

Exploring the Skill Gaps among Bangladeshi Graduates: A Study from HRD Perspective on Higher Education

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Abstract: This study explores the skill development gaps among Bangladeshi graduates from the perspective of Human Resource Development (HRD) in higher education, also examines the mismatch between academic preparation and industry expectations, and identifies key areas of improvement to enhance graduate employability. A qualitative research approach was adopted, through interviews with 46 HR professionals and 6 academicians selected through purposive sampling. Data collection emphasized lived experiences and professional insights into the preparedness of graduates for the workforce. The findings reveal critical deficiencies in soft skills, communication, competence, professional etiquette, problem-solving, critical thinking, and real-world job readiness. Limited collaboration between academia and industry, along with outdated curricula, was identified as a major contributor to these gaps. The study recommends curriculum reform, structured soft skills training, enhanced faculty-industry engagement, and experiential learning approaches to better align higher education outcomes with the demands of a modern workforce. Future research can explore sector-specific skill gaps, student perceptions of readiness, and the long-term impact of curriculum reforms, helping to further align higher education with industry needs.

Keywords: Skill Development, Skill Gaps, Graduates, HRD Perspective, Higher Education.

1. Introduction

In the era of rapid globalization, digitalization, and technological transformation, and shifting labor market dynamics, the concept of employability has emerged as a critical indicator of success for higher education institutions (Momen et al., 2022). At the same time, skilled employees are regarded as a competitive advantage and a critical source of sustainability in this rapidly changing industry (Akter et al., 2021). Across the developing world and particularly in Bangladesh, a growing tension is being observed between the output of the higher education sector and the actual demands of the relevant labor market (Sarker, 2024).

Bangladesh is currently at a demographic crossroads. With an estimated population of 175.7 million—half of whom are women—and around 115 million people in the working-age group (15–64 years), the country holds a significant opportunity to capitalize on its demographic dividend (The Financial Express,

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2025); but this dividend could quickly become a demographic burden if the young aren't equipped with the skills for success in a competitive and ever-changing job market (Shahriar et al., 2023). Reforms in higher education and youth employment have been a priority for successive administrations (Shahriar et al., 2021). But despite all this, the national statistics do not look encouraging: millions of university graduates remain unemployed or underemployed, and business leaders regularly complain that they can't find 'job-ready' candidates.

In all parts of the world, nations are facing great difficulty when it comes to matching their higher education systems to a more sophisticated labor market. In Bangladesh, the situation is more severe due to structural problems in academic planning and curriculum design, inadequacy of linkage between education and industry, and lack of a strong and coherent national HRD strategy that integrates higher education with long-term economic planning. While the country has made notable progress in increasing enrollment and expanding access to higher education, questions about the quality, relevance, and applicability of the education system remain unresolved (Momen et al., 2023). These concerns are most vividly reflected in the skill development gaps that persist among graduates, making them underprepared for the modern world of work.

This research seeks to explore this complex phenomenon by analyzing the alignment, or lack thereof-between higher education outcomes and the human resource development (HRD) needs of Bangladesh.

2. Literature Review

2.1 Changing employability skills and the shift of the Industrial Revolution

The global employment landscape is undergoing a profound transformation driven by the rapid pace of technological advancement and the evolving nature of the industrial revolution (Shahriar, 2025). As the world moves from the Fourth Industrial Revolution – with its convergence of digital, physical, and biological technologies (Wang and Siau 2019), the parameters of employability and labor market skills are changing just as fast (Ziatdinov et al., 2024). The current Industry 4.0 places a premium on competences such as data analysis, artificial intelligence, machine learning, robotics, and cloud computing, but also rewards agility, creativity, and interdisciplinary thinking (Ayandibu et al., 2021; Bagnoli et al., 2021).

But this transition isn't just about technology. Work has changed enough that soft skills, like emotional intelligence, collaboration, problem-solving, digital communication, and a capacity for learning on the fly, are as important to learning how to code as coding is (Chakrabarty, 2021). Employers today look for people whose talent is not only technical, but also a culture fit who is collaborative, a strong communicator, and open-minded when it comes to dealing with ambiguity and change (Nwaohiri and Nwosu, 2021).

Moreover, automation and AI are replacing large quantities of routine and repetitive activities, particularly in manufacturing, administration, and retail

(Kretos, 2025). Yet this shift is accompanied by the rise of fresh roles that draw on a mix of technical and people skills. It's just that jobs like data translator, AI ethicist, digital content creator, or experience designer (Bukartaite and Hooper, 2023) simply did not exist ten years ago.

In emerging economies such as Bangladesh, where much of the population is going to be in the working ages, it is paramount to connect education and training systems with the future of work (Yang, et al., 2024). There is an urgent need to reform curricula, integrate digital and vocational training, and encourage lifelong learning so as to prepare youth for new types of employment. Additionally, the increasing interconnectedness of the global economy and the resurgence of telework have propelled cross-cultural competence (Bilderback and Thompson, 2025), digital literacy (Perera et al., 2025), and global collaboration as key elements of Employability.

2.2 Employability Skills and Reality

Employability Skill comprises the fundamental knowledge and qualities that prepare graduates to get a job, work well, and cope with the dynamics of job requirements; these skills don't consist purely of academic knowledge but a mix of technical, cognitive, and behavioral skills needed in today's dynamic labor market from the perspective of human resource development (HRD) (Subbu Nisha and Rajasekaran, 2018). Internationally, employers and HR practitioners list essential employability skills as communication skills, problem-solving skills, teamwork skills, leadership skills, the ability to adapt, ICT literacy, and emotional intelligence (Sarfraz et al., 2018).

Within Bangladesh, higher education institutions (HEIs) concentrate more on academic or theoretical knowledge rather than hands-on, practical work-related skills. General perception of both employers and employees points to a continuing lack of soft skills, including workplace communication, time management, teamwork, and professional ethics among fresh graduates (Mwita et al., 2024). Bangladesh's higher educational system—particularly outside its major urban centers—isn't nimble or structured enough to teach these skills geared toward the future (Saari et al., 2025).

