


Figure1: subdomain status

Scaling of Digital Infrastructure

There was a growing concern within and between TU's authorities regarding integrating ICT in TU's ecosystem; curriculum, pedagogy, assessment, including library and office automation (ODEC, 2021; TU, 2023). During the Covid 19 context, this concern has been operationalized. The COVID-19 pandemic, which forced the closure of all physical campuses in Nepal from March 2020, TU's digital readiness began to respond to the closure of face to face (F2F) classes. For example, Tribhuvan University has institutionalized Microsoft Teams for over 1.5 million user accounts and adopted Moodle as the university-wide Learning Management System (LMS) to facilitate onsite, online and virtual learning environments (ODEC, 2021).

This deployment can be one of the largest institutional digital communication initiatives in the university ecosystem in South Asia. Within this TU's most consequential ICT deployments has been the university-wide rollout of (a) user email with tu.edu.np domain for its authorities, faculties, staff and students (b) Microsoft Teams as a primary platform for digital communication, collaboration, online and blended teaching learning activities, which is an initial stage of TPACK (Herring et al., 2014; Koehler et al., 2014; Mishra et al., 2007).

However, the Microsoft 365 tenant showed a significant disparity between the total user base and actual service engagement. While writing this paper, one screenshot was taken during the period for March 2-31, 2026, and this shows that there is nearly 230,000 total users active during this

period, among them only 14.1K (approximately 6%) are classified as more active across Microsoft 365 services. The report shows that Microsoft Teams has been extensively used for ICT integrated classes with the integration of Office 365 tools like Word, PowerPoint, and OneNote.

Tribhuvan University authorities have formed a High Level Committee for “Online/blended Education Management and Monitoring” to operationalize the university’s digital infrastructure during Covid-19 context. The author is also one of the members of this committee. This committee has worked with global authority of the tu.edu.np domain to streamline official subdomain for all entities and its email creation. The number of the subdomain within TU ICT infrastructure are as follows.

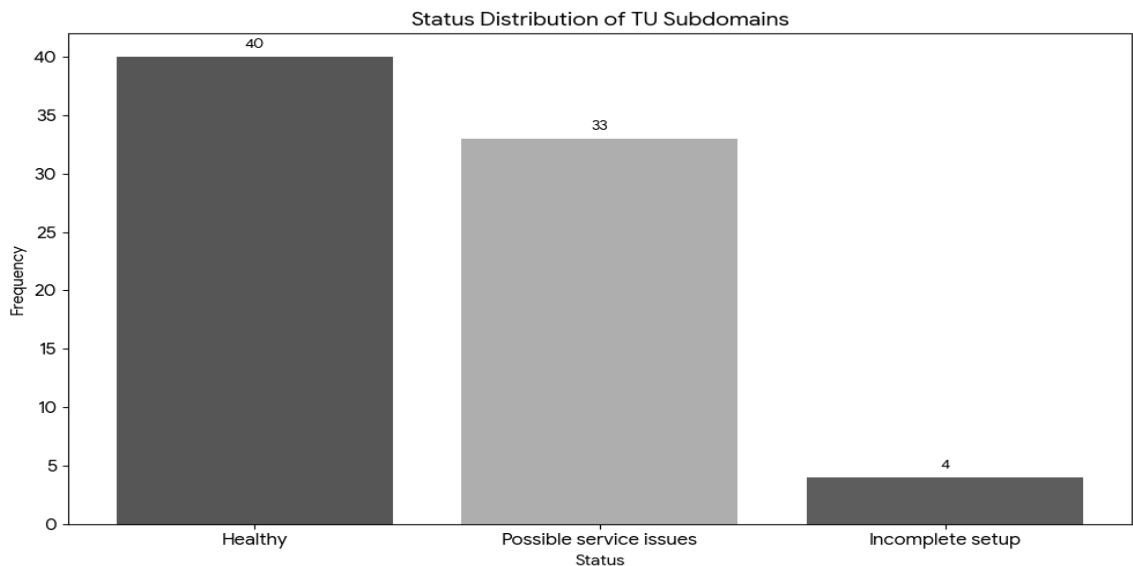


Figure 2: subdomain status in TU

Recently, the analysis of the Microsoft 365 tenant environment showed that approximately 52% of subdomains maintain a “Healthy” status, while others are either with “Possible service issues” or “Incomplete setup” configurations. This evidence suggests AI based robust automated verification and supporting protocols to ensure that all domain subdomains should work with a “Healthy” environment.

It is found that TU’s High Level Committee mobilized tu.edu.np and Moodle LMS resources to provide online professional development training to approximately 8,000 teachers within its constituent campuses across the nation. These training programmes focused on equipping faculty with the practical skills needed to deliver teaching through Microsoft Teams, Moodle, and Zoom digital platforms. The training was also provided to design online assessments both for selected response items and constructed response items. For example, some of the lists are as below.

- Teams Trainer Training (ToT): Specialized training for selected “trainers” to ensure decentralized

support for the MS Teams across all campuses.

- Faculty Training Series: Systematic training sessions for faculty members (in groups of 50) on using Microsoft Teams and Office 365 tools for teaching.
- Moodle Trainer Training (ToT): Specialized training for selected “trainers” to ensure decentralized support for the Moodle LMS across all campuses.
- Staff IT Orientation: Training central office staff and technical personnel on managing the new digital ecosystem.

It is found that the training to approx 8,000 teachers across the TU network, in digital pedagogy, curriculum, pedagogy and assessment within the span of a pandemic and beyond proves a significant institutional coordination, resource mobilization for digital transformation. Research also shows that higher education digitalization in Nepal has identified well-structured training and strong institutional support as among the most significant determinants of effective ICT use by faculty (Thapa & Khatri, 2023). This evidence supports that TU’s COVID-19 training initiative cum induction training can laid a ICT rich foundation within TU network for longer-term pedagogical shifts in digital competency to run AI and ICT integrated curriculum pedagogy and assessment, which is a core essence of TPACK (Herring et al., 2014; Koehler et al., 2014; Mishra et al., 2007).

During Covid 19 context, the High Level Committee worked for Student Data Discounts package with formal coordination with Nepal Telecom and Ncell to provide discounted data packages for students to facilitate participation in online learning, for example it was initially launched to use MS Teams, Zoom and Google Meet. In addition, the High Level Committee working in partnership with the Nepal Research and Education Network (NREN) has distributed secure free Zoom licenses for faculty and departments to conduct virtual classrooms.

During Covid-19 context, the High Level Committee worked to deploy the ProQuest research database via the TU Central Library to ensure students and faculty can access global academic resources remotely. For example, it is said that “The library implemented RemoteXs software, allowing 24/7 access to the ProQuest database and more than 125,000 automated records” (Sharma, 2022). Later this deployment is expanded with a number of rich database and anti-plagiarism software like turnitin and “MyLoFT”, also discussed in TPACK (Herring et al., 2014; Koehler et al., 2014; Mishra et al., 2007).

Moodle LMS Platform for Pedagogy and Assessment

Tribhuvan University has used the Modular Object-Oriented Dynamic Learning Environment (MOODLE/Moodle) as a learning management system (LMS) for the governance of digital pedagogy and assessment related curricular activities (ODEC, 2021). Moodle is open source LMS that empower faculties to create structured online/onsite.hybrid/blended courses, upload learning

resources, designing learning activities, designing learning assessments, and using data from learning (Dhakal, 2023a). For students, this Moodle as LMS provides a learning dashboard through which learners can access course content, work/submit assignments, can participate in learning activities, and receive feedback (Dhakal, 2023a). In literature, it is noted that Moodle's assessment system can be a standard benchmark for both teachers and students to provide formative feedback to improve student performance in chain/subsequent attempts (OECD, 2023). This Moodle platform being used in number of campuses in TU, for example Central Department of Education (cded.tu.edu.np), as exemplified by TPACK (Herring et al., 2014; Koehler et al., 2014; Mishra et al., 2007).

There are a number of researchers which have evidenced that teachers and students are using Moodle as LMS to create a more engaged and better interactive learning experience. These studies have found that AI and ICT-integrated pedagogical activities are shifting traditional onw way type of instructional practice toward a more constructivist, more engaged and better interactive learning experiences with digital content, for example: use can now collaborate with peers, and receive timely and automated feedback (Dhakal, 2023a, 2023b). However, in a research, it is mentioned that

“approximately 69% of students across multiple universities in Nepal, including TU, perceived online learning as less effective than physical classroom learning during the pandemic. While undergraduate and master’s students were less satisfied, M.Phil. and Ph.D. students were highly enthusiastic and found online learning to be very advantageous” (Sah, 2021).

During Covid 19 context, TU has used alternative assessment for its regular exam. The Dean's Office and the ODEC collaborate together to conduct alternative/online examinations. This online exam has been done in the Faculty of Education for the objective type items and the Institute of Forestry for the subjective type written exam, both of them were successfully implemented. The tools used in these exams were MS Teams for Monitoring and Moodle LMS for exam automation. However, Integrated Educational Management Information System (IEMIS) to connect all TU departments and affiliated campuses under a single management umbrella is to be the next step of this deployment. The OECD (2023) identifies “EMIS (IEMIS) as a critical component of effective digital education ecosystems”, which is also an integral part of TPACK (Herring et al., 2014; Koehler et al., 2014; Mishra et al., 2007).

