

NEP 2020: Bridging the Paradigm Gap Between Academia and Industry

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ABSTRACT

The implementation of the National Education Policy (NEP) 2020 represents a watershed moment in Indian higher education, introducing structural reforms designed to address the chronic misalignment between academic curricula and industry requirements. This paper examines NEP 2020's efficacy in bridging the academia-industry paradigm gap, with specific focus on Commerce and Management education. Through a mixed-methods research design combining quantitative outcome analysis with qualitative institutional ethnography, this study evaluates the policy's transformative mechanisms—specifically the Academic Bank of Credits (ABC), Multiple Entry and Exit (MEE) systems, and mandatory vocational integrations. Drawing on primary data from 150 HEIs and 2,000 stakeholders across India, alongside secondary analysis of implementation metrics from 2020-2025, the research assesses whether these interventions substantively enhance graduate employability in a globalized, Industry 4.0 economy.

The study reveals significant progress in policy architecture, with 31.7 million students registered under ABC and 105 universities adopting the Four-Year Undergraduate Programme (FYUP) by 2024. However, critical implementation gaps persist: automated credit transfer remains largely unrealized, only 79% student coverage achieved despite mandatory participation, and industry-academia partnerships exhibit regional and institutional asymmetries. The paper argues that while NEP 2020 provides a robust framework for experiential learning and skill integration, its success hinges on overcoming infrastructural deficits, standardization

challenges, and resistance from traditional academic structures. The findings contribute to education policy theory by operationalizing the "Triple Helix" model in the Indian context and offer empirical evidence for curriculum redesign in professional education. This research provides actionable insights for institutional leaders, policymakers, and industry stakeholders committed to fostering an ecosystem of continuous, market-responsive learning.

Keywords: National Education Policy 2020, Academic Bank of Credits, Industry-Academia Collaboration, Employability, Commerce Education, Skill Development, Higher Education Reform, Industry 4.0

1. INTRODUCTION

1.1 Contextual Background

India's higher education system stands at a critical inflection point. Despite producing over 9 million graduates annually, the country faces a paradoxical crisis: while academic institutions expand quantitatively, qualitative alignment with labor market requirements remains elusive. The *India Skills Report 2023* indicates that only 50.3% of graduates are employable in the formal sector, with Commerce and Management graduates showing particular deficits in practical application and technological adaptability.

This "paradigm gap"—the structural disconnect between pedagogical approaches and industry exigencies—has persisted despite decades of incremental reform attempts.

The National Education Policy (NEP) 2020, approved by the Union Cabinet on July 29, 2020, represents a fundamental departure from previous reform efforts. Replacing the thirty-four-year-old National Policy on Education (1986), NEP 2020 proposes a comprehensive restructuring of India's education landscape, from foundational schooling through doctoral research. For higher education, the policy envisions a "holistic and multidisciplinary" system that "develops creative and critical thinking capacities, and prepares students for the world of work" (Ministry of Education, 2020, p. 28).

1.2 The Commerce and Management Imperative

Commerce and Management education occupies a particularly significant position within NEP 2020's reform architecture. As disciplines inherently oriented toward professional practice, these fields exemplify both the potential and challenges of academia-industry integration. The policy explicitly recognizes that "professional education is critical for the economic and social development of the nation" and mandates that professional programs "include practical training, internships, and project work" (MoE, 2020, p. 42).

However, the translation of policy intent into pedagogical reality faces formidable obstacles. Traditional Commerce curricula remain anchored in theoretical constructs—accounting principles, economic theories, and management frameworks—often taught in isolation from their application contexts. The result is graduates who possess disciplinary knowledge but lack the "soft skills," technological fluency, and adaptive capabilities that contemporary business environments demand.

1.3 Research Significance

This research addresses a critical gap in the emerging NEP 2020 scholarship. While policy analyses have proliferated, empirical studies examining implementation outcomes—particularly in professional

education contexts—remain scarce. Most existing research adopts normative or descriptive approaches, celebrating policy intentions without rigorously evaluating execution challenges or early outcomes. This study contributes by:

1. **Operationalizing abstract policy provisions** into measurable variables relevant to Commerce and Management education
2. **Providing baseline empirical data** on implementation progress during the critical 2020-2025 transition period
3. **Developing a theoretical framework** that connects Indian higher education reform to global debates on employability and human capital formation
4. **Offering evidence-based recommendations** for institutional practice and policy refinement

2. THEORETICAL FRAMEWORK

2.1 The Triple Helix Model: Contextualization for India

This study adopts Etzkowitz and Leydesdorff's (2000) Triple Helix Model as its primary theoretical lens, while adapting it to India's distinctive institutional context. The model posits that innovation and economic development emerge from the dynamic interactions among three institutional spheres: universities (producing knowledge and human capital), industry (applying knowledge for commercial value), and government (providing regulatory frameworks and public goods).

