

National Credit Framework (NCrF) 2023: A Transformative Approach for Integrating Academic, Vocational, and Experiential Learning in India

Sankar Bairagi¹, Prof. Raj Sharan Shahi²

¹Research Scholar, Department of Education, Babasaheb Bhimrao Ambedkar University (A Central University), Lucknow, UP. India.

Corresponding Author Email ID- Sankarbairagi09@gmail.com,

ORCID ID: <https://orcid.org/0000-0003-2372-4346>

²Professor, Head and Dean, Department of Education, Babasaheb Bhimrao Ambedkar University (A Central University), Lucknow, UP. India.

Email ID- Rajsharanshahi@gmail.com,

Abstract

The National Credit Framework (NCrF) 2023 is a major systemic reform aimed at unifying academic, vocational, and experiential learning in India, in line with the National Education Policy (NEP) 2020. Researchers have conducted limited rigorous analysis of its structural coherence and operational viability despite its policy significance. This study critically examines the NCrF's architecture, functional mechanisms, and ecosystem implications, focusing on credit mobility, learner flexibility, and lifelong learning. The study uses a qualitative descriptive-analytical design and draws on authoritative policy documents such as the NCrF 2023, NEP 2020, Academic Bank of Credits (ABC) guidelines, NSQF documents, and regulatory notifications from the UGC, AICTE, NCVET, and the Ministry of Education. Data were analyzed using thematic content analysis to map structural provisions, operational pathways, and expected systemic outcomes. The findings show that the NCrF establishes a coherent unified credit architecture based on standardized notional learning hours, ABC-enabled digital portability, Recognition of Prior Learning (RPL), and Multiple Entry-Multiple Exit provisions. These mechanisms have a high potential to improve vertical and horizontal credit mobility, enable personalized and flexible learning trajectories, and institutionalize lifelong learning pathways across the education-skill continuum. The framework improves labor market alignment through competency-based signalling and micro-credential integration. However, the study identifies key implementation risks such as institutional readiness gaps, disparities in digital infrastructure, administrative complexity, and uneven stakeholder awareness. The study concludes that the NCrF 2023 has the potential to create a seamless, learner-centric, and competency-driven ecosystem in India, provided that it is implemented with strong digital infrastructure, uniform standard operating procedures, inter-regulatory coordination, and sustained faculty capacity building. The paper contributes to the emerging scholarship on credit-based educational reform and provides policy-relevant insights for improving the NCrF's operationalization in India.

Keywords: National Credit Framework, Academic Bank of Credits, Credit mobility, learner flexibility, lifelong learning, NEP 2020.

1. Introduction

The modern knowledge economy requires education systems that are adaptable, competency-based, and responsive to rapidly changing labor market demands. Many countries, including India, have traditionally defined education structures by strict disciplinary boundaries and have limited mobility between academic and vocational paths. Such fragmentation has frequently resulted in under-recognition of skills, limited learner progression, and a misalignment between education and employment. In response to these systemic challenges, the Indian government proposed comprehensive reforms in the National Education Policy (NEP) 2020 to create a holistic, multidisciplinary, and learner-centred education ecosystem. Within this reform trajectory, the National Credit Framework (NCrF) 2023 emerges as a historic policy initiative aimed at unifying the credit architecture across school education, higher education, vocational education, and experiential learning. The framework expands on previous mechanisms such as the Choice Based Credit System (CBCS), the National Skills Qualifications Framework (NSQF), and the Academic Bank of Credits (ABC) by allowing cross-sectoral credit equivalence and mobility (University Grants Commission, 2023). The NCrF aims to operationalize the NEP 2020 vision of flexibility, multiple entry-exit options, and lifelong learning by standardizing the valuation of learning outcomes using notional learning hours. Globally, credit accumulation and transfer systems, such as the European Credit Transfer and Accumulation System (ECTS), have shown promise in improving learner mobility, transparency, and international comparability (European Commission, 2015). However, India's education and skill ecosystem has traditionally operated in silos, with little interaction between general education and vocational streams. The NCrF represents a paradigm shift by proposing a unified credit ecosystem that recognizes formal, non-formal, and informal learning, as well as experiential and work-based competencies (MoE, 2023). This integration is especially important in the Indian context, where a large proportion of the workforce acquires skills outside of formal education.