Paradigmatic Shift in Pedagogy and Assessment

Tribhuvan University's (TU) has started to transform its “curriculum, pedagogy and assessment” with a set milestone from traditional/conventional instruction to a technologically integrated learning experience. A primary result of these initiatives is the deployment of Microsoft Teams with over 1.5 million users accounts, and integration of Moodle as Learning Management System (LMS) for online/onsite/hybrid/blended learning experience. These MS Teams and Moodle tools have provided

an anytime anywhere teaching learning opportunity moving from “lecture and drill” mode of content delivery toward constructivist engaged and interactive online/onsite/hybrid/blended user experience. With these initiatives, several disciplinary faculties are increasingly utilizing flipped pedagogy, and interactive simulations to support student engagement. For example a course “Differential Geometry: Math Ed 537”, a course of Master Program in Mathematics Education, the landing page is captured in Figure 3.

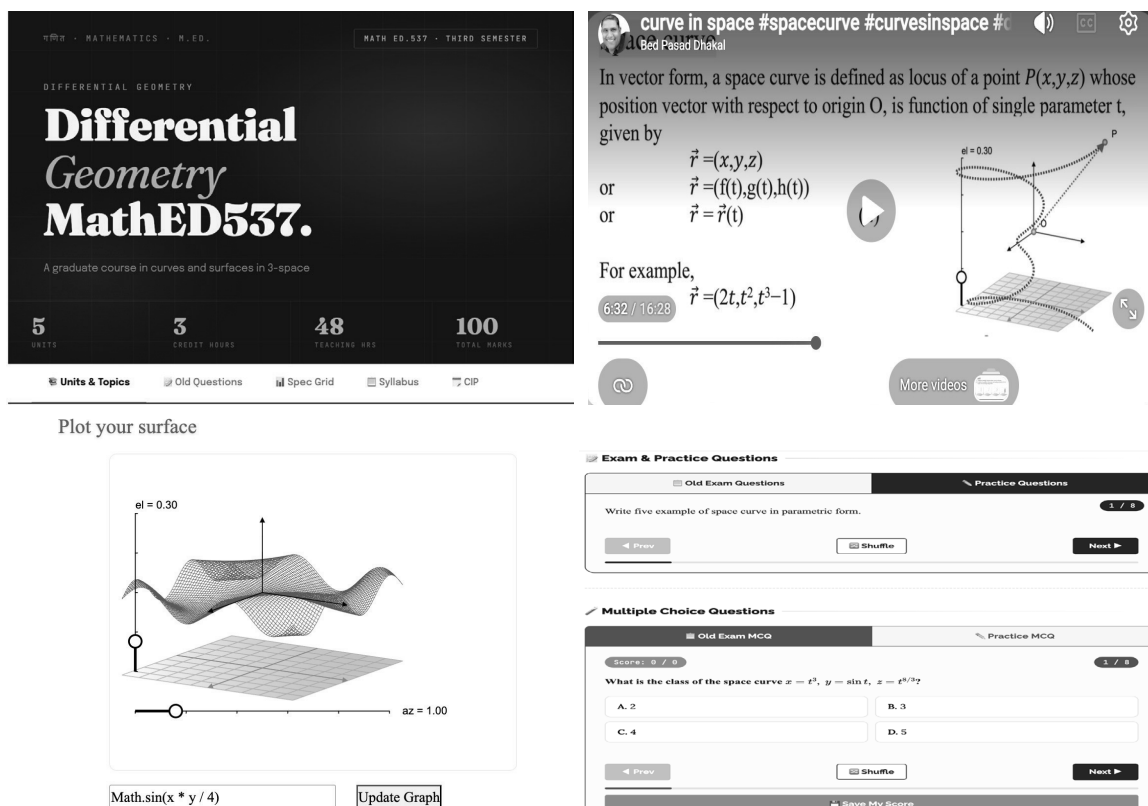


Figure 3: Course Landing Page

The above screenshot shows that pedagogical transformations in TU’s academic Program are driven by engaged interactive AI and ICT integrated flipped pedagogy models. The example of the “Differential Geometry” course (Math Ed 537) has demonstrated this approach. This course has utilized python, java and HTML for automated course delivery with real-time 3D curve and surface plotting and automated digital assessments. It can be said that this automated and integrated approach of course deployment aims to enhance student learning engagement providing an opportunity to actively visualize concept definitions rather than passively consuming information, which is also the essence of digital pedagogy (Dhakal, 2023a).

Talking about assessment, it is found that TU faculties have started to utilize various and versatile assessment tools. These tools include Quizzes, Discussions, and Assignments for both Selected Response/SR and Constructed Response/CR type items. These tools have been deployed with various grading methods, for example (a) auto graded assessment, (b) peer graded assessment, (c) teacher graded assessment, and (d) social graded assessment. These various modalities can be summarized in Figure 4.

	SR	CR	Auto Graded	Peer-Graded	Teacher-Graded	Social-Graded
QUIZ	x	x	x	x	x	x
Discussion	x	x		x	x	x
Assignment	x	x	x	x	x	x
Alternate	?	?	?	?	?	?

Figure 4: Assessment tools

UNESCO and the OECD guidelines have also discussed a versatile model of assessment tools. According to UNESCO, “digital assessment is not merely about digitizing paper tests” it is more about leveraging technology to support a “knowledge creation” (UNESCO, 2023). By utilizing “Social-Graded” and “Peer-Graded” learning activities, the TU digital pedagogy approach reflects a digital transformatory move toward ICT integrated formative, ongoing collaborative learning experience, where assessment becomes means for ends; a benchmark for summative assessment.

The OECD’s frameworks also emphasize self-regulated learning and collaborative learning. The utilization of Constructed Response (CR) and Selected Response (SR) items focusing on higher-order thinking skills (HOTS) foster 21st-century skills(ODEC, 2021; OECD, 2023, 2025). As OECD notes: “alternate assessments include digital portfolios, gamified simulations, or AI-driven adaptive learning paths” that provide real-time feedback and enhance learning participation, which is also articulated by TPACK (Herring et al., 2014; Koehler et al., 2014; Mishra et al., 2007).

As UNESCO mentioned, “the goal of assessment is to empower students to become expert learners” (UNESCO, 2023). In this context, “Auto-Grading learning activities” which were deployed through AI and ICT driven LMS, it provides learner immediate feedback, while “Teacher and Peer-Grading” provide rich qualitative insights, these both are the core essence of digital pedagogy as mentioned in TPACK (Herring et al., 2014; Koehler et al., 2014; Mishra et al., 2007), and also discussed in research work (Dhakal, 2023b).

So, as per the matrix,it can be seen that a holistic ecosystem of assessment was deployed in TU’s curriculum, pedagogy and assessment framework. By integrating social and peer grading, the

framework acknowledges that learning is a social act. This mirrors OECD recommendations to foster “co-agency” between students and teachers (ODEC, 2021; OECD, 2023, 2025). Therefore, it can be understood that assessments serve as “GPS points” in this digital learning environment where this learning journey is helping students navigate complex information landscapes.

Challenges and Constraints

Tribhuvan University has made significant progress in integration of ICT both in curriculum, pedagogy and assessment. Despite the substantial progress, the integration of ICT is yet to be at par because of the number of challenges it faces. TU has provided ICT digital pedagogy training to 8,000 of its teachers and staff during COVID-19, it was a big milestone in the journey of digital transformation. Later with University Grants Commission (UGC) support, under the framework of the Nurturing Excellence in Higher Education Program (NEHEP), TU recognized that faculty competence is the cornerstone of academic quality, so TU delivered comprehensive pedagogy and assessment related training to approximately 1,000 faculty members within its faculties and institutes. This capacity enhancement training cum workshop supported faculties for deploying multimedia format resources, automated assessment, and 21st century skills. This can be a foundation for institutional growth towards digital transformation.

Research conducted within TU’s network has found that, while younger faculty and those in urban campuses show higher rates of ICT adoption, older faculty and those in resource-constrained environments continue to rely primarily on conventional lecture-based methods (Kandel, 2025). Therefore, it can be noted that sustained improvement in pedagogical ICT use and integration in curriculum, pedagogy and assessment requires not one-time training but ongoing, structured, and institutionally supported professional development training cum workshop. This training cum workshop must also align with the international standard, for example UNESCO ICT-CFT competency levels (UNESCO, 2023).

Effective digital transformation requires coherent institutional governance: clear ownership of ICT strategy, dedicated budgetary allocation, and effective coordination across TU’s many constituent departments, faculties, and affiliated campuses. At present, ICT initiatives at TU have emerged from multiple sources, for example, Covid Context, NEHEP, and project related national and international partnerships. The OECD (2023) notes that the most effective digital education systems are those with coherent institutional strategies for the deployment of Faculty Digital Competency training cum workshop, in addition to the collection and utilization of various supports.

