A COMPARATIVE STUDY OF ITEP AND TRADITIONAL INTEGRATED B.A.B.ED./B.SC.B.ED. PROGRAMS: STUDENT PERSPECTIVES

Dissertation Submitted to
Barkatullah University, Bhopal
In Partial Fulfilment of the Requirement for the Degree of
Master of Education (M.Ed.)
Session: 2023-25

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DECLARATION

I hereby declare that the dissertation entitled "A Comparative Study of ITEP and Traditional Integrated B.A.B.Ed./B.Sc.B.Ed. Programs: Student Perspectives" has been carried out by me during the academic year 2023-2025 in partial fulfilment of the requirements for the award of the Two-Year Degree of Master of Education (M.Ed.) from Barkatullah University, Bhopal, Madhya Pradesh.

The study has been conducted under the guidance and supervision of Dr. Pavan Kumar, Assistant Professor, Department of Education, Regional Institute of Education, Bhopal, Madhya Pradesh.

I also declare that the research work done is original and has not been submitted by me for the award of any degree or diploma at any other university.

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CERTIFICATE

This is to certify that the dissertation entitled "A Comparative Study of ITEP and Traditional Integrated B.A.B.Ed./B.Sc.B.Ed. Programs: Student Perspectives" being submitted by Jaya Nehru, student of Master of Education (M.Ed.) bearing roll number- 2406600308 and Enrolment Number-R200661550021, Regional Institute of Education, Bhopal, is submitted in the partial fulfilment of the requirements for the award of the degree of Master of Education (M.Ed.).

This is a bonafide research work carried out by her in the Department of Education, Regional Institute of Education, Bhopal, Madhya Pradesh under my supervision and guidance. The work is original to the best of her knowledge and has not been submitted earlier in any form for degree in any other university.

It is further certified that the dissertation, in its present form, is fit for submission to Barkatullah University for the award of the degree of Master of Education.

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ACKNOWLEDGEMENT

I wholeheartedly express my sincere gratitude to all those who have been instrumental, directly or indirectly, in this research work. With deep reverence, I express my gratitude to the Almighty for granting me the opportunity, strength, and perseverance to accomplish various milestones in life, including the successful completion of this dissertation.

First and foremost, I would like to express my profound respect and heartfelt thanks to my research supervisor, respected ***Dr. Pavan Kumar****, Assistant Professor, Department of Education, Regional Institute of Education, Bhopal (M.P.) for channelizing my efforts and creativity towards the successful accomplishment of this work. His immense patience, constant encouragement, and guidance at every step were invaluable.*

I would like to express my sincere respect and gratitude to ***Prof. Shiv Kumar Gupta****, Principal, Regional Institute of Education, Bhopal for his kind support, cooperation and providing the institutional assistance throughout this journey. I am equally grateful to* ***Prof. Jaydip Mandal****, Dean of Instructions, RIE Bhopal, for his leadership that promotes academic excellence.*

I convey my sincere thanks and heartfelt gratitude to ***Prof. Ayushman Goswami****, Head, Department of Education, Regional Institute of Education, Bhopal and to all other faculty members for their valuable support and encouragement, both direct & indirect, which helped me during my research work.*

Moreover, I extend my gratitude to respected Librarian, ***Dr. P.K. Tripathy*** *and entire library members for allowing the use of library resources and finding the required materials*

Last but not the least, I would like to convey my special heartfelt thanks to my family members and classmates who always stood by me and motivated me to move forward in life. Their constant blessings and regular encouragement played a crucial role in successful completion of this dissertation work.

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1.1 Introduction

1.1.1 Importance of teacher education

Education serves as the cornerstone of any progressive society, and at the heart of this system are teachers, individuals entrusted with shaping the intellectual, emotional, and ethical development of future generations. The influence of a teacher extends far beyond the classroom; they nurture curiosity, foster a love for learning, and play a pivotal role in developing responsible and engaged citizens. It is in this context that teacher education becomes fundamentally important, as it provides the framework through which aspiring educators are equipped to assume this critical responsibility.

Teacher education refers to the formal process of preparing individuals for the teaching profession. This process is typically divided into two distinct phases: pre-service education, which prepares individuals before they enter the teaching workforce, and in-service education, which supports the ongoing professional growth of practicing teachers. Both components are essential in cultivating knowledgeable, skilled, and reflective educators.

The importance of teacher education lies in its direct impact on the quality of classroom instruction and student learning outcomes. Effective teacher preparation programs ensure that future educators understand how students learn, can plan lessons that are engaging and inclusive, and are capable of adapting to diverse learning needs. A well-prepared teacher can positively influence not only academic achievement but also the social and emotional development of students.

Comprehensive teacher education programs go beyond the transmission of academic content. They equip future educators with a broad repertoire of instructional strategies, emphasize the importance of reflective practice, and instil the capacity to meet the varied needs of learners. Such training leads to classrooms where students are more engaged, achieve higher levels of success, and are less likely to fall behind or drop out.

Moreover, teacher education contributes to broader educational and societal goals. Educators who are effectively trained are more adept at promoting critical thinking, collaboration, and ethical behaviour among their students. Through their daily interactions, teachers influence students' character and worldview, imparting essential values such as respect, empathy, responsibility, and fairness, principles that underpin a cohesive, just, and democratic society.

A well-structured teacher education system also promotes consistency and quality across the educational landscape. It ensures that educators possess a clear understanding of curriculum frameworks, can tailor instruction to meet individual learning profiles, and are proficient in using assessment to inform teaching. In this way, the robustness of a nation's teacher education system serves as a key indicator of the overall effectiveness and equity of its education system.

Teacher education also plays a central role in shaping the professional identity of future teachers. It fosters a sense of purpose and a commitment to continuous learning. Through a combination of theoretical coursework, supervised field experiences, and professional dialogue, teacher candidates develop a deeper understanding of their role as educators and their potential to influence society positively.

Another critical function of teacher education is its contribution to pedagogical innovation. Teachers who are well-prepared are more likely to adopt new teaching methodologies, integrate technology effectively, and implement differentiated instruction. By staying informed about emerging research and educational trends, these educators are better equipped to evolve their practice in response to changing student needs.

A robust teacher education framework also provides clear professional standards and benchmarks. It promotes a shared understanding of effective teaching and provides mechanisms for evaluating and enhancing teacher performance. This contributes to maintaining high-quality instruction across regions and helps align teacher preparation with national education priorities such as reducing learning disparities, improving literacy and numeracy, and leveraging educational technology.

In essence, teacher education is the foundation upon which a successful education system is built. It ensures that teachers are not only competent and confident in their subject matter and pedagogical approach but also committed to fostering inclusive, student-centred learning environments. Prioritizing high-quality teacher education is thus critical to improving educational outcomes, promoting social equity, and building a knowledgeable and compassionate society.

1.1.2 Evolution of Teacher Education – Pre-Independence to Post-Independence

The evolution of teacher education in India reflects the broader socio-political and cultural shifts that have shaped the nation over time. From ancient traditions rooted in philosophical

and moral instruction to formal institutional models influenced by colonial and post-colonial reforms, the trajectory of teacher education has been long and dynamic. Understanding this historical development is key to appreciating the current structure, priorities, and challenges of the teacher education system in India.

In the earliest stages of Indian civilization, education was imparted through the Gurukul system, where students (shishyas) lived with their teachers (gurus) in an immersive and holistic learning environment. The guru-shishya tradition emphasized moral development, self-discipline, and experiential learning. Knowledge was closely linked with values, and teachers were revered not only for their scholarship but also for their character and wisdom. Although the Gurukul model lacked formal assessment and certification, it laid the foundation for personalized and values-based education.

With the advent of Buddhist education systems, particularly in renowned institutions like Nalanda and Takshashila, teacher-student interactions continued to emphasize deep inquiry, discipline, and moral training. These early systems, while informal by modern standards, were rigorous and guided by a strong ethical framework. Teachers were expected to model the virtues they sought to instil, and learning often focused on philosophy, logic, medicine, astronomy, and religious texts.

The arrival of Islamic rulers brought with it the madrasa system of education, which also contributed to shaping pedagogical practices. Teachers in madrasas were respected scholars who imparted religious, philosophical, and scientific knowledge. These early education systems, though diverse, shared a common reverence for teachers and viewed education as a sacred and transformative process.

The colonial period marked a significant turning point in the history of Indian teacher education. The British colonial administration introduced a system of education modelled on Western lines, with a strong focus on creating clerks and administrators to serve the colonial bureaucracy. As part of this effort, the training of teachers became more formalized but also increasingly utilitarian.

One of the earliest efforts in structured teacher training came in the form of Normal Schools, which began in the early 19th century. These institutions aimed to train teachers in basic pedagogical methods suitable for primary education. However, their scope was limited, and the emphasis remained on rote learning and obedience rather than critical thinking or creativity. Teacher education during this period was largely driven by the needs of the

colonial government, with limited regard for indigenous knowledge systems or pedagogical innovation.

Several education commissions during the British era attempted to bring reform to the system. The Wood's Despatch of 1854 recognized the importance of training teachers and recommended the establishment of teacher training institutions. The Indian Education Commission (1882), also known as the Hunter Commission, stressed the need for improving primary education and enhancing the quality of teacher training. Despite these recommendations, teacher education remained underdeveloped and poorly resourced.

With India's independence in 1947, there was a renewed commitment to building an education system that would serve national development and social transformation. The Radhakrishnan Commission (1948–49) on University Education emphasized the importance of teacher training in higher education. However, it was the Secondary Education Commission (1952–53) that provided more focused recommendations for improving teacher education, including the need for comprehensive training programs, better infrastructure, and well-qualified faculty.

A major milestone came with the establishment of the Education Commission (1964–66), chaired by Dr. D.S. Kothari. The commission's report famously stated that "the destiny of India is being shaped in her classrooms," underscoring the centrality of teachers to national progress. The commission advocated for the professionalization of teacher education, recommended integrated programs that combined content and pedagogy, and proposed the establishment of teacher training institutions at all levels.

One significant outcome of these recommendations was the introduction of traditional integrated teacher education programs, particularly the B.A.B.Ed. and B.Sc.B.Ed. courses. These four-year integrated programs were primarily offered by the Regional Institutes of Education (RIEs) under NCERT. They aimed to provide a holistic model of teacher preparation by merging undergraduate disciplinary studies with professional training in pedagogy and school internship. These programs represented an early attempt to bridge the gap between subject knowledge and teaching practice within a unified curriculum structure. The RIEs became centres of excellence in integrated teacher education and continue to play a vital role in the professional preparation of school teachers.

Subsequent developments in the 1980s and 1990s continued to build on these recommendations. The National Policy on Education (NPE) 1986, later modified in 1992,

reiterated the importance of teacher education as a means of ensuring quality schooling. It led to the creation of institutions such as the District Institutes of Education and Training (DIETs) for pre-service and in-service training of elementary school teachers. Additionally, the National Council for Teacher Education (NCTE) was established in 1993 as a statutory body to regulate and maintain standards in teacher education across the country.

