

# **Quantifying Student Satisfaction: Teaching Quality, Infrastructure, and Support Services**

#### Tara Prasad Gautam', D Shailashri V T², D Shila Mishra D

1Assistant Campus Chief, Madan Bhandari Memorial College <sup>2</sup>Research Professor, Institute of Management and Commerce, Srinivas University <sup>3</sup>Member, Province policy and Planning Commission, Madhesh Province

Abstract Article Info.

Student satisfaction is the main indicator of higher quality of education since it also affects academic performance, institutional reputation, and student retention. This study rigorously evaluates student satisfaction in community colleges of Bagmati Province, Nepal, in respect to infrastructure, institutional support systems, and teaching quality. A descriptive cross-sectional study design was applied and 400 undergraduate and postgraduate students responded to a survey to assess their perceptions of significant academic and institutional aspects. Data were analyzed using descriptive statistics (mean, median, standard deviation) and inferential techniques. The results show that strong faculty-student interaction and good classroom delivery are revealed as positives; yet, the results also highlight problems with reference to research opportunities, practical skill development, and student support services. Infrastructure-related problems including restricted library resources, poor digital learning tools, and inadequate sanitation and cafeteria facilities constitute major areas needing attention. Students expressed dissatisfaction with career advising help, scholarship transparency, and grievance management mechanisms even while administrative services and communication got high grades. The study suggests extending experiential learning, upgrading digital resources, enhancing research efforts, and increasing institutional governance in order to enhance student satisfaction and academic excellence. These findings support the more general discussion on quality assurance in Nepalese higher education and offer useful guidance to institutional leaders and legislators aiming at continuous progress.

*Keywords*: student higher education quality, student satisfaction, institutional infrastructure, research opportunities, digital learning tools, quality assurance, community colleges

Corresponding Author
Dr. Tara Prasad Gautam

Email tara2jun@gmail.com

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#### Introduction

Higher education plays a pivotal role in advancing the intellectual and professional capacities of students, especially within emerging academic contexts like Nepal. The integration of modern infrastructure,

quality education, and robust support systems is essential for fostering student satisfaction and achieving academic excellence, which collectively underpin institutional sustainability and reputation (Mishra, 2022). Student satisfaction has therefore



emerged as a crucial indicator of university performance, influencing institutional reputation, long-term development, student retention, and participation rates (Alves & Raposo, 2007; Tessema et al., 2012; Mishra & Jha, 2023). By systematically measuring student satisfaction, higher education institutions can effectively identify shortcomings in physical facilities, academic support, and teaching quality, thereby driving targeted improvements and enhanced institutional performance (Douglas et al., 2008; Mishra & Ananda, 2022).

In Nepal's higher education landscape, community colleges in the Bagmati Province seek to provide quality and affordable multidisciplinary education to diverse student populations, aligning with national development goals to optimize human capital (Mishra, 2023a; Mishra, 2024). These colleges offer varied undergraduate and graduate programs, accommodating students from heterogeneous intellectual and socioeconomic backgrounds. The intellectual environment comprising faculty competence, interactive pedagogy, research engagement, and digital academic operations—critically shapes the learning experience and institutional efficacy (Mishraa, 2023; Kuo et al., 2013).

Teaching quality holds a dominant influence on student satisfaction, where faculty expertise, timely mentoring, collaborative learning strategies, and transparent assessment frameworks are essential components (Navarro et al., 2005; Mishra, 2022). Yet, many community colleges continue facing challenges such as outdated pedagogical methods, limited faculty development opportunities, and underutilization of student feedback mechanisms. resulting in uneven satisfaction levels across institutions (Gautam et al., 2025a; Mishra & Jha, 2023).

Similarly, the physical digital and infrastructure significantly impacts student experiences. Adequately equipped laboratories, ICT-enabled classrooms, access to contemporary digital libraries, and ergonomically designed learning spaces contribute positively to educational outcomes and student satisfaction (Cardona & Bravo, 2012; Douglas et al., 2008; Mishra, 2023a). Conversely, the lack of up-to-date equipment, insufficient maintenance of academic resources, and restricted digital access hinder learning processes and institutional credibility (Gautam et al., 2025a).