TU serves students from diverse socioeconomic, linguistic, and geographic backgrounds. Access to personal devices, data plans, and digital literacy are also very important for the effective integration of ICT in curriculum pedagogy and assessment. In this concern, UNESCO’s digital transformation framework (UNESCO, 2023) places inclusion as a central pillar because technology unaccompanied

by equity measures can entrench rather than reduce educational inequality. TU's digital strategy must therefore be deployed with high concern related to device access, data subsidies, and ICT literacy programmes targeted at all kinds of marginalized student groups.

Future Directions

The global scenario is highly leading by AI and ICT tools in educational governance, particularly in pedagogy and assessment. Tribhuvan University, being a national high coverage university in Nepal, must meet internationally recognized standards in ICT and AI integration too. Therefore TU must invest systematically in building robust engines for pedagogy and assessment framework centrally, which need to be adopted locally in all its constituent and affiliated campuses. For example, it is known that Moodle has been adopted by TU, but it is found that its use remained uneven across faculties and departments. Therefore, a structured rollout plan needs to be done to establish minimum standards to integrate ICT both in curriculum, pedagogy and assessment. Particular attention should be paid to “more engaged and better interactive learning experience” integrating Moodle's assessment tools in automation, for example quizzes, assignment, rubric-based grading and peer graded activities both (a) to reduce the administrative burden for portfolio-maintenance and (b) instant and improving quality feedback. This can be aligned with OECD recommendations on digital assessment (OECD, 2023).

Building on the COVID-era training of 8,000 teachers, followed by teacher induction training, and NEHEP supported teacher professional competency training, TU should establish a structured Faculty Digital Professional Development Programme aligned with its mission vision and “Pedagogy and Assessment” framework inline with the UNESCO ICT-CFT framework. This programme should offer tiered training pathways from basic digital literacy through advanced ICT-integrated pedagogy and assessment with incentive structures, for example recognition in performance appraisals and promotion criteria. Such practice rewards faculties for sustained engagement with digital tool integrated teaching practice.

Tribhuvan university is a leading higher education institution in Nepal. For TU to become a leading digital higher education institution, it must develop and distribute high-quality digital learning content. This includes the creation of Open Educational Resources (OERs) in Nepali and English across key disciplines. Open Educational Resources (OERs) can be (a) educational and interactive video lectures, (b) interactive learning content and (c) automated assessment tools. An institutional OER policy, informed by global best practice for example from UNESCO's OER Recommendation (2019), can be an initial roadmap for the effective governance for this content creation initiative.

Conclusion

Tribhuvan University has a pivotal institutional history in Nepal and across the globe. Yet there is a gap between current achievement and the international benchmarks articulated by UNESCO and the OECD in the domain of AI and ICT integration. Bridging this gap is urgent and it requires sustained, coordinated, and adequately resourced institutional transformation both in infrastructure and governance. Digital transformation at TU is urgent because TU is not just an institution of higher education — it is the main hope for millions of Nepali students who have no other realistic option for accessing quality higher education. Transforming TU, therefore, means transforming the future of an entire generation.

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Academic Audit and Quality Enhancement at Tribhuvan University

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Abstract

The quality of higher education is key to a nation's holistic development. Tribhuvan University (TU) is the oldest university of Nepal, which graduates around 78% of the students from Nepal. There is an absolute need to improve TU's academic and research quality to produce skilled graduates and develop technology for the country's development. In higher education institutions, academic audit has become an essential tool for ensuring quality control, accountability, and continuous improvement. An academic audit could be an important tool to achieve the major goals of TU as mentioned in Vision 2030. This article aims to explore the ideas and procedures for the implications of academic audit as a methodical way to achieve the goals of TU. Academic audits focus on quality standards of teaching and learning activities, curriculum development and implementation, student evaluation systems, research output, governance, infrastructure, and proper management of resources. Many studies suggest that good governance, better educational quality, research and innovation, resource management, and international distinguishability are all greatly enhanced by effective academic audit. On the basis of the reported results of other universities around the world, it can be concluded that academic audit should be incorporated as a quality enhancement tool in TU.

Keywords: Tribhuvan University, academic audit, academic audit of faculty, academic quality enhancement

Introduction

In today's global scenario, an institution that provides quality education to students needs to be 'Centre of Excellence'. This is not achieved through a regular process in the institutions, but it is the quality education developed in the institutions that contributes to the quality assurance process. Quality education can only be achieved through quality policy, which helps to develop a sound

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quality management system in the institutions. This quality policy should not be limited to teaching and learning, but it should also focus on research and training, skill development of students, faculty, and staff quality, and a broad range of activities that will help the students to face challenges and take up risks with courage. The outcome of these activities can be seen through the academic audit, which gives feedback that could be used for the improvement of the institutions.

TU, established in 1959, is one of the largest universities in the world in terms of its number of students and diversity of programs conducted through central departments, constituent campuses, and its affiliated colleges. Despite being the backbone of Nepal's higher education, TU is facing many challenges in improving the quality of academic programs through effective teaching and learning, research and innovation, governance, market-based curriculum, quality of graduates, and resource management. An academic audit ensures quality education by reviewing the standards of academic institutions. To achieve 'Centre of Excellence', an academic audit in Tribhuvan University is a must.

An academic audit is a routine process followed by campuses, departments, and the university to examine whether the existing academic programs, teaching methodologies, curriculum, quality of faculty, learning ability of students, research and innovation, and requirements of infrastructures and contribution to society meet the required standards to achieve the goals of the institution. Academic audit plays a key role in achieving higher rankings, developing globally competitive and skilled talent, and improving the institution's reputation in international platforms. It aims to boost education quality, not just check compliance. It also offers a clear, teacher-led system for reflection, review, and ongoing betterment, making sure the University's goals match up with student success and promote accountability. Therefore, academic audit uses evidence to improve quality and ensure the required standards.

Academic audit was started in the United Kingdom in the early 1990s, and in the mid-1990s it expanded to Europe and New Zealand. In Asia, Hong Kong started in the early 2000s, and after 2010, it became a global norm. In Nepal, accredited campuses submit an academic audit report to the University Grants Commission (UGC), according to their templates, but that does not cover matters related to the faculties of the institutions. Appointment of permanent faculties and promoting them on the basis of scores obtained during academic audit, not only motivates faculties for better productivity, but also improves the academic and research quality of the university or academic institutions.

Concept of Academic Audit

An academic audit is a scientific and self-regulating review of policies, academic and research activities, and their outcomes for achieving institutional goals and objectives. It evaluates broad dimensions of academic actions, such as curricular aspects, teaching-learning and evaluation, research and innovation, performance of faculties, support to students, and governance policies.

The academic audit primarily focuses on the effectiveness of the institution and academic quality.

The major determination of academic audit is to undergo strengths, weaknesses, opportunities, and threats (SWOT) analysis.

Rationale of Academic Audit

The fundamental drivers of academic audit include:

Continuous Quality Improvement

Academic audits prioritize regular quality enhancement by closely monitoring the academic practices, teaching methodologies, existing curriculum, and students' performance rather than focusing on compliance only. This encourages accountability and develops a routine system for professional growth and innovation. Additionally, it also creates a culture of excellence and transparency and strengthens quality improvement in different aspects like teaching, learning, research, and governance, etc.

Institutional Accountability

Academic audits evaluate whether colleges, faculties, and departments are working as per the goals and objectives of the institution or not. An academic audit also confirms if the institutions support a proper learning process through the optimum utilization of the resources. Audits examine various aspects of operating an institution – academic, administrative, governance, and financial – ensuring transparency and accountability among everyone involved. This audit highlights the outcomes of SWOT analysis and helps to mitigate errors and ensure everything is as per the required standards. This also strengthens trust from key stakeholders like government agencies, funders, accreditors, employers, students, and others in the community. These audits prioritize continued quality improvement, which boosts the credibility of the institution and helps build trust in higher education.

Benchmarking and Accreditation Readiness

An academic audit prepares educational institutions for accreditation and quality assurance. They let institutions evaluate their existing policies, processes, and outcomes against a defined set of quality standards and identify the best practices and lessons learnt, which help in decision-making and continued quality improvement. Academic audits encourage institutions to collect, review, and compile various documents, records, and data about learning, teaching, research, innovation, and student support. A complete documentation is maintained to show the evidence required to achieve the necessary standards for accreditation.

Optimized Resource Management

Academic audits provide a detailed analysis of activities and resource utilization by the institutions and identify best and weak practices in academics. The outcome of academic audits supports institutions in efficient use of available resources by focusing on value for money, identifying the cross-cutting measures, inefficiencies, and expenses that don't align with the institutional goals. Optimum utilization of resources strengthens sustainability, promotes innovation, and increases standards of organization.

Statement of Problem

Tribhuvan University is a big university in terms of the number of students and faculty. Despite the large number of students, TU is not getting a good rank in the Times Higher Education ranking. TU is getting very low points in teaching, and research publications are also not satisfactory in terms of the number of faculty, and it is far behind in terms of innovation and patenting. Many campuses don't have appropriate infrastructure and laboratories for teaching and research. To solve the above-mentioned problems, an academic audit will be the best tool, which assesses the academic environment, infrastructure, teaching, and learning; research and innovation, and resource management of the campuses. An academic audit highlights the gaps and provides correct data to change policy and management. Academic audit inspires the faculties to perform better in teaching, research, and service to the campuses. This will improve the academic quality of the university.