This discord between newly graduated students and market demand complicates talent identification and development paths for organizations. The HRD interventions, such as corporate trainings, internships, and industry-academia interfaces, are therefore necessary to bridge this gap. Therefore, employability skills are dynamic and changeable and breed global changes, local job market demands, and technological transformation. Thus, the scope of higher education should broaden not only as information disseminators but also as active skill producers, career-ready, and competency-driven for HRD.

2.3 Skill Mismatch in Higher Education and Market

Skills mismatch refers to the difference between the knowledge and skills students learn in higher education and those required by the labor market. It is a matter of increasing concern in the transition to a better and more inclusive labor

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market (Draissi et al., 2023). This mismatch can come in multiple shapes and sizes—whether a quantitative mismatch, a qualitative mismatch, or a geographic mismatch (Abelha et al., 2020). Mismatch of skills is a recognized barrier in Bangladesh that may lead to inefficient employment locations for fresh university graduates. Several research works and HRD-related surveys have revealed that higher education curricula in Bangladesh have frequently lacked the relevance to match real-world practices (Allen et al., 2013). This is despite the increasing number of university graduates who emerge each year, with the difficulty of finding skilled human resources reportedly mainly concentrated in ICT, finance, manufacturing, and service sectors. From an HRD perspective, the discrepancy serves to reduce productivity in the workplace, limit innovation in the workforce, and promote underemployment, job dissatisfaction, and wasted human capital (Bennett, 2002).

Root causes of this gap in Bangladesh are a lack of labor market information, employer participation in curriculum development, career guidance, and internship or on-the-job training opportunities (Hossain and Arefin, 2025). Additionally, the absence of structured skill programs integrated into degree program curricula hinders efforts to mitigate these issues. Addressing this gap necessitates a systemic model that encompasses universities, employers, policymakers, and HRD practitioners (Chisty et al., 2024). This can range from updating curricula to meet the newest industry needs, promoting the cooperation between universities and industry, developing skills-based training modules, and having students learn on-the-job via apprenticeships or co-op programs.

3. Objective of Research

The purpose of this study is to examine the core factors contributing to the skills gap among Bangladeshi graduates, focusing on the misalignment between higher education outcomes and industry expectations. Using an HRD perspective, it specifically explores how theory-dominated curricula, limited applied learning opportunities, and weak academia–industry collaboration shape graduate employability and workplace readiness.

4. Methodology

This research uses a qualitative approach to investigate skills gaps among Bangladeshi graduates from an HRD point of view. A qualitative design can be considered more appropriate, as this design enables a rich exploration of people's perceptions and experiences and can offer valuable insights into the complex reality of higher education and employability. Instead of generalizing statistically, this research aims to provide the rich, contextual, and nuanced data that can help uncover the reasons, meanings, and institutional forces behind the observed skill mismatches in the context of Bangladesh.

In-depth interviews (IDI) were the main data collection method employed in this research. On the other hand, in-depth interviews enable a careful, flexible, and in-depth investigation of informants' perspectives and therefore provide adequate

instruments for further questioning, such as those related to the development of skills, institutional cultures, and HR expectations. Notably, this study used open-ended, deep conversations, as this allows respondents the freedom to express themselves without being confined by predefined answer categories, fostering authenticity and depth in the data collected.

A purposive sampling technique was used to guarantee the presence of those who are implicated in the development of skills, talent scouting, feelings following the experiences related to graduate recruitment, training, performance, and the format or delivery context of higher education. The two primary participant groups were chosen:

Cluster 1: The sample group includes 46 HR professionals from different sectors in Bangladesh. The respondents were chosen among those who have been involved in hiring, training, or managing young graduates currently. These professionals held mid-to-senior-level HR roles such as HR Manager, Talent Acquisition Specialist, Training & Development Lead, HR Business Partner, and Head of HR. Participants were chosen based on three main criteria: (1) a minimum of five years' professional experience in either HR management or higher education; (2) active involvement in hiring, training, or curriculum design; and (3) willingness to provide reflective insights into graduate preparedness. Their insights provided critical data on the expectations, frustrations, and strategies related to graduate employability.

Cluster 2: The sample cluster recruited 6 academicians of the top-ranking public and private Bangladeshi universities as part of the study. These faculty members were from the undergraduate curriculum, career services, and skill development faculties. They were department chairpersons, professors, and members from academic councils or quality assurance cells. Their responses helped frame how universities perceive their responsibility to prepare graduates for the labor market and how they perceive and react to the emerging industry trends.

Purposive sampling was employed to ensure that participants possessed direct, relevant experience with graduate employability issues in Bangladesh. HR professionals were selected because of their first-hand role in assessing graduate skills during recruitment and managing workplace performance. Academicians were included as they directly influence curriculum design, pedagogy, and institutional strategies.

The interviews were conducted over a period of three months, utilizing a combination of in-person and virtual (Zoom/Google Meet) platforms, depending on the participants' availability and location. Each interview lasted approximately 45 to 90 minutes. The data collected through the interviews were analyzed using thematic analysis, a flexible and widely used method in qualitative research that allows the identification of patterns and meanings across the dataset.

