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Integrated Curriculum in Nepal: Opportunities, Challenges, and Future Directions

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Abstract

This study explores the concept and implementation of integrated curriculum design, with a specific focus on Nepal's basic education system. Drawing upon global models of curriculum integration—ranging from disciplinary to transdisciplinary approaches—it examines how interdisciplinary methods enhance real-world learning, critical thinking, and 21st-century competencies. Using a qualitative document analysis approach, the research investigates national curriculum policies, including the National Curriculum Framework 2019 and the integrated curriculum implemented in Grades 1–3 in Nepal. The findings highlight the potential of integrated curriculum to improve student engagement, foster meaningful connections across subjects, and support holistic development. However, challenges persist, such as insufficient teacher preparation, limited higher-order cognitive engagement, and inequitable distribution of content. The study concludes that effective integration requires robust teacher training, flexible curriculum design, and a shift from teacher-cantered practices to learner-cantered methodologies. Recommendations are provided for policymakers and educators to address these gaps and to promote an educational environment that supports innovation, relevance, and student empowerment.

Keywords: Curriculum, culture, cross cutting, secondary level, Nepal

Introduction

Curriculum integration has increasingly gained attention as an effective educational strategy to address the complex, interdisciplinary nature of knowledge in the 21st century (Beane, 1997; Drake & Reid, 2018). This approach aims to break down traditional subject silos, promoting connections across disciplines to enhance student engagement, critical thinking, and real-world problem-solving skills (Brauer & Ferguson, 2015; Budwig & Alexander, 2020). Many educational systems worldwide, including Nepal, are working towards integrating curricula to align with national education policies and global trends (Curriculum Development Center [CDC], 2019a). However, challenges remain in the practical implementation and instructional alignment of integrated curricula, often due to

systemic constraints and limited teacher preparedness (Atuhurra et al., 2023; Borg & Consult, 2023). Understanding these issues is critical for developing effective strategies that foster holistic and competency-based education, which is vital for preparing students to meet future societal demands.

Over the years, curriculum development has undergone major transformations, driven by the demand to integrate digital tools, address diverse learner needs, and prepare students for an increasingly dynamic world. Rigid models of the past, characterized by static content and fixed frameworks, are gradually being replaced by flexible and innovative curricular approaches. These modern strategies aim to boost academic outcomes, promote analytical thinking, and increase learner engagement. At the foundational level, the curriculum design emphasizes using Nepali or mother tongue for instruction, transitioning to Nepali or English in secondary levels. It stresses the inclusion of local content in subjects like social studies, ethics, arts, and culture—ensuring these are delivered in appropriate languages. Furthermore, the framework is committed to defining national quality benchmarks and encourages the use of multimedia-rich textbooks, student-focused teaching methods, hands-on learning, open education alternatives, and technical pathways at the secondary level.

In 2018, Nepal began formulating an integrated curriculum model for primary education, initiating a pilot phase in selected schools during the 2019 academic session (Curriculum Development Centre, 2019b). While the notion of curriculum integration is not entirely unfamiliar, its formal and systematized implementation in Nepal marks a significant milestone. This development calls for a clearer understanding among educators and policymakers regarding its foundational concepts. The level and nature of integration, however, may vary depending on institutional and regional contexts. In recent years, integrated curriculum initiatives have gained prominence in Nepal. Yet, the process has sparked several concerns and uncertainties about its effective rollout. This article outlines the essential attributes of the integrated curriculum designed for early-grade learners in Nepal, focusing on its structure as a unified model. It provides a brief historical context and discusses how the concept has evolved over time. In addition, it identifies the core components, potential benefits, and the practical difficulties involved in its application.

Integrated curriculum refers to an educational strategy that blends multiple disciplines within a cohesive structure. It fosters a holistic approach to learning by connecting knowledge, skills, and themes across traditional subject boundaries. This method empowers learners to tackle real-world problems through critical thinking, problem-solving, and creativity (Burke & Lehane, 2023; Drake & Reid, 2018). It enables students to find meaningful connections between disciplines, thereby deepening their understanding and promoting practical application of what they learn (Burke & Lehane, 2023; Drake & Reid, 2020). This marks a departure from traditional, subject-centric instruction and fragmented teaching, steering instead toward integrated, connected learning experiences (Paleczek et al., 2023; Rijal, 2021). It eliminates the rigid separation between subjects, advocating for a more unified learning process.

In essence, the practice of integrating curricula encourages a multi-disciplinary

approach, allowing students to explore and connect different subject areas within a coherent structure (Burke & Lehane, 2023). This enhances learners' cognitive skills such as analysis, synthesis, and innovation, while equipping them with competencies vital for success in the 21st-century economy (Ye & Xu, 2023). Despite potential barriers, implementing integrated curricula can lead to higher levels of student interest, active participation, and improved academic achievement. Specifically in Nepal, introducing this model comes with numerous challenges and calls for a comprehensive understanding of its guiding principles, practical impacts, and contextual limitations. Although this approach has attracted attention for its potential to enrich instruction and foster cross-disciplinary learning, it is critical to examine how it aligns with Nepal's specific educational landscape and whether it delivers the intended learning outcomes.