Objective of the Academic Audit

General Objective To boost the quality and effectiveness of teaching-learning processes, research activities, and institutional management to achieve institutional goals and ensure continuous improvement

Specific Objective

- To appraise the excellence of teaching, learning, evaluation, and curriculum execution.
- To verify obedience to institutional policies, regulatory requirements, and accreditation standards.
- To assess whether students are achieving the intended learning outcomes and graduate attributes.
- To recognize strengths, weaknesses, gaps, and opportunities for quality enhancement.
- To ensure that academic units effectively utilize resources and fulfill their educational mission.
- To review the effectiveness of teaching, learning, and evaluation, research output, professional growth, and contribution to society of faculty.
- To evaluate academic advising, counseling, library services, laboratories, and other support mechanisms for the students
- To examine whether curricula remain relevant, recent, and aligned to labor market needs.
- To provide consistent data for academic planning and policy formulation.
- To assess the quality, impact, and productivity of research, innovation, and scholarly activities.
- To evaluate the efficient use of human, physical, technological, and financial resources.
- To prepare institutions for external quality assessments, accreditation, and benchmarking exercises.

- To foster a culture of self-evaluation, transparency, and continuous quality improvement.
- To assess the satisfaction of students, employers, alumni, and other stakeholders.

Components of Academic Audit:

Generally, there are two types of academic audit: a) academic audit of the institution b) academic audit of the faculties.

Academic Audit of Institution

Key Areas of Evaluation

Audits meticulously examine the entire academic ecosystem, including:

Governance, leadership, and management: Institutional vision and leadership, strategy development and deployment, financial management and resource mobilization, internal quality assurance system.

Teachers Quality: Certified Faculty Development Programs should be organized regularly to enhance the quality of teaching to foster their skills. Encourage to acquire additional qualification and research degrees.

Curricular aspects: Relevance of course objectives, syllabus updates, and adaptability to industry/ social needs.

Teaching-learning and evaluation: Pedagogical methods, faculty competence, student-to-teacher ratios, and the integration of technology, fairness, transparency, and validity of continuous assessments and examinations.

Research innovation and extension: Promotion of research and facilities; resource mobilization for research; publications, patents, and research projects of faculty; research publication award; innovation ecosystem; consultancy and service to society; promotion based on research and innovation.

Infrastructure and learning resources: Well-managed classrooms, laboratory, library, e-library, ICT-enabled facilities, LMS facility, IT infrastructure, software, and databases, etc.

Student support and progression: Scholarship and awards, career counseling, capacity and skill development programs, redressal of students' grievances mechanism, sports, music, and recreation facility, engagement of alumni, support for job placement, and higher study.

Institutional values and best practices: Gender equity, environmental consciousness and sustainability, water conservation, waste management, green campuses

Internal Quality Assurance Cell (IQAC): Should be strong and is a permanent committee which needs to be active and develop effective mechanism to address all aspects of quality on a day-to-day basis.

Process of Academic Audit of Institution:

Pre-audit (Planning): Internal Quality Assurance Cells (IQAC) set the scope and objectives of the audit, and IQAC prepares the self-study report (SSR). An audit team (comprising internal peers and external experts) is formed, and data collection and questionnaires are prepared.

During audit (Investigation): The audit team reviews the Self-Study Report (SSR), conducts document checks, observes teaching-learning practices, and performs a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis.

Report & action plan: The team identifies bottlenecks and drafts a final report outlining findings and actionable recommendations for improvement.

Academic Audit of Faculties

An academic audit of faculties is a quality-assurance process that evaluates faculty performance, research output, teaching-learning methodologies, and adherence to the curriculum. Designed for self-reflection and continuous improvement rather than a fault-finding mission, it is typically managed by an institution's Internal Quality Assurance Cell (IQAC).

Key Areas of Faculty Evaluation

Teaching & Learning: Obedience to syllabus, course file maintenance, pass percentages, and use of innovative teaching methods are the parameters to evaluate the teaching and learning process.

Students' evaluation is an easy and effective method for assessing faculty's teaching and learning potential. Students will evaluate professors based on the following criteria:

a) Proper knowledge of the subject, b) An enthusiastic attitude towards the job, c) Competency in the task of teaching, d) Readiness to accept new technologies, e) Ability to serve as a role model, f) Ability to communicate easily and effectively, g) Ability to manage the course as well as the classroom, h) Interest in extension activities, i) Ability to perform effective evaluation, j) Scientific approach towards life, and k) Interest in various skills and professional development programs.

Research & Publications: Number of peer-reviewed papers, patents, student supervised, books published, research grants, and conference participations.

Table-1: Key Performance Indicators (KPI) for Research

Criteria	Research Paper Publications	Patents/innovation	Student supervised	Research funding
Weightage	40%	10%	20%	30%

The University can give a target to the faculty for research, publications, patents, grants, etc., as shown in Table-2.

Table-2: Key KPI targets of research given to faculties (Out of 100)*

Criteria	Assistant Professor	Associate Professor	Professor
a. Research Papers Published in Impact Factor Journals	<u>Point:40</u> Two numbers as corresponding or first author in Scimago-ranked journals 25% of the above-cited scores for co-authorship	<u>Point: 40</u> Four numbers as corresponding or first author in Scimago-ranked journals 25% of the above-cited scores for co-authorship	<u>Point: 40</u> Six numbers as corresponding or first author in Scimago-ranked journals 25% of the above-cited scores for co-authorship
b. Patents/products	Point: 10 1 number(Applied)	Point: 10 1 number(granted)	Point: 10 1 number(granted)
c. B. Sc./Master/ Ph.D. supervised	Point: 20 Four B. Sc. Project Work Twomasters or one Ph.D. 25%score for Co-supervisor (Ph.D.: 20, master's/ bachelor: 5)	Point: 20 Four B. Sc. Four masters and one Ph.D.	Point: 20 Six masters and one Ph.D.
d. Research Funding from External Sources	Point:30	Point: 30	Point: 30
(i) Principal Investigator	Project funding obtained 0.5 million or more	Project funding obtained one million or more	Project funding obtained Two million or more
(ii) Co-Principal investigator	50 % of the above-cited score per grant	50 % of the above-cited score per grant	50 % of the above-cited score per grant

***This is just an example; a different university may have different KPI**

Service to Institution: Involvement in curriculum design, examination duties, student mentoring, and administrative responsibilities, IQAC, RMC, SAT, etc.

Table-3: KPI Set for Faculties

Criteria	Research and innovation	Teaching (evaluation by students)	Service to the institution
Weightage	40%	50%	10%

KPI can be different for different subjects and campuses, like for the Central Departments, more weightage can be given to research, and in campuses where only an undergraduate program is running, more weight age can be given to teaching. For the Science and Technology, medicine, and engineering faculties, more weight age can be given to innovation as compared to the Arts and Management faculties. Some additional indices for the academic audit of faculties are: i) citation index: h-index ii) expert lecture organization iii) social outreach activities iv) collaboration with industry v) career progression of the outgoing students vi) books and book chapters in international publications vii) national presence: working in different national policy-making committees viii) international presence: as a visiting professor, board member, research collaboration ix) editor of national/international journals

The Audit Process

- **Self-Study Report (SSR):** Faculty members compile self-appraisals and supporting evidence of their academic activities.
- **Internal Review:** The Internal Quality Assurance Cell assesses the data against predefined institutional benchmarks.
- **External Peer Review:** External subject matter experts review the documentation and may conduct on-site or online evaluations.
- **Action Plan:** The audit team generates a report with recommendations and corrective actions to improve educational delivery.

Discussion

The growing need for quality assurance in higher education has made academic audit an important instrument for organizational development and quality management in educational organizations. Academic audit is not only related to the compliance of institutions but also acts as a useful strategy aimed at continuous quality improvement. Thus, academic audit in Tribhuvan University (TU) may help to solve some crucial problems associated with academic quality, organization and governance, resource management, and stakeholders' satisfaction.

Another advantage of academic audit refers to its ability to make the decision-making process evidence-based. Most universities tend to follow routine procedures without considering their effectiveness. Through academic audit, which implies analyzing such factors as the learning-teaching

process, relevance of curriculum, students' performance, and the results of research work, higher education organizations have an opportunity to obtain reliable information about their functioning and improve their activities. An academic audit can be especially beneficial for TU, where academic operations are distributed among many campuses and colleges.

The academic audit process also plays a crucial role in promoting the accountability of institutions. Institutions are accountable not only to the regulators and financial agencies but also to students, parents, employees, and the general population. Through regular audits, there is an increased level of accountability through the recording of academic success, noting deficiencies, and proposing areas for improvement. In today's competitive world of higher education, this aspect of accountability is becoming even more vital.