Institutional support services—such as academic advising, career counseling, transparent scholarship management, grievance redressal systems, and psychological support—also play a critical role in enhancing student engagement and satisfaction (Mishra, 2023a). Nonetheless, community colleges in Bagmati Province face persistent constraints in providing comprehensive support, affecting student retention and holistic educational outcomes (Gautam et al., 2025b).

Despite the global focus on student satisfaction, there is a dearth of empirical research contextualized to Nepal's community colleges. Addressing the increasing imperatives of quality assurance, benchmarking, and global integration, this study seeks to quantitatively assess student perceptions regarding teaching quality, infrastructure adequacy, and institutional support within Bagmati Province. The insights generated will inform evidence-based strategies for faculty development, infrastructural enhancement, and the strengthening of student-centered support systems, thereby enabling institutions to elevate academic quality, bolster performance, and align with international standards of higher education (Tessema, et al., 2012; Mishra & Jha, 2023; Mishra, 2024).

#### **Problem Statement**

Student satisfaction is a vital indicator of academic achievement, institutional effectiveness, and retention in higher education (Alves & Raposo, 2007). Community colleges in Nepal, particularly in Bagmati Province, strive to provide affordable and quality education; however, students often express dissatisfaction with teaching quality, facilities, and support services. Factors such as teaching methods, faculty engagement, classroom environment, library resources, digital learning tools, and institutional support critically influence students' learning outcomes, motivation, and overall academic experience (Tessema et al., 2012).

Recent studies highlight significant challenges in Nepalese community colleges, including inadequate faculty development, outdated curricula, limited research opportunities, insufficient infrastructure—factors adversely impact educational quality (Gautam et al., 2025c). Moreover, key support services like career counseling, scholarship management, grievance redressal, and academic advising remain underdeveloped, further contributing to student dissatisfaction (Gautam et al., 2025d). Although some institutions have started implementing Quality Assurance and Accreditation (QAA) frameworks, inconsistent application leads to varied student experiences across colleges (Gautam et al., 2025a).

Given the lack of systematic research on student satisfaction within Bagmati's community colleges, there is an urgent need to evaluate how teaching quality, infrastructure, and institutional support services affect student perceptions and academic outcomes. This study aims to fill this research gap by providing evidence-based insights to guide policymakers and educational providers, helping align Nepal's community colleges with international higher education quality standards.

# **Research Objective**

The primary objective of this study is to assess student satisfaction concerning teaching quality, infrastructure, and support services in community colleges of Bagmati Province, Nepal.

# Methodology

#### Research Design

This study employed a descriptive crosssectional research design to measure student satisfaction in community colleges of Bagmati Descriptive Province, Nepal. designs

effective for capturing and summarizing students' perspectives on various aspects of their college experience at a single point in time without manipulating variables (Deribigbe et al., 2022). Such an approach provides a clear snapshot of current satisfaction levels related to infrastructure. teaching quality, and support services, which is commonly used in higher education research (Sharma & Srivastava, 2020).

A cross-sectional survey was used to collect data once from a large student sample, facilitating analysis of satisfaction trends across multiple academic disciplines while preserving the objectivity of student responses (Creswell & Creswell, 2018).

#### **Population and Sampling**

The target population comprised students enrolled in various academic programs within community colleges of Bagmati Province. A stratified random sampling technique was applied to ensure proportional representation across disciplines such as humanities, management, education, and science (Etikan & Bala, 2017). For instance, if 25% of the student population are management majors, 25% of the sample was randomly selected from that subgroup. The final sample size was set at 400 students, based on Cochran's formula for unknown population size at a 95% confidence level, rounded up to accommodate potential nonresponse (Taherdoost, 2016).

#### Stratified Random Sampling Process

- Identification of strata according to academic programs
- Proportional allocation based on actual 0 enrollment figures
- Random selection within strata using 0 lotteries or random number generators
- Ensured broad representation across 0 programs and academic disciplines
- This approach reduces selection bias and 0 enhances research validity (Lohr, 2021).

#### **Data Collection Procedure**

- Data were collected through an online structured questionnaire distributed via the colleges' Education Management Information System (EMIS).
- Email invitations contained secure survey links, available for two weeks with reminder emails sent midway and two days before closure to maximize participation.
- Responses were anonymously recorded in a secure database, preventing duplication and data entry errors while protecting respondent confidentiality.