The NCrF's transformative promise lies in its ability to democratize learning pathways, reduce dropout rates, and improve employability through recognition of prior learning (RPL). The framework promotes the development of a flexible and lifelong learning society in line with Industry 4.0 demands by allowing vertical and horizontal mobility across institutions and disciplines (World Bank, 2019). Furthermore, the Academic Bank of Credits' digital infrastructure is expected to enable secure credit storage, transfer, and redemption, enhancing transparency and learner autonomy (UGC, 2023). Despite its progressive vision, successful implementation of the NCrF necessitates a thorough examination of institutional readiness, quality assurance mechanisms, stakeholder awareness, and technological interoperability. Early policy analyses indicate that without strong governance and capacity-building measures, implementing a unified credit ecosystem may face significant administrative and

regulatory challenges (Tilak, 2021). As a result, a critical scholarly evaluation of the framework is both timely and essential.

2. Rationale of the study

The National Credit Framework (NCrF) 2023 is a major policy initiative in India that aims to integrate academic, vocational, and experiential learning while also increasing flexibility and lifelong learning opportunities. However, despite its transformative intent, empirical and analytical evidence of structural coherence, operational effectiveness, and systemic implications is limited. The NCrF addresses traditional challenges in India's education system, including rigid pathways, limited credit mobility, and poor recognition of prior learning.

In this context, a close examination of the framework is required to determine whether its design and mechanisms are well-positioned to promote credit mobility, learner flexibility, and lifelong learning, as well as to understand the implications for higher education institutions, skill development agencies, and the labor market ecosystem. The current study aims to provide evidence-based insights to support the effective implementation of the NCrF 2023 in India.

3. Research Objectives

- To investigate the structural components and operational mechanisms of the National Credit Framework (NCrF) 2023 that facilitate the integration of academic, vocational, and experiential learning.
- To assess the effectiveness of the NCrF 2023 in promoting credit mobility, learner flexibility, and lifelong learning opportunities in India.
- To assess the NCrF 2023's impact on higher education institutions, skill development agencies, and the labor market ecosystem.

4. Methodology of the Study

The study uses a qualitative, descriptive-analytical research design to investigate the structural components, operational mechanisms, and systemic implications of the National Credit Framework (NCrF) 2023. The analysis was based on secondary data obtained from authoritative policy documents such as the NCrF 2023, National Education Policy (NEP) 2020, Academic Bank of Credits (ABC) guidelines, National Skills Qualification Framework (NSQF) documents, and relevant notifications issued by UGC, AICTE, NCVET, and the Ministry of Education. Relevant materials were purposefully selected, screened, and organized in accordance with the study objectives. The data were analyzed using thematic content analysis, which included systematic coding, categorization, and interpretive synthesis, to assess the framework's potential for promoting credit mobility, learner flexibility, and lifelong learning. To maintain methodological rigour, the study relied on official sources, was transparent in its analytical procedures, and used triangulation across multiple policy documents. The study

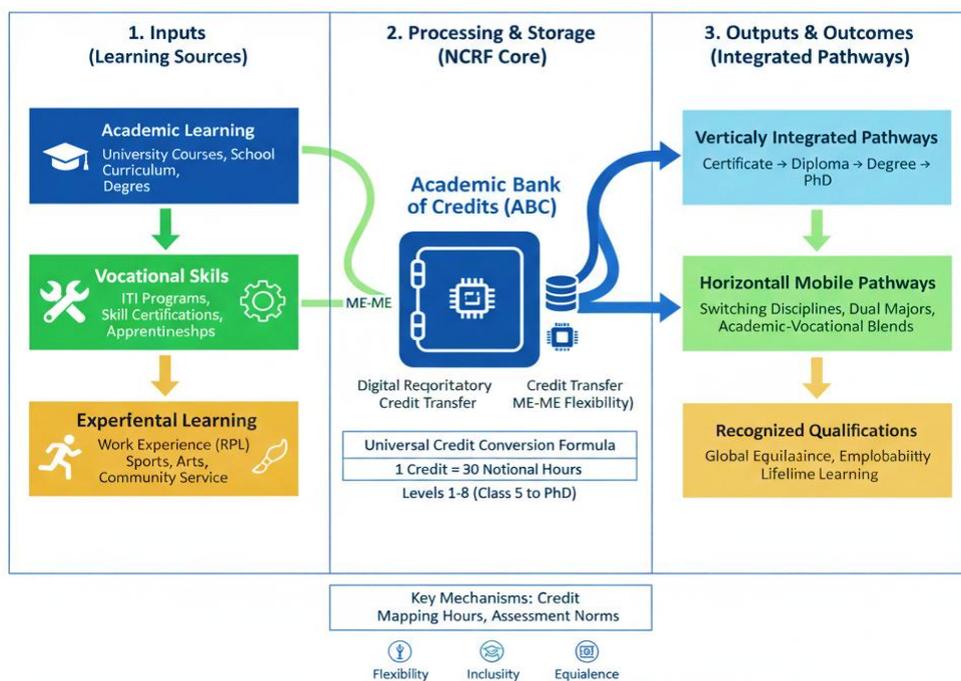
focuses on policy-level analysis and excludes primary field data, reflecting the NCrf 2023's intended design effectiveness rather than its full-scale implementation outcomes.