This study adopted a qualitative research design, employing inductive thematic analysis as outlined by Braun and Clarke (Braun and Clarke, 2006). This approach was chosen for its flexibility in identifying patterned meaning across

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narratives while preserving the depth of participants' lived experiences. The method enabled a systematic yet interpretive exploration of stakeholder perspectives, ensuring rigor through iterative coding and theme development. Thematic analysis was considered particularly appropriate for this study, as it enabled the researcher to interpret the complex realities of skill gaps from multiple stakeholder perspectives, offering a rich and context-sensitive understanding of how higher education intersects with employability in Bangladesh. The analysis process began with a thorough familiarization with the data. All interviews, whether conducted in person or virtually, were audio recorded with the participants' consent and subsequently transcribed verbatim. The transcripts were then reviewed multiple times by the primary researcher to ensure accuracy and to begin identifying recurrent ideas and expressions. Notes and memos were created alongside this process to record early impressions and observations. Then, an open coding process was conducted, during which meaningful parts of the data were coded with brief phrases or words that encapsulated the core of the data. This inductive coding process guaranteed that the codes were derived from the data rather than from preconceived ideas. The verbatim transcripts were read by the authors, and passages related to the perception of graduate readiness, hiring difficulties, relevant curriculum, industry trends, and institutional obligations were coded in a systematic manner. The coding process was interactive, with concurrent comparison and modification to ensure clarity, consistency, and relevance. We initially coded our data by each participant cluster to retain both analytical power, in contrast to the number of quotes being lost, and different stakeholder voices. This enabled the researcher to investigate alignment and misalignment between academia and industry. Codes from the two groups were combined and refined to create more general categories and potential themes. The following codes were grouped into tentative themes that were constructed in order to make sense of the principal aspects of the skill gap issue.

These initial codes were then refined and tested against the data. This comprised examining each theme for coherence. For example, the data contained within the theme had to make sense and be meaningful, and distinct. Similar or overlapping themes were combined or refined, and where appropriate, sub-themes were generated to capture more specific patterns under the overarching theme of curriculum-practice misfit. These codes were compared to each other between the participant clusters (HR professionals vs. academicians) to maintain a clear identity of stakeholder voices. Overlapping codes were collapsed into wider categories through refining iterations, which eventually developed to form themes such as curriculum-practice mismatch, lack of workplace readiness, and institutional weaknesses in academia-industry cooperation. To ensure internal consistency and differentiation, themes were compared with the raw data for validation of interpretations. Peer debriefing among the investigators and checking up with transcript data improved credibility. Finally, themes were synthesized and discussed in the context of the research questions and the HRD lens. This synthesis employed an organic map of the causes of the skills gap for

Bangladeshi graduates to illustrate the structure of constraints from a pedagogical and organizational perspective. A number of thematic stories were created to report the findings, complemented by the use of quotes from participants that maintained their voice and reinforced the findings in lived reality.

5. Findings & Analysis

Analysis of 52 in-depth interviews identified several themes commonly associated with the skills gap among Bangladeshi graduates. These themes also echo concerns of HR professionals and scholars that graduates are not ready to be in the workforce. Five core themes emerged:

5.1 Lack of Soft Skills and Communication Competence

An overwhelming majority (91%) of HR professionals report soft skills gaps, with communication, teamwork, and the ability to make presentations the most in-demand skills lacking among job candidates. Though scholastic and technical competence among the applicants was mostly deemed acceptable, a deficit of soft skills was seen as a deterrent to workplace effectiveness and future career advancement (Table 1).

Table 1: Detailed Analysis of Key Employability Skill Gaps Identified by HR Professionals

Skill	Perceived Gap Level	Gap Level Category	In-Depth Explanation
Communication Skills	65%	High	This was the most frequently cited skill gap. Respondents reported that many candidates lacked the ability to express ideas clearly, both in verbal and written communication. Common issues included poor sentence structure, limited vocabulary, weak business writing, poor email etiquette, and an inability to articulate thoughts confidently in professional settings.
Teamwork & Collaboration	70%	High	Employers observed that candidates often failed to function effectively within team settings. Challenges included difficulty in accepting feedback, lack of a cooperative mindset, resistance to group problem-solving, and inability to work across diverse teams. These deficiencies were seen as critical in roles requiring cross-functional collaboration.
Presentation Skills	85%	High	A significant number of HR professionals noted that candidates lacked the skills to organize and deliver impactful presentations. Weaknesses included monotone delivery, minimal audience engagement, poor use of visual aids, and nervousness under scrutiny. These limitations hinder candidates' ability to lead meetings or communicate ideas to stakeholders.

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	Skill	Perceived Gap Level	Gap Level Category	In-Depth Explanation
Technical Job Knowledge	87%	Very High		Despite possessing basic technical knowledge, a large majority of HR professionals reported that candidates struggled significantly with applying this knowledge effectively in practical work situations. Challenges included difficulty in problem-solving, adapting to new technologies, and using industry-specific tools confidently. This gap indicates that while foundational understanding exists, the ability to translate theory into practice remains a major concern.
Academic Performance	22%	Low		Academic qualifications were generally satisfactory. HR professionals agreed that most candidates met basic educational standards. However, high academic scores did not correlate with professional readiness, as many lacked practical skills, critical thinking, and the ability to adapt to dynamic work environments.

Source: Author, Data Analysis

Note: Skill gaps reported by HR professionals were categorized based on frequency: Very High (above 85%) indicates critical gaps identified by the majority; High (50–85%) reflects significant concerns affecting employability; Less than 50% suggests moderate gaps not seen as widespread; and Low (below 30%) represents minor concerns where most candidates were found to be adequately skilled.

The research results reveal persistent deficiencies in fundamental employability skills, particularly in soft skills such as communication and teamwork, among numerous job applicants. These social skills are critical for successful teamwork and business interaction, yet underdeveloped, stunting job performance.

One of the respondents mentioned -

“Many graduates can write long reports, but when it comes to communicating an idea in a meeting or dealing with a customer, they freeze. That’s a big concern for us.”— C1_Respondent-12- HR Manager, ICT Sector, Dhaka

Here, academicians also acknowledged this gap, attributing it to overemphasis on rote learning and lack of classroom interaction. One of the academicians mentioned-

“Our students rarely get a chance to express themselves in class. We test memory, not articulation or confidence.”— C2_Respondent-06- Professor, Public University, Dhaka

Presentation skills were also identified as a significant weakness of many, suggesting that the candidates tend to have difficulty structuring and delivering compelling stories, which can hinder their ability to lead and motivate in their chosen work environment.

The technical knowledge of the candidates is relatively poor; however, a major problem arises from the gap between theory and practice. Real-world problem-solving and proficiency with industry tools are challenging for many candidates, suggesting a gap between academic prep and the actual job.

