



# Blended Learning in the Pedagogical Components of the B.Ed. Curriculum: A Study

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## Abstract

The shift toward digital education, particularly in the wake of the COVID-19 pandemic, has accelerated the adoption of blended learning across educational institutions in India. The goal is to carefully mix online and face-to-face (F2F) methods to help future teachers learn better, become comfortable with technology, and be ready for today's diverse classrooms. This approach further aims to provide a complete learning experience, preparing Bachelor of Education (B.Ed.) graduates to be effective and adaptable educators in a world that increasingly relies on digital tools. In the context of the undergraduate B.Ed. program, it should be more redefined in pedagogical delivery by integrating both F2F and online modes. This paper examines how blended learning is being implemented in B.Ed. programs so that its practices align with policy mandates such as the National Education Policy (NEP) 2020 and guidelines set forth by the National Council for Teacher Education (NCTE). It further explores the integration of blended learning within the B.Ed. course in India, focusing specifically on its ratio and distribution in both pedagogical and practicum components.

**Keywords:** Blended Learning, B.Ed., Teacher Education, NEP 2020, NCTE, Hybrid Teaching, Digital Pedagogy

## INTRODUCTION

In the realm of teacher training and education, blended learning—which combines online and in-person instruction—as well as shared reflection are becoming more and more popular globally. However, they also bring with them new problems for teacher preparation and education. Focusing on blended pedagogy in B.Ed. programs and figuring out the optimal ratio of combining online and in-person instruction is also becoming more and more important.

B.Ed. teacher training is a university-level Bachelor's degree program in and it comes under the Indian Ministry of Education. The national education policy 2020 became a mandatory document to guide higher education pedagogy. The data consist of curriculum documents related to B.Ed. level of teacher education at the higher education in India. The trainee students of the course complete this degree by means of blended learning, which includes face-to-face teaching, online learning, and work-based tasks. The college teachers were assigned periods to supervise them in the practice teaching sessions conducted in various schools. The B.Ed. program is based on dialogue between theory and practice. Students carry out tasks related to their studies within their internship groups and thus can apply theory- and research-based knowledge directly in practice. They are required to do independent work and online study, and there is also heavy reliance on pair and group work. The research in this study will focus on the highlighting the appropriate ratio in the online and face-to-face instructions following the 2-year curriculum for the B.Ed. course.

## OBJECTIVES OF THE STUDY

1. To study the integration of blended learning within the B.Ed. course in India, focusing specifically on its ratio and distribution in both pedagogical and practicum components.
2. To examine how blended learning is being implemented in B.Ed. programs so that its practices align with policy mandates such as the National Education Policy-2020.

## METHODOLOGY

The methodology includes a systematic review of a series of primary and secondary sources of materials. Various online and library journals were consulted. A few papers were chosen for in-depth examination based on the requirements of the current study after their titles and abstracts were examined. For this study, relevant research articles, concept notes, and various government documents and reports on NCTE (2014), NEP (2020) and recent guidelines issued by UGC (2021) on Blended Mode of Teaching and Learning: Concept Note were consulted.

## BLENDED LEARNING PRACTICES IN B. Ed. PROGRAMME

Blended learning is defined as a pedagogical approach that combines in-person classroom methods with online educational materials and interactive virtual activities. Blended learning, in the context of B.Ed. programs, refers to the planned integration of online and face-to-face learning experiences to optimize learning outcomes. It is not simply about adding technology to existing courses but rather about redesigning the learning environment to leverage the strengths of both modalities. This can involve using online platforms for content delivery, collaborative activities, assessments, and communication, while reserving face-to-face sessions for interactive discussions, demonstrations, and hands-on activities.

The NCTE's 2014 regulations mandate that B.Ed. programs must comprise 72 credits over two years, including theoretical coursework, practicum, and internships (NCTE, 2014). The guidelines emphasize face-to-face instruction and require at least 16 weeks of school-based internship. While ICT is acknowledged as part of the curriculum, there is limited guidance on blended or online course delivery. The National Education Policy 2020 calls for the use of educational technology to enhance teaching and learning across all levels. It advocates for teacher education programs that integrate technology and active learning strategies. The policy encourages institutions to use online platforms like Study Webs of Active-learning for Young Aspiring Minds (SWAYAM) for credit-bearing courses and teacher training (Ministry of Education, 2020). Also, the University Grants Commission (UGC) in 2021 introduced guidelines on blended learning, allowing up to 40% of any course to be delivered via online platforms such as SWAYAM (UGC, 2021). Although these guidelines target higher education broadly, their application to teacher education remains largely interpretive.