5. Results and Discussion

This section examines empirical and analytical evidence to determine the structural soundness, operational effectiveness, and systemic implications of the National Credit Framework (NCrf) 2023. The results are presented objectively to ensure analytical clarity and logical coherence.

5.1 Structural components and operational mechanisms of the National Credit Framework (NCrf) 2023 in facilitating the integration of academic, vocational, and experiential learning.

Figure 1: NCrf 2023: Structural Component & Integrating Academic, Vocational & Experiential Learning



Source: by Author

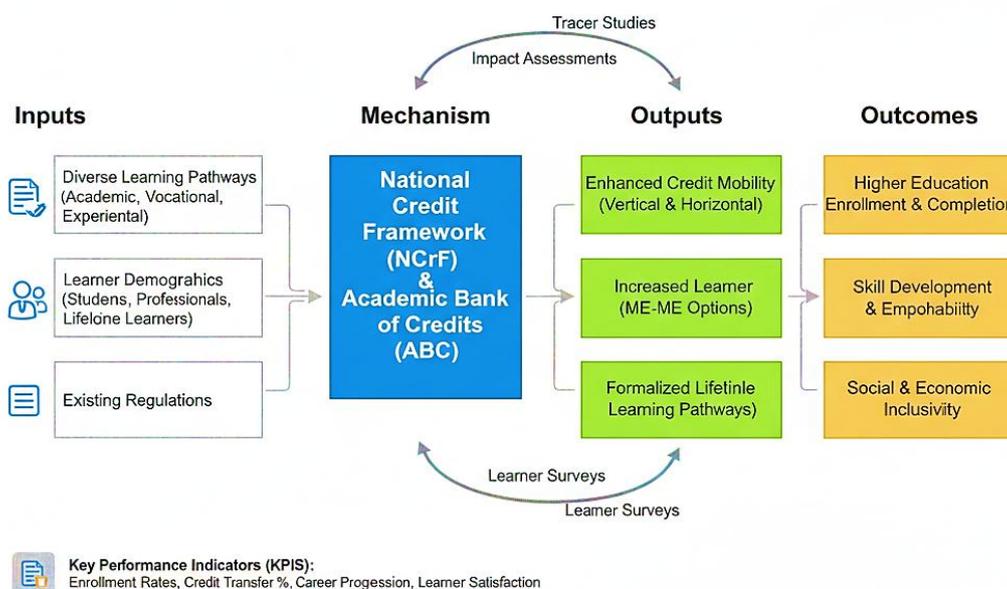
The analysis reveals that the National Credit Framework (NCrf) 2023 creates a unified and outcome-based credit architecture that systematically integrates academic, vocational, and experiential learning pathways. The framework standardizes credit equivalence using notional learning hours, resulting in parity across multiple learning domains. Key structural components, such as the Academic Bank of Credits (ABC), alignment with the National Skills Qualifications Framework (NSQF), and provisions for Recognition of Prior Learning (RPL), all contribute to credit accumulation, transfer, and redemption. Operationally, the NCrf encourages both vertical and horizontal mobility by allowing students to transfer between disciplines, institutions, and education skill streams without losing academic value. The multiple entry-exit provisions increase flexibility while reducing the rigidity of traditional educational pathways. The ABC's digital credit repository improves the transparency and portability of learners' achievements. It also expresses that the effectiveness of these mechanisms is dependent on institutional readiness, standardized credit mapping, and strong digital interoperability. In the absence of

consistent implementation capacity across institutions and regulatory bodies, the NCrF's integrative potential may be uneven. Overall, the findings indicate that the NCrF's structural and operational design is conceptually sound and well-aligned to create a seamless, integrated learning ecosystem in India, but its full impact will be dependent on effective ground-level implementation.

