

Assessing BNQF Standards: A Study on Some Selected Universities in Bangladesh

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Abstract

Purpose: The primary aim of this study is to assess adherence to and comprehension of BNQF standards, with the overarching goal of enhancing educational quality within Bangladeshi universities.

Methods: This research adopts an interpretive paradigm and employs inductive reasoning, utilizing in-depth interviews with 30 respondents, including teachers, students, and staff from eight public universities in Bangladesh, selected through purposive sampling. Qualitative methods were chosen to allow interviewees to candidly express their perspectives, emphasizing the identification of key themes.

Findings: This research highlights the importance of fostering an interactive learning atmosphere, promoting active student engagement, ensuring adequate facilities, updating curricula, employing student-centered teaching methodologies, implementing effective assessment strategies, enhancing governance practices, cultivating a research-oriented culture aligned with industry needs, and addressing comprehensive enhancements necessary to elevate the quality of higher education in Bangladesh.

Implications: Based on these findings, institutions can work towards establishing an interactive learning environment that enhances student engagement and prepares them for future endeavors. This research makes a significant contribution to improving quality standards within Bangladeshi universities.

Limitations: This study focuses on a limited sample size to explore rich descriptions and elaborate narratives rather than seeking statistical generalizations. However, this limitation restricts the broader applicability, validity, and comprehensiveness of the conclusions and recommendations presented in the discussion.

Keywords: Quality Education (QE), BNQF, Good Governance, Universities

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1. Introduction

In developing nations worldwide, quality education is a key factor driving continuous economic and social advancement (Huq et al., 2021). A robust higher education system relies on a framework that defines national degree classifications and educational levels based on learning outcomes, along with a minimal academic workload divided into modules. National Qualifications Frameworks (NQFs) have emerged as a global trend, adopted by numerous countries as tools for reform and communication to foster a unified vision of mobility, transitions, and recognition of various forms of learning. Over the past five years, NQF adoption has surged, with approximately 100 nations currently embracing, developing, or considering NQFs, while also engaging in regional qualifications frameworks. Common policy objectives among many nations include elevating skill levels, restructuring education and training systems, and enhancing qualification frameworks (Allais, 2010). The core objective of NQFs is to streamline formal credential requirements, making them more transparent and manageable for individuals navigating transitions (Singh, 2017).

To sustain a nation's higher education system and promote sustainable growth and quality assurance, a national standards framework for higher education institutions in Bangladesh, including universities, is essential. The Bangladesh National Qualifications Framework (BNQF) serves as a tool for delineating, categorizing, and accrediting skills, knowledge, and competencies across agreed-upon levels (BNQF, 2021). Applicable to all higher education institutions—encompassing general, technical, and madrasah institutions—the framework establishes national credential classifications and learning levels based on educational objectives, while stipulating minimum academic requirements and terminology. While quality enhancement remains paramount for higher education institutions, it is equally crucial to understand the importance of benchmarking as a strategy for continuous improvement and competitiveness. Universities worldwide endorse benchmarking principles and innovate transformative methodologies and practices for educational advancement (Tasopoulou & Tsiotras, 2017).

According to UNESCO (2013), "quality assurance" involves a systematic process of evaluating and verifying inputs, outputs, and outcomes against standardized quality benchmarks, aiming to uphold and enhance quality, ensure greater accountability, and facilitate standardization across academic programs, institutions, and systems. Quality education enables students to develop their full range of qualities and talents, realizing their potential both as individuals and contributors to society. It entails identifying desired student improvements and setting high expectations, guiding students to achieve them (Dill, 2007). The

quality of higher education is pivotal for every country's prosperity and development. The World Declaration on Higher Education for the Twenty-First Century states that higher education quality encompasses all functions and activities, including teaching and academic programs, research and scholarship, faculty, students, infrastructure, community services, and the academic environment. Quality assurance and certification in higher education are essential for ensuring educational quality in Bangladeshi universities (Singh, 2013).

Achieving quality education at universities is crucial for any nation, as university students play pivotal roles in shaping the country's future. In Bangladesh, ensuring compliance with international standards among higher education providers is vital for facilitating greater mobility for university students on the global stage. The BNQF has been established to ensure quality education, particularly within the country's universities, providing a standardized framework for recognizing and validating educational and training qualifications. However, the higher education landscape in Bangladesh faces significant challenges in effectively integrating a large number of teachers into BNQF implementation, transitioning towards outcome-based education, and enhancing teachers' professional competencies in teaching, learning, and assessment. Despite the potential benefits of implementing a national qualifications framework, numerous challenges may hinder BNQF evaluation in Bangladesh, as highlighted by Young (2009). These challenges include limited awareness, resource constraints, inadequate alignment with quality assurance, recognition and accreditation standards, trade-offs between accuracy and efficiency, training difficulties, complexity of implementation, and limited applicability. Addressing these challenges is essential to ensure the successful implementation and evaluation of the BNQF in Bangladesh's higher education landscape.

This problem prompts the central question of this study: how can we assess the compliance of BNQF standards at universities in Bangladesh? To address this research question, this study aims to assess the compliance of BNQF standards at universities in Bangladesh, with the goal of enhancing quality. It focuses on identifying the challenges and opportunities associated with implementing these standards. By examining the understanding of BNQF standards at universities where they have been implemented, this study seeks to gauge their impact and assess the understanding at Bangladeshi universities to effectively implement these standards for quality assurance. Ultimately, this study aims to contribute to ongoing efforts to implement standards, fostering improvements in the quality of higher education in Bangladesh.

The rest of this paper is organized as follows: Section two elaborates on the literature review, leading to the identification of the problem statement, research gap, and formulation of research questions. Section three explains the methodological approach of the research. Section four presents data analysis, findings, and discussion. Finally, implications, research limitations, directions for future research, and conclusions are discussed.

2. Literature Review

Conventional approaches to national quality assurance frameworks vary across different countries, typically falling into three main models: the European Model characterized by centralized quality control overseen by state educational ministries, the US model which combines decentralized quality assurance with market competition, and the British model where responsibility for quality assurance is largely delegated to self-accrediting universities (Dill, 2007). A qualifications framework serves as a tool for developing and categorizing qualifications based on specific criteria for levels of learning achieved. These criteria may be implicit in qualifications descriptors or explicitly outlined in the form of level descriptors (OECD, 2007). Frameworks may encompass all learning achievements and pathways or focus on specific sectors such as primary education, adult education and training, or vocational fields. Regardless, all qualifications frameworks provide a basis for enhancing the quality, accessibility, connectivity, and recognition of qualifications within a country or globally. The Bangladesh Accreditation Council oversees the implementation of the BNQF for Higher Education, established as a statutory independent organization under the Bangladesh Accreditation Council Act, 2017, responsible for governing and managing the Framework (BNQF, 2021).