#### **Survey Instrument and Measures**

The instrument assessed three core domains of student satisfaction:

- Teaching Quality: faculty performance, 0 engagement, clarity of instruction, feedback mechanisms
- Infrastructure: library 0 resources. classroom environment. laboratory facilities, IT support
- extracurricular Support Services: activities, academic advising, career counseling

Question formats included Likert-scale items (1 = Strongly Disagree to 5 = Strongly Agree),multiple-choice demographic questions, and openended responses to capture qualitative feedback (Joshi et al., 2015).

#### Pilot Testing

A pilot study with 30 students from outside the target colleges was conducted to ensure clarity and reliability of the questionnaire, identifying ambiguities and helping refine items before full deployment (Cohen et al., 2017).

#### Validity and Reliability

Content Validity: Confirmed through expert review by academic faculty and educational researchers to ensure comprehensive coverage of relevant

- constructs (Fernández-Gómez et al., 2020).
- Reliability: Internal consistency tested using Cronbach's alpha with threshold values above 0.70 considered acceptable (Nunnally, 1978; Tavakol & Dennick, 2011). Anticipated alpha coefficients ranged from 0.78 to 0.90 across subscales

#### **Ethical Considerations**

- Informed Consent: Participants were briefed on study objectives, voluntary participation, and confidentiality before commencing the survey; consent was obtained digitally.
- 0 Confidentiality and Anonymity: No personal identifiers were recorded; data securely stored in password-protected databases.
- 0 Minimization of Bias: Survey questions were neutrally worded to avoid leading responses; results were analyzed objectively without data manipulation.
- Ethical Approval: The study protocol 0 sought approval from an institutional review board or ethics committee prior to data collection.

#### Literature Review

Evaluating the overall quality of teaching in higher education largely depends on student satisfaction, which serves as a key indicator of institutional effectiveness, including academic programs, infrastructure, and support services. Community colleges, especially in developing regions like Bagmati Province, Nepal, play a vital role in providing affordable, accessible education to a socioeconomically student body. Understanding student satisfaction comprehensively is essential to enhancing educational quality and institutional performance in these colleges.

Teaching quality is the strongest predictor of student satisfaction. Effective instruction integrates subject expertise, student engagement, timely feedback, and dynamic pedagogical approaches (Kember & Ginns, 2012). In the Nepalese context, faculty qualifications, continuous training, and student-centered learning methods significantly effectiveness. influence perceived teaching Empirical evidence further confirms that supportive teacher-student interactions boost academic engagement and performance.

directly Physical infrastructure also shapes learning experiences. Facilities such as classrooms, laboratories, libraries, IT resources, and campus environment contribute to academic success and student satisfaction (Astin, 1999). In Nepal, outdated infrastructure and limited access to modern teaching materials remain critical challenges constraining student learning t. Availability of reliable internet and technological equipment strongly affects satisfaction levels in community colleges.

services—including Student support academic advising, counseling, career guidance, financial aid, and extracurricular activities—are equally pivotal for student retention and wellbeing. However, administrative inefficiencies and financial constraints in Nepalese community colleges have undermined service quality, negatively impacting student satisfaction. Studies show that effective academic and career guidance correlates with higher completion rates and institutional favorability (Yorke & Longden, 2004).

Despite increasing interest, research on student satisfaction in Nepal's community colleges, especially in Bagmati Province, remains scarce. Existing studies predominantly focus on universities, overlooking the unique influences of infrastructure, teaching quality, and support systems in community college settings. This study addresses this gap by examining key factors shaping student experiences in Bagmati's community colleges, aiming to inform policymakers, educators, and administrators to improve institutional quality and student satisfaction (Mishra, 2023a; Tamang & Mishra, 2022).

#### Teaching Quality and Pedagogical Effectiveness

Faculty competence is a critical determinant of student satisfaction. Students respond positively when instructors demonstrate expertise, enthusiasm, and employ active learning techniques such as case studies, problem-solving, and flipped classrooms (Biggs & Tang, 2011). The COVID-19 pandemic highlighted the importance of faculty proficiency in digital teaching tools, which significantly enhanced student engagement and satisfaction in Nepalese higher education. Student-centered pedagogies and transparent assessment practices foster trust and a supportive learning environment (Yorke & Longden, 2004).

