



# Enhancing Undergraduate Research in India through Inquiry-Based Learning and Industry Collaboration: A NEP 2020 Perspective

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Undergraduate research is increasingly viewed as an essential component of high-quality higher education, particularly in economies transitioning toward innovation-driven growth. India's National Education Policy (NEP) 2020 marks a significant shift by prioritizing inquiry-driven pedagogy, experiential learning, and structured industry collaboration at the undergraduate level. Despite the policy's ambitious vision, research integration in Indian higher education institutions (HEIs) remains uneven, with substantial gaps in faculty mentoring capacity, research infrastructure, and institutionalized pathways for industry partnerships. This paper examines how inquiry-based learning (IBL) and systematic industry collaboration can enhance undergraduate research outcomes in India, drawing on a comprehensive analysis of secondary data from UGC, AICTE, Ministry of Education (MoE), national innovation councils, and academic literature published between 2015 and 2025. The study adopts a descriptive qualitative methodology supported by simulated national-level data (2020–2025) consistent with reported trends. Findings indicate that NEP 2020 has catalysed significant progress: (i) growing adoption of IBL across diverse HEIs, (ii) increasing availability of research internships and industry-linked projects, and (iii) rising student research output through journals, conferences, and innovation challenges. However, resource disparities, limited faculty research capacity, insufficient industry incentives, and fragmented policy implementation continue to impede system-wide progress. This research contributes a comprehensive conceptual model integrating IBL, industry partnerships, and NEP 2020 structural reforms. The model highlights pathways for HEIs to build sustainable undergraduate research ecosystems. Managerial implications emphasize faculty development, institutional governance reforms, structured industry–academia partnerships, and targeted public funding. The study concludes by reaffirming that embedding IBL and industry collaboration can position Indian HEIs as engines of knowledge creation, in alignment with NEP 2020's vision of transforming India into a global research and innovation hub.

**Keywords:** Inquiry-Based Learning; Undergraduate Research; NEP 2020; Industry Collaboration; Experiential Learning; Higher Education; India.

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