The turn of the millennium brought further reforms, particularly in response to the changing educational landscape. The National Curriculum Framework for School Education (NCFSE 2000) and its successor, the National Curriculum Framework (NCF 2005), emphasized learner-centred education, constructivist pedagogy, and inclusive practices. These principles were echoed in the National Curriculum Framework for Teacher Education (NCFTE 2009), which offered a comprehensive vision for preparing teachers as reflective practitioners committed to equity and justice.

Another significant development came in the form of the Justice Verma Commission (2012), which was set up to examine the state of teacher education in India. The commission's report highlighted widespread concerns, including the proliferation of substandard teacher training institutions, inadequate regulation, and disconnect between theory and practice. It recommended a complete overhaul of the teacher education system, with a focus on integrated and practice-based programs, rigorous accreditation, and faculty development.

Throughout this evolution, teacher education in India has gradually expanded in scope and complexity. From basic training in colonial Normal Schools to integrated professional degrees like the B.Ed., and from short-term certificate programs to comprehensive postgraduate research in education, the field has grown significantly. Despite these advances, challenges remain. Issues such as uneven quality, limited access in rural areas, under-resourced institutions, and weak linkage between schools and training centres continue to affect the impact of teacher education.

However, the cumulative effect of historical efforts has laid the groundwork for the current phase of reform. Contemporary teacher education builds on this legacy while seeking to overcome its limitations. With the implementation of the National Education Policy (NEP) 2020, India aims to bring teacher education in line with global best practices and national aspirations. The policy's emphasis on integrated programs, multidisciplinary approaches, and practice-based learning reflects a synthesis of lessons learned over centuries of educational evolution.

In conclusion, the evolution of teacher education in India, from its roots in moral and philosophical instruction to the present emphasis on professional training and reflective practice, illustrates the dynamic interplay between tradition, policy, and pedagogy. Each phase of development has contributed to shaping a system that now aspires to be inclusive, rigorous, and aligned with the needs of a diverse and changing society. Understanding this historical context is essential for critically engaging with current reforms and envisioning the future of teacher education in the country.

1.1.3 How the Structure of Teacher Education Programs Have Changed Over Time

The structure of teacher education programs in India has undergone significant transformations over time, reflecting evolving educational philosophies, policy shifts, and the need to respond to changing social and classroom realities. From early systems that emphasized moral instruction and informal training to the contemporary focus on integrated, professional, and research-based preparation, the progression has been both dynamic and multifaceted. A closer look at how these structures have changed helps contextualize the rationale for new reforms such as the Integrated Teacher Education Programme (ITEP) under the National Education Policy 2020.

In the colonial era, teacher training programs were largely designed to meet the administrative needs of the British Empire. Training structures were rudimentary and emphasized uniformity, obedience, and rote memorization. The establishment of Normal Schools introduced a more organized form of teacher preparation, though these remained limited in scope. The programs were generally short in duration and did not offer deep pedagogical training or opportunities for classroom practice. The focus was on training teachers for primary and lower secondary levels, with minimal attention to educational philosophy, psychological understanding, or reflective practice.

Post-independence, there was a strong push to revamp and expand teacher education. One of the earliest and most prominent changes was the development of diploma and degree-level programs. These included the Basic Teacher Certificate (BTC), the Diploma in Education (D.Ed.), and the Bachelor of Education (B.Ed.). Initially, the B.Ed. was offered as a one-year program following a three-year undergraduate degree. This model became the standard for secondary teacher preparation and remained largely unchanged for several decades.

Over time, concerns emerged about the adequacy of a one-year B.Ed. program. Critics noted that it did not provide sufficient time for practical training, often emphasized theoretical knowledge at the expense of hands-on teaching experience, and failed to adequately integrate content and pedagogy. To address these limitations, institutions began experimenting with more comprehensive formats, leading to the development of integrated programs that would combine general education with teacher training from the outset.

A notable structural innovation came with the launch of four-year integrated teacher education programs such as B.A.B.Ed. and B.Sc.B.Ed., primarily by the Regional Institutes of Education (RIEs) under NCERT. These programs represented a shift in both structure and philosophy. They allowed students to pursue undergraduate studies in arts or sciences alongside pedagogical training, thereby integrating subject expertise with professional preparation. The structure was more coherent, offered sustained school-based practicum, and fostered a deeper understanding of teaching as a process grounded in both theory and practice.

The structural shift toward integrated programs marked a recognition that teacher education should not be viewed as a standalone post-degree qualification but as a continuous developmental process. These programs also addressed issues related to the redundancy of content between undergraduate and teacher education degrees, offering a more efficient and focused pathway into the profession. They aimed to nurture a professional identity from the early stages of a student's academic journey.

Simultaneously, new structures were introduced for elementary teacher training. The D.El.Ed. (Diploma in Elementary Education) emerged as a two-year course designed to replace older programs like the BTC and D.Ed. With the establishment of District Institutes of Education and Training (DIETs) across the country, pre-service education at the elementary level became more systematized. However, variations in quality, faculty preparedness, and infrastructure remained persistent challenges.

Another important structural development was the expansion of postgraduate and research programs in education. Master of Education (M.Ed.) and Doctor of Philosophy (Ph.D.) in Education programs became increasingly common, serving to build academic leadership and advance educational research. These programs offered a route for those interested in educational policy, teacher training, curriculum development, and educational leadership to contribute meaningfully to the field.

Despite these advances, structural inconsistencies remained a challenge across teacher education institutions. The unregulated expansion of teacher education colleges, particularly in the private sector, led to concerns about the dilution of standards. Many institutions offered the B.Ed. as a one-year or two-year course with little attention to practical training or curricular coherence. The Justice Verma Commission Report (2012) noted these discrepancies and recommended the rationalization of teacher education structures through standardization, integration, and improved governance.

Responding to these issues, the National Council for Teacher Education (NCTE) introduced new regulations in 2014 that extended the B.Ed. program from one to two years. This change was aimed at providing more space for practicum, reflection, and integration of ICT and inclusive education. The structure now included components such as field engagement, internship, and action research, signalling a more practice-oriented approach. Similarly, the D.El.Ed. program was formalized as a two-year course with updated curriculum guidelines.

The most recent and potentially transformative structural reform in teacher education has been the introduction of the Integrated Teacher Education Programme (ITEP) under the NEP 2020. ITEP is a four-year dual-major undergraduate program designed to replace fragmented pathways with a unified, multidisciplinary, and practice-based structure. Unlike previous programs that required a separate degree before entering teacher education, ITEP integrates general and professional education into a seamless whole. It includes rigorous coursework, school immersion, community engagement, and emphasis on foundational literacy, numeracy, and Indian Knowledge Systems (IKS).

The structural innovation of ITEP also introduces multiple entry and exit points, credit transfers, and alignment with the National Higher Education Qualifications Framework (NHEQF). It reflects a modern approach to curriculum design and delivery, offering flexibility while maintaining academic rigor. The program is envisioned as the cornerstone of a new era in teacher preparation, one that is inclusive, interdisciplinary, and globally informed.

In essence, the structure of teacher education programs in India has moved from short-term, disconnected models toward longer, integrated, and professionally enriching formats. Each phase of structural reform has sought to address the gaps in earlier models, whether related to depth, coherence, practical training, or professional identity. While implementation challenges remain, the current trajectory reflects a strong commitment to elevating the

profession and ensuring that teacher preparation is aligned with the complex demands of modern classrooms.

1.1.4 Traditional Integrated B.A.B.Ed./B.Sc.B.Ed. Programs – Introduction and Development

The traditional four-year Integrated B.A.B.Ed. and B.Sc.B.Ed. programs were conceived as an innovative approach to address the fragmented structure of teacher education in post-independence India. Primarily introduced by the Regional Institutes of Education (RIEs) under the aegis of the National Council of Educational Research and Training (NCERT), these programs aimed to integrate academic and professional education in a coherent and continuous manner. They sought to develop committed and professionally equipped teachers who could cater to the secondary school level with both subject expertise and pedagogical proficiency.

As noted in Mandal and Mete's (2023) comparative study of B.Ed. curricula, the Integrated B.A.B.Ed./B.Sc.B.Ed. model offered a significant advantage by concurrently blending the content knowledge of subjects such as science, mathematics, social sciences, and languages with essential pedagogical training. This integration allowed student-teachers to grasp educational theory and classroom practice in a more meaningful, context-rich manner from the beginning of their academic journey. The programs also reduced redundancy in course content, offering a time-efficient alternative to the traditional route of pursuing a general degree followed by a B.Ed.

Another strength of these integrated programs, particularly those conducted at the RIEs, lies in their structured practicum model. Student-teachers were engaged in school observation, internship, micro-teaching, and practice teaching spread over multiple semesters. This gradually scaffolded exposure to the school environment contributed to improved confidence, professionalism, and classroom readiness. The RIEs also promoted action research, peer collaboration, and reflective practice as part of their pedagogical approach, which enriched the professional identity of trainee teachers.

However, as Mandal and Mete (2023) observe, while these programs laid a strong foundation for integrated teacher education, several limitations persisted. First, their implementation remained restricted to a handful of RIEs, which limited accessibility and reach. The article highlights that the quality and structure of integrated B.Ed. programs outside RIEs varied widely, often lacking the institutional support, faculty expertise, and

school collaboration that characterized RIE offerings. Secondly, the curriculum, while balanced, did not always reflect contemporary priorities such as digital pedagogy, inclusive education, and interdisciplinary learning, elements now emphasized in global best practices.

Further, in the absence of a national regulatory framework to standardize such programs across teacher education institutions, integrated models failed to gain systemic traction. This disconnect was exacerbated by regulatory confusion and inconsistencies in recognition across states. The Justice Verma Commission Report (2012) similarly criticized the unregulated proliferation of sub-standard teacher education colleges and emphasized the need for structural reforms.

In summary, while traditional integrated B.A.B.Ed./B.Sc.B.Ed. programs provided a robust model of teacher preparation with an emphasis on academic depth and pedagogical practice, their limitations in accessibility, innovation, and scalability necessitated a more contemporary and policy-aligned alternative. ITEP thus emerges not as a replacement but as an evolution which refines and expands the foundational strengths of the integrated programs within a nationally regulated, future-ready teacher education ecosystem.

1.1.5 Emergence of ITEP under NEP 2020

The introduction of the Integrated Teacher Education Programme (ITEP) under the National Education Policy (NEP) 2020 marks a significant paradigm shift in India's approach to pre-service teacher education. Conceptualized as a four-year integrated dual-major degree, ITEP is designed to prepare future educators through a structured, practice-oriented, and multidisciplinary framework that aligns with national priorities and global educational standards.

The NEP 2020 recognizes that fragmented and inconsistent models of teacher education have led to varied quality in the preparation of teachers across the country. According to the policy, "the teacher must be at the centre of the fundamental reforms in the education system" (NEP 2020, p. 22). It emphasizes that only professionally trained teachers, possessing not only content knowledge and pedagogical understanding but also values, ethics, and socio-emotional awareness, can drive the envisioned transformation in school education.

