

Skill Mismatch among Students: The Gap between University Education and Job Market Demands in India

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ABSTRACT

In today's knowledge-driven economy, the promise of a university degree as a guaranteed pathway to employment is increasingly being questioned. Across the world, and particularly in India, graduates often find themselves unable to secure meaningful employment due to a mismatch between the skills taught in universities and those demanded by the job market. This paper reviews existing literature on the concept of skill mismatch and situates the discussion within the Indian context. It emphasizes the ways in which outdated curricula, rote learning, and weak industry–university linkages have created a large pool of educated but unemployable youth. The study highlights how this problem is no longer restricted to elites or a particular class, but has become a common challenge for the general student population. Finally, the paper suggests reforms such as curriculum redesign, industry collaboration, and skill-based learning to bridge the gap.

Keywords: Skill mismatch, Indian graduates, employability, higher education, job market

INTRODUCTION

The pursuit of a university degree in India has long been associated with social mobility, stable employment, and economic progress. However, the reality confronting millions of graduates tells a different story. Despite completing higher education, large numbers of young Indians struggle to find jobs that match their qualifications. This disconnect—commonly referred to as skill mismatch—has emerged as one of the most significant challenges facing higher education.

International literature points out that skill mismatch is a global issue (OECD, 2017; ILO, 2019). Yet, in a country like India, with its rapid expansion of universities and a vast youth population, the consequences are particularly severe. For families, graduation often represents years of financial sacrifice, but the anticipated rewards in the form of stable employment frequently remain elusive. Thus, skill mismatch has become a problem not just for policymakers and academics but for ordinary people across Indian society.

Understanding Skill Mismatch:

The International Labour Organization (2019) defines skill mismatch as a situation where individuals' skills do not correspond to those required for their jobs. Scholars categorize mismatch into three broad forms:

Vertical mismatch: when graduates are over-qualified or under-qualified for their roles.

Horizontal mismatch: when graduates work in fields unrelated to their studies.

Skill gaps/obsolescence: when individuals lack specific skills (e.g., digital literacy, teamwork) that are crucial in the modern workplace.

Globally, the World Economic Forum (2023) warns that nearly half of existing workers will require reskilling due to technological disruption. In India, the challenge is sharper because university curricula are slow to change, and practical training remains limited.

Key contributing factors

Outdated curriculum: Many Indian universities operate with a slow-to-update curriculum, focusing on rote learning and theory rather than the practical skills needed for a rapidly evolving job market. Technologies like AI, data analytics, and green energy are developing faster than many academic syllabi can adapt.

Weak industry collaboration: There is often a significant disconnect between academia and industry. A 2025 report noted that over 70% of colleges lack formal industry partnerships, and only 36% of students have internship experience before graduating. This limits students' exposure to real-world applications and current employer expectations.

Inadequate soft skills training: The job market increasingly values soft skills such as communication, critical thinking, problem-solving, and teamwork. However, the traditional education system often sidelines these essential traits. Reports from 2025 indicate significant deficits in these areas, with recruiters frequently citing a lack of such skills in graduates.

Unequal access and quality: While elite institutions like the IITs and IIMs produce highly sought-after graduates, many tier-2 and tier-3 colleges lack the infrastructure, quality faculty, and resources to prepare students adequately. This creates a geographic and quality-based divide in employability.

Technological disruption: The rapid adoption of technologies like AI and automation is transforming industries and job roles. Many graduates, especially those from non-technical fields, lack the specialized, up-to-date skills required to compete for new roles, while traditional jobs are becoming obsolete.

Low focus on vocational training: India's Technical and Vocational Education and Training (TVET) infrastructure remains weak, particularly in rural areas. This limits the ability of individuals to gain specialized, hands-on skills through formal channels, leading to a large, informally-skilled workforce that lacks official certification.

Skill Mismatch in the Indian Context

The Indian higher education system has expanded massively, producing over 10 million graduates annually. Yet employability surveys consistently reveal a grim picture. The India Skills Report 2024 estimates that only about half of Indian graduates are considered employable by industry standards. Similarly, the India Employment Report 2024 shows that unemployment rates are actually highest among educated youth, especially those with general degrees in arts, commerce, and science.

Several studies attribute this to:

Rote-based learning that rewards memorization rather than problem-solving (Tilak, 2019).

Lack of soft skills such as communication, teamwork, and leadership, which employers value highly (Agarwal, 2020).

Inadequate digital skills, which are increasingly demanded in all sectors.

Weak industry linkages, resulting in curricula that lag far behind market needs.

The result is that graduates, even from middle-class backgrounds, often find themselves in jobs unrelated to their studies—working as sales assistants, call centre employees, or in low-paying clerical roles. For many households, this outcome is a source of frustration and disappointment.

Why It Has Become a Common Problem:

Unlike earlier times when higher education was limited to elites, today students from diverse backgrounds pursue graduation. Families in rural and urban areas alike invest heavily in their children's education, often taking loans or making sacrifices. Yet, regardless of socio-economic status, many graduates confront the same reality: their degrees fail to guarantee employment. This makes skill mismatch a shared and widespread experience.