A second key benefit involves the improvement of teaching and learning processes. Through the audit process, the effectiveness of learning procedures can be analyzed. The results may lead instructors to explore new techniques in terms of pedagogy, use of information technology, and professional development. Overall, the process can lead to the development of a learner-focused approach to education that will improve learning outcomes.

Moreover, for the effectiveness of academic audit, there is a need for institutional commitment and follow-through. Audit reports will not contribute to quality improvement until their recommendations are incorporated into effective policies and plans. For this reason, it is necessary for the leadership of the universities to incorporate audit findings into their planning, budgeting, and performance evaluation processes. Internal Quality Assurance Cells (IQACs) of the campus and department levels can play a crucial role in this purpose.

From a global perspective, academic audit aligns with the evolving methods of higher education management worldwide, recognizing quality enhancement as an ongoing effort that requires the involvement of all stakeholders within educational institutions. On an international scale, universities are now placing greater emphasis on internal quality assurance to support the external accreditation process. In some universities, universities hire faculty in a tenure-track system, then the university does an academic audit of the faculty for 5-7 years, and on the basis of the academic audit report, the faculty will be tenured (permanent). If the academic audit report is not satisfactory, the faculty member's job will be discontinued. The significance of academic audit in the processes of quality assurance and accreditation should also be acknowledged. The Quality Assurance and Accreditation (QAA) system, designed for Nepalese institutions, is based on self-evaluation, enhancement, and compliance with established quality standards. An academic audit will support the effective operation of the QAA framework by offering documented proof of the organization's performance. Institutions that regularly perform academic audits will find it more straightforward to navigate the accreditation process, as they possess thorough documentation and are committed to ongoing

quality improvement. Therefore, by adopting academic audit practices, Tribhuvan University can strengthen its culture of quality.

The process of implementing academic audit in universities can pose several challenges. These problems can include resistance to evaluation, poor documentation practices, inadequate budgets, and inadequate quality assurance skills. University professors will likely view academic audits as punishment rather than improvement. Therefore, it is essential to create an environment in which academic audit is seen as an interactive tool for improvement.

On the whole, the application of academic audit can make a major contribution towards ensuring academic excellence, building confidence among stakeholders, and promoting sustainability within Tribhuvan University. If TU gives key performance targets to the faculty, the academic audit and promotion of faculty based on academic audit report, university's performance will be highly improved.

Expected Outcomes

Implementation of academic audit at Tribhuvan University is expected to produce several positive outcomes:

- Teaching quality improvement
- Students will learn better
- Quality and productivity of research will be improved
- Governance and management policy will be improved
- Transparency and accountability within the university will be developed
- Stakeholders will be satisfied
- Prepare for accreditation
- Founding of quality culture
- Data for decision making
- Incessant progress of institutions

Challenges in Implementing Academic Audit

Several challenges may arise during implementation:

- Resistance to change
- Lack of awareness of audit processes
- Insufficient infrastructure and resources

- Insufficient training of auditors
- Weak documentation systems
- Lack of commitment from faculty members
- Lack of institutional commitment

The University requires strong leadership, stakeholder engagement, capacity building, and policy support.

Strategies for Effective Implementation

The following strategies are suggested to induct academic audit at Tribhuvan University:

- Develop a university-wide academic audit framework.
- Establish Internal Quality Assurance Cells (IQACs) in all campuses
- Strengthen the Internal Quality Assurance Center of the Tribhuvan University
- Conduct training on quality assurance and audit regularly
- Integrate audit conclusions into strategic planning.
- Inspire stakeholder participation.
- Digitized the documentation and monitoring.
- A report of academic audit should be implemented for the development plan of the campuses
- Promotion of faculties should be based on academic audit results

Conclusion

In short, academic audit is one of the most effective tools available to improve the quality, accountability, and efficiency of higher education institutions.

As far as Tribhuvan University is concerned, the adoption of an academic audit approach will help in building a process-oriented system to evaluate academic performance and facilitate its improvement. If TU makes faculty permanent and promotes to higher posts based on academic audit of faculty, the quality of teaching, research, and innovation will be highly improved. The introduction of academic audit will definitely contribute to achieving the university's strategic goals and improving the overall quality assurance system.

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Internationalization of Tribhuvan University: Current Status, Challenges, and Ways Forward

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Abstract

Tribhuvan University (TU) that caters for nearly four-fifth of the total students in higher education in Nepal has prioritized internationalization in policies and vision documents, however, systematic efforts to assess status of internationalization is not yet made. In this context, this article assessed status of internationalization, identified challenges, and recommended strategic areas for interventions required. Current status of internationalization is assessed as 'Emerging-Developing' with a composite score of 2.81/5, in which key contributors in decreasing order of contribution are policy and institutional provisions (4/5), international partnership and global engagement (3.5/5), international research collaboration (3/5), curricula and teaching/learning practices (2.5/5), global visibility (2.5/5), international students and faculties (2/5), and institutional capacity (2/5). Several challenges are identified and 40 strategic actions/interventions associated with five strategic areas are recommended for improving the internationalization of the university. This assessment is expected to be a baseline for improving internationalization of TU.

1. Introduction

The emergence of global university rankings, international research networks, and digital learning platforms has reshaped the role of higher education institutions (UNESCO, 2009). Accordingly, internationalization has evolved as a strategic means of transforming higher education over the years (Tran et al., 2023). Universities began to incorporate an international vision into their agenda in the 1970s; however, the term 'internationalization' became widely used in higher education around the 1980s (Prieto-Gutiérrez, 2024). It expanded further through diverse mechanisms, including international student and faculty mobility, transnational education, international research collaboration, joint and dual degree programs, internationally benchmarked curricula, and the use of digital technologies for global learning (Altbach & Knight, 2007). Gradually, it moved towards a comprehensive transformation of institutional culture and operations.

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Internationalization generally refers to a deliberate process of integrating multi-cultural, and international dimensions into university's overall purpose, function and delivery (Marinoni and Pina-Cadnona, 2024). It highlights that internationalization is not an isolated activity but a continuous process. Internationalization is not a goal in itself, but a way to boost academic quality and development (de Wit, 2018). Through international collaborations and cooperation, higher education institutions maximize their resources to create competitive synergies (Munadi, 2020). A truly international university does not limit to increasing proportion of foreign students or memorandum of understanding with international institutions, but promotes international research collaborations, facilitates mobility of students/faculties/staffs, incorporates global perspectives in teaching and learning, and participates actively in addressing global problems (Amante and Rodrigues, 2025).

For universities in developing countries like Nepal, internationalization is an opportunity to bridge the knowledge and technology gaps. The world class universities in science-technology-innovation orientated nations have invested highly in research infrastructure, international faculty recruitment, competitive funding mechanisms, and partnerships with globally-recognized universities. Leveraging those facilities through institutional partnership with those universities – a dimension of internationalization – can help strengthen global standing and enhance impact of universities like Tribhuvan University (TU).

Nepal has also recognized the value of internationalization of higher education to transition towards knowledge-based economy. Being the oldest and the largest university in Nepal with higher reputation, TU established in 1959 has played an instrumental role in producing high quality human resources. The university also felt the responsibility to lead the process of research and innovation for development, and subsequently, established the Centre for International Relations (CIR) in 1998 to operate under the Vice Chancellor's Office to drive the process of internationalization. However, extent of internationalization is not yet evaluated. This article aims to assess the internationalization status of TU, identify challenges, and recommend strategic priorities ahead.

2. Current Status of Internationalization of TU

Several frameworks are available to evaluate internationalization of a university. Some of them include, Knight's Internationalization Framework (Knight 2004, 2012); Hudzik's Comprehensive Internationalization Framework (Hudzik, 2011); de Wit's Comprehensive Internationalization Approach (de Wit et al., 2015); etc. Aligning with the provisions in those frameworks, and selecting relevant components, current status of internationalization has been assessed based on the following **seven (7)** dimensions. They are ranked qualitatively within a Likert scale of 1 to 5: 1 as Very Limited; 2 as Emerging; 3 as Developing; 4 as Advanced; 5 as Globally Competitive. When quantitative data are available, the qualitatively assessment are backed-up accordingly. **Table 1** presents the results and subsequent sub-chapters elaborate them further.

Table 1: Current status of internationalization of Tribhuvan University

Key areas	Status	Basis/Rationale
Policy and Institutional Provisions	Advanced (4/5)	- TU's annual policies and programs always emphasize internationalization - Internationalization explicitly included in TU Vision 2030 (TU, 2019) - CIR is established in 1998 and operating under the Office of Vice Chancellor
Institutional Capacity	Emerging (2/5)	- To make CIR to full functional with adequate activities for internationalization, at least 15 full staffs of varying roles are required; however, CIR is operating with only 4 full-time staffs. - Staffs are not allocated even as per approved organization structure, though current structure is itself inadequate
Academic Programs, Curricula, and Teaching/ Learning Practices	Emerging – Developing (2.5/5)	- Some of the programs (e.g., Medicine, Engineering) that have programs oriented towards global demands and also attracting international students; however, many among the TU's large number (> 300) of programs at various levels are yet to catch global spirit and trends. - Teaching learning environment, including physical facilities/ infrastructure, teaching methods, faculty strengths, require a significant improvement before we are ready to accept international students. - TU is yet to define number of students the academic programs where it can accept international students
International Students and Faculties	Emerging (2/5)	- Total number of international students/scholars are much lower than 1% - Though TU lacks a robust database, based on information available with CIR, total number of students studying at regular academic programs, short-term/ exchange students, and international students enrolled for independent research (non-degree) in 2025 were 14, 19, and 27, respectively; and that number until the end of May 2026 are 1, 43, and 12, respectively. - Further six international faculty members (Chinese Language Teachers) have joined TU in 2026.
International Partnership and Global Engagement	Developing – Advanced (3.5/5)	- TU has signed Memorandum Understanding (MoU)/ Memorandum of Agreement (MoA) with 234 institutions in 33 countries across the globe (see Figure 1). - Many of those MoUs, unfortunately, are not active.