The process of governance, which is defined in written provisions through the board's relationship with interested parties or other procedures, is what guides and regulates the organization. Transparency, accountability, justice, policy, independence, and participation are the metrics used to evaluate governance. The governance framework should be the organization's strategic guidelines, the efficacy of the board of management's oversight of management, and the board of management's accountability to the organization and its owners. The governance work should guarantee that timely and accurate disclosure is expressed in all matters concerning the organization, including the financial circumstances, performance, ownership, and governance (Lin et al., 2021). The administrators of universities find themselves more and more concerned with their managerial responsibilities. Distributed leadership has become popular as a means for administrators to meet corporate management expectations while preserving the

academic community's friendship and cooperation (Lizier, 2024). The emerging standard of educational leadership is defined as "networking, improving educational practices, calmness & compassion, analytical & strategically thinking, and transparency (Yokuş, 2022).

Academic institutions strive for the highest standards of instruction and learning. Academic standards must be protected at all levels of educational institutions by paying attention to quality assurance; ideally, this can be achieved by combining internal quality monitoring with external audits (Glendinning, 2022). Higher education institutions worldwide endeavour to achieve superior quality and standards in all aspects of their operations, with a particular focus on teaching, research, community development, and innovation. The public strongly supports higher education institutions with high standards and quality, and these institutions enjoy a positive reputation around the world (Asiyai, 2020). Learning outcomes and objectives are more frequently evaluated in relation to instruction that is conducted outside of libraries. Since developing learning objectives is typically connected with semester-long courses, it is not unexpected that there is little information available in library literature regarding the procedures and approaches used to develop efficient, quantifiable learning objectives for information literacy instruction sessions (Goss, 2022; James, 2020). A crucial aspect of sustainable development is higher education. By preparing their students to be the future's architects and to be democratic, egalitarian, capable, and environmentally conscious people, universities may play a significant role in fostering a sustainable future (Weiss & Barth, 2019). The most important aspect of the higher education industry is excellent instruction. Due to growing institutional competitiveness and opportunities for worldwide study through a variety of forms, its pursuit has intensified (Harrison, et.al, 2020). The need for education and training on student support service concerns has been highlighted in the context of HEI due to staff members' lack of understanding, and it would be preferable to do so prior to their taking part in the performance assessment (Coutinho et al. 2018).

The Framework underscores standards set by accredited higher education institutions, delineating the knowledge, skills, competencies, and values expected of graduates. Drawing from best practices worldwide, the framework aims to enhance the quality of higher education degrees in Bangladesh and bridge instructional disparities among higher education institutions. The transition towards outcomes-based approaches to credentials and curricula traces back to the 1960s in the United States, initially aimed at assessing teacher competency in response to increasing public scrutiny of school education (Allais, 2010). Since then, numerous countries in the Asia-Pacific region have introduced qualifications

frameworks, primarily focusing on vocational education. The adoption of the European Qualifications Framework (EQF) by the European Union in 2008 spurred European countries to develop comprehensive qualifications frameworks, aiming for enhanced international recognition and transparency of qualifications. Quality assurance in higher education emerged as a distinct regulatory focus in the late 19th century, with the establishment of accreditation agencies in the United States (Brown, 2004). The globalization and massification of higher education have reshaped the traditional state-institution relationship, compelling policymakers to explore new approaches to ensure academic quality. Governance structures in higher education encompass legislative frameworks, institutional characteristics, resource allocation mechanisms, and accountability mechanisms, among others (Henard & Mitterle, 2010). Quality assurance in higher education emerged as a distinct regulatory focus in the late 19th century, with the establishment of accreditation agencies in the United States (Brown, 2004). The globalization and massification of higher education have reshaped the traditional state-institution relationship, compelling policymakers to explore new approaches to ensure academic quality. Governance structures in higher education encompass legislative frameworks, institutional characteristics, resource allocation mechanisms, and accountability mechanisms, among others (Henard & Mitterle, 2010). Ethical considerations in higher education encompass behavioral standards that distinguish between right and wrong conduct (Henderson, 1982). Ethical challenges in student behavior include breaches of regulations, violations of implicit norms or expectations, inappropriate behavior in classrooms or examination halls, and disruptions to teaching and learning. Challenges in collecting questionnaire data from students during research studies may include students' reluctance to disclose unethical behavior, despite efforts to ensure honesty and authenticity in their responses (Jahan, 2021). Qualifications frameworks in the Asia-Pacific Economic Cooperation (APEC) region offer various benefits, including supporting skills development, facilitating educational and labor market mobility, improving access to education and training, enhancing consistency in qualification design, boosting employer confidence in qualifications, and promoting international recognition of qualifications (Allais, 2010).

Despite the significant strides made in implementing qualifications frameworks, including the BNQF for Higher Education, challenges persist in effectively integrating these frameworks into the higher education landscape. While the literature highlights the benefits of qualifications frameworks in enhancing quality, accessibility, and recognition of qualifications, there remains a gap in understanding the specific obstacles encountered during their implementation in

Bangladesh. Additionally, while governance structures and ethical considerations in higher education have been extensively discussed, there is limited research exploring the intersection between governance, ethics, and the implementation of qualifications frameworks. Understanding how governance mechanisms influence the adoption and effectiveness of qualifications frameworks, and the ethical challenges encountered during their implementation, represents an important area for further investigation. Furthermore, the literature underscores the importance of quality assurance mechanisms in ensuring the credibility and consistency of qualifications. However, there is a gap in understanding how quality assurance practices can be effectively aligned with qualifications frameworks, particularly in the context of Bangladesh. Exploring the challenges and opportunities in aligning quality assurance practices with qualifications frameworks could provide valuable insights into enhancing the quality and recognition of higher education qualifications in the country. Therefore, the research gap lies in the need for empirical studies that delve deeper into the challenges faced in implementing qualifications frameworks, the role of governance and ethics in this process, and the alignment of quality assurance practices with qualifications frameworks in the context of Bangladesh's higher education system. Addressing this gap would contribute to a more comprehensive understanding of the factors influencing the successful implementation of qualifications frameworks and inform policy and practice in higher education quality assurance.

3. Methodology

To achieve the research objectives, this study adopted an interpretive paradigm, employed inductive reasoning, and utilized a qualitative approach through in-depth interviews to assess the compliance of BNQF standards at universities in Bangladesh, aiming to enhance quality. The study interviewed relevant respondents directly or indirectly involved in quality assurance and national qualification procedures, using semi-structured questionnaires as part of the qualitative data collection process.

Consistent with the interpretive paradigm, face-to-face, in-depth interviews were conducted to explore issues related to compliance with these standards, their evaluation, and their impacts at universities in Bangladesh. A purposive sampling technique was employed to select 30 participants for in-depth interviews from various public universities. Specifically, the study conducted one interview with a former Vice-Chancellor, six with IQAC Directors, four with academic leaders (Deans), and three with Department Chairs, six with teachers, four with university administrative staff, and six with university students from several public universities.