ITEP is the policy's flagship solution to streamline and elevate the quality of pre-service teacher education across India. As articulated by the National Council for Teacher Education

(NCTE) in its "Guidelines for the Four-Year ITEP" (2021), the program integrates general education (either in sciences, social sciences, humanities, or commerce) with rigorous and well-structured professional training in pedagogy, school-based practice, and values education. The ITEP is meant to replace older models, such as the B.Ed. pursued after graduation, and to bring coherence, depth, and national consistency to teacher preparation.

ITEP is designed with multiple objectives:

- To eliminate the divide between general and professional education
- To introduce prospective teachers to pedagogical thinking early in their academic journey
- To integrate theory and practice through sustained field experience
- To include 21st-century skills such as digital literacy, inclusive pedagogy, environmental consciousness, and social-emotional learning
- To foster an ethical and reflective mindset among future teachers.

The program is structured into eight semesters and encompasses four major components: foundational courses, discipline-based studies, professional education, and field-based practicum. As per the NCTE framework, the curriculum is aligned with the National Higher Education Qualification Framework (NHEQF), ensuring that learning outcomes are clearly defined and progression through levels is measurable and standardized.

In the first year, students undertake foundational courses that introduce them to education as a discipline, along with general university-level coursework. From the second year onward, students are exposed to curriculum and pedagogic studies, including the teaching of specific subjects, classroom management strategies, educational psychology, and instructional design. A major emphasis is laid on continuous and progressive school engagement, with a semester-long internship in the final year where students are embedded in schools under mentorship.

A distinguishing feature of ITEP is its strong emphasis on experiential learning. The program includes microteaching sessions, peer collaboration, reflective journals, action research, school observations, and lesson plan development. These components are systematically integrated to ensure that student-teachers are not just theoretically informed but also practically adept and confident to manage diverse classroom settings.

Another significant aspect is the integration of Indian Knowledge Systems (IKS), environmental education, multilingualism, and digital pedagogy. These reflect the broader vision of NEP 2020, which advocates for a rooted yet forward-looking education system. Courses in yoga, arts integration, and community engagement further enrich the holistic development of the trainee.

ITEP also introduces mechanisms for continuous internal assessment and portfolio development to monitor student-teacher growth comprehensively. This is a shift from earlier evaluation systems that were largely summative and content-focused. The inclusion of formative assessment and feedback cycles supports self-regulated learning and fosters reflective teaching practices.

In terms of policy impact, ITEP is poised to address some of the key challenges identified in the Justice Verma Commission Report (2012), such as the oversupply of poorly regulated teacher education institutions, lack of uniformity in program delivery, and the absence of strong school-university partnerships. By institutionalizing ITEP across multidisciplinary universities and colleges, NEP 2020 envisions the establishment of a standardized and respected pathway for teacher preparation.

The phased implementation of ITEP began in 2022, with select Central and State universities approved by the NCTE initiating pilot batches. The plan is to make ITEP the mandatory qualification for all new teachers by 2030. Institutions seeking to offer the program are required to meet rigorous criteria in terms of faculty qualification, infrastructure, and linkage with schools, thereby ensuring that quality is maintained from the outset.

Furthermore, ITEP facilitates academic mobility and progression through the National Credit Framework (NCrF), allowing for lateral entry and exit with recognized certification at appropriate stages (e.g., Certificate after 1 year, Diploma after 2 years, Bachelor's degree after 3 years, and B.Ed. after 4 years). This makes teacher education more inclusive and accessible without compromising academic integrity.

It is also worth noting that ITEP integrates global pedagogical advances such as differentiated instruction, inquiry-based learning, and inclusive education practices that prepare future teachers to meet the needs of diverse learners, including children with special needs. The inclusion of courses on gender, equity, and human rights ensures that graduates are socially aware and capable of fostering inclusive classrooms.

In summary, the emergence of ITEP under NEP 2020 is a carefully calibrated response to long-standing systemic issues in Indian teacher education. It builds upon the foundational ideas of earlier integrated models while expanding their scope, modernizing their content, and embedding them in a larger policy vision for national educational transformation. If implemented with fidelity, ITEP has the potential to redefine the landscape of teacher preparation in India by producing not only competent professionals but also ethical, empathetic, and innovative educators.

1.2 Rationale of the study

Teacher education plays an essential role in improving the quality of school education. The strength of any education system depends greatly on the quality of its teachers, and this quality is influenced by the way teacher preparation programs are designed and delivered. In India, teacher education is going through a major shift with the introduction of the Integrated Teacher Education Programme, also known as ITEP, as part of the National Education Policy of 2020. At the same time, the four-year integrated B.A. B.Ed. and B.Sc. B.Ed. programs, especially those offered by the Regional Institutes of Education under the National Council of Educational Research and Training, are also in operation. This overlap between the new and the traditional teacher education programs offers a valuable opportunity to study both models while they are active. Additionally, this research addresses a gap in existing studies. While many academic works focus on policy or theoretical aspects of teacher education, very few give importance to the voices of student teachers. By focusing on their experiences and reflections, this study is motivated by the need to bring student teachers' perspective and provide a ground level view of how policy intentions translate into teacher education curriculum.

While both models aim to prepare competent teachers, they follow different approaches and priorities. The traditional integrated programs are known for offering a structured combination of subject knowledge and teaching practice, with gradual exposure to classroom environments. On the other hand, the ITEP program introduces new features such as digital learning, inclusive education, Indian knowledge systems, and a strong focus on foundational learning. Exploring how student teachers experience curriculum integration of these differences is important for understanding how well these programs meet the needs of future educators.

In conclusion, the rationale for this study lies in the need to understand how student teachers perceive and experience two different models of teacher education at a time of major educational change. Their perspectives can help build stronger, more meaningful programs that not only follow policy goals but also support the real-life journey of becoming a teacher in today's diverse and demanding classrooms.

1.3 Statement of the problem

A Comparative Study of ITEP and Traditional Integrated B.A.B.Ed./B.Sc.B.Ed. Programs: Student Perspectives

1.4 Objectives of the Study

1. To explore the perceptions of students enrolled in the traditional four-year integrated B.A. B.Ed. and B.Sc. B.Ed. programs regarding various aspects of their course curriculum.
2. To examine the perceptions of students enrolled in the Integrated Teacher Education Programme (ITEP) regarding various aspects of their course curriculum.
3. To compare the traditional B.A. B.Ed./B.Sc. B.Ed. and the ITEP course based on students' perceptions of various aspects of their course curriculum.

1.5 Research Questions

1. What are the perceptions of students enrolled in the traditional four-year integrated B.A. B.Ed. and B.Sc. B.Ed. programs regarding various aspects of their course curriculum?
2. What are the perceptions of students enrolled in the ITEP regarding various aspects of their course curriculum?
3. In what ways do the traditional B.A. B.Ed./B.Sc. B.Ed. programs and ITEP differ, as perceived by students?

1.6 Delimitations of the study

1. The present study is confined to RIE Bhopal students only
2. In the present study four-year integrated B.A. B.Ed./B.Sc. B.Ed. tradition and ITEP students were included.
3. The scope of the study is restricted to various aspects of the course curriculum only.
4. In this study students' perceptions were taken only on various aspects of the curriculum.

1.7 Operational Definitions of Key Terms

- **Integrated Teacher Education Programme (ITEP):** The Integrated Teacher Education Programme (ITEP) is a four-year dual-major undergraduate degree introduced under the NEP 2020. It combines a bachelor's degree in a disciplinary subject (such as Arts, Science, or Commerce) with a Bachelor of Education (B.Ed.) degree. ITEP is designed to prepare teachers for all stages of school education (Foundational, Preparatory, Middle, and Secondary) by integrating subject knowledge with pedagogical training from the undergraduate level itself. The programme emphasizes a multidisciplinary approach, early exposure to school environments, and competency-based teaching methods.
- **Traditional B.A. B.Ed./B.Sc. B.Ed. Programmes:** These are four-year integrated teacher education programmes traditionally offered by institutions like the Regional Institutes of Education (RIEs) under NCERT. The B.A.B.Ed. programme integrates content from Social Sciences and Humanities with pedagogical training, allowing students to opt for subjects such as one language and two social science disciplines. Similarly, the B.Sc.B.Ed. programme combines studies in science subjects with education courses. Both programmes are structured over eight semesters and are recognized as equivalent to separate B.A./B.Sc. and B.Ed. degrees.
- **Perception:** In the context of this study, 'perception' refers to the student-teachers' subjective understanding, interpretations, and evaluations of their experiences within their respective teacher education programmes. This includes their views on curriculum relevance, teaching methodologies, practicum experiences, institutional support, and overall preparedness for the teaching profession.

CHAPTER-II:

REVIEW OF RELATED LITERATURE

A literature review provides a critical overview of existing research, helping to contextualize a study, highlight knowledge gaps, and build a foundation for further inquiry. In this dissertation titled "A Comparative Study of ITEP and Traditional Integrated B.A.B.Ed./B.Sc.B.Ed. Programs: Student Perspectives," the literature review examines key studies on teacher education in India, particularly focusing on the Integrated Teacher Education Programme (ITEP) introduced under NEP 2020 and its comparison with traditional integrated programmes. It explores historical developments, policy shifts, curriculum design, institutional challenges, and student experiences. This review establishes a conceptual and empirical grounding for analysing how students perceive these evolving models of teacher education.

2.1 Review of related literature

- **Mandal, R. and Mete, J. (2023)**, in their study A Comparative Study of the Three B.Ed. Curricula: Emphasizing on the Teacher Education in Post-Independence Era, examine the historical and policy-driven evolution of teacher education in India, focusing on the 1-year, 2-year, and four-year integrated B.Ed. models. Drawing from key policy documents including the Kothari Commission, Chattopadhyaya Committee, and Ramamurti Committee, the study aims to understand how these frameworks influenced curricular reforms leading up to the NEP 2020. A central objective is to analyse the comparative effectiveness of these models, with special emphasis on the four-year integrated B.A.B.Ed./B.Sc.B.Ed. programme, which aligns closely with the recently introduced ITEP. The findings highlight the integrated model's strengths, such as its dual-degree structure, blend of content and pedagogy, and inclusion of practicum components. However, the study also identifies critical concerns, including overemphasis on educational theory, limited disciplinary depth, unclear postgraduate pathways, and the readiness of students entering directly after school. The authors stress that institutional support, faculty development, and curriculum coherence are essential for successful implementation. Their analysis offers important insights into how similar challenges may affect the rollout and reception of ITEP, making the study particularly relevant to current reforms in Indian teacher education.
- **Mandal, S.K., (2024)**, in his study titled Four-Year Integrated Teacher Education Programme: A Policy Perspective of India, offers a policy-level analysis of ITEP, examining it as a structural shift in Indian teacher education rather than just an academic reform. Using a SWOT framework, the study aims to assess the programme's evolution,

current implementation, and institutional challenges. It revisits the roots of integrated teacher education through earlier models like those of RIEs, which faced persistent issues such as poor coordination between academic and pedagogical departments. Among ITEP's strengths, the study identifies its holistic 3H model focusing on cognitive, emotional, and practical development, its dual-degree structure, and suitability for humanities due to lower infrastructure demands. However, concerns are raised over inadequate facilities, disjointed departmental delivery, lack of standard curriculum, and limited academic readiness of students entering after school. Despite these weaknesses, the study points to significant opportunities, including reduced training time, direct job pathways, improved field engagement, and streamlined progression to higher education. It also highlights potential threats, particularly in science streams with higher resource needs, ambiguity in qualifications, and overlap with other teacher education programmes. The study concludes that while ITEP presents a promising framework, its success depends on institutional readiness, standardization, faculty development, and system-wide coordination. By aligning past integrated models with current policy, the study provides a timely lens to evaluate ITEP's implementation and relevance, offering critical insights into ongoing teacher education reform in India.