International Research Collaboration	Developing (3/5)	• Many faculty members in TU are contributing to international publications with joint authorship, implementing joint research projects, jointly supervising students, and participating in global research networks, however, authentic and regularly updated database of those activities are not readily available. • General impression, however, is that such activities are increasing over the years, and have multiplied with new program of hiring research-excellency-based faculty members initiated more than five years ago.
Global Visibility	Emerging – Developing (2.5/5)	• TU is ranked globally within 801 – 1000 in 2019, 1001+ in 2020, 801 – 1000 in 2021-2023, 1201 – 1500 in 2024, 1500+ in 2025 and 2026, respectively, as per THE ranking.

2.1. Policy and Institutional Provisions

Internationalization have been prioritized in almost all annual policies and programs approved by the Senate of TU since a long ago. A systematic document to guide the university – TU’s Vision 2030 (TU, 2019) – viewed internationalization as a strategic means of transforming the university into a globally-recognized center of academic excellence, innovation, and research. It emphasizes in improvement in academic quality, increase in international visibility, enhance research competitiveness, attracting international students/scholars and improve global ranking are key areas of focus for achieving internationalization.

The university has established CIR in 1998 – 30 years after establishing the university – as an institutional wing to look after internationalization. The CIR, governed by a By-Law formulated by TU in 2077 BS, is functioning directly under the Vice Chancellor’s office. For over 2.5 decades, CIR played an instrumental role in identifying core areas of internationalization, streamlining the process, and hence making a strong foundation for moving forward. Despite having institutional architecture for internationalization and prioritized in policies and other key guiding documents, TU’s global ranking is yet to be satisfactory; effectiveness and depth of international engagement require significant improvement; institutional fundings dedicated to global engagement is not allocated; performance indicators for internationalization is still not in place; and ‘Internationalization Guidelines or Working Procedure’ that integrates procedure/process for various aspects of internationalization is yet to be formulated.

2.2. Institutional Capacity

CIR has the role to coordinate and facilitate internationalization of the universities. To coordinate those activities across various Campuses/Colleges spread across the country (see **Figure 1**), current staff structure is inadequate. Only four full-time staffs are currently allocated to CIR, far below the currently approved staff structure. Some faculties and departments are maintaining their own international collaboration, which are complementary to CIR’s role, still CIR’s

human resources strength needs significant improvement to function its internationalization role effectively. As a result of under-staffing, administrative procedure as well as required follow-up for visa support, admission, and other related services for international students/scholars have been relatively slow. Therefore, the institutional support system has not yet reached the level expected of an internationally competitive university.

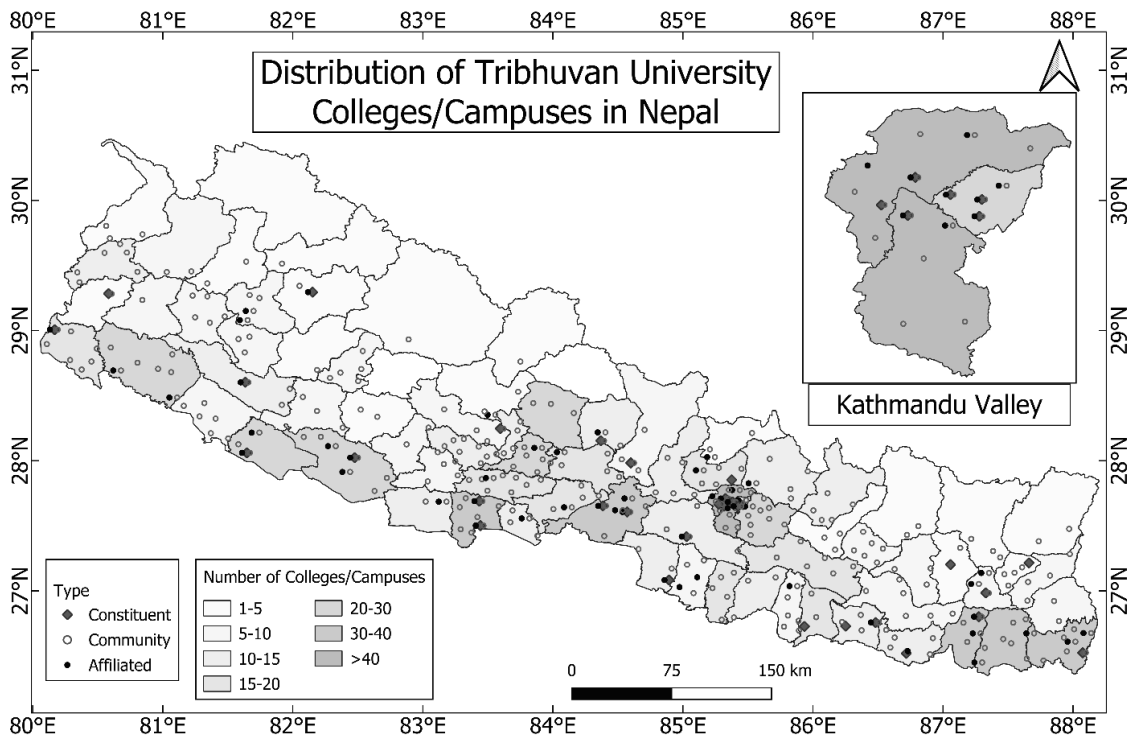


Figure 1: Distribution of TU's campuses/colleges across Nepal (Source: Based on data accessed from Planning Division, TU in May 2026).

2.3. Academic Programs, Curricula, and Teaching/Learning Practices

An internationally-oriented curricula contains global perspectives and comparative approaches on topics, focuses on developing inter-cultural competencies, promotes foreign language skills, and adopts globally-benchmarked academic standards. Further, such academic programs are offered in English medium, adopt flexible credit transfer systems, and promotes dual or joint degree programs with foreign institutions. Internationalization of academic programs, however, also includes integrating indigenous and local knowledge systems, globalizing local practices and location-specific specialties, and balancing between global knowledge and local relevance.

TU has historically been influenced by Western academic traditions, however, gradually evolved in integrating local knowledge and practices into the university's curricula. Except some of the programs (e.g. Medicine, Engineering) that have curricula aligned with global trends and

attracting international students too, and some language related short-medium term programs that Biswa Bhasa Campus offers, most of the over 300 academic programs that TU offers are not able to attract international students. Even in the programs that have international students, inter-cultural learning and institutional internationalization are not adequately prioritized. Teaching learning environment, including physical facilities/infrastructure, teaching methods, faculty strengths, require a significant improvement before we are ready to accept international students. Further, TU is not able to define the number of students and academic programs that it can admit in every academic session and disseminate it widely in the form of integrated brochure of the university.

2.4. International Students and Faculties

International students at TU can be one of the following categories – i) students at regular academic programs; ii) exchange/ short-term students; and iii) international students enrolled for independent research (non-degree). Similarly, short-term faculty members join TU as a part of exchange or collaborative research project activities and relatively long-term (> 1 year) faculty members join TU as language teachers, currently Chinese Language teachers through Confucius Institute at TU (CU@TU). Information on outbound mobility of students and faculties are not available at CIR's record.