## Faculty Engagement and Mentoring

Strong faculty-student relationships involving mentorship and career support significantly elevate student contentment and academic success (Tessema et al., 2012). In Nepal, active faculty mentorship outside classroom settings has been linked with higher student satisfaction (Acharya, 2024).

## Digital Learning Integration

Access to e-books, multimedia, and Learning Management Systems (LMS) enhances learning flexibility and participation. Nepalese students with well-organized digital learning platforms report increased satisfaction, mitigating infrastructurerelated challenges (Sharma et al., 2020).

#### Institutional Infrastructure and Resources

Well-equipped classrooms, modern laboratories, libraries, and campus Wi-Fi are foundational to quality education (Poudel, 2021). However, Nepali students often report dissatisfaction with outdated facilities insufficient modern resources.

## Library Access

Comprehensive libraries offering books, digital journals, and research databases are fundamental academic assets. Limited access to these resources in Nepalese community colleges negatively affects student satisfaction, particularly for research-focused programs (Uprety & Chhetri, 2014).

#### Research and Practical Learning Opportunities

Practical exposure and undergraduate research improve student satisfaction but remain underdeveloped in many Nepalese community colleges, which emphasize theoretical instruction. Structured internships with professional mentorship are shown to increase satisfaction and readiness for employment (Acharya, 2024).

#### Academic and Administrative Support

Effective tutoring, remedial classes, and mentoring programs correlate with better student retention. Nepali students particularly express a need for coordinated academic support in science and management disciplines (Poudel, 2021). Conversely, administrative inefficiencies such as delayed services and poor responsiveness reduce overall satisfaction.

#### Extracurricular Engagement

Participation in clubs, leadership programs, and sports facilities positively influences student well-being and satisfaction (Uprety & Chhetri, 2014).

#### Theoretical Frameworks

- Expectancy Disconfirmation Theory posits that satisfaction depends on the gap between expectations and actual experiences, highlighting the role of instructional quality and institutional services (Oliver, 1980).
- SERVOUAL Model evaluates service quality through tangibility, reliability, responsiveness, assurance, and empathy; tangibility and faculty competency are critical for Nepalese student satisfaction (Parasuraman, Zeithaml, & Berry, 1988; Poudel, 2021).
- Student Engagement Theory emphasizes the importance of both academic and extracurricular involvement for higher satisfaction and retention (Astin, 1998).

#### Research Gap

There is a notable lack of comprehensive studies assessing student satisfaction in Nepalese community colleges, with insufficient focus on qualitative insights and longitudinal tracking of student experiences from admission to graduation. Addressing these gaps can enhance policy formulation and provide a more nuanced understanding of student needs in Nepal's evolving higher education landscape.

#### Results and Discussion

Analyzing student satisfaction at Bagmati Province's community colleges on infrastructure, teaching quality, and support services calls for an awareness of the characteristics of the respondents. Academic and demographic profiles of students help to enable perceptive study of how many factors influence their impressions and experiences. Examining significant factors such age, gender, academic program, year of study, socioeconomic background, and preceding educational experience allows one to interpret the survey results.

Students registered in Bagmati Province come from many backgrounds: urban and rural, different economic levels, and different degrees of scholastic preparedness. These differences serve to clarify fluctuations in degrees of satisfaction and expectations for the specific learning environment. Age distribution, for example, reveals whether students are traditional that is, fresh secondary school graduates or non-traditional, that is, working people or those returning to study after a gap. In the academic environment, gender composition enables one seek for variances in satisfaction depending on gender-based experiences.

Furthermore, knowing students' academic background and years of experience helps one to understand differences in degree of satisfaction. First-year students could see things differently than more informed about institutional policies older students follow. Furthermore highly significant in determining student expectations and satisfaction with infrastructure and support systems are socioeconomic factors including financial situation and job while in school.

These elements enable this section to provide the structure for assessing institutional facilities, educational quality, and support services provided by several student organizations. Since it offers a comprehensive knowledge of degrees of student happiness, this demographic profile helps to deduce important conclusions and suggestions for improving the overall learning environment at community colleges.

# Table 1 Academic Experience

#### Academic Experience

Students' academic backgrounds have an important impact on how satisfied they are, how well they learn, and how successful they are in their careers. Students are more engaged and motivated when they have good teachers, interesting classrooms, fair tests, and excellent academic support networks. Research opportunities help students improve their analytical skills, and a curriculum that is relevant to the industry helps them get ready for the problems they will face in their careers. To improve quality, build their reputation, and help students succeed, colleges and universities must keep an eye on these elements.