In the Indian context, however, the Triple Helix operates under unique constraints:

- **State Dominance:** Unlike Western models where universities and industry maintain relative

autonomy, Indian higher education has historically been heavily regulated by state bodies (UGC, AICTE), creating rigid boundaries that NEP 2020 seeks to dissolve through the proposed Higher Education Commission of India (HECI).

- **Fragmented Industry Engagement:** Indian industry, particularly the small and medium enterprise (SME) sector that employs the majority of Commerce graduates, lacks systematic mechanisms for curriculum input and skill co-development.
- **Developmental State Imperatives:** The government's role extends beyond regulation to active intervention through initiatives like Skill India, Startup India, and the National Apprenticeship Promotion Scheme (NAPS), creating a dense policy environment that NEP 2020 must navigate.

The theoretical framework therefore conceptualizes NEP 2020 as an attempt to reconfigure the Triple Helix relationships—reducing state micromanagement while strengthening university-industry linkages through market-responsive mechanisms like ABC and MEE.

2.2 Human Capital Theory and Employability

Becker's (1964) Human Capital Theory provides the economic rationale for the study's focus on employability outcomes. The theory treats education as an investment that yields returns through enhanced productivity and earnings. However, traditional human capital models often assume automatic market clearing—education automatically translates to employment.

This study incorporates signaling theory (Spence, 1973) and credentialism critiques (Collins, 1979) to explain why mere degree acquisition fails to ensure employability. NEP 2020's emphasis on "credits" rather

than "degrees," and its recognition of experiential learning through ABC, represents a shift from credential-based to competency-based human capital formation. The research operationalizes this shift by examining whether ABC-accumulated credits serve as more accurate signals of productive capability than traditional degree classifications.

2.3 Institutional Theory and Policy Implementation

DiMaggio and Powell's (1983) Institutional Isomorphism and Scott's (2014) Institutional Pillars framework explain the implementation challenges NEP 2020 faces. The policy introduces coercive pressures (mandatory ABC registration, MEE requirements), mimetic pressures (benchmarking against international best practices), and normative pressures (faculty retraining, professional development).

The framework predicts that institutional resistance will emerge where these pressures conflict with existing regulative (accreditation rules), normative (professional academic standards), and cultural-cognitive (beliefs about legitimate knowledge) institutional elements. This explains why technical implementation (ABC registration) has outpaced pedagogical transformation (actual credit transfer and curriculum redesign).

2.4 Conceptual Model

The study proposes the following integrated conceptual model:

Independent Variables (Policy Interventions):

- Academic Bank of Credits (ABC) adoption and utilization
- Multiple Entry and Exit (MEE) system implementation
- Vocational integration intensity (bagless days, internships)

- Industry partnership depth (advisory boards, joint research, faculty exchange)

Mediating Variables (Institutional Mechanisms):

- Curriculum flexibility (interdisciplinary course availability)
- Assessment reform (competency-based evaluation adoption)
- Digital infrastructure capacity (SWAYAM integration, virtual labs)

Dependent Variables (Outcome Measures):

- Graduate employability rates (placement statistics, starting salary premiums)
- Skill-job alignment (employer satisfaction scores, skill gap assessments)
- Student mobility (credit transfer volumes, lateral entry success)
- Entrepreneurial outcomes (startup formation, innovation metrics)

Moderating Variables:

- Institutional type (central vs. state vs. private university)
- Regional economic context (industrial cluster proximity)
- Disciplinary focus (Commerce vs. Management vs. interdisciplinary programs)

3. REVIEW OF LITERATURE

3.1 Global Perspectives on Education-Industry Alignment

The academia-industry disconnect is not uniquely Indian but represents a global challenge intensified by Industry 4.0 disruptions. The World Economic Forum's *Future of Jobs Report 2023* identifies cognitive flexibility,

complex problem-solving, and digital literacy as emerging skill requirements that traditional curricula inadequately address

European responses provide comparative context. The Bologna Process (1999) introduced credit transfer systems (ECTS) and qualification frameworks analogous to NEP 2020's ABC and National Credit Framework (NCF). Research by Vossensteyn et al. (2015) demonstrates that while credit architectures facilitate mobility, actual transfer rates depend on trust mechanisms among institutions and quality assurance standardization—areas where India currently faces significant deficits

Germany's dual education system offers another reference point. Combining apprenticeships with academic study, the model achieves higher employability rates than purely academic tracks (Busemeyer & Trampusch, 2012). NEP 2020's vocational integration from Grade 6 and mandatory internships represent attempts to import such models, though India's scale and institutional diversity present distinct implementation challenges.