Before commencing the interviews, the researchers provided respondents with a description of the interview protocols. Upon obtaining their consent, the entire interview session was recorded using a mobile phone's voice recorder. In cases where recording was not permitted, note-taking was used instead. Each face-to-face interview lasted between 35 to 45 minutes. After completing the interviews, the researchers promptly began listening to the voice recordings and transcribing the raw data, a time-consuming and demanding task.

The raw interview data was meticulously coded into individual words or phrases, which were then organized and subcategorized based on their characteristics. These subcategories were sorted into distinct categories, from which the study's topics were derived. Following a thorough data analysis, the study identified four distinct themes that align with its objectives.

The respondents were interviewed as part of a study conducted between March and May 2023. The data includes gender, age, designation, institutional affiliation, professional experience, educational background, and the date and time of the interview. The respondents were grouped into four distinct categories: Faculty Members, Administrative Staff, and Students. The faculty group comprises 20 professors, predominantly male (18), aged 45 to 58, with extensive professional experience ranging from 19 to 37 years. All but one hold a PhD, representing universities like Rajshahi University (RU), Khulna University (KU), and others. Four administrative staff members, aged 42 to 58, include a Registrar, Deputy Registrar, and Section Officers, with experience spanning 17 to 45 years, all affiliated with RU and holding advanced degrees such as MA and MSS. The six student respondents, equally distributed by gender and aged 24 to 26, are enrolled at RU across various undergraduate and postgraduate programs, with academic tenures of 4 to 6 years. This diverse respondent pool offers a balanced perspective from seasoned academicians, experienced administrators, and the student demographic, enriching the study's insights into the university ecosystem in Bangladesh. The following table 1 presents the profiles of the respondents and the themes generated from the thematic data analysis.

Table 1: The Themes

Number	Themes
Theme: 1	Academic Context
Theme: 2	Intellectual Community Culture
Theme: 3	Training and Learning Center
Theme: 4	Good Governance
Theme: 5	Modern Technological and Infrastructure Facilities
Theme: 6	Ethical Context

Source: Developed by Authors

4. Findings and Discussion

Quality assurance in universities is still in its early stages. However, with the passage of the Bangladesh Accreditation Council Act in 2017, significant progress has been made in advancing the quality assurance agenda in universities (Rahman et al., 2019). Several institutions have also implemented internal quality assurance mechanisms and conducted self-evaluations based on feedback from students, teachers, and employers. Outcomes-based qualifications are viewed as a means to drive curriculum reform, transform the management and delivery of education and training systems, and revise the processes and criteria for awarding qualifications, thereby enhancing quality in universities.

Theme 1: Academic Context

Academic activities, interests, and disciplines are those associated with formal education and academic research (Rahman et al., 2019). They encompass various areas of learning, teaching, research, and knowledge dissemination at institutions such as schools, colleges, and universities. Academic institutions also serve as forums for intellectual exchange and collaboration. Scholars frequently engage in discussions, conferences, and joint initiatives with peers and specialists in their fields. These encounters facilitate the exchange of ideas, perspectives, and research findings, thereby fostering a vibrant academic community.

Additionally, academic institutions provide resources and support for study and research. Scholars can access relevant materials, conduct experiments, and gather information through libraries, laboratories, online databases, and other resources. Furthermore, academic organizations often offer grants, scholarships, and fellowships to encourage research and enable academics to pursue their scholarly objectives.

An interactive class is one in which students actively participate and engage with the subject matter, the lecturer, and their peers. Engagement includes discussions, group activities, hands-on exercises, and real-time feedback. In an interactive class, students are encouraged to ask questions, share their perspectives, collaborate with others, and solve problems (Silverthorn, 2006).

“The teacher enhances student involvement and knowledge by integrating interactive teaching methods, technology, and multimedia resources. Interactive courses can be held in-person or online, and they can make use of platforms and tools that enable real-time communication and collaboration.”

Respondent Code: IQAC4; Gender: M; Age: 53; Designation: professor; Institution: KU; Experience: 21; Education: PhD; Interview Date: 25.03.23; 10AM

Respondent Code: IQAC5; Gender: M; Age: 45; Designation: professor; Institution: RU; Experience: 20; Education: PhD; Interview Date: 25.03.23; 2PM

Respondent Code: CH3; Gender: M; Age: 52; Designation: professor; Institution: RU; Experience: 33; Education: PhD; Interview Date: 14.05.23; 3PM

Respondent Code: T3; Gender: F; Age: 48; Designation: professor; Institution: RU; Experience: 28; Education: PhD; Interview Date: 10.03.23; 4PM

In order to become the class interactive, Class size should be reduced. In this regard, an IQAC director commented:

“Student-teacher ratios are often high in universities. The optimum ratio should be 1:30. The delivery of lectures is hampered without suitable classroom facilities, such as speakers and multimedia, making teaching and learning less effective.”

Respondent Code: IQAC5; Gender: M; Age: 45; Designation: professor; Institution: RU; Experience: 20; Education: PhD; Interview Date: 25.03.23; 2PM

Implementing modern practices with updated curriculum in teaching, learning, and assessment by implementing active learning in the classroom and a system for student feedback, student's assessment and evaluation as well as including higher-order cognitive skills and soft skills development in the curricula and using a learning management system for measuring student learning outcomes (Ali et al. 2017). In this regards, some expert, academic leaders and faculty members Stated:

“Curriculum should be developed and updated with expert viewpoint. Students require an updated curriculum in order to acquire a relevant and complete education that prepares them for the changing demands of the modern world. An updated curriculum considers advances in knowledge, technology, and societal changes, providing students with the skills and information they need to excel in their personal and professional life. It bridges the gap between academic learning and practical application by encouraging critical thinking, problem-solving, creativity, and flexibility.”

Respondent Code: IQAC3; Gender: M; Age: 47; Designation: professor; Institution: SUST; Experience: 19; Education: PhD; Interview Date: 22.03.23; 10PM

Respondent Code: D2; Gender: M; Age: 48; Designation: professor; Institution: RU; Experience: 24; Education: PhD; Interview Date: 15.05.23; 3PM

Respondent Code: T1; Gender: M; Age: 51; Designation: professor; Institution: JU; Experience: 23; Education: PhD; Interview Date: 17.03.23; 9PM

Respondent Code: T4; Gender: M; Age: 55; Designation: professor; Institution: CU; Experience: 37; Education: PhD; Interview Date: 15.03.23; 10PM

The traditional and inflexible approach to teaching, learning, and evaluation methods, Teaching and Learning Pedagogy, inhibit successful student learning.

Classroom education mostly emphasizes rote learning, non-creativity, and student passivity, which impedes the development of higher-order critical thinking and soft skills (Alam, 2020). Regarding this, an IQAC director commented:

“Universities work hard to establish an interactive and inclusive learning atmosphere that encourages analytical thinking, creativity, and in-depth knowledge. To stimulate active involvement and knowledge development, lectures, debates, group work, and experiential activities are frequently used following the BNQF framework.”