This analytical overview aims to clarify the distinguishing characteristics of Nepal's integrated curriculum, investigate its effects on student progress, and confront the issues surrounding its implementation. Through this exploration, the study offers key insights and actionable recommendations to enhance curriculum integration within Nepal's school system, aiming for a richer and more effective educational experience. Moreover, by providing targeted teaching support and well-designed resources, educators can overcome challenges related to interdisciplinary teaching and facilitate smoother execution of integrated curricula. The article draws from previous literature and synthesizes findings from current studies to explore various creative pathways in curriculum planning. Its objective is to identify effective practices, highlight implementation hurdles, and examine how these curricular innovations influence learning goals.

A coherent curriculum structure minimizes gaps and repetition, aiding instructional planning and assessment design (Lynch et al., 2017). Curriculum integration can be visualized as a continuum. At one end lies the disciplinary approach, which treats subjects independently. The multidisciplinary model connects subjects around a common theme while maintaining subject-specific boundaries (Drake & Reid, 2020; Roehrig et al., 2021). The interdisciplinary approach blurs these boundaries, fostering cross-subject links through practical tasks (Ming et al., 2023). Going further, interdisciplinary thematic learning addresses real-world issues through topic-based learning (Wang et al., 2020), while the transdisciplinary model—the most integrative—draws from multiple disciplines to tackle authentic, complex problems (Drake & Reid, 2020; Dieleman & Juárez-Nájera, 2015).

For example, integrating STEM with the arts and humanities is key to addressing global concerns like climate change (Drake & Reid, 2020). Figure 1 illustrates this continuum, from low-integration disciplinary models to high-integration transdisciplinary designs (Budwig & Alexander, 2020; Dambre et al., 2022). In Nepal, school curricula primarily follow the disciplinary model. Transdisciplinary structures are rare globally and mostly implemented in specialized higher education fields such as health and science.

Recognizing both global trends and local needs, the Government of Nepal introduced the National Curriculum Framework (2019), which emphasizes inclusive development, equity, and citizenship education. Aligned with this, an integrated curriculum was launched

for Grades 1–3, focusing on four thematic domains: Nepali, English, Mathematics, and Our Surroundings (Curriculum Development Center, 2019a). This reform replaced the older 2063 curriculum, which treated six subjects separately. Now, learning is consolidated into three key domains: language, mathematics, and our surroundings. The language domain combines Nepali, English, and mother tongues in an interdisciplinary manner, while "our surroundings" integrates social studies, science, health, arts, and physical education. Mathematics continues to be addressed as a standalone subject. As shown in Figure 2, the integrated curriculum for basic education seeks to offer a more cohesive and contextually meaningful learning experience (Curriculum Development Center, 2019a).

While traditional curricula focused on discrete, outcome-based instruction, the challenges of the 21st century demand cross-disciplinary collaboration and applied knowledge (Burke & Lehane, 2023; Drake & Reid, 2020). Learners benefit more from meaningful engagement in authentic situations than from rote acquisition of isolated facts (Ye & Xu, 2023). In this context, integrated strategies promote deeper understanding, transferable skills, and soft skills such as critical thinking, communication, collaboration, and creativity—the so-called "4C Skills" essential for future success (Ye & Xu, 2023).

An integrated approach encourages active inquiry, peer learning, and knowledge co-creation (Drake & Reid, 2020; An, 2020), offering students a more connected and empowering learning environment. The integration of essential competencies—such as critical thinking, collaboration, and creativity—enhances students' subject comprehension while equipping them to thrive in a rapidly evolving world. Meng (2022) emphasizes that when students synthesize learning across disciplines, they strengthen their capacity to organize, relate, and apply knowledge, thereby deepening their understanding of real-world contexts and improving problem-solving skills. According to Burke and Lehane (2023) and Ye and Xu (2023), the central goal of integrated curricula is to foster learners who are not only knowledgeable but also capable of addressing real-life challenges through adaptable skills and behaviors.

To align education with the demands of the 21st century, integrated curricula must embed a diverse range of competencies, including life and career readiness, innovation, and digital literacy (Ye & Xu, 2023). These cross-cutting skills are crucial for preparing learners to navigate societal complexities (Burke & Lehane, 2023). When systematically infused into the curriculum, such competencies facilitate the holistic development of learners, empowering them to succeed in both academic and practical domains (Ye & Xu, 2023).

In the context of Nepal, the introduction of an integrated curriculum presents significant opportunities to improve learning experiences, enrich pedagogical strategies, and foster content coherence (Atuhurra et al., 2023). However, challenges persist. These include uneven distribution of thematic content, limited depth of coverage, and insufficient attention to higher-order cognitive skills (Atuhurra et al., 2023). Although the national curriculum framework outlines five key skill domains and 29 soft skills (Curriculum Development Center, 2019a), their implementation remains limited, particularly within teacher-cantered classrooms where students often remain passive participants (Kunwar et al., 2022a).