- **Sultana, S. and Pandey, P. (2024)**, in their article Integrated B.Ed. Programme Implemented in Teacher Education in Respect to NEP-2020, conduct a detailed conceptual study of the four-year integrated B.Ed. programme outlined in the NEP 2020, focusing on two key objectives: explaining the design and structure of the programme, and offering actionable institutional recommendations for effective implementation. Describing it as a shift from traditional models, the programme integrates subject content and pedagogical training from the outset, beginning post-higher secondary education and spanning four years to combine undergraduate academic learning with continuous professional preparation. A notable feature is its multi-exit format, allowing students to earn a certificate after one year, a diploma after two, and a dual degree upon completion, thus enhancing accessibility. The standardized NCET-based admission process is highlighted for promoting equity and transparency. The curriculum is described as multidisciplinary and values-based, blending Indian traditions with global competencies, and emphasizing critical thinking, problem-solving, and context-sensitive pedagogy. The study underscores the importance of institutional readiness, calling for collaboration among NCERT, NUEPA, and SCERT, faculty recruitment from diverse disciplines, competitive compensation, and

infrastructural upgrades like smart classrooms and digital libraries. Faculty development is also stressed through training, research, and mobility policies. Concluding that the programme is a transformative step toward producing culturally rooted and professionally capable teachers, the authors emphasize the need for strong institutional support.

- **Suresh et al. (2025)**, in their study ITEP: An Idiosyncratic Programme for Generating Teachers with 21st Century Skills, provide a comprehensive institutional and pedagogical analysis of the Integrated Teacher Education Programme (ITEP) under NEP 2020, with the primary objective of examining how ITEP differentiates itself from traditional B.Ed. and earlier four-year integrated programmes by unifying disciplinary knowledge and professional training in a continuous dual-major structure. The study highlights ITEP's flexibility in allowing students to simultaneously pursue B.A., B.Sc., or B.Com degrees with B.Ed., removing the historical divide between subject mastery and pedagogy. It emphasizes ITEP's alignment with global educational benchmarks and Indian knowledge systems, its responsiveness to the NEP's 5+3+3+4 model, and its focus on 21st-century skills like critical thinking, leadership, collaboration, and creativity. With features such as multiple entry and exit points, a six-year flexible duration, and pathways to research without requiring a master's degree, ITEP is positioned as an adaptive and future-ready model. Empirical data support the analysis, showing ITEP's expansion from 42 institutions in 2023–24 to 64 in 2024–25, including premier institutions like IITs and NITs, with state universities showing the highest readiness according to the Annual Growth Index and the Western Regional Centre leading regional expansion. The study also notes ITEP's pedagogical emphasis on cognitive, emotional, and ethical development, its incorporation of Indian values, centralized admissions fostering diversity, and alignment with the National Professional Standards for Teachers (NPST) through continuous evaluation. Concluding that ITEP signifies a systemic reimagining of teacher education in India rather than a mere curricular change, the authors assert that the programme addresses past educational gaps while preparing educators to meet evolving national and global demands. These findings offer vital conceptual and empirical insights for comparative studies on ITEP and traditional integrated programmes, especially in understanding specialization patterns, regional disparities, curriculum design, and student perception within an evolving educational framework.

- **Gupta, P. (2021)**, in her study titled Perception of Prospective Teachers towards Four-Year Integrated Teacher Education Programme, investigates the experiences and perspectives of final-semester students enrolled in the four-year integrated B.A.B.Ed. and B.Sc.B.Ed. programmes at the Central University of South Bihar, focusing on how these prospective teachers perceive the curriculum and structure of the traditional integrated model. The objective of the study is to assess the effectiveness of the programme in preparing students for their professional roles, while also identifying the institutional and academic challenges they encounter. The findings suggest that while students appreciated the dual-degree advantage, professional orientation, and support for competitive exam preparation, they also faced challenges such as curriculum overload, repetitive content, and time management issues. A lack of coordination between departments led to a fragmented academic experience, and the scheduling of school internships during the final semester conflicted with preparations for postgraduate admissions. Many students, particularly from science backgrounds, preferred further studies in their core disciplines, indicating concerns about limited professional mobility. There was also a marked preference for horizontally structured programmes over vertical ones due to perceived curricular coherence and employment relevance. Overall, the study highlights both the strengths and limitations of the traditional integrated model, offering insights that are equally relevant to emerging programmes like ITEP.
- **Jabbar, S.A. and Barkati, M.G. (2024)**, in The Integrated Teacher Education Program (ITEP): Shaping the Future of Education, analyse ITEP as a transformative initiative under NEP 2020, aiming to redefine teacher preparation in India. The objective is to present ITEP as a four-year, future-ready programme that integrates general education with pedagogical training, creating a unified pathway for developing academically competent and professionally skilled educators. The findings highlight ITEP's focus on early and continuous teaching practice through internships, micro-teaching, and immersive experiences. It also addresses digital literacy, inclusive education, ethical values, and competency-based learning. ITEP prepares graduates for diverse roles beyond teaching, including curriculum design, policy, and research, while fostering professional growth and leadership. Although theoretical, the study shows how ITEP aligns with NEP 2020's vision and contributes to the professionalization of teaching,

offering valuable insights for comparative studies with traditional integrated programmes.

- **Kaur, N. (2019)**, in her study Integrated Teacher Education Programme: An Analysis through Comparative Perspective, explores how India's ITEP model aligns with global standards while addressing national challenges. The objective is to examine the vision and structure of ITEP under NEP 2020 and compare it with teacher education systems in Finland and Singapore. The study positions ITEP as a major reform aimed at unifying academic and professional training in a four-year course that emphasizes Indian values, cultural grounding, and modern pedagogy. However, in contrast to Finland's research-intensive model and Singapore's institutionally supported, development-focused system, ITEP faces challenges such as limited faculty expertise, inadequate infrastructure, and poor coordination between universities and regulatory bodies. Issues like student preparedness post-secondary education and the balance between theory and practice also emerge. The study recommends adopting global best practices, enhancing faculty development, fostering collaboration, and ensuring clear policies for effective implementation. While acknowledging ITEP's transformative potential, it stresses that success depends on systemic readiness. This analysis offers critical insights for comparing student experiences in ITEP and traditional integrated programmes, particularly regarding structural limitations and international benchmarks.
- **Perumal et al., (2023)** in the study, *Four-Year Integrated Teacher Education Programme (ITEP): A Holistic Approach To Teacher Training*, provide a detailed examination of the Four-Year Integrated Teacher Education Programme (ITEP), positioning it as a significant shift in the landscape of teacher education in India. Their study, set within the framework of the National Education Policy 2020, offers a comprehensive overview of ITEP's structure, pedagogy, and philosophical foundation, particularly emphasizing its holistic and learner-centred approach. The authors explore how the program integrates subject knowledge and pedagogical training over eight semesters, with a strong focus on experiential learning, classroom internships, reflective practices, and the use of educational technology. Designed as a dual-major degree that blends academic specialization with educational theory, ITEP aims to produce teachers who are not only professionally competent but also socially conscious and capable of responding to diverse classroom realities. The paper also addresses the practical challenges of implementation, such as the need for holistic faculty development,

balanced curriculum design, appropriate assessment methods, and sensitivity to varied learner backgrounds. Ultimately, the study positions ITEP as a forward-looking, policy-aligned initiative that seeks to replace traditional teacher training programs and prepare future educators as agents of change. This makes it a valuable point of comparison in research examining how student experiences differ between ITEP and conventional integrated programs, particularly when assessing curriculum content, structure, and alignment with contemporary educational goals.

CHAPTER III:

RESEARCH METHODOLOGY

Research methodology is a way to systematically solve a research problem. It refers not only to the methods used for conducting research but also the logic behind them. It helps the researcher explain why a particular method or technique has been chosen, ensuring that the findings are capable of being evaluated objectively. This chapter presents the methods and processes adopted to conduct the present study, which compares two teacher education programmes, the Integrated Teacher Education Programme (ITEP) and the traditional four-year integrated B.A. B.Ed./B.Sc. B.Ed. both of which are based solely on curriculum structure and content, as perceived by enrolled students. The objective is to understand how these courses differ in terms of what they offer to students, reflected through their perceptions and experiences.

3.1 Research Design

A research design is the plan or blueprint for the collection, measurement, and analysis of data. It represents the conceptual structure within which research is conducted and ensures that procedures are efficient, objective, and economical. The present study adopted a descriptive research design, as it aimed to describe the perceptions and feedback of students without manipulating any variables, focusing on curriculum-specific insights within existing program structures.

3.2 Research Method

Research methods refer to all techniques used by a researcher during the course of studying a research problem. They are concerned with data collection, establishing relationships among variables, and evaluating the accuracy of findings. This study employed the survey method as it is well-suited for descriptive research and effective in gathering a broad range of student perceptions. A structured questionnaire was used to collect the required information from students in both ITEP and traditional programmes.

3.3 Population

In research, the term population refers to the total group of individuals about whom information is desired. It includes all the units possessing certain defined characteristics relevant to the study. For this research, the population comprised all students enrolled in the ITEP and the traditional B.A. B.Ed./B.Sc. B.Ed. programmes at the Regional Institute of Education (RIE), Bhopal.

3.4 Sample

A sample is a subset of the population selected to participate in the study. It should be representative and free from bias to ensure valid conclusions. In this study, a total of 100 students were selected, representing both programmes and different years of study, to ensure diversity and balance in perspectives.

3.5 Sampling Technique

Sampling is the process of selecting a portion of the population to draw inferences about the whole. Simple random sampling, used here, ensures that every individual has an equal chance of being selected, which enhances the representativeness and reliability of the sample.

3.6 Tools

The main tool used was a structured perception scale-based questionnaire consisting of 20 Likert-scale items and two open-ended questions. These items focused on themes such as curriculum structure, relevance, integration of theory and practice, experiential learning, leadership development, Indian Knowledge Systems (IKS), digital preparedness, alignment with NEP 2020, and future readiness. The structured design ensured focused data collection aligned with the objectives of the study.