Even when learning performance is fine, it does not always result in readiness for work. This gap underscores the call for learning institutions to be aligned with actual work skills, as it points to curricular gaps leaving candidates unprepared for the changing workplace.

5.2 Skill-Job Mismatch and Irrelevant Curriculum

The skills gap is a major challenge faced by organizations in growing economies today because of the need to align what is taught in educational institutions with what is needed by industries. This behavior, also known as the skill-job mismatch, is closely associated with the outdated and sometimes irrelevant curriculum. This theme is critically elaborated upon constructively across this section through microanalysis of its components, causes, and consequences, constructing actionable pathways for alignment. Mismatch between the content of university curricula and the needs of the labor market was a major concern of HR professionals (79%). Participants noted that graduates do not possess the technical and digital skills needed for low-level jobs.

One of the respondents mentioned that

“We hire engineers who don’t know how to use Excel or write a professional email. That tells you how disconnected the system is.” — C1_Respondent-05- Head of HR, RMG- Related Manufacturing, Chattogram

In Bangladesh, for example, many university graduates find it tough to get a job that matches their education. On the other hand, employers encounter difficulties in finding employees who have the skills to work at lower levels, especially in key sectors such as ICT, the financial services sector, marketing, and service provision.

Table 2: Key Areas of Skill-Job Mismatch

Mismatch Area	Description	Impact on Employment
Curriculum Irrelevance	Syllabi do not reflect current industry tools, practices, or knowledge trends.	Graduates lack job-ready competencies, leading to low employability.
Lack of Practical Training	Insufficient internships, case-based learning, or industry exposure.	Inability to perform on-the-job tasks efficiently.
Poor Industry-Academia Linkage	Weak collaboration between universities and the private sector.	Delayed curriculum updates and poor demand-supply alignment.

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	Mismatch Area	Description	Impact on Employment
	Inadequate Skill Mapping	No alignment between national skill frameworks and university programs.	Mismatched qualifications and skill shortages in key sectors.
	Limited Soft Skills Integration	Communication, leadership, and teamwork are not embedded in curriculum.	Graduates face difficulties in interviews and team-based settings.

Source: Author, Data Analysis

Table 2 highlights the weak alignment between higher education curricula and industry needs. Rather than restating the raw details, the key insight is that universities remain heavily theory-oriented, often teaching outdated content and irrelevant case studies. This disconnect not only undermines the development of practical skills but also forces employers to retrain new hires or bypass them altogether. The findings further show that the lack of meaningful internships, fieldwork, and industry projects deprives students of opportunities to apply knowledge in authentic contexts. While institutions may nominally include such elements, they are often tokenistic, leaving graduates without the confidence or problem-solving capacity required in dynamic fields. Minimal engagement between academia and employers compounds this gap. Where partnerships exist, they tend to be ceremonial, with little impact on curriculum design. The result is a fragmented system where universities produce graduates trained in outdated methods, while industries demand competencies in digital transformation, sustainability, and emerging technologies.

These gaps, which have been identified, cannot be perceived in isolation but are rooted within the social, economic, and cultural as well as educational set-up of Bangladesh. From a broader socio-economic perspective, the speed of urbanization and growth in higher education institutions has greatly accelerated the number of graduates, but not their quality or fit with the labor market. Unis tend to focus on growth in numbers rather than reform of how they teach, and end up with a workforce that is adequate in quantity but not of sufficient quality. Culturally, education in Bangladesh has been historically formed by exam-focused traditions that value rote learning and memorization. This method discourages critical thinking, creativity, and independent learning, which are the qualities that modern industrial employers want.

In the educational setting, underfunding, outdated curriculums, and faculty development are systemic weaknesses. Industry involvement is infrequent, patchy, and when it does occur, it may not lead to significant curriculum innovation. Furthermore, national skill development policies and higher education institutions often work in silos, producing a fragmentation between policy wishes, e.g., digital literacy, renewable energy, AI, and what universities actually offer.

5.3 Deficiency in Problem-Solving and Critical Thinking

A key finding of this study is the general lack of problem-solving ability and critical thinking of Bangladeshi graduates. This constraint was vehemently expressed by 91% of the HR professionals (Cluster 1), who pointed out that they frequently encounter problems with graduates being unable to deal with new situations, tackle complexity, or take autonomous actions. For them, this bridge is directly affecting their efficiency at work, particularly in disciplines that are more vibrant and creativity-based, such as ICT, marketing, and development.

Similarly, the academic experts (Cluster 2) also came to a consensus that, despite heavy reliance on theoretical bases, the Bangladeshi higher education system does not sufficiently develop the required analytical thinking for a modern economy driven by knowledge.

Identifying the context of a problem, considering alternative solutions, and justifying one's judgments are all essential components of problem-solving. Closely related is critical thinking, which involves challenging assumptions, synthesizing different pieces of information, and thinking logically under conditions of uncertainty. However, HR professionals and academics noted a lack of intellectual curiosity, a lack of decision-making confidence, and a difficulty in synthesizing information across multiple disciplines in Bangladeshi graduates.

This lack is also connected with traditions of the academy. The academicians of cluster 2 strongly agreed that the existing university examination system is more towards rote-based learning and memory-based examination. They encourage students to repeat back what the text says instead of showing comprehension or creativity. Moreover, the majority of classrooms still adopt target-oriented instruction. The learning is largely passive, and there is little room to engage in collaborative problem-solving, debates, or interdisciplinary exploration, all of which are crucial to the development of critical skills. This shortage does have real-world implications, according to 91% HR professionals. Those disparities are particularly pronounced for recent graduates, who often struggle to adjust to workplace practices that reward innovation, agility, and autonomy—even in industries such as start-ups, services, and tech-based fields. They are dependent on their managers for direction, don't take risks, and are reluctant to act without direct instructions. This hinders them from soldiering meaningful strategic intent and dealing with role complexity, especially under time pressure and ambiguous business conditions.

“They wait for instructions. When something unusual happens, they panic or escalate without even trying to think.”