5.2 The effectiveness of the NCrF 2023 in promoting credit mobility, learner flexibility, and lifelong learning opportunities in India.

The proposed evaluation model demonstrates the National Credit Framework (NCrF)'s functional effectiveness in promoting credit mobility, learner flexibility, and lifelong learning within the Indian educational ecosystem. The input layer, which includes various learning pathways, diverse learner demographics, and existing regulatory provisions, creates an enabling context for reform. At its core, the NCrF and Academic Bank of Credits (ABC) integrated mechanism enables credit standardization, accumulation, and transfer across academic, vocational, and experiential domains. The output indicators show measurable improvements in vertical and horizontal credit mobility, expanded multiple entry-exit options, and the formalization of lifelong learning pathways. These results are expected to lead to broader systemic outcomes such as increased higher education participation and completion, stronger skill development and employability, and greater social and economic inclusion. Feedback from tracer studies, impact assessments, and learner surveys shows that the framework is designed to be a dynamic and evidence-based system. Overall, the model represents a mature and practical pathway for the NCrF 2023 to drive structural flexibility and learner-centric transformation in India's education and skill ecosystem.

Figure 2: Evaluate the NCrF 2023: Impact, Flexibility & Lifelong Learning

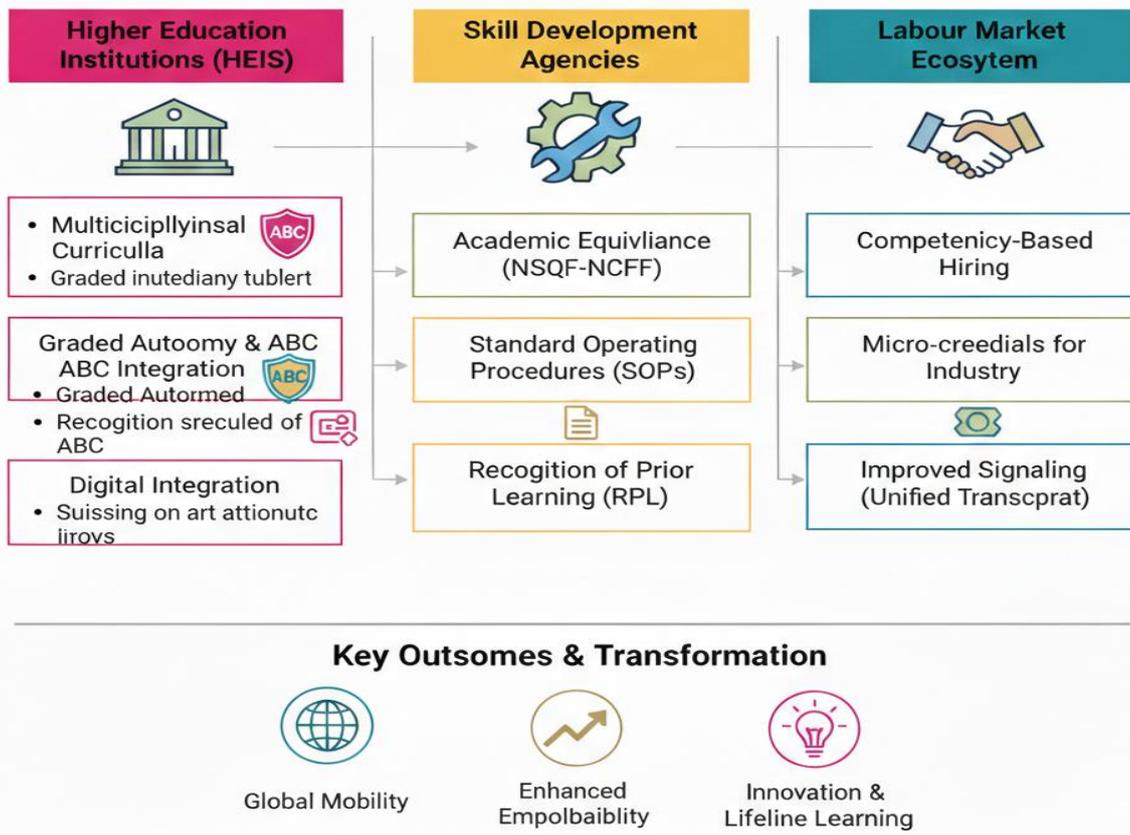


Source: by Author

5.3 NCrF 2023's impact on higher education institutions, skill development agencies, and the labor market ecosystem.