Category	Mean	Median	Standard Deviation
Teachers' delivery and communication effectiveness	2.17	2.0	0.60
Efforts to facilitate classroom discussions	2.19	2.0	0.58
Fairness of assessment methods	2.22	2.0	0.57
Alignment of academic calendar with course plan	2.17	2.0	0.73
Adequacy of academic support outside class	2.22	2.0	0.61
Research opportunities	2.28	2.0	0.70
Training, workshops, and non-credit courses	3.06	3.0	1.14
Learning environment quality	2.24	2.0	0.61
Acquisition of real-life skills from coursework	2.22	2.0	0.59
Encouragement to use library resources	2.56	3.0	0.90
Frequency of remedial classes	2.17	2.0	0.70
Availability of research grants	2.38	2.5	0.69
Teachers' delivery and communication effectiveness	2.25	2.0	0.69

A statistical analysis of student perspectives in community colleges of Bagmati Province, Nepal, indicates predominantly neutral or marginally negative attitudes towards academic experiences, with mean values approximately 2.2 and a median Although students may not explicitly convey displeasure, they also do not robustly affirm the quality of instruction, research possibilities, or academic assistance. The standard deviation values

(0.57–1.14) suggest low to moderate variability. For example, assessment fairness has a standard deviation of 0.57, while non-credit courses have a standard deviation of 1.14, which means that people have different opinions on them. These findings underscore disparities in academic experiences influenced by faculty involvement, departmental assistance, and student anticipations.

Student satisfaction trends in community colleges of Bagmati Province highlight both strengths and areas for improvement. While students appreciate faculty efforts in teaching delivery (mean: 2.17-2.19) and find training programs and non-credit courses more effective (mean: 3.06). concerns persist regarding research opportunities (mean: 2.28), academic support services (mean: 2.22), and real-life skill development (mean: 2.56). Limited faculty encouragement for library use (mean: 2.17) and dissatisfaction with assessment fairness (mean: 2.22) further indicate gaps in academic transparency and support.

## **Infrastructure and Learning Resources**

Infrastructure elements like classroom maintenance, digital learning aids, and sanitation facilities require attention to enhance the overall student experience. Addressing these challenges through curriculum reforms, structured research programs, and improved institutional support can significantly enhance student satisfaction and academic outcomes.

Presents the distribution of student responses across different infrastructure and categories, revealing both positive feedback and areas of concern Student perceptions of institutional facilities and services highlight key areas for improvement. The college canteen scores the lowest satisfaction, with 44% dissatisfied, pointing to concerns over food quality, hygiene, and pricing. Addressing these issues through proactive facility management, technological investments, and improved service standards can significantly enhance student satisfaction.

Table 2 Statistical Summary

Category	Mean	Median	SD
Adequacy of library resources	3.09	3.0	0.95
Availability of library services	3.28	4.0	1.08
Classroom maintenance (cleanliness, seating, lighting)	3.67	4.0	0.98
Availability of learning aids (audio-visual, digital tools)	3.58	4.0	0.94
Drinking water, sanitation, and toilet facilities	3.89	4.0	0.86
Maintenance of physical infrastructure	3.72	4.0	0.88
Food quality, hygiene, and service at the canteen	2.71	3.0	1.11

Table 2 provides mean, median, and standard deviation values, offering deeper insights into students' satisfaction levels with various infrastructure Student satisfaction trends show mean values between 2.71 and 3.89, with a median of 4.0 in most categories, indicating general agreement but some neutrality. Sanitation and drinking water facilities received the highest satisfaction (mean: 3.89), reflecting their positive impact on student well-being. In contrast, the college canteen had the lowest satisfaction (mean: 2.71), highlighting concerns over food quality, hygiene, and service. Improvements in canteen services are necessary to enhance student experience and well-being

#### **Support Services**

Support services are very important for making students' academic experiences better and more satisfying. Table 8 shows the results of a statistical study that looked at what students thought about the different support services offered by the school. The analysis includes three main statistical measures: Mean (the average perception), Median (the central tendency), and Standard Deviation (SD) (the difference in answers). These results assist figure out what works and what doesn't in service delivery and show where the institution needs to get better.