Respondent Code: IQAC2; Gender: M; Age: 50; Designation: professor; Institution: RU; Experience: 24; Education: PhD; Interview Date: 19.03.23; 2PM

Also regarding this issue, a former Vice-Chancellor commented:

“A student-centered approach is at the heart of university teaching and learning practice. Faculties try to create accessible and engaging educational environments by taking into account students' various cultures, passions and learning styles. They promote active involvement, collaborative learning, and knowledge application in real-world scenarios.”

Respondent Code: FVC1; Gender: M; Age: 58; Designation: professor; Institution: KU; Experience: 30; Education: PhD; Interview Date: 09.04.23; 4PM

Learning is mostly assessed through written tests, with minimal opportunity for learners to get feedback other than traditional grades. Some institutions have taken proactive initiatives to develop active learning approaches, which have been linked to greater levels of student satisfaction with teaching-learning. Inadequate and conventional teaching and learning facilities offer a substantial barrier to providing effective education. Observations made by experts and academic leaders stated:

“Universities try to develop students' analytical and critical thought, research skills, and habits of lifelong learning following the BNQF framework. Assignments, projects, and continuous assessment exams are intended to stretch students, foster autonomous investigation, and enhance knowledge application in real-world scenarios. When students have little or no access to raw materials and lab facilities, the quality of practical learning suffers, particularly in science, technology, engineering, and mathematics education.”

Respondent Code: IQAC5; Gender: M; Age: 45; Designation: professor; Institution: RU; Experience: 20; Education: PhD; Interview Date: 25.03.23; 2PM

Respondent Code: IQAC6; Gender: M; Age: 56; Designation: professor; Institution: RU; Experience: 35; Education: PhD; Interview Date: 16.03.23; 10AM

Respondent Code: D1; Gender: M; Age: 57; Designation: professor; Institution: RU; Experience: 28; Education: PhD; Interview Date: 14.05.23; 2PM

Respondent Code: D3; Gender: M; Age: 57; Designation: professor; Institution: HSTU; Experience: 24; Education: MBA; PGD; Interview Date: 11.03.23; 3PM

Furthermore, access to high-quality Internet connectivity and digital resources is limited. Even if these resources are well-provided, digital literacy among instructors and students remains low, resulting in limited use of digital facilities in teaching and learning.

Theme 2: Intellectual Community Culture

A research-based culture fosters inquiry, creativity, and critical thinking. It prioritizes knowledge acquisition, evidence-based decision-making, and lifelong learning. This culture encourages collaboration, open communication, and the exchange of ideas, facilitating the generation of new insights and discoveries (Cheetham, 2007). By addressing complex issues with evidence-based solutions, it promotes intellectual growth, drives advancements across various sectors, and contributes to social progress.

However, the proportion of research grants in public funding for universities has remained stable, at significantly below 1%. Research facilities, including modern laboratories, equipment, and digital resources, are still inadequate, hindering academics from conducting and producing high-quality research (Rahman et al., 2019). In this regard, IQAC experts and faculty members commented:

“University research has been badly underfunded, impacting their ability to do knowledge work despite the fact that universities have a large number of professors with advanced degrees and research expertise.”

Respondent Code: IQAC2; Gender: M; Age: 50; Designation: professor; Institution: RU; Experience: 24; Education: PhD; Interview Date: 19.03.23; 2PM

Respondent Code: IQAC4; Gender: M; Age: 53; Designation: professor; Institution: KU; Experience: 21; Education: PhD; Interview Date: 25.03.23; 10AM

Respondent Code: IQAC5; Gender: M; Age: 45; Designation: professor; Institution: RU; Experience: 20; Education: PhD; Interview Date: 25.03.23; 2PM

Respondent Code: CH1; Gender: M; Age: 53; Designation: professor; Institution: RU; Experience: 26; Education: PhD; Interview Date: 28.03.23; 5PM

Respondent Code: T1; Gender: M; Age: 51; Designation: professor; Institution: JU; Experience: 23; Education: PhD; Interview Date: 17.03.23; 9PM

Respondent Code: T2; Gender: M; Age: 55; Designation: professor; Institution: RU; Experience: 32; Education: PhD; Interview Date: 18.03.23; 10PM

Respondent Code: T4; Gender: M; Age: 55; Designation: professor; Institution: CU; Experience: 37; Education: PhD; Interview Date: 15.03.23; 10PM

Respondent Code: SF1; Gender: M; Age: 58; Designation: Register; Institution: RU; Experience: 45; Education: MA; Interview Date: 07.05.23; 12PM

There is a significant pool of Bangladeshi academics with PhDs, many of whom were trained overseas and are primarily concentrated in major public universities, indicating that Bangladesh has untapped research potential. In academia, research is extremely important. Scholars do research in order to develop new information, enhance current knowledge, and advance their particular subjects. This includes developing research questions, devising experiments, collecting and analyzing data, and publishing or presenting findings in academic publications or at conferences (Elton & Laurillard, 1979). Regarding this issue, some IQAC expert and faculties commented:

“Universities place a high priority on the construction of research centers, institutes, and labs that provide cutting-edge facilities and technology. They also urge faculty members to participate in research initiatives, seek external financing, and publish their findings in peer-reviewed publications. They actively encourage student engagement in research by providing undergraduate and graduate students with opportunity to engage in research initiatives, internships, and support from mentors.”

Respondent Code: IQAC4; Gender: M; Age: 53; Designation: professor; Institution: KU; Experience: 21; Education: PhD; Interview Date: 25.03.23; 10AM

Respondent Code: T2; Gender: M; Age: 55; Designation: professor; Institution: RU; Experience: 32; Education: PhD; Interview Date: 18.03.23; 10PM

Respondent Code: SF2; Gender: M; Age: 55; Designation: Deputy Register; Institution: RU; Experience: 26; Education: MA; Interview Date: 07.05.23; 2PM

Critical Thinking and systematic innovative work conducted to grow the store of information, including understanding of mankind, culture, and society, and the use of this knowledge to design new applications (Cheetham, 2007). In this regards, an IQAC director and a faculty member who have pursue degree in foreign and have huge experience, commented:

“University students' critical thinking skills are developed through a variety of academic activities such as research assignments, essay writing, group debates, and problem-solving exercises. By stimulating intellectual curiosity and questioning existing assumptions, university education frequently develops an environment that encourages critical thinking. Students are encouraged to participate in discussions, challenge authority, and investigate novel solutions to society issues.”