— C1_Respondent-37- Talent Acquisition Lead, Bank, Dhaka

Additionally, respondents from both clusters concurred that soft skills, such as thinking critically, are infrequently integrated into curricula or measured during course transmission. There's very little metacognition, reflection, or well-considered feedback-setting to help students learn and get better at how they think, learn, comprehend, and solve problems. Graduates can, therefore, 'ace'

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their exams but be underprepared in other ways for the real world, for innovation, and for being resilient with decision-making.

To fill this important void, HR practitioners and educators urged a change in pedagogy and testing. A compelling argument was made for project-based learning, cross-curricular learning, and inquiry-based teaching in which learners construct meaning by interacting with materials. Competency-based assessment that incorporates rubrics for inquiry, analysis, and application should be the goal of universities. Faculty development specific to moving from didactic to facilitative teaching roles is necessary for faculty to become enthusiastic users.

5.4 Lack of Professional Etiquette and Workplace Readiness

Another significant finding of this research is the evident lack of professional etiquette and workplace readiness among Bangladeshi graduates. Almost 82% of HR professionals (Cluster 1) expressed concern that graduates, despite having technical knowledge or academic credentials, lack the foundational understanding of professional behavior necessary for workplace integration. All six academicians (Cluster 2) also acknowledged that universities often overlook these aspects of student development. In a professional context, etiquette comprises a set of well-established norms that are adhered to by the members of an organization to which one belongs, and the organization expects them to be. The expectations pertain to general conduct and behavior, regardless of individual differences. The concept of being 'ready for the workplace' encompasses managing one's time, handling simple office correspondence, adapting to office culture, and demonstrating professional behavior within an organizational context.

Table 3: Key Gaps in Professional Etiquette and Workplace Readiness

Gap Area	Description	Impact Noted by HR Professionals	Consequences
Punctuality and Attendance	Graduates often lack discipline in maintaining regular attendance or timing.	Disrupts workflow and reflects poor reliability.	Seen as unreliable; risk of disciplinary action or job loss.
Email and Communication	Use of informal or inappropriate language in emails and verbal exchanges.	Damages professional image and creates confusion.	Limits promotion opportunities and reduces client-facing roles.
Appearance and Grooming	Lack of understanding about dress code and professional appearance.	Perceived as unprofessional during client or management interactions.	Negative impressions hinder acceptance and credibility.

Gap Area	Description	Impact Noted by HR Professionals	Consequences	JUJBR
Meeting Etiquette	Poor attention span, interrupting others, and lack of preparation.	Seen as disengaged or disrespectful in team settings.	Exclusion from key discussions and leadership roles.	
Office Culture Adaptability	Inability to align with organizational norms and work ethics.	Slows integration and team cohesion.	Results in isolation, lower job satisfaction, and attrition.	

Source: Author, Data Analysis

Table 3 highlights consistent concerns from both HR professionals and academicians about graduates' deficiencies in workplace etiquette and preparedness. Beyond the raw data, these findings point to deeper structural and cultural issues. For instance, challenges with punctuality and meeting conduct are not only matters of individual discipline but also reflect inadequate professional socialization within higher education. Similarly, communication failures, particularly in business writing and formal interactions, signal the absence of structured training in applied communication skills. Issues of dress, self-presentation, and cultural fit further suggest that universities rarely emphasize the non-technical dimensions of employability, which employers nonetheless regard as crucial for integration and advancement. Taken together, these insights underscore that the problem is not limited to technical knowledge gaps but extends to professional behavior and workplace readiness, highlighting the urgent need for holistic employability training in higher education.

5.5 Limited Industry-Academia Collaboration

Industry-Academia linkage in Bangladesh was recognized as a major contributor to the increasing skill gap in the Bangladeshi graduates by 87% of HR personnel (Cluster 1) and all six academicians (Cluster 2).

HR respondents emphasized that universities rarely consult industry experts when designing curricula, resulting in graduates who lack applied skills, workplace awareness, and sector-specific competence. In regard to one of the respondents from cluster-1, mentioned

“Many freshers think a degree is enough. They’re not humble enough to learn or grow.”— C1_Respondent-42- HR Manager, Telecom Sector

Academics recognized that they have insufficient interaction with employers and that partnerships are often tokenistic or hit-and-miss and do not have any significant impact on the 'real world' that students enter.

One of the respondents from cluster-2 mentioned –

“Internships are often tokenistic. Companies don’t engage, and universities don’t follow up. Students gain very little.”— C2_Respondent-3-MBA Coordinator, Private University, Dhaka

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Both clusters agreed that this gap weakens the relevance of education and hampers graduate readiness in today's competitive job market.

From HR Professionals' Perspective:

- i. Graduates are not equipped with industry-required technical and soft skills for the job profiles.
- ii. Companies need to invest more in onboarding, training, and oversight.
- iii. It takes new hires more time to adjust to actual world expectations and processes.
- iv. Diminished cooperation reduces the potential for talent pipelines.
- v. Academic credentials as leading indicators of performance have lost their effectiveness in employers' eyes.

From Academicians' Perspective:

- i. Curricula have not been revised in the same time due to a lack of recent industry feedback.
- ii. There is inadequate faculty development because teachers are not getting any exposure to innovations.
- iii. Exposure to internships or live projects is a casualty.
- iv. Industry relevance is required to make research outputs relevant.
- v. Colleges have a hard time proving their programs are worth the employment.