3.7 Data Collection Procedure

After selecting the sample through simple random sampling, data collection was carried out using a structured questionnaire designed in Google Forms. The link to the form was shared with the selected students through official academic channels, including email and class coordinators. Clear instructions were provided regarding the purpose of the study, ensuring informed consent and voluntary participation. Students were assured of confidentiality and anonymity to encourage honest responses. The form remained accessible for a fixed period during which responses were submitted. Once the data collection window closed, responses were securely downloaded in spreadsheet format and prepared for analysis.

3.8 Statistical Techniques

For data analysis, descriptive statistical techniques such as percentage analysis and graphical representation (bar graphs) were used. To compare student responses from the two

programmes, the independent t-test was applied, which allowed for assessing the significance of differences in perceptions between ITEP and traditional course students.

CHAPTER IV:

DATA ANALYSIS AND INTERPRETATION

Data analysis and interpretation form the core of any research study by providing meaningful insights from the collected responses. In this chapter, the data gathered from student-teachers enrolled in both the Integrated Teacher Education Programme (ITEP) and the traditional four-year integrated B.A.B.Ed./B.Sc.B.Ed. programs is presented, analysed, and interpreted. The objective is to examine and compare their perceptions regarding various curriculum aspects. The analysis offers a deeper understanding of the effectiveness, strengths, and challenges associated with each program from the students' point of view, and serves as a foundation for drawing meaningful conclusions and educational implications.

4.1 Objective-wise analysis, interpretation and discussion of results

Objective 1: To explore the perceptions of students enrolled in the traditional four-year integrated B.A. B.Ed. and B.Sc. B.Ed. programs regarding various aspects of their course curriculum

The analysis of responses from students enrolled in traditional four-year integrated B.A.B.Ed. and B.Sc.B.Ed. programs provides a multifaceted view of how the curriculum is experienced in practice. The perceptions reflect both strengths and significant areas requiring further development, offering critical insight into how well the program is fulfilling its educational objectives.

Table 4.1 Perceptions of Traditional four-year program students about program structure

S.No.	Curriculum Aspect	Response	Frequency	Percentage
1	The curriculum is well structured	Strongly disagree	1	2.00%
		Disagree	10	20.00%
		Neutral	20	40.00%
		Agree	16	32.00%
		Strongly agree	3	6.00%

Beginning with the structure of the curriculum, as shown in table 4.1, only 38% of students agreed or strongly agreed that it is well structured, while 22% disagreed and a notable 40% remained neutral. This suggests limited confidence among students regarding the internal coherence and sequencing of the course, highlighting a need for a more logically articulated curricular framework. While there is no widespread dissatisfaction, the high neutrality implies that many students are uncertain about how well the curriculum is designed, possibly due to inconsistencies in delivery or lack of transparency in structure.

Table 4.2 Perceptions of Traditional four-year program students about curriculum understanding

S.No.	Curriculum Aspect	Response	Frequency	Percentage
2	The curriculum is easy to understand.	Strongly disagree	1	2.00%
		Disagree	4	8.00%
		Neutral	12	24.00%
		Agree	30	60.00%
		Strongly agree	3	6.00%

In contrast, when asked about whether the curriculum is easy to understand, table 4.2 shows that, a significant majority (66%) of respondents found it accessible, while only 10% expressed difficulty and 24% remained neutral. This is a strong point for the program, indicating that despite structural concerns, the content is generally comprehensible and well communicated. Clear instructional delivery likely plays a role in this positive perception.

Table 4.3 Perceptions of Traditional four-year program students about theoretical and practical aspects

S.No.	Curriculum Aspect	Response	Frequency	Percentage
3	The course clearly covers theoretical and practical aspects.	Strongly Disagree	4	8.00%
		Disagree	8	16.00%
		Neutral	11	22.00%
		Agree	26	52.00%
		Strongly Agree	1	2.00%

As shown in table 4.3, perceptions of how well the curriculum integrates theoretical and practical aspects were moderately favourable, with 54% agreeing or strongly agreeing. However, 24% disagreed and 22% were neutral, revealing that almost half the students do not view the theory-practice balance as clearly or effectively integrated. This gap suggests inconsistency in the extent to which practical components are embedded and contextualized within the theoretical framework.

Table 4.4 Perceptions of Traditional four-year program students about content relevance

S.No.	Curriculum Aspect	Response	Frequency	Percentage
4	The curriculum content is relevant to modern educational practices.	Strongly disagree	5	10.00%
		Disagree	6	12.00%
		Neutral	19	38.00%
		Agree	20	40.00%
		Strongly Agree	0	0.00%

When students were asked whether the curriculum is relevant to modern educational practices, table 4.4 shows that only 40% agreed, 22% disagreed, and 38% were neutral. These responses reveal a pressing area for improvement. In an evolving educational landscape shaped by digital pedagogy, inclusive education, and global competencies, only moderate satisfaction with curriculum relevance suggests that it may not be adequately updated or contextually adapted.

Table 4.5 Perceptions of Traditional four-year program students about promotion of active participation

S.No.	Curriculum Aspect	Response	Frequency	Percentage
5	The curriculum encourages you to actively participate and share ideas in the classroom.	Strongly disagree	2	4.00%
		Disagree	6	12.00%
		Neutral	19	38.00%
		Agree	22	44.00%
		Strongly agree	1	2.00%

As seen in table 4.5, in terms of student engagement and classroom participation, 46% of respondents agreed that the curriculum encourages participation, while 38% remained neutral and 16% disagreed. While the overall tone is moderately positive, the data points to a need for more active and participatory instructional methods that stimulate student voice and collaboration in the classroom environment.

Table 4.6 Perceptions of Traditional four-year program students about promotion of critical thinking and problem solving

S.No.	Curriculum Aspect	Response	Frequency	Percentage
6	The curriculum promotes critical thinking and problem-solving skills.	Strongly disagree	5	10.00%
		Disagree	5	10.00%
		Neutral	13	26.00%
		Agree	24	48.00%
		Strongly agree	3	6.00%

Similarly, responses to the promotion of critical thinking and problem-solving in table 4.6 show that 54% perceive the curriculum as supportive of these higher-order skills. However, 20% disagreed and 26% were neutral. This indicates a curriculum that is beginning to foster analytical thinking but may still rely too heavily on rote or content-based learning. Active learning strategies, case-based discussions, and inquiry-oriented pedagogies could enhance this area.

Table 4.7 Perceptions of Traditional four-year program students about opportunities for hands-on practices

S.No.	Curriculum Aspect	Response	Frequency	Percentage
7	Ample opportunities have been provided to use hands-on teaching practices effectively.	Strongly disagree	4	8.00%
		Disagree	7	14.00%
		Neutral	18	36.00%
		Agree	21	42.00%
		Strongly Agree	0	0%

Table 4.7 shows that, regarding hands-on teaching practice, a critical aspect of teacher education, 42% agreed they had received sufficient opportunities, while 22% disagreed and 36% remained neutral. This distribution signals a clear area for enhancement. Given that teaching practice is central to building professional competence, the moderate satisfaction and high neutrality underscore the need for more consistent and meaningful practicum exposure.

Table 4.8 Perceptions of Traditional four-year program students about ICT integration

S.No.	Curriculum Aspect	Response	Frequency	Percentage
8	The curriculum provides ample opportunities to integrate ICT into the teaching-learning process.	Strongly disagree	4	8.00%
		Disagree	9	18.00%
		Neutral	11	22.00%
		Agree	21	42.00%
		Strongly agree	5	10.00%

The integration of Information and Communication Technology (ICT) into the teaching-learning process received a generally favourable response, as seen in table 4.8, with 52% agreement, 26% neutrality, and 26% disagreement. While this suggests progress in digital adoption, the mixed responses imply variability in access, training, or integration strategies. Ensuring digital readiness across all subjects and institutions could improve outcomes.

Table 4.9 Perceptions of Traditional four-year program students about leadership development

S.No.	Curriculum Aspect	Response	Frequency	Percentage
9	Your course develops leadership skills within you.	Strongly disagree	3	6.00%
		Disagree	5	10.00%
		Neutral	18	36.00%
		Agree	19	38.00%
		Strongly agree	5	10.00%

As seen in table 4.9, students' views on leadership skill development were also divided: 48% felt the curriculum supported this aspect, while 36% remained neutral and 16% disagreed. This suggests moderate success, but points to a lack of intentional, structured leadership training components within the curriculum. Clearer emphasis on team-based projects, classroom management, and mentorship models may be beneficial.

Table 4.10 Perceptions of Traditional four-year program students about IKS integration

S.No.	Curriculum Aspect	Response	Frequency	Percentage
10	Your curriculum meaningfully integrates the Indian Knowledge System (IKS).	Strongly Agree	4	8.00%
		Agree	21	42.00%
		Neutral	19	38.00%
		Disagree	5	10.00%
		Strongly Disagree	1	2.00%

Table 4.10 shows that the integration of the Indian Knowledge System (IKS), a pillar of the NEP 2020, was acknowledged by 50% of students, with 38% neutral and 12% disagreeing. While the responses affirm an effort to include culturally rooted perspectives, the high neutrality may reflect limited clarity or inconsistent exposure. Institutions might consider embedding IKS more explicitly across subjects and modules to increase awareness and engagement.

Table 4.11 Perceptions of Traditional four-year program students about experiential learning

S.No.	Curriculum Aspect	Response	Frequency	Percentage
11	Your curriculum incorporates experiential learning into classroom teaching.	Strongly Agree	0	0%
		Agree	29	58.00%
		Disagree	3	6.00%
		Neutral	15	30.00%
		Strongly disagree	3	6.00%

Table 4.11 shows that perceptions of experiential learning were relatively strong, with 58% agreeing that it was well integrated. However, 30% remained neutral and 12% disagreed. While the majority indicates satisfaction, the neutral segment again suggests variability in how experiential components like internships, fieldwork, and classroom simulations are implemented.

Table 4.12 Perceptions of Traditional four-year program students about classroom preparedness

S.No.	Curriculum Aspect	Response	Frequency	Percentage
12	This course prepares you to face real classroom challenges	Strongly agree	5	10.00%
		Agree	23	46.00%
		Disagree	3	6.00%
		Neutral	17	34.00%
		Strongly disagree	2	4.00%

As table 4.12 shows, when asked whether the course prepares them to face real classroom challenges, 56% responded positively. However, 34% were neutral, and 10% expressed dissatisfaction. These figures reveal that while foundational readiness is felt, confidence in practical competence could be bolstered through more field-based assignments and feedback loops.

Table 4.13 Perceptions of Traditional four-year program students about career opportunities

S.No.	Curriculum Aspect	Response	Frequency	Percentage
13	You have a clear idea about the possible career opportunities after completing this course.	Strongly Agree	7	14.00%
		Agree	22	44.00%
		Disagree	4	8.00%
		Neutral	15	30.00%
		Strongly Disagree	2	4.00%

Table 4.13 shows that students' awareness of career opportunities was relatively strong, with 58% expressing clarity about opportunities, though 30% were unsure and 12% disagreed. This indicates a decent level of guidance but also points to the necessity of strengthening career counselling and awareness programs to support informed decision-making.