The blended model has gained traction in higher education due to its ability to foster flexibility and learner autonomy (Means et al., 2013). Several models of blended learning are commonly applied like:

- a) **Rotation Model:** In this model, students rotate between online and in-person learning stations.
- b) **Flipped Classroom Model:** According to this methodology, the students access content online before class and engage in active learning during in-person sessions.
- c) **Enriched Virtual Model:** Here most of the coursework is completed online by the trainee students with infrequent face-to-face interactions with the teachers.

The integration of technology in teacher education is often framed using the TPACK (Technological Pedagogical Content Knowledge) model (Mishra & Koehler, 2006), which encourages the thoughtful incorporation of digital tools into pedagogy. Similarly, the SAMR (Substitution, Augmentation, Modification, Redefinition) model provides a framework for evaluating how technology transforms learning tasks. A key focus of this paper is to propose the ratio and distribution of online and F2F components within both the pedagogical aspects of the curriculum and the practicum components. For instance, in theoretical pedagogical subjects like Educational Psychology or Curriculum Development, a greater online component might be feasible for content delivery (e.g., 60% online, 40% F2F), leveraging Learning Management Systems (LMS) for video lectures and forums. Conversely, highly practical components such as Microteaching or School Internship would necessitate a higher F2F ratio (e.g., 60-80% F2F), with online elements primarily supporting reflection, feedback via video uploads, or virtual simulations. This planned blend aims to enhance flexibility, ensure continuity of learning, and equip future educators with the digital competencies essential for 21st-century classrooms, while simultaneously addressing the unique infrastructure and digital literacy challenges prevalent in diverse Indian contexts.

Course Component	Delivery Mode	Tools/Methods
Educational Theory	60% Online, 40% F2F	LMS (Moodle/Google Classroom), video lectures, forums
Pedagogy of Subjects	50% Online, 50% F2F	Interactive webinars, lesson plan demos
Microteaching	40% Online, 60% F2F	Peer video uploads, feedback via LMS
School Internship	20% Online, 80% F2F	Physical classroom teaching, online reflections
ICT in Education	70% Online, 30% F2F	Software tutorials, virtual lab work
Workshops and Seminars	Mixed Mode	In-person recorded sessions or webinars

## **A) Integrating Blended Learning in Pedagogical Components**

The pedagogical components of the B.Ed. curriculum, which focus on teaching methodologies, educational psychology, curriculum development, and assessment, can greatly benefit from blended learning approaches in the following crucial areas:

- 1. Content Delivery:** Online platforms can be used to deliver lectures, readings, and multimedia resources, allowing student teachers to access content at their own pace and convenience. This frees up face-to-face sessions for more interactive activities.
- 2. Collaborative Learning:** Online discussion forums, group projects, and peer review activities can foster collaboration and knowledge sharing among student teachers. They can discuss complex pedagogical concepts, share teaching strategies, and provide feedback on each other's work.
- 3. Personalized Learning:** Blended learning allows for personalized learning experiences by providing student teachers with access to a variety of resources and activities that cater to their individual learning styles and needs. Adaptive learning technologies can be used to tailor content and assessments to each student's progress.
- 4. Assessment:** Online quizzes, assignments, and presentations can be used to assess student teachers' understanding of pedagogical concepts. Formative assessments can be integrated throughout the course to provide students with feedback and support their learning.

5. **Resource Access:** Online repositories can provide student teachers with access to a wealth of resources, including lesson plans, teaching materials, research articles, and videos of exemplary teaching practices.