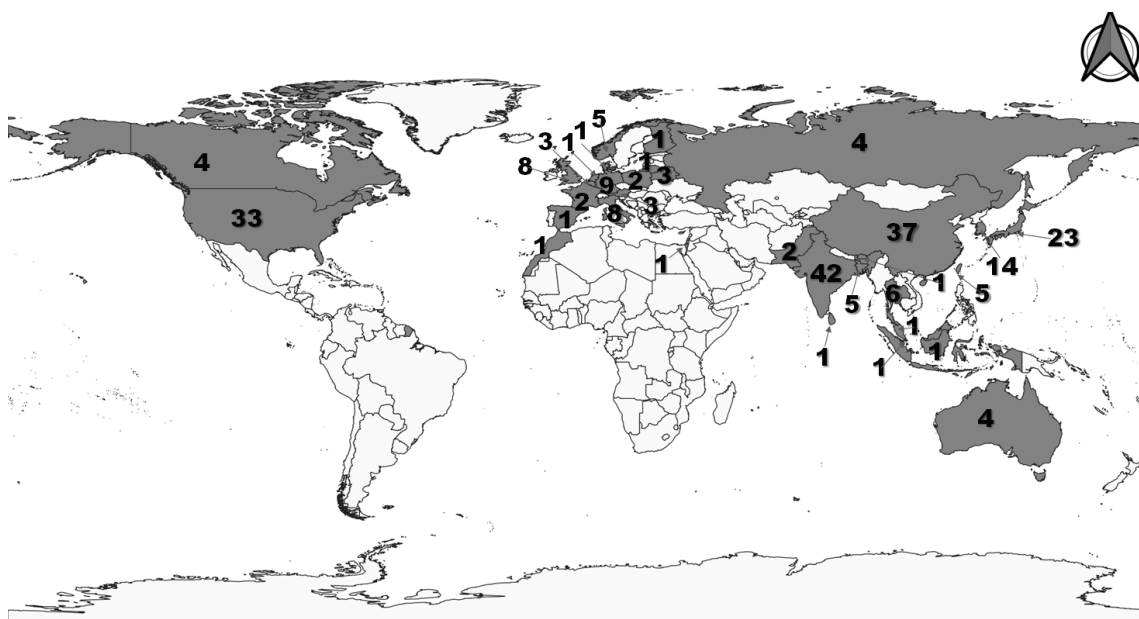
Total number of international students/scholars at TU in 2025 was far less than 1% of total students. Though a robust data is not yet available, based on information available with CIR, total number of students studying at regular academic programs, short-term/exchange students, and international students enrolled for independent research (non-degree) in 2025 were 14, 19, and 27, respectively; and that number in 2026 (until the end of May) are 1, 43, and 12, respectively. Further six faculty members (Chinese Language Teachers) have joined TU in 2026 (until May, 2026). Actual number of students are expected to be more than the above-mentioned numbers. International students enrolled for independent research (non-degree) have a great diversity in countries. For example, out of 27 such students in 2025, 17 were from USA, 2 each from UK and South Africa, 1 each from Austria, Australia, Brazil, Canada, Czech Republic, and South Korea).

In a nutshell, international students and faculties proportion is very low relative to TU's large enrollment. There are only few systematic students exchange programs. Information on mobility of out-bound students and faculties are integrated with CIR to generate actual authentic data of out-bound mobility from TU.

2.5. International Partnership and Global Engagement

Signing a MoU is the first step of establishing institutional relationships between any two institutions, which opens-up door for wider engagement. However, internationalization must shift from symbolic partnerships to performance-oriented global engagement.

As per the records available at CIR, TU has signed MoU/MoA with 234 institutions across 33 countries spread over the world (see **Figure 2**). Further, each faculty/institutes have autonomy to sign MoUs and sometimes those records might have not been integrated with CIR's database. Considering those uncertainties, TU and its units might have signed MoU with much large number (than 234) of international universities/institutions. Many of those MoUs, unfortunately, are not active. Top five countries based on number of MoUs signed so far with institutions in those countries are India (17.9%), China (15.8%), USA (14.1%), Japan (9.8%), and Republic of Korea (6.0%). The MoU with Kansas State University signed on 6th January 1981 for indefinite period is the oldest one available at CIR's record. In 2025 alone, 14 MoUs were signed and in 2026, until the end of May, 12 MoUs have been signed already.



2.6. International Research Collaboration

With increasing globalization of education, institutional linkages, and availability of expertise, laboratory other resources at different institutions, leveraging those expertise and resources is inevitable for overall efficiency. As a result, research is increasingly becoming international. Many high impact scientific publications are a result of collaborative research activities involving scholars from multiple institutions and countries. Further, for the universities aiming to improve global visibility, increasing internationally co-authored publications, participation in global research networks, and involvement in multinational research projects are essential.

Though many faculty members in TU are contributing to international publications with joint authorship, implementing joint research projects, jointly supervising students, winning international grants, and participating in global research networks, authentic and regularly updated database of those activities are not readily available to quantify those efforts. CIR is in the process of developing a system to track those things. As an initial result, publications with TU's affiliation for the last five years are already available at CIR's website (see: <https://cir.tu.edu.np/pages/2025-2826>).

Limited institutional research funding and uneven research productivity across the faculty members and/or across institutions/faculties are clearly observed as disparity in research impacts. It indicates a need to initiate incentive-based grants to promote internal competition for research impact. Overall, research internationalization is growing and represents one of the most promising pathways for TU.

2.7. Global Visibility

TU has participated in the global ranking since 2019. Times Higher Education (THE) is ranking TU every year. As per the THE rank, TU is ranked globally within 801 – 1000 in 2019, 1001+ in 2020, 801 – 1000 in 2021-2023, 1201 – 1500 in 2024, 1500+ in 2025 and 2026, respectively. It means TU's global ranking is declining over the years, though, it can partly be attributed to data inconsistencies and/or lack of adequate and strong database to showcase TU's strength on various dimensions that THE considers. In either case, overall evaluation of various dimensions of internationalization (**Table 1**) clearly indicates a need to put more emphasis on internationalization of TU in true sense. A clear message, however, is that TU's size and historic role in Nepal is not yet reflected appropriately in international reputation.

Improving global visibility through global ranking has many dimensions, including internationalization and research. Contributions from each faculty members, staffs, students and units of the university count in this endeavor. Therefore, increasing internal awareness on various indicators of internationalization, strengthening capacity of young students, faculty members and staffs in that direction, leveraging strengths of alumni, and acquiring support from external

stakeholders cumulatively contributes in global visibility. Further, having a highly informative website is a key in this digital world to disseminate activities and attract international students.

Keeping those things in mind, recently, various activities were organized with the aim of understanding status of internationalization as well as sensitizing on this dimension with internal stakeholders. Some of the recent activities include;

- Interaction programs with Vice Chancellor, Rector, Registrar and all Deans on “Action plan for internalization with 1% international students” held on 5th February 2026 in Kathmandu;
- Joint seminar on “Prospects of developing graduate program on entrepreneurship in Nepal” organized together with Gyeongsang National University in presence of HE Park Tea Young, Ambassador of South Korea to Nepal on 16th January, 2026;
- Organizing an event titled “Nepa’s readiness for internationalization of higher education: A discourse” organized jointly with StudyinNepal Initiative on 9th April, 2026;
- International conference on Climate Samvaad 2026 organized jointly with Central University of Jammu in Jammu, India (25-27 May, 2026).

3. Challenges for Internationalization

Assessing current status of internationalization of TU indicates that many areas where improvement is required, the starting point for which should be developing a mechanism that integrates all data related to internationalization in a single platform and updates regularly. Further, there are several challenges and/or bottlenecks for making TU a truly an internationalization university. Following sub-sections highlight five key challenges.

3.1. Absence of internationalization guidelines

Despite CIR is operating for over 25 years and the word ‘internationalization’ has been in limelight of policies, programs and TU Vision, a fully-functional ‘internationalization guideline’ for TU is not yet in place. Such a guideline is expected to identify specific areas of internationalization, establish procedure to implement them, simplify the process for recruiting international students who meet admission quality standards of TU, and facilitate both in-bound and out-bound students, staffs and faculty smoothly. Despite willingness of many partner institutions to launch integrated (Bachelor + Master) program, joint/dual degree programs, and visiting scholars’ programs, they are not moving forward due to lack of clearly defined guidelines.

3.2. Limited support system for international students and scholars

Review of global practices reveal international office plays a significant role in each and every aspect related to international students, which includes but not limited to preparing brochure and detailed information about the university, participating in international forums related to

internationalization of university to promote the university's strength, inviting potential partners as a gesture of cooperation, organizing information sessions to prospective international students, orientation program to enrolled students, thorough and smooth facilitation at every steps of visa processing and accommodation searching, running international hostel of the university, among others. However, TU is not able to perform many of those activities in par with international standard for various reasons. Even preparing an integrated brochure is not completed due to lack of consistent and authentic data/information related to the university.

TU's annual financial report shows the university is in surplus, however, per student spending is much lower than average of the universities in neighborhood. Though many faculty members, Departments, Campuses, and Dean's offices are proactively engaged in internationalization, human resources strength of CIR – the unit with responsibility to coordinate and facilitate the process of internationalization – is working under serious under-staffing. CIR is not considered as budget unit with annual budget disbursement for implementing internationalization activities. Within such circumstances, nature and extent of internationalization efforts has been entirely upon the interest and capacity of the person who leads the CIR rather than driven institutionally through annual budgeted programs.

3.3. Highly centralized and less-flexible governance system

Large number of campuses of TU spread across the country is a challenge as well as opportunity to get mileage on internationalization effort of the university. Each campus may take an initiative to position itself into a specific center of excellence taking advantage of geographic, cultural and social contexts. Further, they can offer short- to medium-term courses, diploma programs in the areas that are related to our region but interesting to the global community (e.g., eco-tourism, mountains, culture, yoga/meditation, etc.). This can attract international students and collaborators from different parts of the world. Flexible governance system with the spirit of **'decentralized operation but centralized information'** can encourage to explore those potentials and translate into action. This, however, requires a flexibility in governance system. Given TU's relatively highly centralized and rigid governance structures and limited institutional flexibility and autonomy, which can constrain internationalization (Kunwar et al., 2024), is creating a barrier towards internationalization. Further, it has slowed down the decisions as well as response to queries from international partners and prospective students/scholars. Further, smooth international collaboration requires efficient systems for financial management, contract administration, procurement, intellectual property management, and human resource policies, where reforms are necessary in TU.