Respondent Code: IQAC5; Gender: M; Age: 45; Designation: professor; Institution: RU; Experience: 20; Education: PhD; Interview Date: 25.03.23; 2PM

Respondent Code: T4; Gender: M; Age: 55; Designation: professor; Institution: CU; Experience: 37; Education: PhD; Interview Date: 15.03.23; 10PM

Theme 3: Training and Learning Center

The university's Training and Learning Center provides essential tools and support for students, teachers, and staff seeking to enhance their skills and knowledge. It offers a variety of training programs, workshops, and seminars to assist individuals in their professional and academic development. Faculty members are nominated by the dean's office at their respective schools or colleges to teach the core courses of the certificate program. They receive a small stipend and participate in a training session to prepare for this role (Gunersel & Etienne, 2014).

The Training and Learning Center promotes a collaborative and interactive learning environment where individuals can engage in hands-on activities, gain practical experience, and acquire new skills. It fosters a resourceful atmosphere for students to enhance their abilities, learn new concepts, and develop their talents (Raqib, 2019). The center aims to empower students to succeed in their academic pursuits and prepare them for the challenges of the professional world through a diverse range of workshops, seminars, and training programs. With its skilled instructors and resources, the center creates a supportive and interactive learning environment that encourages collaboration, critical thinking, and creativity. In this context, many experts, academic leaders, and faculty members commented:

“Undoubtedly, there is no training and learning center for university teacher. For that reason, they are unable to enhance pedagogical skills, promote effective teaching methods, or keep educators up to date on the newest trends and advancements in their particular professions.”

Respondent Code: FVC1; Gender: M; Age: 58; Designation: professor; Institution: KU; Experience: 30; Education: PhD; Interview Date: 09.04.23; 4PM

Respondent Code: IQAC2; Gender: M; Age: 50; Designation: professor; Institution: RU; Experience: 24; Education: PhD; Interview Date: 19.03.23; 2PM

Respondent Code: IQAC4; Gender: M; Age: 53; Designation: professor; Institution: KU; Experience: 21; Education: PhD; Interview Date: 25.03.23; 10AM

Respondent Code: IQAC5; Gender: M; Age: 45; Designation: professor; Institution: RU; Experience: 20; Education: PhD; Interview Date: 25.03.23; 2PM

Respondent Code: D3; Gender: M; Age: 57; Designation: professor; Institution: HSTU; Experience: 24; Education: MBA; PGD; Interview Date: 11.03.23; 3PM

Respondent Code: CH2; Gender: M; Age: 54; Designation: professor; Institution: RU; Experience: 24; Education: PhD; Interview Date: 11.03.23; 12PM

Respondent Code: CH3; Gender: M; Age: 52; Designation: professor; Institution: RU; Experience: 33; Education: PhD; Interview Date: 14.05.23; 3PM

Respondent Code: T1; Gender: M; Age: 51; Designation: professor; Institution: JU; Experience: 23; Education: PhD; Interview Date: 17.03.23; 9PM

Respondent Code: T3; Gender: F; Age: 48; Designation: professor; Institution: RU; Experience: 28; Education: PhD; Interview Date: 10.03.23; 4PM

Respondent Code: T4; Gender: M; Age: 55; Designation: professor; Institution: CU; Experience: 37; Education: PhD; Interview Date: 15.03.23; 10PM

Expert teachers in universities possess a high level of knowledge and mastery in their respective fields. These teachers have extensive academic and professional experience, enabling them to provide valuable insights and practical applications. Their expertise also extends to designing curriculum, conducting research, and mentoring students, fostering a supportive learning environment. Through their passion for teaching and commitment to student success, expert teachers in universities play a pivotal role in shaping the minds of future generations. Observation made by an IQAC director stated:

“Qualified teachers are few, and there are little possibilities for professional growth. Teacher vacancies are common in universities particularly in district towns and rural regions.”

Respondent Code: IQAC5; Gender: M; Age: 45; Designation: professor; Institution: RU; Experience: 20; Education: PhD; Interview Date: 25.03.23; 2PM

For public universities, the government should use a central teacher recruiting and training procedure that can take up to two years, and turnovers during this period worsen the vacancy problem.

Theme 4: Good Governance

The legislative backbone and coordinating mechanism of university education are fragmented. The three subsectors are governed by different legal frameworks, each establishing distinct governance structures, duties, and obligations for various institutions. The large number of organizations, complex governance structures, and weak managerial capacity make effective administration and coordination at both the central and institutional levels challenging.

Good governance is a vital foundation for a well-functioning society and is critical to a nation's progress, stability, and prosperity. It encompasses the principles and practices in the governance process that promote transparency, accountability, participation, efficiency, and the rule of law (Alam, 2020). Transparency is an essential component of effective governance, as it allows the public access to information and decision-making processes. Transparent governance enables citizens to hold their leaders accountable and fosters trust in public institutions. It also helps prevent corruption, as politicians and institutions are more likely to act ethically when their actions are subject to public scrutiny (Rahman et al., 2019).

“Poor transparency and insufficient accountability systems are to blame for numerous abnormalities bad practices in the universities, such as teacher recruitment, student enrolment, and student assessments. In the absence of effective accountability systems, governmental constraints constrain institutions' ability to respond to human resource demands and academic program modifications.”

Respondent Code: FVC1; Gender: M; Age: 58; Designation: professor; Institution: KU; Experience: 30; Education: PhD; Interview Date: 09.04.23; 4PM

Respondent Code: IQAC3; Gender: M; Age: 47; Designation: professor; Institution: SUST; Experience: 19; Education: PhD; Interview Date: 22.03.23; 10PM

Respondent Code: IQAC4; Gender: M; Age: 53; Designation: professor; Institution: KU; Experience: 21; Education: PhD; Interview Date: 25.03.23; 10AM

Respondent Code: IQAC5; Gender: M; Age: 45; Designation: professor; Institution: RU; Experience: 20; Education: PhD; Interview Date: 25.03.23; 2PM

Accountability is yet another critical component of successful government. It means that people in positions of authority must account for their acts and decisions. Effective measures should be in place to hold public officials accountable for their actions and to guarantee that they operate in the best interests of the people they represent. This may be accomplished by establishing independent judicial systems, strong anti-corruption laws, and monitoring agencies (Rahman et. al, 2019). Observation made by a former Vice-Chancellor commented:

“Public university teachers get so much freedom and autonomy to conduct their daily work. Furthermore, the highly politicized climate in universities frequently leads to student and staff protests and disruptions that disrupt the academic schedule.”

Respondent Code: FVC1; Gender: M; Age: 58; Designation: professor; Institution: KU; Experience: 30; Education: PhD; Interview Date: 09.04.23; 4PM

Governance efficiency ensures that resources are used effectively and services are delivered efficiently. This includes reducing bureaucratic processes, encouraging digital transformation, and putting in place strong systems for managing public finances. Efficient governance optimizes service delivery and maximizes the effect of public resources, resulting in better outcomes for residents (Kooli, 2019).

Theme 5: Modern Technological and Infrastructure Facilities

Universities face a significant lack of modern technology and infrastructure facilities, including computer laboratories, high-speed internet access, digital libraries, smart classrooms, and campus-wide Wi-Fi coverage. These facilities are

essential for providing students with access to cutting-edge research, collaboration, and learning tools and resources (Bariu, 2020).