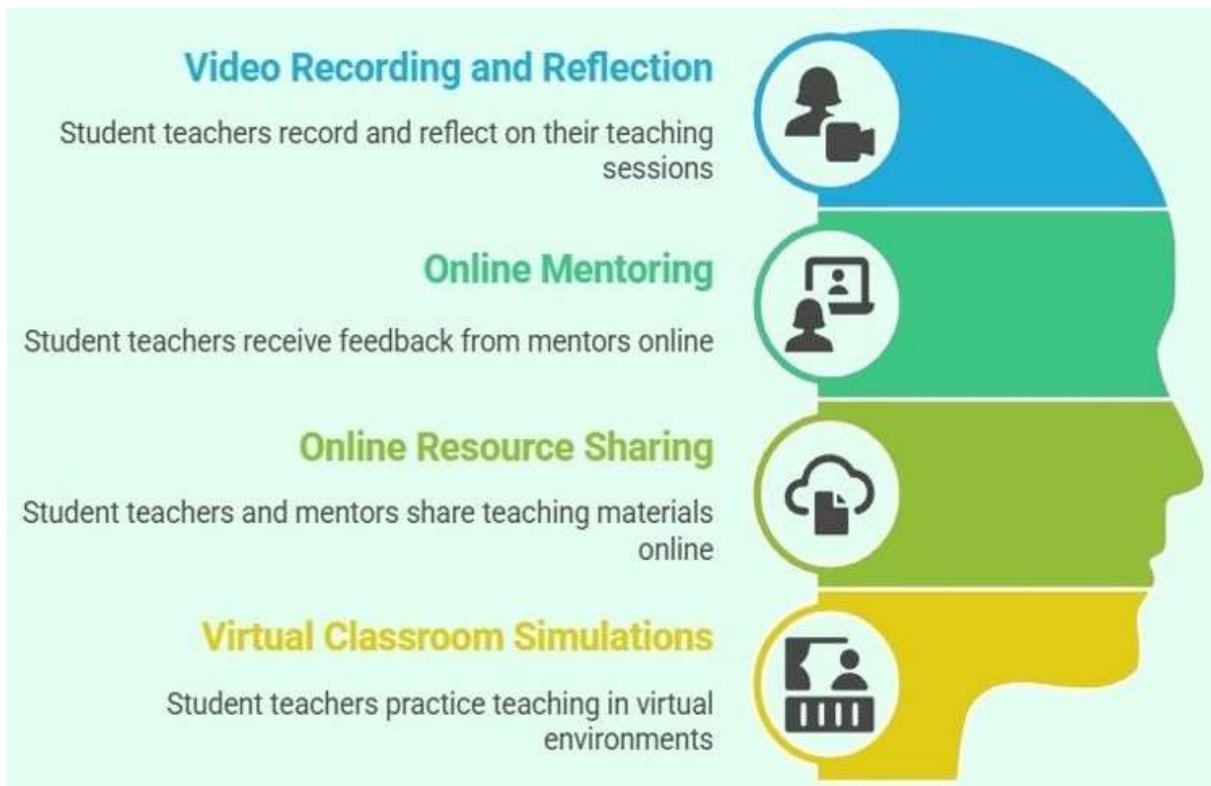


Figure 1: Examples of Blended Pedagogy and Learning Activities in B.Ed.

## **B) Integrating Blended Learning in Practicum Components**

The practicum component of the B.Ed. program, which involves student teachers gaining practical experience in real classroom settings, is crucial for developing their teaching skills. Blended learning can enhance the practicum experience in several ways:

- 1) **Observation and Reflection:** Student teachers can use video recording technology to record their teaching sessions and then reflect on their performance using online reflection tools. They can also share their videos with mentors and peers for feedback.
- 2) **Mentoring and Supervision:** Online communication tools can facilitate communication between student teachers and their mentors, allowing for regular feedback and support. Mentors can also use online platforms to track student teachers' progress and provide targeted guidance.
- 3) **Resource Sharing:** Online platforms can be used to share resources and best practices among student teachers and mentors. This can include lesson plans, teaching materials, and videos of exemplary teaching practices.
- 4) **Data Analysis:** Student teachers can use data analytics tools to analyse student performance data and identify areas where they need to improve their teaching.
- 5) **Virtual Simulations:** Virtual simulations can provide student teachers with opportunities to practice their teaching skills in a safe and controlled environment. This can be particularly useful for practicing challenging classroom management techniques or teaching difficult concepts.



**Figure 2: Examples of Blended Pedagogy and Learning Activities in B.Ed. Practicum**

## CONCLUSIONS AND SUGGESTIONS

It can be inferred that implementation there is a gradual yet fragmented adoption of blended learning in B.Ed. programs. The use of platforms like Google Classroom has become normalized; however, pedagogical innovations such as flipped classrooms or virtual microteaching remain rare. This is consistent with Boelens et al. (2017), who note that lack of institutional support and teacher training are significant barriers to effective blended learning. While NEP 2020 provides a visionary framework, while the guiding document for National Professional Standards for Teachers (NPST) forwarded by NCTE in 2023 is not too radical, emphasizing face-to-face modalities (NCTE, 2023). The absence of a unified national policy on blended B.Ed. delivery has led to inconsistent practices. Nevertheless, the adoption of the TPACK framework among some teacher educators indicates a shift toward more deliberate digital pedagogy (Mishra & Koehler, 2006). Internationally, blended learning in teacher education has shown promise in improving student outcomes, enhancing digital competencies, and promoting reflective practice (Graham, 2013). However, studies also highlight barriers such as inadequate infrastructure, lack of faculty training, and challenges in student assessment (Boelens et al., 2017).

Thus, it can be concluded that the blended learning is no longer optional and becomes essential for making teacher education future-ready. While B.Ed. programs in India are taking initial steps toward blended delivery, the process requires robust policy support, faculty training, and infrastructural development. With strategic investment and policy alignment, the blended pedagogy can transform the quality and reach of teacher education in India.

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