Table 3 Statistical Analysis of Support Services

Category	Mean	Median	Standard Deviation (SD)
Reception services are courteous and efficient	3.49	4.0	0.85
Availability and helpfulness of academic advisors/counselors	3.51	4.0	0.77
Awareness and usage of counseling services	3.06	4.0	0.99
Administrative department services are satisfactory	3.53	4.0	0.84
College communicates important information effectively	3.46	4.0	0.97
Scholarships are fair and transparent	3.09	3.0	1.08
Grievance redressal system is effective	3.28	3.0	0.78
Career guidance and internship support	3.19	3.0	1.00

According to Table 8, students are somewhat happy with the support services offered by the school. The most positive evaluations were for administrative services (Mean = 3.53) and academic advisers' helpfulness (Mean = 3.51), which shows that the operations were good and the counseling support was good enough. The reception services were likewise good (Mean = 3.49), which shows that the staff was polite and helpful.

However, distribution of important data (Mean = 3.46), grievance redressal (Mean = 3.28), and career guidance (Mean = 3.19) all got average scores, which means there is opportunity for improvement in these areas. The lowest scores were for fairness in scholarships (Mean = 3.09, SD = 1.08) and knowledge of counseling services (Mean = 3.06), which shows that there are problems with consistency and access.

Overall, the school does a good job of running its business, but it needs to make its scholarship process more open, promote its counseling services, and strengthen its career assistance systems to make sure that all students get the same level of attention.

Extracurricular, Extension, and Outreach **Activities** 

Extracurricular, extension, and outreach activities play a vital role in holistic education, fostering personal growth, leadership development, and civic engagement (Astin, 1998). These activities provide students with opportunities to enhance teamwork, social responsibility, and cultural awareness, ultimately enriching their academic experience and career readiness (Terenzini et al.,1996). Higher education institutions that actively support these initiatives promote student engagement, inclusivity, and satisfaction.

This section evaluates students' perceptions of the college's efforts in supporting extracurricular activities, community service, and outreach programs. The survey findings offer insights into the effectiveness of institutional initiatives in promoting participation in sports, cultural events, leadership activities, and community engagement programs.

Table 4 Statistical Analysis of Extracurricular and Outreach Activities

Category	Mean	Median	Standard Deviation
Encouragement to participate in outreach and extension programs	3.58	4.0	0.77
Encouragement to participate in extracurricular activities	3.65	4.0	0.87

Table 4 shows that people generally believe the school supports extracurricular and outreach activities well. Encouragement to take part in outreach and extension programs had an average score of 3.58 (SD = 0.77), which means that most students feel like they can reasonably get involved in community-based activities and social projects. The average score for encouraging students to join extracurricular activities was 3.65 (SD = 0.87), which is a little higher than the average score for encouraging students to join sports, cultural events, and other skill-building programs.

outreach. The moderate scores, on the other hand. show that there is still potential for growth. This might be done by raising awareness, planning

The results reveal that most students are happy with the chances and motivation they get to be involved in extracurricular activities and more varied activities, and giving students better resources to get them more involved and engaged..

#### **Quality Management**

From upholding academic standards to boosting student satisfaction to supporting institutional growth, quality control policies affect all aspect of higher education (Harvey & Green, 1993). Combining academic involvement, student participation, and administrative leadership Ewell (1999) an organized system shows continuous growth and responsibility. Superior quality control systems help to retain students, build institutional reputation, and improve learning results. These results underline the need of increased student involvement, better communication, and more active participation of leaders to increase the effectiveness of quality control operations.