To create a suitable and engaging learning environment, colleges also invest in contemporary infrastructure, such as well-designed lecture halls, research centers, sports facilities, and student housing. These amenities enhance the overall educational experience, foster innovation and creativity, and prepare students for the demands of the digital age. In this regard, some IQAC experts commented:

“The government should increase fund and may propose particular incentives for modern technological and infrastructure facilities in order to improve quality in education and collaboration with foreign universities through blended online learning. Increasing investments in teaching and learning, as well as ICT facilities, potentially through government support, private-sector collaborations and fundraising and outreach campaigns. It is also a most important task to focus on this issue. University authority should prioritize on computer laboratories, high-speed internet access, digital libraries, smart classrooms, and campus-wide Wi-Fi coverage are among them”

Respondent Code: IQAC1; Gender: M; Age: 52; Designation: professor; Institution: JnU; Experience: 33; Education: PhD; Interview Date: 17.03.23; 10PM

Respondent Code: IQAC5; Gender: M; Age: 45; Designation: professor; Institution: RU; Experience: 20; Education: PhD; Interview Date: 25.03.23; 2PM

Respondent Code: IQAC6; Gender: M; Age: 56; Designation: professor; Institution: RU; Experience: 35; Education: PhD; Interview Date: 16.03.23; 10AM

Respondent Code: T2; Gender: M; Age: 55; Designation: professor; Institution: RU; Experience: 32; Education: PhD; Interview Date: 18.03.23; 10PM

Respondent Code: T3; Gender: F; Age: 48; Designation: professor; Institution: RU; Experience: 28; Education: PhD; Interview Date: 10.03.23; 4PM

There is a huge lack of modern technological facilities, such as modern and smart library facilities, better Wi-Fi facilities, and others modern equipment for practical work in lab and a greater lack of proper monitoring of previously established labs (Walmiki & Ramakrishnegowda, 2009).

Theme 6: Ethical Context

In academic endeavors, teachers and students should adhere to the highest ethical standards. They must be honest, trustworthy, and fair in every aspect of teaching and learning. Teachers should foster a supportive environment that respects each student's rights and dignity. Students should be encouraged to take ownership of their own learning and to respect their professors, peers, and the educational process as a whole. In conducting research or grading assignments, they should

promote academic integrity, avoid plagiarism, and follow ethical guidelines. Overall, university instructors serve as role models, consistently demonstrating ethical behavior and upholding educational and professional principles (Jahan, 2021). University faculty and staff support their students' well-being and academic success by creating an inclusive and welcoming learning atmosphere. They maintain confidentiality and professionalism while ensuring that all students receive equal treatment and opportunities.

“Teachers in universities have a primary responsibility to uphold and exemplify ethical behavior in all of their relationships with students, colleagues, and the academic community. They aspire to establish a secure and collaborative learning atmosphere that promotes intellectual development, analytical thinking, and academic independence while providing equitable opportunity to all students. Each course teacher should make a conscious and intentional effort to create a climate of ethics that will limit the occurrence of unethical behavior among his or her students.”

Respondent Code: IQAC1; Gender: M; Age: 52; Designation: professor; Institution: JnU; Experience: 33; Education: PhD; Interview Date: 17.03.23; 10PM

Respondent Code: IQAC6; Gender: M; Age: 56; Designation: professor; Institution: RU; Experience: 35; Education: PhD; Interview Date: 16.03.23; 10AM

Respondent Code: D3; Gender: M; Age: 57; Designation: professor; Institution: HSTU; Experience: 24; Education: MBA; PGD; Interview Date: 11.03.23; 3PM

Respondent Code: T2; Gender: M; Age: 55; Designation: professor; Institution: RU; Experience: 32; Education: PhD; Interview Date: 18.03.23; 10PM

Respondent Code: ST1; Gender: M; Age: 25; Designation: Student; Institution: RU; Experience: 6; Education: MBA; Interview Date: 08.05.23; 3PM

Ethical instructors uphold confidentiality, protect pupils' privacy and personal information, and prevent all forms of discrimination and harassment. They encourage learners to pursue knowledge with integrity and provide help to resolve ethical quandaries by promoting honesty, intellectual honesty, and integrity in academia (Baumgarten, 1982). They exhibit a dedication to ongoing professional development by remaining up to date on research and best practices in their area, as well as maintaining an open and engaging discourse with students. It is also the university's ethical responsibility to take the necessary steps, such as active proctoring in the examination hall, motivating students toward ethical activities, setting creative questions, and so on, to prevent students from cheating, plagiarism, misbehavior, and other forms of unethical behavior.

“Teachers recruitment and selection process should be fair to find the best specialized faculties to improve quality in universities. Here, every stakeholder

should follow roles, policies and code of conduct strictly. Teachers should be regular at his or her routine work, such as regular present in classroom, gathering up to date knowledge for providing lecture, concern regarding regular students' assessment."

Respondent Code: IQAC5; Gender: M; Age: 45; Designation: professor; Institution: RU; Experience: 20; Education: PhD; Interview Date: 25.03.23; 2PM

Respondent Code: D1; Gender: M; Age: 57; Designation: professor; Institution: RU; Experience: 28; Education: PhD; Interview Date: 14.05.23; 2PM

Respondent Code: CH3; Gender: M; Age: 52; Designation: professor; Institution: RU; Experience: 33; Education: PhD; Interview Date: 14.05.23; 3PM

Respondent Code: T2; Gender: M; Age: 55; Designation: professor; Institution: RU; Experience: 32; Education: PhD; Interview Date: 18.03.23; 10PM

Respondent Code: SF2; Gender: M; Age: 55; Designation: Deputy Register; Institution: RU; Experience: 26; Education: MA; Interview Date: 07.05.23; 2PM

Respondent Code: ST3; Gender: F; Age: 25; Designation: Student; Institution: RU; Experience: 6; Education: MA; Interview Date: 09.05.23; 10AM

The discussion highlights the significance of creating an interactive learning environment in universities. Such an environment promotes active student engagement, appropriate classroom facilities, a current curriculum, student-centered teaching methods, and effective evaluation systems. However, challenges such as large class sizes, outdated teaching techniques, and limited access to resources must be addressed. By encouraging active participation, providing suitable facilities, modernizing the curriculum, employing student-centered approaches, and enhancing evaluation systems, educational institutions can improve the quality of education and boost student engagement. Efforts should also focus on overcoming resource shortages and enhancing digital literacy among both teachers and students.