3.2 Indian Higher Education Reform Trajectories

Pre-NEP reform efforts provide essential context. The National Curriculum Framework (2005) emphasized "learning without burden" but lacked structural mechanisms for implementation. The Rashtriya Uchchatar Shiksha Abhiyan (RUSA, 2013) introduced outcome-based funding but maintained rigid disciplinary boundaries. Analysis by Agarwal (2021) and Gupta (2022) identifies persistent barriers: affiliating university structures that resist autonomy, faculty recruitment focused on academic credentials rather than industry experience, and examination systems prioritizing memorization over application.

Recent scholarship specifically examines NEP 2020's architecture. Kumar (2023) provides comprehensive

policy analysis, while Sharma and Reddy (2024) assess early implementation in technical institutions. However, systematic evaluation of Commerce and Management education remains limited. Notably, Sancheti (2024) identifies ABC's potential for "infinite combinations of expertise" in engineering contexts but notes standardization challenges that equally apply to business education

3.3 Credit Transfer and Academic Mobility

The Academic Bank of Credits represents NEP 2020's most technically ambitious intervention. Drawing on India's Aadhaar digital infrastructure, ABC creates unique identifiers for students to accumulate credits across institutions and time periods. By January 2026, 31.7 million students had registered, with 1,693 institutions participating

.However, critical gaps persist. Research by Aggarwal (2024) on agricultural sciences and Ranganath (2024) across general HEIs reveals that while registration is mandatory, **actual credit transfer remains largely manual**, requiring bilateral institutional negotiations rather than automated NCF equivalence recognition

. Only 79% coverage achieved despite mandatory participation indicates digital divide barriers—rural students lacking Aadhaar-linked mobiles, institutions without technical infrastructure For Commerce education specifically, credit portability raises unique challenges. Unlike STEM fields where course content shows greater standardization, business curricula vary significantly across institutions—accounting standards taught may differ, case study approaches vary, and software applications (Tally vs. SAP vs. Oracle) lack uniformity. This heterogeneity complicates the "credit equivalence" assumptions underlying ABC.

3.4 Skill Development and Employability

NEP 2020's skill integration mandate—vocational education from Grade 6, bagless days for hands-on training, and mandatory internships—responds to extensive documentation of India's skill deficits. The *India Skills Report* series consistently shows that while technical skills are teachable, "soft skills" (communication, teamwork, problem-solving) and "meta-skills" (learning agility, adaptability) remain underdeveloped.

Recent studies by the All India Council for Technical Education (AICTE, 2024) and industry associations (NASSCOM, 2024) indicate that NEP-aligned curriculum reforms show early promise but face faculty capacity constraints. The Malaviya Mission Teacher Training Programme has trained 2.5 lakh faculty, yet this represents a fraction of India's 1.5 million plus higher education teachers

. For Commerce specifically, faculty often lack industry experience in emerging areas like fintech, data analytics, and digital marketing—fields where curriculum relevance is most critical.

3.5 Research Gaps

The literature review identifies specific gaps this research addresses:

1. **Disciplinary Specificity:** Most NEP 2020 research examines engineering or general higher education; Commerce and Management as professional disciplines with distinct industry interface requirements receive insufficient attention.
2. **Outcome Measurement:** Existing studies rely on policy analysis or institutional self-reporting; independent, standardized outcome

measurement (employability rates, employer assessments) is scarce.

3. **Implementation Process:** Research focuses on policy design or final outcomes, neglecting the process of implementation—how institutions navigate administrative barriers, faculty resistance, and resource constraints.
4. **Regional Variation:** India's diverse economic geography (metropolitan vs. tier-2/3 cities, industrial clusters vs. service economies) creates varying implementation contexts largely unexplored in current research.

4. RESEARCH PROBLEM AND OBJECTIVES

Despite the National Education Policy 2020's ambitious architecture for transforming Indian higher education through mechanisms like the Academic Bank of Credits (ABC), Multiple Entry and Exit (MEE) systems, and mandatory vocational integrations, a significant implementation-outcome gap persists in Commerce and Management education. While policy mandates have achieved high registration rates (31.7 million students, 1,693 institutions by 2025), substantive transformation of pedagogical practices and measurable improvements in graduate employability remain uneven and insufficiently documented.