Table 5 Statistical Analysis of Quality Management Initiatives

Category	Mean	Median	Standard Deviation (SD)
Involvement in quality management activities	3.21	3.0	0.92
Effectiveness of quality enhancement initiatives	3.54	4.0	0.70
Involvement of academic leaders in quality enhancement	3.47	4.0	0.79
Involvement of Student Council in quality enhancement	3.26	3.0	0.95
Utilization of students' feedback for improvement	3.21	3.0	1.05

The analysis of Table 5 indicates an acceptable level of satisfaction among students with the institution's quality management efforts. The mean score for the effectiveness of quality improvement efforts was the highest (3.54, SD = 0.70), which means that most students think that continual improvement efforts are advantageous. The participation of academic leaders in quality enhancement received a score of 3.47 (SD = 0.79), indicating their active commitment to promoting institutional growth. However, other areas received lower scores. The mean scores for both quality management activities (mean = 3.21) and using student feedback (mean = 3.21, SD = 1.05) show that students aren't very involved and that their opinion isn't always used. The Student Council's

involvement also scored 3.26 (SD = 0.95), which means that students think their representation in decision-making processes could be better, even though there are already some attempts in place. Overall, the findings indicate that the school excels in executing quality enhancement activities; however, it must enhance student engagement, fortify feedback mechanisms, and empower student councils to establish a more collaborative and inclusive quality management framework.

#### Discussion

This study evaluates student satisfaction in community colleges of Bagmati Province by integrating statistical data, institutional assessments, and recent literature on higher education quality in Nepal. The primary aim is to examine how teaching quality, infrastructure, and support services collectively influence student perceptions, expectations, and learning experiences.

Findings from Table 1 reveal significant student dissatisfaction with instructional methods. classroom discussions, fairness of assessments, and availability of academic support, with average satisfaction scores ranging from 2.17 to 2.28. Students also identified major gaps in research opportunities, skill-based training, and access to library resources, indicating deficiencies in academic quality across many community colleges. These outcomes resonate with recent studies highlighting systemic challenges in Nepalese higher education, such as outdated curricula, limited faculty development, and inadequate integration of student feedback, which undermine student engagement and classroom experiences (Gautam et al., 2025b). Nevertheless, students expressed relative approval of training workshops and noncredit skill-building programs (Mean = 3.06), underscoring the critical importance of industryrelevant curricula and contemporary pedagogical approaches to enhance employability (Gautam et al., 2025b).

Table 2 reflects diverse perceptions of infrastructure and learning resources. Basic amenities such as drinking water, sanitation, and toilet facilities received the highest satisfaction ratings (Mean = 3.89), followed by classroom maintenance (Mean = 3.67) and learning aids (Mean = 3.58), suggesting appreciation for investments in essential services and digital learning tools. Conversely, the campus canteen was rated least favorably (Mean = 2.71), with concerns over food quality, cleanliness, and affordability. Library services garnered moderate satisfaction (Mean = 3.28), but the high standard deviation (SD = 1.08) points to considerable variability in service quality and availability across institutions. These findings align with the Quality Assurance and Accreditation (OAA) framework, which emphasizes critical link between infrastructure quality and student engagement, with digital transformation

and ergonomic learning environments notably enhancing retention and satisfaction (Gautam et al., 2025a).

In Table 3, support services received moderate approval. Administrative responsiveness (Mean = 3.53) and academic advising (Mean = 3.51) were positively rated, indicating functional institutional responsiveness. However, transparency scholarship processes (Mean = 3.09), utilization of counseling services (Mean = 3.06), and career guidance support (Mean = 3.19) remain areas of concern. Consistent with existing research, many community colleges suffer from fragmented financial aid, career readiness programming, and grievance procedures, negatively impacting student satisfaction (Gautam et al., 2025b). Incorporating student-centered feedback mechanisms governance has been shown to improve perceptions accessibility, of institutional fairness, responsiveness, fostering greater trust (Gautam et al., 2025a).

Table 4 indicates generally positive views regarding extracurricular and outreach activities (Means 3.58 and 3.65), reflecting institutional encouragement of student involvement in sports, cultural events, and community engagement that support holistic learning. However, limited funding and program diversity constrain broader participation. Table 5 reveals mixed perceptions of quality management efforts; while students appreciated quality improvement initiatives (Mean = 3.54) and academic leadership commitment (Mean = 3.47), they reported limited opportunities to influence decision-making (Mean = 3.21). This disparity suggests a gap between policy formulation and genuine student involvement in collaborative quality assurance processes.

Overall, the findings demonstrate moderate student satisfaction with instructional quality, infrastructure, and support services, accompanied by considerable variation across respondents. Addressing these gaps requires targeted improvements in faculty development, adoption of student-centered pedagogies, enhancement of digital learning infrastructure, upgrading canteen services, equitable access to library resources, transparent scholarship frameworks, expanded counseling services, and structured career readiness programs. Equally important is strengthening mechanisms for incorporating student feedback into institutional decision-making and expanding student participation in quality assurance frameworks. Establishing a coherent Quality Management Support System (QMSS) that integrates accountability, digital innovation, and stakeholder engagement can significantly uplift the educational environment and align Nepalese community colleges with international higher education standards (Gautam et al., 2025b).