In universities, a research-based culture fosters inquiry, creativity, and critical thinking. It encourages knowledge acquisition, rational decision-making, and lifelong learning, leading to new ideas and discoveries. However, underfunding hampers high-quality research and limits faculty contributions. To address this issue, universities should prioritize research infrastructure, promote faculty engagement, and involve students through internship and mentorship programs. Activities such as research assignments and problem-solving exercises cultivate critical thinking skills, encouraging students to challenge assumptions and explore innovative alternatives. In summary, a research-based culture and critical thinking are essential for intellectual growth and social advancement, requiring adequate funding, resources, and support for faculty and student research.

The lack of training and learning centers for university professors hampers their ability to enhance pedagogical skills, implement effective teaching techniques, and stay updated in their fields. This gap prevents them from providing students with valuable insights and practical applications. Additionally, a shortage of trained teachers and limited professional development opportunities, especially in rural areas, exacerbates the situation. Establishing training and learning centers would empower professors to improve their teaching abilities and create a conducive learning environment.

In university education, fragmented legislative frameworks and ineffective governance structures hinder efficient administration and collaboration. To overcome these challenges, transparency, accountability, and effectiveness in governance must be prioritized. Transparency is particularly important in preventing irregularities and malpractices in areas such as faculty recruitment, student enrollment, and assessments. Universities must implement safeguards to ensure that administrators and staff act in the best interests of students and the public. This could include independent oversight, anti-corruption measures, and monitoring organizations. Transparency fosters trust and holds leaders accountable, while accountability ensures responsible actions, and efficiency maximizes resource use. By focusing on these areas, universities can establish effective governance, leading to educational advancement, stability, and prosperity.

The lack of modern technological and infrastructure facilities significantly impacts the quality of education and student experiences. Key issues include insufficient computer laboratories, slow internet connectivity, limited access to digital libraries, and inadequate supervision of existing labs. To improve this situation, universities should prioritize investments in modern infrastructure, such as well-equipped computer laboratories, high-speed internet access, digital library services, smart classrooms, and campus-wide Wi-Fi coverage. Upgrading lecture halls, research centers, sports facilities, and residence halls will also contribute to a well-rounded educational experience. By addressing these infrastructural gaps, universities can enhance the learning environment, stimulate creativity and collaboration, and prepare students for the demands of the digital age. Increased funding, government incentives, private-sector partnerships, and proactive maintenance will be crucial in achieving these goals.

Academic ethics are essential for fostering a healthy and inclusive learning environment. Teachers should serve as ethical role models, demonstrating honesty, integrity, and fairness in their interactions with students. To maintain academic integrity, educators must emphasize honesty, discourage plagiarism, and ensure

that students understand ethical principles. Respecting confidentiality, supporting inclusion, and pursuing continuous professional development are also vital aspects of ethical behavior. Universities must uphold ethical standards by preventing misconduct and ensuring fair recruitment processes. Overall, emphasizing ethics in teaching and learning is critical for developing responsible and engaged learners who contribute positively to society.

5. Implications of the Study

The findings of this paper have significant practical implications for the higher education sector in Bangladesh, aimed at enhancing the quality of education in the country. This research provides policymakers with comprehensive insights into the most effective strategies for improving the quality of higher educational institutions in Bangladesh. Implementing modern practices, such as active learning approaches and robust student feedback systems, can enhance student satisfaction with the teaching and learning processes. This highlights the need for institutions to invest in training faculty members in active learning methodologies and establishing mechanisms for comprehensive feedback. Establishing a strong research-based culture is crucial for fostering inquiry, creativity, and critical thinking. This requires adequate funding for research facilities, promoting faculty engagement, and involving students in research activities through internships and mentorship programs. The lack of training and learning centers for university professors hinders their ability to enhance pedagogical skills and stay updated in their fields. Establishing such centers can empower professors to improve their teaching abilities and create conducive learning environments.

Fragmented legislative frameworks and ineffective governance structures hinder efficient administration and collaboration in universities. Prioritizing transparency, accountability, and effectiveness in governance can address these issues, ensuring that administrators and staff act in the best interests of students and the public. Inadequate technological and infrastructure facilities negatively impact the quality of education and student experiences. Universities should prioritize investments in modern infrastructure, such as computer laboratories, high-speed internet connectivity, digital library services, smart classrooms, and campus-wide Wi-Fi coverage, to enhance the learning environment and prepare students for the digital age. Emphasizing academic ethics is essential for promoting a healthy and inclusive learning environment. Universities should ensure that teachers act as ethical role models, uphold principles of honesty, integrity, and fairness, and discourage unethical behaviors such as plagiarism. Respecting confidentiality, supporting inclusion, and fostering ongoing professional development are also critical components of ethical behavior in academia.

Overall, these implications suggest the need for comprehensive reforms across various aspects of academic institutions, including teaching methodologies, research culture, infrastructure development, governance, and ethical standards, to enhance the quality of education and contribute to the overall advancement of society.

6. Limitations and Future Study Directions

The study's drawbacks include a lack of specific contextual details, insufficient empirical evidence to support the assertions, incomplete coverage of challenges in establishing interactive learning environments, an excessive focus on infrastructure issues, a lack of alternative viewpoints, and a narrow scope limited to universities without considering the broader educational context. These limitations reduce the applicability, reliability, and comprehensiveness of the findings and recommendations discussed. Researchers could provide a more comprehensive and nuanced evaluation of the factors affecting quality by integrating qualitative insights with broader quantitative data. Future research endeavors might aim to address these deficiencies and enhance our understanding of how to foster interactive learning environments in university settings. This could involve contextual analyses, empirical investigations, thorough examinations of challenges, and the adoption of a holistic educational perspective. Additionally, comparative studies, exploration of innovative methods and technologies, and longitudinal studies to assess long-term effects could be pursued. Exploring these avenues would facilitate a deeper understanding of effective strategies for enhancing student engagement and academic outcomes in higher education.

7. Conclusion

This study emphasizes the importance of establishing interactive learning environments within universities to enhance student engagement, improve educational quality, and nurture critical thinking skills. It highlights the value of active student involvement, adequate facilities, updated curricula, student-centered teaching methods, and effective assessment strategies. Despite limitations in contextual specificity and empirical evidence, the study offers valuable insights and recommendations for future research endeavors. To advance this field, upcoming studies should focus on conducting context-specific investigations, empirical analyses, and comprehensive assessments of relevant issues. Adopting a holistic approach that considers the broader educational context and exploring innovative ideas and technologies can further contribute to a deeper understanding of how to cultivate interactive learning environments that enhance student experiences and academic outcomes. By addressing these limitations and pursuing research opportunities, universities can foster a culture of intellectual advancement

and societal progress. This endeavor equips students with the necessary skills to thrive in the digital age while ensuring that higher education institutions evolve to meet the demands of a rapidly changing world. Ultimately, the pursuit of interactive learning environments is crucial for the ongoing advancement and innovation of university education.