This research problem centers on identifying the institutional, administrative, and structural barriers that prevent NEP 2020's transformative potential from translating into enhanced industry readiness among Commerce and Management graduates. Specifically, the study investigates why automated credit transfer and genuine multidisciplinary learning—essential for Industry 4.0 adaptability—remain largely unrealized despite technical infrastructure deployment; why industry-academia partnerships exhibit significant variation across institutional types and regions; and how

traditional assessment and faculty credentialing systems resist competency-based reforms.

The problem is further complicated by digital divide effects that risk exacerbating rather than reducing educational inequalities, and by the tension between policy's global aspirations (internationalization, world-class standards) and local economic realities (SME-dominated employment markets, regional skill requirements). Without rigorous empirical analysis of these implementation dynamics, NEP 2020 risks becoming a technically successful but pedagogically hollow reform, failing to bridge the paradigm gap it was designed to address.

4.2 Key Variables and Concepts

Independent Variables (Policy Implementation):

- *ABC Utilization Index:* Composite measure of registration rates, credit upload volumes, and actual transfer transactions
- *MEE Adoption Score:* Institutional implementation of four-year undergraduate programs with multiple exit certificates
- *Vocational Integration Ratio:* Proportion of curriculum allocated to experiential learning, internships, and skill modules
- *Industry Partnership Index:* Composite of advisory board participation, joint research projects, guest faculty appointments, and curriculum co-design activities

Dependent Variables (Outcomes):

- *Graduate Employability Rate:* Placement statistics within six months of graduation, disaggregated by sector and role quality
- *Skill-Job Alignment Score:* Employer-assessed ratings of graduate preparedness, measured through standardized surveys

- *Academic Mobility Rate:* Volume of credit transfers, lateral entries, and interdisciplinary course enrollments
- *Entrepreneurial Engagement:* Startup formation rates, business plan competition participation, and innovation outputs

Control Variables:

- Institutional type (central university, state university, deemed university, private institution, autonomous college)
- Regional economic context (metropolitan, tier-2 city, tier-3 town, rural)
- Student demographics (socioeconomic status, prior academic performance, digital access)
- Faculty characteristics (academic credentials, industry experience, training participation)

4.3 Research Objectives

RO1: To assess the current status of NEP 2020 implementation in Commerce and Management education, specifically evaluating the operational effectiveness of ABC, MEE, and vocational integration mechanisms across diverse institutional contexts.

RO2: To analyze the relationship between policy intervention intensity (ABC adoption, MEE implementation, industry partnership depth) and graduate employability outcomes, controlling for institutional and regional variation.

RO3: To identify the institutional barriers—administrative, technological, cultural, and financial—that impede the translation of NEP 2020 policy mandates into pedagogical transformation and industry-aligned skill development.

RO4: To evaluate the efficacy of NEP 2020's multidisciplinary and flexibility provisions in enhancing

student adaptability to Industry 4.0 skill requirements, particularly in emerging areas like fintech, business analytics, and digital commerce.

RO5: To develop an evidence-based framework for institutional best practices in bridging academia-industry gaps, providing actionable recommendations for curriculum designers, academic administrators, and policy implementers in the Commerce and Management education sector.

5. RESEARCH METHODOLOGY

5.1 Research Design: Mixed-Methods Sequential Explanatory Design

This study employs a mixed-methods sequential explanatory design (Creswell & Plano Clark, 2018), with quantitative dominance followed by qualitative elaboration. This approach is justified by the need to:

1. Establish magnitude and patterns of implementation variation across India's vast and diverse higher education landscape (quantitative phase)
2. Explain causal mechanisms and process dynamics that statistical analysis cannot capture (qualitative phase)
3. Generate contextualized recommendations that account for institutional specificities while maintaining generalizability

The design aligns with Q1/Q2 journal expectations in higher education and policy studies, where mixed-methods approaches are increasingly valued for capturing both "what" and "why" of policy implementation.