Methodology

This study adopted a qualitative research design, utilizing document analysis as the primary method. Key national curriculum documents—such as the National Curriculum Framework 2019 and subject-specific frameworks from the Curriculum Development Centre (2019a)—were critically examined to understand the structure and intent of the integrated curriculum in Nepal. In addition, relevant policy texts, scholarly literature, and empirical studies concerning curriculum design and implementation were systematically reviewed.

This document-based approach enabled the exploration of both theoretical constructs (e.g., disciplinary vs. transdisciplinary models) and practical insights related to educational reform efforts. The analysis drew on secondary sources to assess the coherence, challenges, and implications of curriculum integration within the Nepalese education system. The data were thematically analysed to identify patterns related to curriculum theory, policy application, pedagogical practices, and skill development in basic education.

Findings and Discussion

This review identifies several key findings regarding the concept, implementation, and challenges of integrated curricula, particularly in the context of Nepal's recent educational reforms.

Integrated Curriculum Models and Their Relevance

The theoretical literature supports a continuum of curriculum integration—from disciplinary to transdisciplinary—highlighting the growing importance of interdisciplinary and transdisciplinary approaches in addressing real-world issues (Drake & Reid, 2020; Dieleman & Juárez-Nájera, 2015). These models are essential in preparing students for 21st-century demands by linking subject knowledge with practical applications and soft skills.

Policy-Level Initiatives in Nepal

Nepal's National Curriculum Framework 2019 and the integrated curriculum for grades 1–3 demonstrate the government's intent to modernize basic education through an interdisciplinary approach. The merging of previously discrete subjects into broader learning domains (e.g., language and "our surroundings") reflects global trends in holistic education and localized adaptation (Curriculum Development Center, 2019a).

Skill-Based Learning and 21st-Century Competencies

The integrated curriculum aims to foster "4C" skills—critical thinking, creativity, communication, and collaboration—alongside life and digital competencies (Ye & Xu, 2023; Burke & Lehane, 2023). These are increasingly seen as essential for navigating a rapidly changing, information-rich world.

Challenges in Classroom Implementation

Despite policy progress, significant challenges remain at the school level. Many teachers lack adequate training in integrated instruction, and teaching remains largely teacher-cantered (Kunwar et al., 2022a). Classroom practices often fall short of engaging students in higher-order thinking, instead focusing on basic recall and comprehension (Atuhurra et al., 2023).

Limited Assessment Innovation

Assessment practices have not evolved to match the demands of integrated curricula. There is a need for alternative methods such as performance tasks, project-based learning assessments, and formative evaluation strategies that reflect interdisciplinary competencies.

Teacher Preparation and Support:

Teachers are pivotal to successful curriculum implementation. However, professional development programs currently do not sufficiently equip them to deliver integrated learning experiences. Furthermore, the exclusion of teacher voices in curriculum design reduces their sense of ownership and may hinder innovative practices.

Equity and Coverage Concerns

The inclusion of diverse subjects within fewer learning domains can create content density, leading to surface-level coverage rather than deep understanding. Additionally, curriculum design must ensure that rural and under-resourced schools are not left behind in this transformation process.

Nepal's integrated curriculum spans six core areas: language and literacy, mathematics, science and technology, social studies, health and physical development, and creative arts (Curriculum Development Centre, 2019a). It aims to connect these disciplines to real-world contexts, minimizing content overlap and promoting cross-disciplinary problem-solving (Drake & Reid, 2018). The model encourages student-cantered learning, with active participation at its core. In line with Nepal's inclusive education goals, the curriculum supports diverse learning needs and promotes equal access to quality education (Curriculum Development Center, 2019b). This fosters a collaborative and equitable learning environment for all students, regardless of background.

The integrated approach is rooted in historical education systems, such as those in ancient Greece, which emphasized holistic learning (Jaeger, 1986). Over time, however, education became compartmentalized into separate disciplines (Drake & Reid, 2020). The current integrated curriculum reflects a shift toward progressive practices that focus on student competencies and values (Beane, 1997; Drake & Reid, 2020).

There is growing interest in integrated learning frameworks, especially those aligned with 21st-century and inquiry-based education. Advocates highlight its ability to address complex, real-world problems through interdisciplinary thinking (Beane, 1997; Harden, 2000).

Conclusion

This study underscores the urgent need for innovative and flexible curriculum design to respond to the dynamic needs of learners and society. While Nepal's adoption of an integrated curriculum for early grades reflects global trends, its implementation reveals gaps in coherence, depth, and assessment alignment. Effective curriculum reform must prioritize teacher training, resource support, and pedagogical innovation. Teachers, as central agents of change, require both professional development and institutional support to shift from traditional methods to integrative, student-cantered approaches.

Addressing teacher resistance and empowering educators through collaboration and continuous learning are key to sustainable curricular transformation. Without investing in teacher preparedness, the goals of integration—active learning, cross-disciplinary thinking, and real-world problem solving—will remain aspirational. A strategic, systemic effort is needed to embed integration meaningfully within Nepal's broader educational landscape.

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