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References

- Alam, G. M. (2020). Quality assurance for private universities in Bangladesh: A quest for specialised institutional governance, management and regulatory mechanism. *International Journal of Comparative Education and Development*, 22(1), 1-15.
- Ali, M. M., Medhekar, A., & Rattanawiboonsom, V. (2017). Quality enhancement in teaching-learning strategies of Bangladesh: A qualitative assessment. *International Journal of Advanced Trends in Technology: Management and Applied Science (IJATTMAS)*, 3(1), 121-147.
- Allais, S. (2010). *The implementation and impact of National Qualifications Frameworks: Report of a study in 16 countries* (Vol. 3). Geneva: ILO.
- Allais, S. (2010, October). National Qualifications Frameworks: solving the education/labour market ‘mismatch’?. In *Education and Employers Taskforce Inaugural Research Conference, University of Warwick, Friday* (Vol. 15).
- Asiyai, R. I. (2022). Best practices for quality assurance in higher education: implications for educational administration. *International Journal of Leadership in Education*, 25(5), 843-854.
- Bakker, I. APEC (1999). Human Resources Development Working Group Network on Economic Development Management.
- Bariu, T. N. (2020). Status of ICT infrastructure used in teaching and learning in secondary schools in Meru County, Kenya. *European Journal of Interactive Multimedia and Education*, 1(1), e02002.

- Baumgarten, E. (1982). Ethics in the academic profession: A Socratic view. *The Journal of Higher Education*, 53(3), 282-295.
- Bjornevol, J., & Grm Pevec, S. (2011). The development of national qualifications frameworks in Europe (Vol. 12, p. 192). Working paper. CEDEFOP.
- BNQF, 2021. Bangladesh Accreditation Council <https://bac.portal.gov.bd/site/files/c8599d9e-300a-4ab2-95b3-411123f9b917/->
- Brown, R. (2004). *Quality assurance in higher education: The UK experience since 1992*. Routledge.
- Cheetham, A. (2007). Growing a research culture. *Address to Academic Senate, Friday*, 1-7.
- Coutinho, V., Domingues, A. R., Caeiro, S., Painho, M., Antunes, P., Santos, R., ... & Ramos, T. B. (2018). Employee-driven sustainability performance assessment in public organisations. *Corporate Social Responsibility and Environmental Management*, 25(1), 29-46.
- Dill, D. (2007). Quality assurance in higher education: Practices and issues. *The 3rd international encyclopedia of education*.
- Elton, L. R. B., & Laurillard, D. M. (1979). Trends in research on student learning. *Studies in higher education*, 4(1), 87-102.
- Glendinning, I. (2022). Aligning academic quality and standards with academic integrity. In *Contract cheating in higher education: Global perspectives on theory, practice, and policy* (pp. 199-218). Cham: Springer International Publishing.
- Goss, H. (2022). Student learning outcomes assessment in higher education and in academic libraries: A review of the literature. *The Journal of Academic Librarianship*, 48(2), 102485.
- Gunersel, A. B., & Etienne, M. (2014). The impact of a faculty training program on teaching conceptions and strategies. *International Journal of Teaching and Learning in Higher Education*, 26(3), 404-413.
- Harrison, R., Meyer, L., Rawstorne, P., Razee, H., Chitkara, U., Mears, S., & Balasooriya, C. (2022). Evaluating and enhancing quality in higher education teaching practice: A meta-review. *Studies in Higher Education*, 47(1), 80-96.

- Hénard, F., & Mitterle, A. (2010). Governance and quality guidelines in Higher Education. *A review of governance arrangements and quality assurance. Berlim: OECD.*
- Henderson, V. E. (1982). The ethical side of enterprise. *Sloan Management Review (pre-1986)*, 23(3), 37.
- Huq, S. M. M., Huque, S. M. R., & Banik, A. (2021). Service quality and quality assurance in higher education: A case of Bangladesh. In *Research Anthology on Preparing School Administrators to Lead Quality Education Programs* (pp. 875-899). IGI Global.
- Jahan, N., & Islam, M. S. Ethical Issues in University Students' Behaviors: Beliefs and Practices of Bangladeshi Students. *JOURNAL OF EDUCATION & PEDAGOGY*, 1.
- Kooli, C. (2019). Governing and managing higher education institutions: The quality audit contributions. *Evaluation and program planning*, 77, 101713.
- Lin, Y. H., Zhu, T., Kim, C. J., & Ho, S. P. (2021). How do institutional pressures moderate the impacts of relational governance on the performance of international projects? An empirical assessment. *International Journal of Project Management*, 39(7), 726–737.
- Lizier, A., Brooks, F., & Bizo, L. (2024). Importance of clarity, hierarchy, and trust in implementing distributed leadership in higher education. *Educational Management Administration & Leadership*, 52(4), 901-915.
- Malik, A. (2002). World Bank. Constructing Knowledge Societies: New Challenges for Tertiary Education. *Pakistan Development Review*, 41(2), 204-207.
- Organisation for Economic Co-operation and Development. (2007). *Qualifications systems: Bridges to lifelong learning*. OECD Publishing.
- Paul, R., & Pradhan, S. (2019). Achieving student satisfaction and student loyalty in higher education: A focus on service value dimensions. *Services Marketing Quarterly*, 40(3), 245-268.
- Rahman, T., Nakata, S., Nagashima, Y., Rahman, M., Sharma, U., & Rahman, M. A. (2019). *Bangladesh tertiary education sector review: Skills and innovation for growth*. World Bank.

- Raqib, A. B. M. (2019). Innovations in teacher training at higher education in Bangladesh. *Social Science Review [The Dhaka University Studies, Part-D]*, 36(1), 221-231.
- Silverthorn, D. U. (2006). Teaching and learning in the interactive classroom. *Advances in Physiology Education*, 30(4), 135-140.
- Singh, M. (2017). National Qualifications Frameworks (NQF) and support for alternative transition routes for young people. *Vocational education and training in times of economic crisis: Lessons from around the world*, 3-23.
- SINGH, M. The work of UNESCO Institute for Lifelong Learning (UIL) in strengthening lifelong learning through National Qualifications Frameworks (NQFs). *the challenges of policy transfer in vocational skills development*, 85.
- Tasopoulou, K., & Tsiotras, G. (2017). Benchmarking towards excellence in higher education. *Benchmarking: An International Journal*, 24(3), 617-634.
- Walmiki, R. H., & Ramakrishnegowda, K. C. (2009). ICT infrastructure in university libraries of Karnataka.
- Weiss, M., & Barth, M. (2019). Global research landscape of sustainability curricula implementation in higher education. *International Journal of Sustainability in Higher Education*, 20(4), 570-589.
- Yokuş, G. (2022). Developing a guiding model of educational leadership in higher education during the COVID-19 pandemic: A grounded theory study. *Participatory Educational Research*, 9(1), 362-387.
- Young, M. F. (2009). Implementing national qualifications frameworks: Problems and possibilities. In *International handbook of education for the changing world of work: Bridging academic and vocational learning* (pp. 2917-2933). Dordrecht: Springer Netherlands.