Table 4.14 Perceptions of Traditional four-year program students about opportunities in higher education

S.No.	Curriculum Aspect	Response	Frequency	Percentage
14	You have clarity about the available options in higher education, after completion of the course.	Strongly agree	10	20.00%
		Agree	23	46.00%
		Disagree	1	2.00%
		Neutral	14	28.00%
		Strongly disagree	2	4.00%

Similarly, clarity about higher education options was affirmed by 66% of students as swwn in table 4.14, while only 6% disagreed. This is one of the stronger areas of the program, suggesting that students feel well-informed about academic progression, such as M.Ed., NET, or research pathways.

Table 4.15 Perceptions of Traditional four-year program students about NEP-2020 alignment

S.No.	Curriculum Aspect	Response	Frequency	Percentage
15	Your curriculum is aligned with the vision of NEP-2020.	Strongly Agree	4	8.00%
		Agree	18	36.00%
		Disagree	5	10.00%
		Neutral	22	44.00%
		Strongly Disagree	1	2.00%

Table 4.15 shows that, student perceptions of the curriculum's alignment with NEP 2020 were more neutral: 44% agreed it was aligned, 44% were unsure, and 12% disagreed. These findings imply that although NEP ideals may be present in the curriculum, they may not be sufficiently highlighted or explained to students, warranting more explicit discussion and framing of NEP-aligned goals in coursework.

Table 4.16 Perceptions of Traditional four-year program students about competitive examination preparedness

S.No.	Curriculum Aspect	Response	Frequency	Percentage
16	This program enables you to prepare for competitive examinations in the teaching field.	Strongly agree	5	10.00%
		Agree	27	54.00%
		Disagree	6	12.00%
		Neutral	10	20.00%
		Strongly disagree	2	4.00%

As seen in table 4.16, when it comes to exam readiness, 64% agreed that the course helped prepare them for competitive teaching exams, while 24% were neutral and 16% disagreed. This is a relatively strong outcome, suggesting the curriculum offers exam-oriented competencies, though support could be improved through practice tests and orientation workshops.

Table 4.17 Perceptions of Traditional four-year program students about personal and professional development

S.No.	Curriculum Aspect	Response	Frequency	Percentage
17	This course is helpful in your personal and professional development.	Strongly Agree	4	8.00%
		Agree	25	50.00%
		Neutral	18	36.00%
		Disagree	1	2.00%
		Strongly Disagree	2	4.00%

Table 4.17 shows that, in terms of personal and professional development, 58% felt the course had been helpful. However, 36% were neutral and 6% disagreed, pointing to a need for more holistic support systems that foster reflection, confidence, and adaptability beyond academic learning.

Table 4.18 Perceptions of Traditional four-year program students about confidence boosting

S.No.	Curriculum Aspect	Response	Frequency	Percentage
18	Based on what you have learned so far, you feel confident in handling real classroom situations.	Strongly Agree	4	8.00%
		Agree	25	50.00%
		Neutral	14	28.00%
		Disagree	6	12.00%
		Strongly Disagree	1	2.00%

Confidence in handling real classroom situations was similarly promising, as seen in table 4.18, with 58% expressing agreement, but 28% neutrality and 14% disagreement show room for enhancement in practical training, mentoring, and feedback mechanisms during field experiences.

Table 4.19 Perceptions of Traditional four-year program students about overall usefulness

S.No.	Curriculum Aspect	Response	Frequency	Percentage
19	You find your enrolled course useful for your teaching as well as your academic future.	Strongly Agree	5	10.00%
		Agree	27	54.00%
		Neutral	16	32.00%
		Disagree	0	0%
		Strongly Disagree	2	4.00%

Table 4.19, shows the overall usefulness of the course for both teaching and academic futures was seen positively by 64%, with no disagreement and 32% neutrality. This indicates solid baseline satisfaction and suggests that the program holds perceived value for future educators, though greater visibility of interdisciplinary applications could increase student confidence further.

Table 4.20 Perceptions of Traditional four-year program students about preparedness for other competitive examinations

S.No.	Curriculum Aspect	Response	Frequency	Percentage
20	You feel that your current course prepares you for teaching as well as other competitive exams.	Strongly Disagree	2	4.00%
		Disagree	7	14.00%
		Neutral	13	26.00%
		Agree	24	48.00%
		Strongly Agree	4	8.00%

When assessing if the course prepares them for both teaching and competitive exams, as we can see in Table 4.20, 56% responded positively, 26% remained neutral, and 18% expressed dissatisfaction. These numbers reveal a need to fortify the dual focus of the program by integrating exam-focused support with broader pedagogical development.

Table 4.21 Perceptions of Traditional four-year program students about overall satisfaction

S.No.	Curriculum Aspect	Response	Frequency	Percentage
21	You are satisfied with the structure of your course.	Strongly Disagree	4	8.00%
		Disagree	8	16.00%
		Neutral	22	44.00%
		Agree	15	30.00%
		Strongly Agree	1	2.00%

As shown in table 4.21, overall satisfaction with the course structure was notably mixed, with only 32% of students expressing satisfaction. Meanwhile, 24% reported dissatisfaction, and a substantial 44% remained neutral in their responses. This distribution highlights a lack of strong consensus among students, suggesting that many are uncertain about the effectiveness or suitability of the course design. The data points to a need for reviewing and potentially revising the curriculum structure to better align with student expectations and learning needs.

Table 4.22 Perceptions of Traditional four-year program students about the program with the highest academic opportunities

S.No.	Curriculum Aspect	Response	Frequency	Percentage
22	Keeping in mind, the structure of the course, which of the following courses do you think will be more useful in providing teaching as well as academic opportunities?	B.Sc. B.Ed. Traditional	28	37.00%
		B.A. B.Ed. Traditional	14	19.00%
		B.Sc. B.Ed. ITEP	18	24.00%
		B.A. B.Ed. ITEP	6	8.00%
		B.Sc. Three Years and Two Years B.Ed.	5	7.00%
		B.A. Three Years and Two Years B.Ed.	4	5.00%

In table 4.22 it is clear that, when considering the course structure and its potential to provide both teaching and academic opportunities, 37% of students identified the B.Sc. B.Ed. Traditional program as the most useful. This was followed by 24% favouring the B.Sc. B.Ed. ITEP course, indicating a strong preference for science-focused integrated programs. Meanwhile, 19% preferred the B.A. B.Ed. Traditional, and smaller proportions supported other combinations such as B.A. B.Ed. ITEP (8%), B.Sc. Three Years plus Two Years B.Ed. (7%), and B.A. Three Years plus Two Years B.Ed. (5%). These preferences suggest that students generally favour traditional and integrated science-based courses, highlighting perceived strengths in their ability to prepare for both teaching and academic careers.

23. In your opinion what are the contrasting features that differentiates ITEP from traditional integrated B.A. B.Ed. and B.Sc. B.Ed. batches.

A total of 22 responses were recorded. The most frequently mentioned contrasting feature was in-depth or advanced subject knowledge in a specific discipline. Curriculum structure and syllabus differences were mentioned, specifically referring to major and minor subjects. NEP 2020 alignment and a more holistic or multidisciplinary approach were noted. Eligibility for PGT was cited, with mention of better preparation for future opportunities

such as higher studies. Overall, students highlighted specialization, curriculum structure, and NEP-based reforms as the primary distinguishing features of ITEP.

Summary

In summary, several aspects of the traditional integrated B.A.B.Ed./B.Sc.B.Ed. curriculum were viewed positively by students. These include the ease of understanding the curriculum, clarity about higher education options, usefulness of the course for teaching and academic futures, preparation for competitive teaching exams, personal and professional development, and confidence in handling real classroom situations. These areas reflect the program's success in providing accessibility, conceptual clarity, and foundational teacher competencies.

Some items received more neutral or mixed responses, signalling variability in implementation or limited student awareness. These include curriculum alignment with NEP 2020, the promotion of critical thinking and leadership development, relevance to modern practices, clarity on career opportunities, experiential learning, and integration of Indian Knowledge Systems. These aspects show potential but require better visibility, consistency, and communication within the curriculum.

A few important areas emerged as needing clear improvement, such as structural organization of the curriculum, hands-on teaching opportunities, encouragement for active classroom participation, theoretical-practical integration, and satisfaction with overall course structure. These responses highlight the need for better sequencing, increased field exposure, participatory methods, and a more cohesive course design. Strengthening these areas would ensure a more robust and future-ready teacher preparation pathway.

Collectively, the findings point to a curriculum that holds valuable potential but would greatly benefit from structural realignment, deeper integration of practical training, and enhanced student-centred implementation to fully support the aspirations of tomorrow's educators.

Objective 2: To examine the perceptions of students enrolled in the Integrated Teacher Education Programme (ITEP) regarding various aspects of their course curriculum.

Table 4.23 Perceptions of ITEP program students about program structure

Sr. No.	Questions	Response	Frequency	Percentage
1	The curriculum is well structured.	Strongly Disagree	18	36.00%
		Disagree	8	16.00%
		Neutral	13	26.00%
		Agree	8	16.00%
		Strongly Agree	3	6.00%

Table 4.23 shows that, a significant concern emerged regarding the structure of the curriculum, where 36% of the students strongly disagreed and 16% disagreed that it was well structured, whereas only 22% (Agree + Strongly Agree) viewed it positively. This indicates a pressing need for structural revision.

Table 4.24 Perceptions of ITEP program students about curriculum understanding

Sr. No.	Questions	Response	Frequency	Percentage
2	The curriculum is easy to understand.	Strongly Disagree	3	6.00%
		Disagree	11	22.00%
		Neutral	16	32.00%
		Agree	17	34.00%
		Strongly Agree	3	6.00%

As seen in table 4.24, when students were asked if their curriculum is easy to understand, 40% students found the curriculum easy to comprehend, and 32% remained neutral, though 28% still found it difficult, which indicates that clarity remains a moderately positive but improvable area.

Table 4.25 Perceptions of ITEP program students about theoretical and practical aspects

Sr. No.	Questions	Response	Frequency	Percentage
3	The course clearly covers theoretical and practical aspects.	Strongly Disagree	1	2.0
		Disagree	6	12.00%
		Neutral	5	10.00%
		Agree	33	66.00%
		Strongly Agree	5	10.00%

Table 4.25 shows that, perceptions regarding the coverage of theoretical and practical aspects within the curriculum were largely positive, with 76% of students agreeing or strongly agreeing that these elements were adequately addressed. This suggests that a majority found the content balance effective and coherent. However, the remaining 24% of responses, falling into neutral or disagreeing categories, indicate that for a notable portion of students, the integration of theory and practice may still lack clarity or consistency in its application.