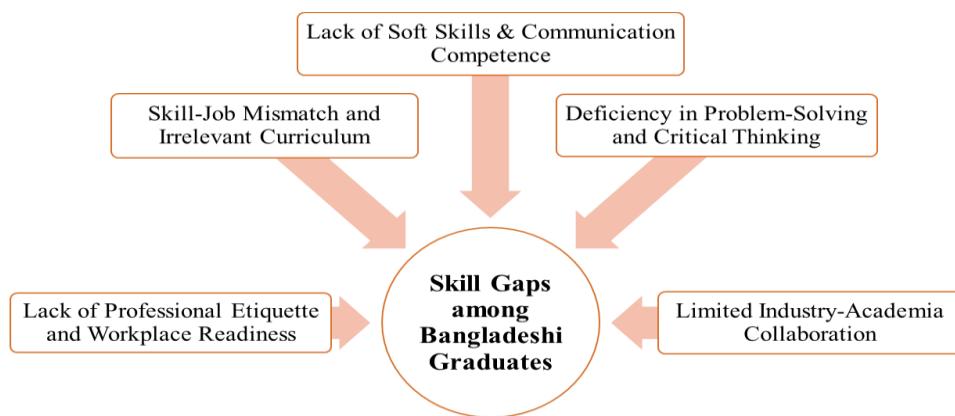


Figure 1: Thematic Model: Exploring the Skill Gaps among Bangladeshi Graduates

6. Discussion

This research aimed to investigate emerging divides between the higher education results and the expectations of industry in Bangladesh, and most specifically, graduate employability. Based on inputs from 46 HR professionals

(Cluster 1) and 6 academicians (Cluster 2), the study critically analyzes the issues of skills-job gap, poor problem-solving and critical thinking, poor work culture, and low levels of workplace readiness. The implications of the results extend from the organizational and national levels to the context of global development, particularly in relation to Sustainable Development Goals (SDGs) affecting the education sector, such as SDG 4 (Quality Education) and SDG 8 (Decent Work and Economic Growth).

An obvious issue emerging from the interview data analysis that a gap between academic content and industry requirements. Both groups of stakeholders also underscored that HE in Bangladesh is too much theory-oriented and less on applied learning, interdisciplinary approach, and employability-driven pedagogy.

Consequently, students do not possess the capacity to transfer knowledge to action, adapt to changing job demands, or ever function adequately in professional settings. This disparity is exacerbated by obsolete educational procedures, theory-laden sets of course materials, and scant students' exposure to industry-shaped learning situations. With universities anchored to tests that reinforce the memorization of formulas and techniques, students are prepared for jobs that instead require creativity, complex problem solving, communication, and digital literacy, none of which are well developed at traditional universities.

This study also shows that with a lack of problem-solving and critical thinking nature. More than 90% of HR officers said that graduates are 'not fully fit' to deal with problems at work on their own. They have trouble making decisions, struggle to think in shades of grey, and don't like ambiguity pretty much the skills we need in a 21st-century knowledge economy. Educators recognized this as one outcome of non-participatory classroom environments, in which students are seldom involved in critical discussions, in problem-based work, or in project-based assessment. The results suggest that there can be no progress without the development of pedagogical innovations and active learning methods in higher education if we want to stop delivering technically trained but intellectually undeveloped graduates.

Here, from these skills gaps, it is visible that the lack of professional etiquette and workplace readiness is another situation of concern. According to HR professionals, even academically strong youth encounter it difficult to display basics of professional behavior. Very little of this is addressed in school settings, where it is all about mastering subject matter.

Consequently, new grads struggle with team collaboration, representing their company, or becoming client-facing. Their lack of professional polish can slow the hiring process and dampen the faith in the employer about their sustainable future.

Moreover, poor interaction between industry and academia appeared as a major structural problem. Virtually all agreed that, without regular interaction, curriculum reviews, and joint ventures between universities and employers, graduates would continue to disappoint. HR heads, they said, are rarely even sought for advice on course content. Academics, for their part, concede that

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partnerships, when they exist, tend to be largely ornamental. This is a major deficiency that leaves students vastly underexposed to real-world problems, inventions, and solutions. Without industry input, academic institutions run the risk of producing educated yet unemployable graduates, and they begin to lose relevance to the national workforce.

Beyond the institutional shortcomings, the persistence of graduate skill gaps also reflects broader socio-economic and cultural dynamics within Bangladesh. The rapid massification of higher education has increased graduate numbers without proportional investment in quality, faculty training, or curriculum modernization. Simultaneously, cultural traditions of hierarchical teacher-student relationships and exam-centric pedagogy discourage questioning, debate, and experimentation, leaving students ill-prepared for professional contexts that demand adaptability and initiative. These structural and cultural influences, while less visible than curriculum content, play a decisive role in shaping graduate outcomes.

The findings also carry implications at the policy and national development level. Although Bangladesh has articulated national skills development strategies, these initiatives often operate in isolation from universities, resulting in fragmented pathways for students to acquire market-relevant skills. Without deliberate alignment between policy frameworks, industry demand, and higher education curricula, reforms remain piecemeal and ineffective. Addressing these challenges requires an ecosystem approach where government, employers, and academic institutions collaborate on long-term strategies for graduate employability. This systemic integration is essential not only for labor market competitiveness but also for advancing the country's commitments to SDG 4 (Quality Education) and SDG 8 (Decent Work and Economic Growth).

7. Policy Recommendations

There are several practical policy implications resulting from these findings.

The first must be a national effort to sync academic curricula with industrial benchmarks. Universities should establish curriculum advisory boards, comprising corporate executives, startup founders, and alumni, to ensure the curriculum remains agile and innovative.

Second, it is essential to adopt competency-based education and active learning pedagogies. We need to move from a kind of lecture-based instruction to this experiential, project-based learning that teaches you the real stuff that actually applies and actually allows you to learn to think and be curious and really utilize your ability to learn.

Third, all undergraduate program curricula must include professional development and soft skills development. Universities should have core modules on communication, teamwork, professional grooming, ethics, and time management. These need to be taught through workshops, mentorship, peer feedback, and real-life practice.

Fourth, industry partnerships with academia need to be institutionalized or at least more intentional than just hoping they happen. Arranged internships,

international guest lectures, industry-driven seminars, and real business projects may also help to close the exposure loop and prepare students for the work pressures of today's businesses.

Fifth, emphasis should be given to the training and retraining of faculty. It is recommended to inspire teachers to participate in corporate immersion programs, industry conferences, and material development with employers. This is to help them bring modern perspectives and real-world relevancy into classrooms.