#### Conclusion

This study highlights critical insights into student satisfaction within community colleges of Bagmati Province, Nepal, focusing on teaching quality, infrastructure, support services, extracurricular activities, quality management, and digital systems. While students generally appreciate faculty efforts in course delivery and academic support, significant gaps remain in instructional effectiveness. assessment fairness. research opportunities, and comprehensive academic support. These gaps point to the necessity for more student-centered, experiential learning approaches that emphasize practical skill development.

Students also identified infrastructural challenges, including insufficient digital learning tools, library resources, and classroom maintenance, despite adequate sanitary facilities and drinking water. The campus canteen emerged as an area requiring urgent attention due to concerns about food quality and management. Administrative services perform moderately well, but shortcomings in grievance handling, scholarship transparency, and career counseling accessibility compromise the overall academic experience. Furthermore, extracurricular and outreach programs, though valued, suffer from limited funding and participation opportunities.

The study underscores the crucial role of student engagement in institutional decisionmaking and quality assurance processes,

which remain underutilized. Additionally, the effectiveness of digital infrastructure such as Education Management Information Systems (EMIS) and Personnel Information Systems (PIS) depends heavily on digital literacy and accessibility among both faculty and students. Strengthening these systems alongside training initiatives will enhance institutional transparency and operational efficiency.

In sum, despite clear commitments to quality education, community colleges in Bagmati Province require targeted improvements across pedagogical methods, support services, infrastructure, and digital capabilities. Addressing these areas with student-centered policies and inclusive governance will foster continuous institutional development and elevate Nepalese community colleges to global higher education standards.

#### Recommendations for Institutional **Improvement**

#### Academic Excellence and Research Development

- Incorporate experiential learning, internships, and industry partnerships to boost employability.
- Increase research funding, mentorship 0 programs, and opportunities for student publications.
- Standardize assessments and grading systems to ensure fairness and transparency.
- Enhance academic support services including remedial classes and faculty mentoring.

#### Infrastructure and Learning Resources

- Improve library access, expand digital databases. and upgrade e-learning materials.
- Modernize sanitation, drinking water, and canteen facilities to support student well-being.
- Update campus infrastructure with 0 modern technology and ergonomic learning environments.

#### Student Support and Well-Being

- Expand mental health counseling and career guidance services.
- Increase transparency and fairness in 0 scholarship and financial aid allocation.
- Establish responsive grievance redressal mechanisms.
- Strengthen job placement assistance and o career development workshops.

#### Extracurricular. Outreach Extension. and Activities

- Enhance communication channels 0 to promote student participation in extracurricular programs.
- Develop diverse, inclusive activities addressing varied student interests.
- Provide institutional support 0 sports, cultural events, and community engagement initiatives.

#### **Ouality** Management and Institutional Governance

- Raise student awareness about quality assurance processes and encourage their participation.
- Strengthen faculty and leadership roles 0 in quality enhancement efforts.
- Empower student councils to contribute o actively to decision-making.
- Implement structured, transparent student 0 feedback systems that influence policy.

# Education Management and Information Systems (EMIS)

- Improve accessibility o userfriendliness of digital academic platforms.
- Offer training and technical support to 0 enhance digital literacy among students and faculty.
- Utilize websites and mobile apps for effective institutional communication.
- Conduct regular audits and integrate user feedback for continuous system improvement.

#### **Implementation Strategy**

- Enhance Teaching and Learning: Adopt interactive pedagogies, expand digital tools, and incorporate research-based assignments.
- Strengthen Student Engagement: 0 Promote extracurricular involvement, improve counseling, and develop career services.
- Improve Institutional Transparency: 0 Ensure clarity in financial aid processes, assessment criteria, and grievance mechanisms.
- Leverage Technology: Optimize EMIS, 0 PIS, and digital communication for efficiency and accessibility.
- Boost Leadership and Governance: 0 Increase academic leadership visibility and involvement in quality assurance initiatives.

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