Table 4.26 Perceptions of ITEP program students about content relevance

Sr. No.	Questions	Response	Frequency	Percentage
4	The curriculum content is relevant to modern educational practices	Strongly Disagree	0	0.00%
		Disagree	7	14.00%
		Neutral	7	60.00%
		Agree	30	14.00%
		Strongly Agree	6	12.00%

As table 4.26 shows, a substantial 74% of students agreed or strongly agreed that the curriculum content aligns with modern educational practices, indicating that many found it relevant to contemporary pedagogical approaches. This reflects positively on the curriculum's responsiveness to evolving educational standards. However, the remaining 26% of students were either neutral or disagreed, suggesting that for a significant minority, the curriculum may not fully meet expectations in addressing current trends or innovations in education.

Table 4.27 Perceptions of ITEP program students about promotion of active participation

Sr. No.	Questions	Response	Frequency	Percentage
5	The curriculum encourages you to actively participate and share ideas in the classroom	Strongly Disagree	0	0.00%
		Disagree	4	8.00%
		Neutral	34	68.00%
		Agree	10	20.00%
		Strongly Agree	2	4.00%

Table 4.27 shows that, when it came to classroom engagement, 68% of students responded neutrally about whether the curriculum encouraged them to actively participate and share ideas, suggesting a lack of clear impact in this area. With only 24% expressing agreement and 8% disagreeing, the data indicates that student-centred teaching strategies may be inconsistently applied or insufficiently emphasized, potentially limiting opportunities for active involvement and collaborative learning in the classroom.

Table 4.28 Perceptions of ITEP program students about promotion of critical thinking and problem solving

Sr. No.	Questions	Response	Frequency	Percentage
6	The curriculum promotes critical thinking and problem-solving skills.	Strongly Disagree	0	0.00%
		Disagree	5	10.00%
		Neutral	19	38.00%
		Agree	24	48.00%
		Strongly Agree	2	4.00%

As seen in table 4.28, in terms of fostering critical thinking and problem-solving skills, 52% of students agreed or strongly agreed that the curriculum supported such development, indicating a generally positive response. However, with 38% remaining neutral and 10% expressing disagreement, the results suggest that while the curriculum is somewhat effective in encouraging higher-order thinking, its impact may not be consistently experienced by all students, highlighting room for enhancement in this area.

Table 4.29 Perceptions of ITEP program students about opportunities for hands-on practices

Sr. No.	Questions	Response	Frequency	Percentage
7	Ample opportunities have been provided to use hands-on teaching practices effectively.	Strongly Disagree	3	6.00%
		Disagree	28	56.00%
		Neutral	7	14.00%
		Agree	10	20.00%
		Strongly Agree	2	4.00%

We can see in table 4.29, a notable area of concern is the lack of hands-on teaching practice, as reflected in the responses of 62% of students who disagreed or strongly disagreed that ample opportunities were provided. This points to a significant shortfall in the experiential aspects of the programme, which are essential for equipping future educators with practical classroom readiness and confidence. The absence of sufficient real-world teaching exposure may hinder the development of essential instructional skills and limit the overall effectiveness of the teacher preparation process.

Table 4.30 Perceptions of ITEP program students about ICT integration

Sr. No.	Questions	Response	Frequency	Percentage
8	The curriculum provides ample opportunities to integrate ICT into the teaching-learning process	Strongly Disagree	1	2.00%
		Disagree	5	10.00%
		Neutral	8	16.00%
		Agree	22	44.00%
		Strongly Agree	14	28.00%

As table 4.30 shows, on a positive note, 72% of students agreed or strongly agreed that the curriculum integrates ICT effectively into the teaching-learning process, indicating that the programme is keeping pace with technological advancements in education. This favourable perception suggests that digital tools and platforms are being meaningfully incorporated, supporting interactive and modern teaching methods. However, the remaining 28% of responses, comprising neutral or disagreeing views, imply that the integration of ICT may still be inconsistent or underutilized in some areas.

Table 4.31 Perceptions of ITEP program students about leadership development

Sr. No.	Questions	Response	Frequency	Percentage
9	Your course develops leadership skills within you.	Strongly Disagree	0	0.00%
		Disagree	6	12.00%
		Neutral	7	14.00%
		Agree	21	42.00%
		Strongly Agree	16	32.00%

As table 4.31 shows, the curriculum appears to be effective in nurturing leadership skills, with 74% of respondents agreeing or strongly agreeing that their course contributed to this aspect of their development. This suggests that the programme offers opportunities for students to build confidence, take initiative, and engage in roles that foster responsibility and collaborative decision-making. Nevertheless, the remaining 26% of students who were neutral or disagreed point to a need for more intentional or visible leadership-building components across the curriculum.

Table 4.32 Perceptions of ITEP program students about IKS integration

Sr. No.	Questions	Response	Frequency	Percentage
10	Your curriculum meaningfully integrates the Indian Knowledge System (IKS)	Strongly Disagree	0	0.00%
		Disagree	0	0.00%
		Neutral	8	16.00%
		Agree	26	52.00%
		Strongly Agree	16	32.00%

As seen in table 4.32, one of the strongest positive responses came from the item on the integration of the Indian Knowledge System (IKS), with 84% of students agreeing or strongly agreeing that it was meaningfully embedded in the curriculum. This indicates a strong alignment with the cultural and philosophical goals outlined in the National Education Policy (NEP-2020), reflecting the programme's commitment to contextualizing education within indigenous traditions and values. The high level of agreement suggests that students are not only aware of this integration but also perceive it as a valuable and relevant component of their teacher training.

Table 4.33 Perceptions of ITEP program students about experiential learning

Sr. No.	Questions	Response	Frequency	Percentage
11	Your curriculum incorporates experiential learning into classroom teaching.	Strongly Disagree	0	0.00%
		Disagree	4	8.00%
		Neutral	17	34.00%
		Agree	23	46.00%
		Strongly Agree	6	12.00%

Table 4.33 shows that, the inclusion of experiential learning in the curriculum was acknowledged positively by 58% of students who agreed or strongly agreed with its presence, indicating a reasonably favourable perception of practical, hands-on components within the course. However, with 34% of students responding neutrally and 8% expressing disagreement, there appears to be a degree of uncertainty or variability in how effectively these experiential elements are implemented. This suggests that while experiential learning is present, its consistency, quality, or visibility may require strengthening to ensure all students benefit equally from applied learning opportunities.

Table 4.34 Perceptions of ITEP program students about classroom preparedness

Sr. No.	Questions	Response	Frequency	Percentage
12	This course prepares you to face real classroom challenges	Strongly Disagree	0	0.00%
		Disagree	5	10.00%
		Neutral	28	56.00%
		Agree	11	22.00%
		Strongly Agree	6	12.00%

Table 4.34 shows that, only 34% of the students felt that the programme adequately prepared them to face real classroom challenges, while a significant 56% remained neutral in their responses. This widespread neutrality suggests a lack of clear or consistent exposure to real-world teaching environments, possibly due to limited fieldwork, insufficient simulation-based practice, or a gap between theoretical learning and classroom realities. The data indicates that more structured, immersive, and reflective practicum experiences may be

necessary to build students' confidence and preparedness for the practical demands of teaching.

Table 4.35 Perceptions of ITEP program students about career opportunities

Sr. No.	Questions	Response	Frequency	Percentage
13	You have a clear idea about the possible career opportunities after completing this course.	Strongly Disagree	16	32.00%
		Disagree	18	36.00%
		Neutral	8	16.00%
		Agree	5	10.00%
		Strongly Agree	3	6.00%

A seen in table 4.35, a significant concern of the students was career guidance, with 68% disagreeing or strongly disagreeing that they had a clear understanding of future career opportunities. This widespread uncertainty highlights a major gap in the program's practical orientation, indicating that career support and counselling are inadequate. The findings suggest the need for more structured career planning resources, mentorship, and exposure to real-world professional pathways to better equip students for their post-graduation futures.

Table 4.36 Perceptions of ITEP program students about opportunities in higher education

Sr. No.	Questions	Response	Frequency	Percentage
14	You have clarity about the available options in higher education, after completion of the course.	Strongly Disagree	3	6.00%
		Disagree	6	12.00%
		Neutral	6	12.00%
		Agree	28	56.00%
		Strongly Agree	7	14.00%

Table 4.36 shows that, on a positive note, 70% of students expressed clarity regarding the higher education options available to them after completing the ITEP program. This strong majority reflects effective communication or support in this area, suggesting that the program successfully informs students about their academic progression pathways. However, this clarity stands in contrast to other areas where guidance may be lacking,

highlighting the need to maintain and expand such support mechanisms across all aspects of student development.

Table 4.37 Perceptions of ITEP program students about NEP-2020 alignment

Sr. No.	Questions	Response	Frequency	Percentage
15	Your curriculum is aligned with the vision of NEP-2020	Strongly Disagree	0	0.00%
		Disagree	2	4.00%
		Neutral	4	8.00%
		Agree	27	54.00%
		Strongly Agree	17	34.00%

As seen in table 4.37, a substantial 88% of students believed that their curriculum is aligned with the vision of NEP-2020, indicating strong perceived coherence between the program and national education policy goals. This high level of agreement suggests successful integration of the policy's principles into the curriculum design, reflecting the program's responsiveness to contemporary educational reforms. Such alignment may enhance the relevance and effectiveness of the curriculum in preparing students for future challenges.

Table 4.38 Perceptions of ITEP program students about competitive examination preparedness

Sr. No.	Questions	Response	Frequency	Percentage
16	This program enables you to prepare for competitive examinations in the teaching field.	Strongly Disagree	0	0.00%
		Disagree	16	32.00%
		Neutral	11	22.00%
		Agree	19	38.00%
		Strongly Agree	4	8.00%

Table 4.38 shows that, preparation for competitive exams elicited mixed responses from students, with 46% expressing positive views about their readiness. However, a combined 54% of respondents were either neutral or disagreed, indicating a lack of strong confidence in their exam preparation. This distribution suggests that the program may not be

consistently effective in equipping students with the skills and strategies needed for competitive exams, highlighting an area for potential enhancement in support and training.

Table 4.39 Perceptions of ITEP program students about personal and professional development

Sr. No.	Questions	Response	Frequency	Percentage
17	This course is helpful in your personal and professional development.	Strongly Disagree	0	0.00%
		Disagree	4	8.00%
		Neutral	12	24.00%
		Agree	22	44.00%
		Strongly Agree	12	24.00%

Table 4.39 shows that, a large majority of 68% of students acknowledged that the course contributes positively to their personal and professional development. This strong endorsement suggests that the program fosters a well-rounded growth experience, supporting not only academic learning but also broader skills and attributes essential for future success. The data highlights the program's holistic impact in preparing students both personally and professionally.

Table 4.40 Perceptions of ITEP program students about confidence boosting

Sr. No.	Questions	Response	Frequency	Percentage
18	Based on what you have learned so far, you feel confident in handling real classroom situations	Strongly Disagree	1	2.00%
		Disagree	3	6.00%
		Neutral	10	20.00%
		Agree	33	66.00%
		Strongly Agree	3	6.00%

As seen in table 4.40, confidence in handling real classroom situations was relatively strong, with 72% of students agreeing or strongly agreeing that they felt prepared. This majority indicates that the program effectively builds practical skills and self-assurance necessary for classroom management. However, the remaining 28% who were neutral or disagreed

suggest there is still room to enhance hands-on training and real-world practice to ensure all students feel equally confident.