Sixth, assessment systems need to be reformed so that they measure not only mastery of content but also application, teamwork, and independent thinking. Some of the enablers could be peer assessment, reflective portfolios, and case-based tests.

More broadly, the projects contribute directly to Bangladesh's pursuit of the Sustainable Development Goals. SDG 4 focuses on equitable and inclusive quality education and lifelong learning. This study emphasizes the need to rethink quality—not only in terms of enrollment or certification but also regarding the graduates themselves, who should be capable of adding value to both the economy and society. SDG 8, which demands decent work for all, requires, to a large extent, a highly educated and flexible workforce. Failure to address the graduate skills gap will continue to limit economic productivity and innovation.

8. Conclusion

This study explored the disconnect between higher education outcomes and industry expectations in Bangladesh, with a focus on graduate employability. Insights from HR professionals and academicians revealed significant skill gaps among graduates, including weak problem-solving, poor critical thinking, limited workplace readiness, and a lack of professional behavior. A recurring theme was the overemphasis on theoretical learning in universities, which limits students' ability to apply knowledge in practical settings and adapt to modern job demands. Both stakeholder groups highlighted that outdated curricula, passive teaching methods, and minimal industry exposure hinder students' readiness for the 21st-century workforce. Graduates often lack creativity, decision-making ability, digital literacy, and communication skills—key competencies in today's knowledge economy. Furthermore, the absence of structured collaboration between academia and industry was identified as a core structural weakness. Without active partnerships, curriculum alignment remains poor, and students remain disconnected from real-world challenges and solutions. These findings carry important implications for policy and practice, particularly in advancing Sustainable Development Goals (SDG 4 and SDG 8). The research underscores the urgent need for pedagogical reform, applied learning models, and institutional collaboration to bridge the education-to-employment gap and produce graduates equipped for meaningful, future-ready careers. By redesigning higher education curriculum to respond to changing labor market trends, incorporating instruction from industry practitioners, and emphasizing active learning, we can improve

outcomes for graduates. It is more than an academic reform; it is a national development imperative. Looking ahead, the findings call for a more dynamic and forward-looking higher education system that embraces interdisciplinary teaching, embeds soft-skill development, and integrates technology-enhanced learning. Stronger academia-industry partnerships are vital, not only for curriculum alignment but also for creating work-based learning opportunities that prepare students for evolving labor markets. Policymakers should prioritize mechanisms for continuous curriculum review, incentivize faculty to adopt innovative pedagogies, and encourage employers to co-design training modules. At the institutional level, building a culture of applied learning and fostering entrepreneurial mindsets can equip graduates with adaptability and resilience. By situating reforms within the broader agenda of national competitiveness and sustainable development, Bangladesh can transform its higher education system into a driver of inclusive growth and global relevance.

Reference

Abelha, M., Fernandes, S. R., Mesquita, D., Barreto de Seabra Borges, F. I., & Ferreira-Oliveira, A. (2020). Graduate employability and competence development in higher education-a systematic literature review using PRISMA. *Sustainability*, 12, 5900. <https://doi.org/10.3390/su12155900>

Akter, S., Shahriar, S. H. B., Momen, M. A., and Sultana, N. (2021), Expatriation After the Terror Attack: A Qualitative Inquiry from HR Perspective, *Journal of Leadership in Organizations*, 3(1), 58-71, <https://doi.org/10.22146/jlo.62247>

Alam, M., Ogawa, K., & Islam, S. (2022). Importance of skills development for ensuring graduates employability: the case of Bangladesh. *Social Sciences*, 11(8), 1-19, <https://doi.org/10.3390/socsci11080360>

Allen, K., Quinn, J., Hollingworth, S., & Rose, A. (2013). Becoming employable students and 'ideal' creative workers: Exclusion and inequality in higher education work placements. *British Journal of Sociology of Education*, 34(3), 431–452. <https://doi.org/10.1080/01425692.2012.714249>

Ayandibu, A. O., Kaseeram, I., Vezi-Magigaba, M. F., and Oladejo, O. M. (2021). Developing Global Relevant Skills in the Fourth Industrial Revolution. In E. Abe (Ed.), *Future of Work, Work-Family Satisfaction, and Employee Well-Being in the Fourth Industrial Revolution* (pp. 232-245). IGI Global Scientific Publishing. <https://doi.org/10.4018/978-1-7998-3347-5.ch016>

Bagnoli, C., Dal Mas, F., and Massaro, M. (2021). The 4th Industrial Revolution: Business Models and Evidence From the Field. In I. Management Association (Ed.), *Research Anthology on Cross-Industry Challenges of Industry 4.0* (pp. 37-52). IGI Global Scientific Publishing. <https://doi.org/10.4018/978-1-7998-8548-1.ch003>

Bennett, R. (2002). Employers' demands for personal transferable skills in graduates: A content analysis of 1000 job advertisements and an associated empirical study. *Journal of Vocational Education & Training*, 54 (1), 457–476. <https://doi.org/10.1080/13636820200200209>

Bilderback, S. and Thompson, C.B. (2025), "Developing global leadership competence: redefining higher education for interconnected economies", *Higher Education, Skills and Work-Based Learning*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/HESWBL-10-2024-0301>

Braun, V., and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>

Bukartaitė, R. and Hooper, D. (2023), "Automation, artificial intelligence and future skills needs: an Irish perspective", *European Journal of Training and Development*, 47(10), 163-185. <https://doi.org/10.1108/EJTD-03-2023-0045>

Chakrabarty, S. (2021). Preparing for the 4th Industrial Revolution: Innovative Approaches to Teaching and Learning for Education 4.0. In D. Coulson, S. Datta, & M. Davies (Eds.), *Educational Reform and International Baccalaureate in the Asia-Pacific* (pp. 155-176). IGI Global Scientific Publishing. <https://doi.org/10.4018/978-1-7998-5107-3.ch009>

Chisty, N., Guttin, T., Irin, N., Sattar, A., Hoque, M., & Baillie, S. (2024). Utilizing stakeholder consultations to identify context-specific professional skills for veterinary graduates in Bangladesh. *Journal of Veterinary Medical Education*, 51(6), 807-818. <https://doi.org/10.3138/jvme-2023-0101>