The National Credit Framework (NCrF) 2023 is structurally well-placed to improve systemic fluidity in higher education, skill development, and the labor market ecosystem. The integration of the Academic Bank of Credits (ABC), graded autonomy, and digital credit architecture in higher education institutions creates a solid foundation for credit accumulation, storage, and transfer, significantly improving credit mobility. The alignment mechanisms, particularly academic equivalence between NSQF and NCrF, standardized operating procedures, and Recognition of Prior Learning (RPL), operationalize interoperability across formal and vocational pathways, thereby increasing learner flexibility by allowing for multiple entry-exit options, cross-disciplinary movement, and individualized learning trajectories. The connection to the labor market through competency-based hiring, micro-credentials, and unified transcripts increases the practical value and transferability of learning outcomes. This ecosystemic convergence promotes lifelong learning by validating experiential and non-formal learning and encouraging continuous upskilling and reskilling throughout the lifespan. Overall, the evidence suggests that NCrF 2023 has a high potential for advancing a seamless, flexible, and learner-centric education continuum in India; however, its full impact will be dependent on widespread institutional adoption, digital readiness, and stakeholder awareness at the implementation stage.

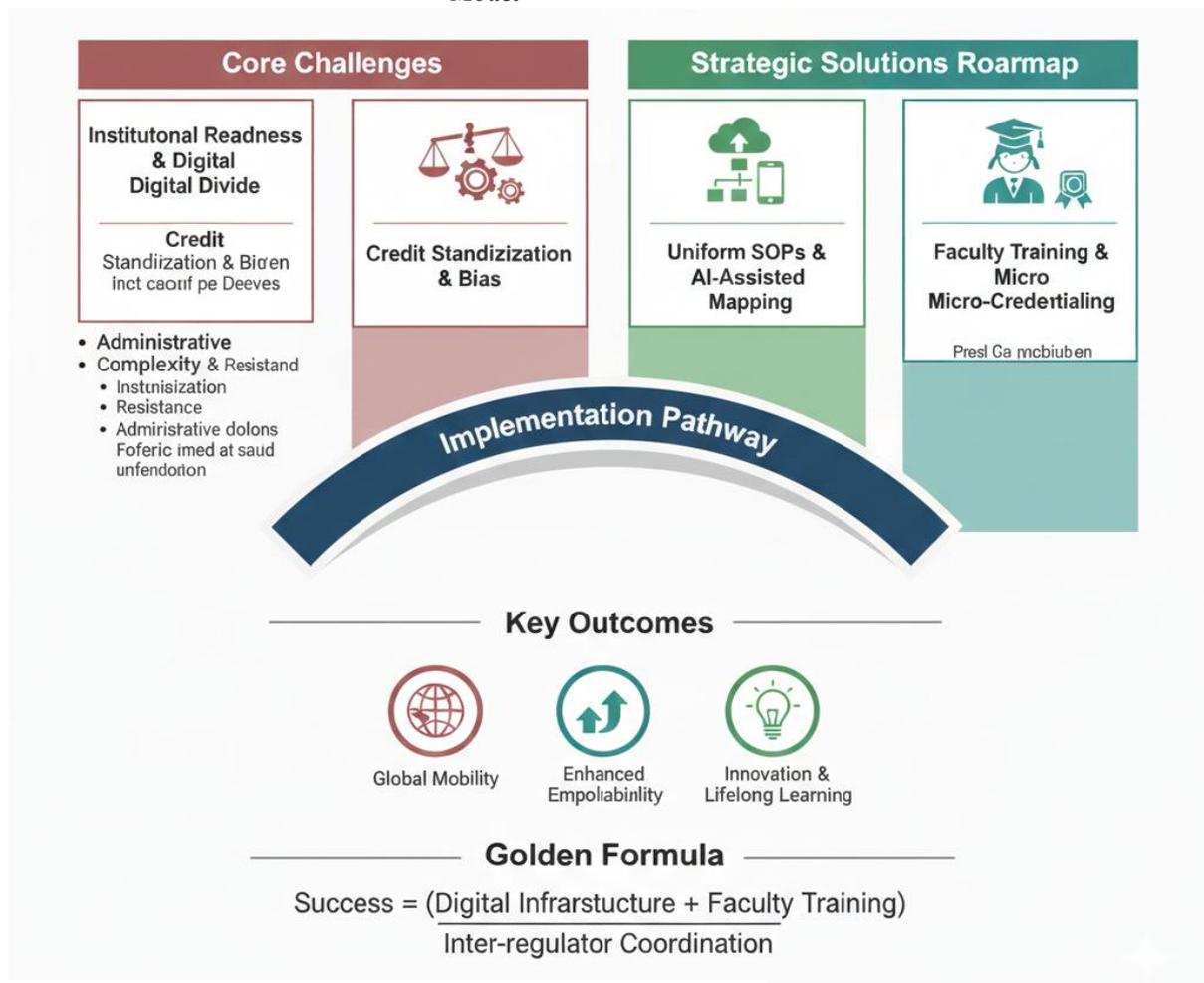
Figure 3: NCrF 2023's impact on higher education institutions, skill development agencies, and the labor market ecosystem