5.2 Quantitative Phase: Cross-Sectional Institutional Survey

Sample Design:

- **Population:** All universities and autonomous colleges offering Commerce and/or Management programs in India (approximately 12 universities, 120 colleges)

Data Collection Instruments:

1. Institutional Implementation Survey (IIS): Structured questionnaire capturing ABC registration status, MEE adoption stage, vocational curriculum percentage, industry partnership inventory, digital infrastructure capacity, and faculty development metrics. Administered to institutional heads/Nodal officers.
2. Graduate Employability Assessment (GEA): Standardized instrument measuring placement rates, salary benchmarks, employer satisfaction ratings (where available), and student self-assessment of job readiness. Administered to final-year students and verified against placement cell records.
3. Industry Partnership Index (IPI): Composite scale measuring advisory board functionality, curriculum co-design activities, internship placement volumes, guest faculty appointments, and joint research/output metrics.

Data Collection Protocol:

- Online survey deployment via Qualtrics/RedCap with offline paper backup for institutions with limited connectivity
- Follow-up telephone verification for non-respondents

- Secondary data triangulation from AISHE, NIRF, and ABC dashboard statistics
- Employer survey component: 300 HR managers/recruiters from companies hiring Commerce/Management graduates

Quantitative Analysis Approach:

- Descriptive Statistics: Implementation status profiling across institutional types and regions
- Inferential Analysis: Multiple regression examining policy intervention intensity effects on employability outcomes, controlling for institutional characteristics
- Structural Equation Modeling (SEM): Testing the conceptual model's hypothesized relationships among policy inputs, institutional mechanisms, and outcomes
- Propensity Score Matching: Comparing NEP-adopter vs. non-adopter institutions (where comparison possible) to estimate treatment effects

5.3 Qualitative Phase: Institutional Ethnography and Case Studies

Case Selection: Purposive sampling of 12 institutions representing:

- High/medium/low implementation success (based on quantitative phase results)
- Diverse institutional types (3 central universities, 3 state universities, 3 private universities, 3 autonomous colleges)
- Regional variation (2 per major zone)
- Distinctive industry contexts (financial hub, manufacturing cluster, IT corridor, traditional commerce center)

Qualitative Analysis:

- **Thematic Analysis** (Braun & Clarke, 2006) using NVivo software
- **Process Tracing** to identify causal mechanisms linking policy inputs to outcomes (or implementation failures)
- **Cross-Case Synthesis** to develop typologies of implementation strategies and their effectiveness

5.4 Integration and Validity Strategies

Integration Points:

- **Explanation Building:** Qualitative findings explain quantitative anomalies (e.g., why high ABC registration doesn't correlate with high mobility)
- **Contextualization:** Quantitative patterns are interpreted through qualitative insights about institutional culture and resource constraints
- **Triangulation:** Convergence and divergence between survey data, interviews, and documents are explicitly analyzed

Validity and Reliability:

- **Member Checking:** Interview transcripts reviewed by participants
- **Peer Debriefing:** Regular consultation with NEP implementation experts and higher education researchers
- **Audit Trail:** Detailed documentation of analytical decisions and coding evolution
- **Quantitative Rigor:** Pre-tested instruments, pilot study (n=30 institutions), reliability testing (Cronbach's $\alpha > 0.80$ for all scales)

5.5 Ethical Considerations

- Institutional Review Board approval from [University Name]
- Informed consent from all participants, with particular attention to student vulnerability
- Anonymization of institutional identifiers in publications (institutional type and region reported, specific names masked)
- Data security protocols compliant with IT Act 2000 and emerging data protection regulations

6. CONCLUSION

NEP 2020 represents India's most ambitious attempt to bridge the persistent divide between academic preparation and industry requirements. This research framework positions the policy as both a technical intervention—digitizing credits, restructuring degrees—and a normative transformation—redefining what constitutes valuable knowledge and legitimate credentials in a globalized, technology-disrupted economy.

For Commerce and Management education specifically, the stakes are particularly high. These disciplines serve as the primary interface between educational systems and employment markets, yet they have been slow to adapt to the digital transformation of business, the datafication of decision-making, and the sustainability imperatives reshaping corporate practice. NEP 2020 provides the structural architecture for adaptation; this research investigates whether that architecture is being populated with the pedagogical content and institutional practices necessary for genuine transformation.

The study's ultimate contribution lies in moving beyond binary assessments of NEP 2020 as "success" or "failure" toward nuanced understanding of implementation variation, contextual adaptation, and incremental progress. By identifying what works, for

whom, and under what conditions, the research supports the policy's evolutionary refinement while maintaining its transformative aspirations.

The paradigm gap between academia and industry will not close automatically through policy pronouncement. It requires sustained institutional effort, resource commitment, and cultural change. This research provides the empirical foundation and analytical framework to guide that effort, contributing to India's emergence as a global knowledge economy while ensuring that the benefits of educational transformation reach across regions, institutions, and socioeconomic strata.

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