3.4. Global-relevance of the curricula and teaching/learning environment

TU offers more than 300 academic programs from Bachelor to Doctoral levels. However, international student's number have remained quite low, much below 1%. One of the primary

reasons is the inadequate efforts to update curricula periodically with the spirit of need as well as trends of the global market. Most of our courses are often theory-heavy but less practical-orientation, not upgraded to reflect global trends and comparative analysis, are not able to attract large number of international students. One may not expect all the programs to attract international students; however, TU may need to consider defining targeted programs and number of international students and making such courses truly of international-relevance. Further, teaching learning environment, including physical facilities/infrastructure, teaching methods, and faculty strengths, require a significant improvement before we are ready to accept international students. Several campuses/ programs face limitations in modern research laboratories, digital resources, student accommodation, and international support services.

3.5. Uncertainty in academic calendar

High level of certainty in academic calendar remains at the center of any international prospective students so that s/he can make career planning accordingly. However, due to unexpected disturbances from various elements, overall trust in TU's calendar is quite low in Nepal and abroad. In this context, either having special provisions for international students to ensure timely entry, exams and results, or ideally to maintain strictly the academic calendar of all the programs of TU should be a high priority not only for attracting international students but also for domestic students.

4. Opportunities and Strategic Areas for Interventions Required

Although TU faces several challenges, Nepal's natural environment, strategic location, and global reputation provides opportunities to gradually strengthen as a globally-recognized university for higher education. In consideration of TU's comparative advantage, current status of internationalization, and challenges highlighted above, following strategic areas for interventions are recommended, which can be institutionalized by developing 'internationalization guidelines or similar type of guiding document to facilitate for implementing the activities/interventions. They are recommended based on review of global practices, interaction with stakeholders, specially those who are experienced in various aspects of internationalization, and insights from author's own experience of working professionally and leading CIR for about half a year.

Internationalization of TU is to be guided by the following five principles;

- *Academic excellence*: All international collaborations are expected to contribute to academic quality, research excellence, and institutional reputation.
- *Reciprocity and mutual benefit*: Partnership shall be developed based on mutual respect, shared benefits, and long-term collaboration.
- *Inclusiveness*: International opportunities are expected to be accessible to students and

faculty across all faculties, campuses and institutes.

- *Cultural immersion*: Internationalization is expected to promote inter-cultural understanding and global citizenship.
- *Institutional sustainability*: International programs are generally expected to be financially sustainable and aligned with the university's long-term strategic priorities

Five strategic areas for internationalization and 40 associated activities/interventions are recommended as detailed in the following sub-sections. Procedure to implement them should be duly developed as 'Internationalization Guidelines' to facilitate smooth implementation of the proposed/recommend activities.

4.1. Increasing global visibility of TU

Global visibility can generally be improved by enhancing academic reputation, academic influence, international publication and citations, global partnerships and collaborations, and attracting international students and scholars, accelerating global engagement, and ultimately by improving TU's position in the global ranking. CIR is primarily responsible for this; however, other entities of TU and each faculty and students are expected to contribute to this endeavor by collaborating closely with CIR. Following 10 activities are recommended for increasing global visibility of TU: i) launch a dedicated CIR website to serve as a digital resource and platform for connecting for international collaboration; ii) showcase TU's strength by developing an integrated brochure of TU; iii) synthesize international publications with affiliation of TU and disseminate through CIR website; iv) identify 10 thematic focus of TU for the next one decade to prioritize institutional concentration towards those areas; v) organize international conferences at regular interval (e.g., every two years); vi) contribute with information and coordination for improving global ranking; vii) encourage faculty members, research staffs and students to participate in international conferences/ forums; viii) maintain official presence in all types of social media; ix) showcase research-related achievements; and x) compile global visibility report quarterly and publish through CIR website.

4.2. Strengthening international partnership

This strategic area aims to enhance collaborative research, faculty exchange, and joint/dual/unified academic programs, among others. Following eight (8) activities/interventions are recommended: i) map existing MoUs/MoAs and evaluate their effectiveness; ii) establish new partnerships and layout procedure for signing MoUs/MoAs; iii) prepare and publish database of international collaboration periodically; iv) facilitate smooth implementation of existing and initiation of new joint research projects; v) initiate 'Alumni Connect' program (TU Global Initiative) to leverage alumni resources for partnership strengthening; vi) develop a mechanism

to connect with non-Nepali alumni by establishing ‘TU’s International Scholar’s Forum’; vii) initiative and manage long-term international partnership programs; and viii) work as a nodal point for bilateral/multi-lateral partnership with any international institutes/ organizations/ agency

4.3. Facilitating enrollment of and strengthening the support system for international students

International students/scholars can be categorized into different types such as those enrolling in regular academic programs of TU, independent research scholars, exchange students/scholars, walk-in students who enroll for one-semester or so, and participants in short courses (e.g., summer/ winter school, specially designed course for international students, etc.), among others. Attracting international students depends upon various factors such as attractive academic program, strong faculty and research programs, conducive teaching/learning environment, and a strong student support system. Following 12 activities/interventions are recommended for facilitating enrollment of international students/scholars and strengthening the student support system: i) defining academic programs targeted for international students in close coordination with Dean’s offices; ii) prepare an integrated brochure of TU for prospective students; iii) prepare international students’ handbook for TU; iv) facilitate for ensuring accommodation to international students and visiting scholars/ faculties/guests; v) promote TU through international platforms; vi) develop international student admission portal; vii) strengthen support system to international students; viii) institutionalize credit transfer by defining procedure; ix) encourage different units of TU to offer short-term courses; x) facilitate enrollment of walk-in students; xi) promote dual/joint degree and unified bachelor-master degree programs; and xii) encourage any other types of enrollment/affiliation with TU.

4.4. Enhancing mobility of students, staffs and faculty members

Academic mobility – both inbound and outbound – enhances knowledge exchange, research collaboration, cultural understanding, and institutional reputation. TU aims to promote national and international mobility through structured exchange programs, joint research initiatives, academic visits, and professional development opportunities. Following six (6) activities/interventions are recommended for enhancing mobility: i) define types of student mobility (e.g., short-term, semester- exchange program, degree-seeking mobility aimed at dual or joint degree, research mobility, etc.); ii) define types of faculty mobility (e.g., visiting/ adjunct professorship appointments, sort-term teaching assignments, postdoctoral and research fellowship appointments, participation in international workshops and conferences, sabbatical visits at partner of new institutions, etc.); iii) define types of administrative/research/technical staff mobility; iv) disseminate information of such programs widely; v) initiative visiting/ adjunct professorship program; and vi) leverage other activities to enhance mobility, as appropriate.

4.5. Strengthening capacity for internationalization

For satisfactory delivery of services to international students, scholars, and partner institutions, strengthening institutional, academic, administrative and financial capacities is required. Following four (4) activities/interventions are recommended for strengthening capacity for internationalization: i) transform CIR into a one-stop help desk for international students and supporting international research collaboration; ii) sensitize faculty members, staffs, and students on international collaboration; iii) standardize various templates and make them available in the public domain; and iv) initiative to build international student's dormitory (e.g., capacity of at least 50 occupancy, at the beginning).

5. Conclusions

Nepal has recognized the value of internationalization of higher education to move towards knowledge-based economy, however, concrete efforts and focus towards that end is still lacking. In this context, efforts were made to assess status of internationalization of TU, highlight existing challenges, and recommend strategic areas of interventions.

Status of internationalization was assessed based on seven key areas selected from existing global frameworks. They were ranked in a scale of 1 to 5; 1 as Very Limited; 2 as Emerging; 3 as Developing; 4 as Advanced; 5 as Globally Competitive. Out of the seven areas, policy and institutional provisions ranks the highest (4/5); followed by international partnership and global engagement (3.5/5); international research collaboration (3/5); academic programs, curricula, and teaching/learning practices (2.5/5); global visibility (2.5/5); international students and faculties (2/5), and institutional capacity (2/5). Overall, current status of internationalization can be ranked as 'Emerging-Developing' category (score: 2.81/5).

Current status of internationalization indicates opportunities to contribute meaningfully towards the internationalization of the university by improving many areas where improvements are required. However, multitude of challenges are hindering speed of progress. They include but not limited to absence of internationalization guideline, limited support system for international students/scholars, highly centralized and less-flexible governance system, global-relevance of the curricula and teaching/learning environment, and uncertainty in academic calendar.

In consideration of TU's comparative advantage, current status of internationalization, and challenges highlighted above, 40 interventions/ activities associated with five strategic areas are recommended. The starting point, however, should be developing a mechanism that integrates all data related to internationalization in a single platform, updates regularly, and translate that into TU's brochure indicating clearly TU's strength, opportunities, and academic programs that accepts international students. Further, procedure for implementing the proposed interventions need to be clearly defined by formulating an internationalization guideline.

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