Moreover, in India's competitive job market, employers increasingly demand not only technical skills but also flexibility, adaptability, and communication proficiency. Graduates from smaller towns, who lack exposure and training opportunities, are often at a further disadvantage.

Consequences of Skill Mismatch

The skill mismatch between graduates and the demands of the job market creates a host of damaging consequences for individuals, businesses, and the wider economy. Instead of reaping a "demographic dividend," India risks facing a "demographic disaster" if this persistent gap is not addressed.

Consequences for individuals

Underemployment and poor wages: A 2025 study on the Indian market found that over 50% of graduates were underemployed in lower-skilled jobs, such as clerks and sales associates. These roles result in stagnant wages and an inability to realize their earning potential, as shown by one analysis that indicated workers could increase their wages by up to 149% if they moved to a job matching their skills.

Wasted resources: For individuals who invest in higher education only to take lower-level jobs, the time and money spent on their degrees become a wasted investment. For the nation, this represents a deadweight loss of human capital.

Job dissatisfaction and psychological distress: When workers are stuck in jobs that do not fully utilize their skills, it often leads to low job satisfaction, motivation, and engagement. This can have a profound impact on mental health, increasing stress, anxiety, and a sense of unrealized potential.

Long-term career stagnation: Skill mismatch hinders career progression by limiting professional growth and preventing workers from acquiring more relevant, on-the-job experience in their intended field. This can create a permanent "scarring effect" on an individual's career trajectory.

Consequences for businesses

Lower productivity and efficiency: Under-skilled employees may work less efficiently, requiring more supervision and causing delays, errors, and rework. This decreases the team's overall productivity and hurts the company's output and quality of service.

Higher costs and increased turnover: Hiring the wrong person is costly, and a skills mismatch increases the likelihood of high employee turnover due to job dissatisfaction. This forces companies to incur additional expenses and time for recruitment, onboarding, and training.

Hindered innovation and competitiveness: When a workforce lacks the necessary skills, a company's ability to innovate, adopt new technologies, and respond to market changes is severely limited. This can cause a business to fall behind its competitors, especially in rapidly evolving sectors like technology.

Talent gaps and shortages: As older, experienced workers retire, skill mismatches prevent their younger replacements from developing the institutional knowledge required to fill the void. This exacerbates industry-wide talent shortages that already plague India's labor market.

Consequences for the economy and society

Slower economic growth: Widespread skill mismatch reduces national labor productivity and overall economic efficiency. A 2025 analysis revealed that the skill-employment mismatch resulted in a 25% loss in labor productivity in the Indian labor market, hampering its economic potential.

Demographic shock: The inability to productively employ its vast working-age population could turn India's "demographic dividend" into a "demographic disaster". A large, underutilized workforce places a strain on the economy instead of driving growth.

Exacerbated inequality: Skill mismatch disproportionately affects individuals from disadvantaged backgrounds who have less access to high-quality education and training. When these individuals are crowded out of jobs by overqualified graduates, it widens the income and consumption gap, reinforcing social and economic inequalities.

Weakened global standing: A workforce unprepared for the demands of a globalized, technologically advanced economy makes it difficult for a country to compete effectively. This can deter foreign investment and weaken the nation's position in the global market.

Proposed solutions and way forward

Curriculum overhaul: Academic curricula must be regularly updated with input from industry experts to incorporate in-demand skills in emerging technologies like AI, machine learning, and data science.

Strengthen industry-academia partnerships: Universities should mandate internships, apprenticeships, and live projects that offer students hands-on experience and build professional networks. Industry leaders should also participate in curriculum development and provide guest lectures.

Develop soft skills: Education should move beyond theoretical knowledge to focus on developing critical thinking, communication, leadership, and emotional intelligence from an early stage.

Expand vocational training: The government needs to strengthen and expand its TVET infrastructure, especially in underserved regions. Programs like the National Apprenticeship Promotion Scheme (NAPS) must be enhanced to provide quality on-the-job training and certification.

Increase digital skills access: India must increase digital literacy and expand online learning infrastructure, especially in rural areas, to equip a wider population with the tech skills required for the digital economy.

Focus on outcome-based education: Educational institutions should be evaluated not just on enrollment numbers or degree output, but on tangible metrics like student skill proficiency and job placement rates.

Integrate skilling with education: Under the National Education Policy (NEP) 2020, modular vocational courses should be integrated into higher education to create a seamless transition between academia and industry.

CONCLUSION

Skill mismatch in India is not an isolated academic debate but a lived experience for millions of graduates and their families. Literature highlights that while the problem is global, its intensity in India is magnified by outdated teaching practices, weak institutional-industry collaboration, and the massive expansion of higher education without corresponding attention to employability. Addressing this challenge requires urgent reforms: restructured curricula, integration of soft and digital skills, and close cooperation between universities and industries. Only by narrowing the gap between what students learn and what the job market demands can higher education truly serve as a ladder of opportunity in India.

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