Draissi, Z., Rong, Y., & Ebrahim Suliman, M. A. (2023). Employability and Education Mismatch in the Moroccan Urban Workplace. *SAGE Open*, 13(4), 1-18, <https://doi.org/10.1177/21582440231217890>

Hossain, M. Z., and Arefin, T. (2025). Bridging the Skills Gap: Examining Factors Influencing Graduate Employability in Bangladesh. *European Journal of Contemporary Education and E-Learning*, 3(2), 55-74. [https://doi.org/10.59324/ejceel.2025.3\(2\).07](https://doi.org/10.59324/ejceel.2025.3(2).07)

Kretos, L. (2025), "Is AI Coming for Our Jobs? Rethinking the Future of Work and Inclusion", Vassilopoulou, J. and Kyriakidou, O. (Ed.) *AI and Diversity in a Datafied World of Work: Will the Future of Work be Inclusive? (International Perspectives on Equality, Diversity and Inclusion, Vol. 12)*, Emerald Publishing Limited, Leeds, 55-73. <https://doi.org/10.1108/S2051-233320250000012008>

Momen, M.A., Shahriar, S.H.B., Naher, N., Nowrin, N. (2022), Unemployment During the Recent COVID-19 Pandemic: Exploring the Perspective of Fresh Graduates from a Developing Nation, *Economics and Business*, 36 (1), 105 – 119, <https://doi.org/10.2478/eb-2022-0007>

Momen, M.A., Sultana, S., Hoque, M.A., Shahriar, S.H.B. and Ashif, A.S.M. (2023), Determinants of students' satisfaction with digital classroom services: moderating effect of students' level of study, *Asian Association of Open Universities Journal*, 18(2), 160-175. <https://doi.org/10.1108/AAOUJ-09-2022-0124>

Mwita, K., Mwilongo, N., and Mwamboma, I. (2024). The role of soft skills, technical skills and academic performance on graduate employability. *International Journal of Research in Business and Social Science* (2147- 4478), 13(5), 767–776. <https://doi.org/10.20525/ijrbs.v13i5.3457>

Nwaohiri, N.M. and Nwosu, M.C. (2021), "Reskilling the Library Workforce for the Fourth Industrial Revolution", Chigwada, J.P. and Nwaohiri, N.M. (Ed.) *Examining the impact of industry 4.0 on academic libraries*, Emerald Publishing Limited, Leeds, 227-233. <https://doi.org/10.1108/978-1-80043-656-520201025>

JUJBR

Perera, P., Selvanathan, S., Selvanathan, S., Su, J.-J. and Jayasinghe, M. (2025), "From digital inequality to income inequality: exploring the multifaceted impact of digital literacy on income", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/DPRG-11-2024-0278>

Saari, A., Jalaludin, N. A., Rasul, M. S., & Yasin, R. M. (2025). Skills Sets for Workforce In Fourth Industrial Revolution: Lifelong Learning In Digital Age. *International Journal of Academic Research in Progressive Education and Development*, 14(2), 2192-2206. <http://dx.doi.org/10.6007/IJARPED/v14-i2/25685>

Sarfraz, I., Rajendran, D., Hewege, C., Mohan, M. D. (2018) An exploration of global employability skills: a systematic research review, *International Journal of Work Organisation and Emotion*, 9(1) 63-88, <https://doi.org/10.1504/IJWOE.2018.091339>

Sarker, N. and Zareen, T. (2024), Bridging the demand-skill gap in Bangladesh, *The Daily Star*, <https://www.thedailystar.net/tech-startup/news/bridging-the-demand-skill-gap-bangladesh-3746071>

Shahriar, S.H.B. (2025), Future of work and talent development realities: a qualitative analysis from a developing country perspective, *Journal of Management Development*, 44(2), 178-193. <https://doi.org/10.1108/JMD-04-2024-0119>

Shahriar, S.H.B., Akter, S., Sultana, N., Arafat, S. and Khan, M.M.R. (2023), MOOC-based learning for human resource development in organizations during the post-pandemic and war crisis: a study from a developing country perspective, *Journal of Research in Innovative Teaching & Learning*, 16(1), 37-52, <https://doi.org/10.1108/JRIT-09-2022-0054>

Shahriar, S.H.B., Arafat, S., Sultana, N., Akter, S., Khan, M.M.R., Nur, J.M.E.H. and Khan, S.I. (2021), The transformation of education during the corona pandemic: exploring the perspective of the private university students in Bangladesh, *Asian Association of Open Universities Journal*, 16 (2), 161-176, <https://doi.org/10.1108/AAOUJ-02-2021-0025>

Subbu Nisha, M., and Rajasekaran, V. (2018). Employability skills: A review. *The IUP Journal of Soft Skills*, 12(1), 29–37. <https://ssrn.com/abstract=3251255>

The Financial Express, (2025), Country's population hits 175.7m, majority in working-age group, *The Financial Express*, <https://thefinancialexpress.com.bd/national/countrys-population-hits-1757m-majority-in-working-age-group>

Wang, W. & Siau, K. (2019). Artificial Intelligence, Machine Learning, Automation, Robotics, Future of Work and Future of Humanity: A Review and Research Agenda. *Journal of Database Management (JDM)*, 30(1), 61-79. <https://doi.org/10.4018/JDM.2019010104>

Yang, C., Luo, Z., Xu, N. and Tang, C. (2024), "Fostering career crafting by developmental HR practices: the mediating role of future work self and moderating role of AI awareness", *Career Development International*, Vol. 29 No. 6, pp. 641-655. <https://doi.org/10.1108/CDI-08-2023-0303>

Ziatdinov, R., Atteraya, M. S., and Nabiiev, R. (2024). The Fifth Industrial Revolution as a Transformative Step towards Society 5.0. *Societies*, 14(2), 1-15, <https://doi.org/10.3390/soc14020019>