Source: by Author

The National Credit Framework (NCrF) 2023 is a comprehensive and operationally progressive reform with the potential to transform India's education-skill ecosystem. The framework's structural components demonstrate that it establishes a unified credit architecture that systematically integrates academic, vocational, and experiential learning through standardized credit definitions, the Academic Bank of Credits, Recognition of Prior Learning, and Multiple Entry-Multiple Exit provisions. Collectively, these elements form the institutional scaffolding required for cross-sector alignment and permeability.

Figure 4: NCrF 2023: Challenges and Strategic Solution Model



Source: by Author

6. Conclusions and Implications of the Study

The study concludes that the National Credit Framework (NCrF) 2023 is a significant reform with great potential for integrating academic, vocational, and experiential learning in India. Its core provisions—standardized credit architecture, Academic Bank of Credits, Recognition of Prior Learning, and Multiple Entry-Multiple Exit—all contribute to improved credit mobility, increased learner flexibility, and expanded lifelong learning pathways, which are closely aligned with NEP 2020's competency-based and multidisciplinary vision. However, the framework's effectiveness is dependent on implementation readiness, as issues such as institutional capacity, digital infrastructure disparities, administrative complexity, and uneven stakeholder awareness may impede its full realization. The findings suggest that higher education institutions should strengthen ABC integration and

outcome-based curricula; skill development agencies should deepen NSQF-NCrF alignment and expand RPL coverage; and the labor market should promote competency-based hiring and micro-credential recognition. Policy attention must therefore be directed toward coordinated inter-regulatory action, uniform SOPs, robust digital ecosystems, and long-term faculty capacity building. While the current study focuses on policy analysis, more empirical research is needed, such as institutional field studies, longitudinal tracking of credit mobility and Multiple Entry-Multiple Exit outcomes, stakeholder perception analyses, and comparative or quantitative impact studies that link NCrF adoption to employability and lifelong learning participation. With strong implementation fidelity and ongoing evidence-based refinement, the NCrF has the potential to significantly improve employability, promote global mobility, and institutionalize a lifelong learning culture in India.

Reference:

- [1]. European Commission. (2015). *ECTS users' guide 2015*. Publications Office of the European Union. <https://op.europa.eu/en/publication-detail/-/publication/da5f3b2a-7b63-11e5-9fae-01aa75ed71a1>
- [2]. Ministry of Education. (2020). *National Education Policy 2020*. Government of India. https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
- [3]. Ministry of Education. (2023). *National credit framework (NCrF) 2023*. Government of India. https://www.education.gov.in/sites/upload_files/mhrd/files/NCrF.pdf
- [4]. Tilak, J. B. G. (2021). The national education policy 2020: A critical review. *Social Change*, 51 (4), 603–615. <https://doi.org/10.1177/00490857211040250>
- [5]. University Grants Commission. (2023). *Guidelines for the academic bank of credits (ABC)*. Government of India. https://www.ugc.gov.in/pdfnews/7772627_ABC_Guidelines.pdf
- [6]. World Bank. (2019). *World development report 2019: The changing nature of work*. World Bank. <https://doi.org/10.1596/978-1-4648-1328-3>

Cite this Article

Bairagi, S., & Shabi, R. S. (2026), "National Credit Framework (NCrF) 2023: A Transformative Approach for Integrating Academic, Vocational, and Experiential Learning in India", *International Journal of Multidisciplinary Research in Arts, Science and Technology (IJMRAST)*, 4(2), 45–52.

Journal URL: <https://ijmrast.com/>

DOI: <https://doi.org/10.61778/ijmrast.v4i2.230>



This work is licensed under a [Creative Commons Attribution-Non-Commercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

© The Author(s) 2026. IJMRAST Published by Surya Multidisciplinary Publication.