Table 4.41 Perceptions of ITEP program students about overall usefulness

Sr. No.	Questions	Response	Frequency	Percentage
19	You find your enrolled course useful for your teaching as well as your academic future.	Strongly Disagree	0	0.00%
		Disagree	16	32.00%
		Neutral	11	22.00%
		Agree	20	40.00%
		Strongly Agree	3	6.00%

Table 4.41 shows that, the overall usefulness of the course for both academic and teaching futures elicited mixed perceptions among students. While 46% responded positively, indicating that nearly half found the program beneficial for their career and educational goals, a notable 32% disagreed, expressing dissatisfaction with its relevance or applicability. This division suggests that the course may not consistently meet all students' expectations or needs, highlighting an opportunity to better tailor content and support to enhance its perceived value.

Table 4.42 Perceptions of ITEP program students about preparedness for other competitive examinations

Sr. No.	Questions	Response	Frequency	Percentage
20	You feel that your current course prepares you for teaching as well as other competitive exams.	Strongly Disagree	1	2.00%
		Disagree	4	8.00%
		Neutral	16	32.00%
		Agree	18	36.00%
		Strongly Agree	11	22.00%

In table 4.42 we can see that a similar trend emerged regarding preparation for teaching and other competitive exams, with 58% of students expressing satisfaction with their readiness. However, 32% of respondents were either neutral or dissatisfied, indicating that a significant portion of students lack confidence in the program's ability to fully prepare them for these

important assessments. This suggests that enhancements in exam-focused training and support may be necessary to address gaps and boost overall student preparedness.

Table 4.43 Perceptions of ITEP program students about overall satisfaction

Sr. No.	Questions	Response	Frequency	Percentage
21	You are satisfied with the structure of your course.	Strongly Disagree	5	10.00%
		Disagree	7	14.00%
		Neutral	14	28.00%
		Agree	14	28.00%
		Strongly Agree	10	20.00%

Table 4.43 shows that, when asked about overall satisfaction with the course structure, students' responses were fairly divided. While 48% expressed satisfaction, a significant 28% remained neutral, and 24% reported dissatisfaction. This distribution indicates moderate approval of the curriculum but also reveals considerable scope for improvement to better meet student expectations and enhance their learning experience.

Table 4.44 Perceptions of ITEP program students about the program with the highest academic opportunities

Sr. No.	Questions	Response	Frequency	Percentage
22	Keeping in mind, the structure of the course, which of the following courses do you think will be more useful in providing teaching as well as academic opportunities?	B.Sc. B.Ed. Traditional	21	30.00%
		B.A. B.Ed. Traditional	6	9.00%
		B.Sc. B.Ed. ITEP	26	38.00%
		B.A. B.Ed. ITEP	14	20.00%
		B.Sc. Three Years and Two Years B.Ed.	1	1.50%
		B.A. Three Years and Two Years B.Ed.	1	1.50%

We can see in table 4.44 that, when asked which course structure would be more useful in providing both teaching and academic opportunities, 38% of students favoured the B.Sc. B.Ed. ITEP program, indicating a strong preference for this integrated science education pathway. This was closely followed by 30% who preferred the B.Sc. B.Ed. Traditional course, reflecting the appeal of traditional science-focused programs. The B.A. B.Ed. ITEP program attracted 20% of respondents, while only 9% favoured the B.A. B.Ed. Traditional course. Very few students selected the B.Sc. Three Years plus Two Years B.Ed. and B.A. Three Years plus Two Years B.Ed. options, each receiving just 1.5%. These results suggest a clear inclination toward integrated and science-based programs, highlighting their perceived effectiveness in balancing academic and teaching prospects.

23. In your opinion what are the contrasting features that differentiates ITEP from traditional integrated B.A. B.Ed. and B.Sc. B.Ed. batches.

A total of 27 responses were recorded. The students mentioned contrasting features such as focus on major or minor subjects, NEP alignment, curriculum or syllabus structure, future opportunities and further studies, four-part course structure, and early specialization. Some students raised concerns about the credit system and lack of practical exposure, while many others were blank or unclear.

Summary

In summary, the ITEP programme reflects considerable promise in several core areas of teacher education. Students expressed strong confidence in the integration of Indian cultural knowledge, the curriculum's alignment with the National Education Policy 2020, and the incorporation of ICT in the teaching-learning process. They also viewed the programme as beneficial to their personal and professional growth, offering a good balance between theoretical and practical learning, and helping them feel prepared for real classroom environments. Further, many students appreciated the programme's support in developing leadership qualities and felt well-informed about the academic pathways available to them after graduation.

At the same time, several aspects of the curriculum yielded mixed or neutral perceptions. These included the relevance of the content to modern educational practices, the promotion of critical thinking and problem-solving, the clarity and ease of understanding the curriculum, the overall satisfaction with the course structure, and the usefulness of the

programme for both teaching and academic futures. Students also expressed uncertainty regarding their preparation for competitive examinations and whether the curriculum provided sufficient experiential learning opportunities. Such responses suggest that while the curriculum is conceptually robust, its implementation may vary, leaving some students unsure of its effectiveness in specific areas.

More critically, certain elements of the programme emerged as clear areas for improvement. Many students felt the curriculum lacked a coherent structure and reported inadequate opportunities for hands-on teaching practice. A significant number also expressed confusion about career prospects after course completion, indicating a need for more targeted guidance and professional orientation. Additionally, students felt that the curriculum could do more to foster classroom engagement and encourage active participation. These findings point to gaps in practical training, curriculum communication, and real-world preparedness that, if addressed, could substantially enhance the overall impact of the ITEP programme.

Ultimately, while the ITEP initiative aligns well with policy goals and is appreciated for its theoretical foundation and cultural relevance, it must strengthen its structural clarity, experiential components, and career guidance efforts in order to fully equip future educators for the dynamic demands of the teaching profession.

Objective 3: To compare the traditional B.A.B.Ed./B.Sc.B.Ed. programs and the ITEP based on students' perceptions of various aspects of their course curriculum.

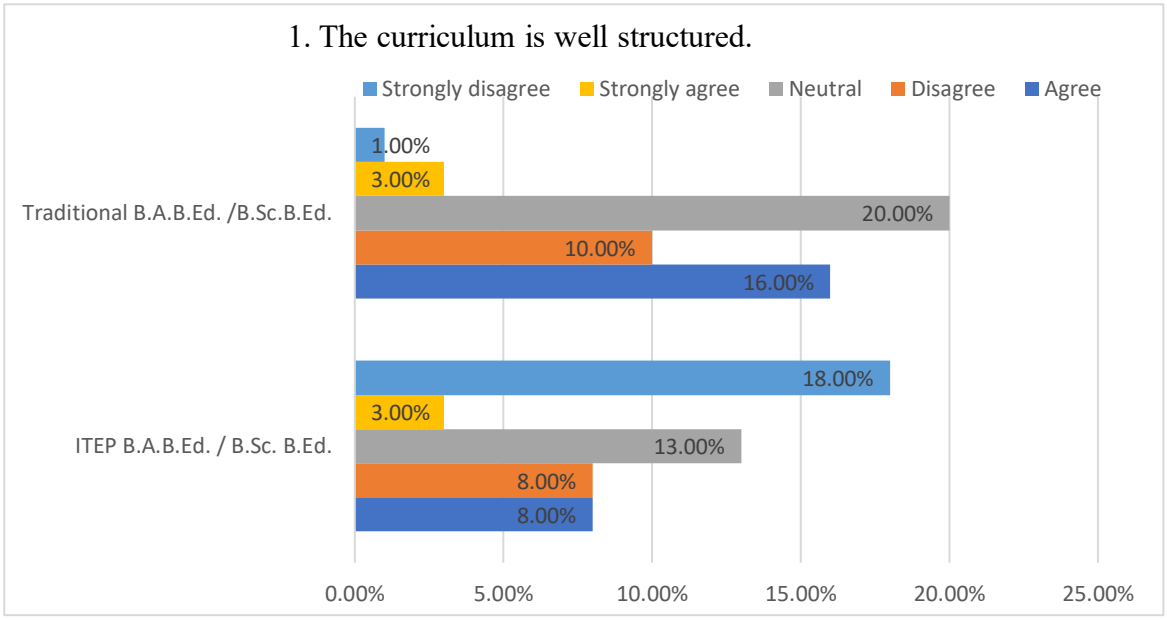

Figure 4.1 Student Perceptions on Curriculum Structure in Traditional Integrated Programs vs. ITEP

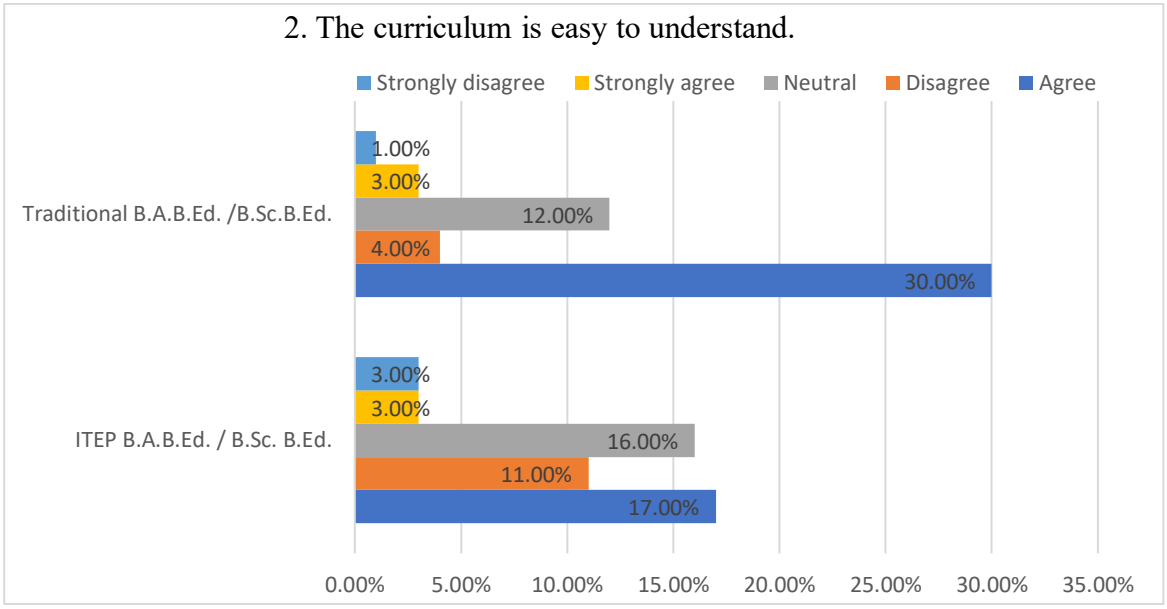

Figure 4.2 Student Perceptions on comprehensiveness in Traditional Integrated Programs vs. ITEP

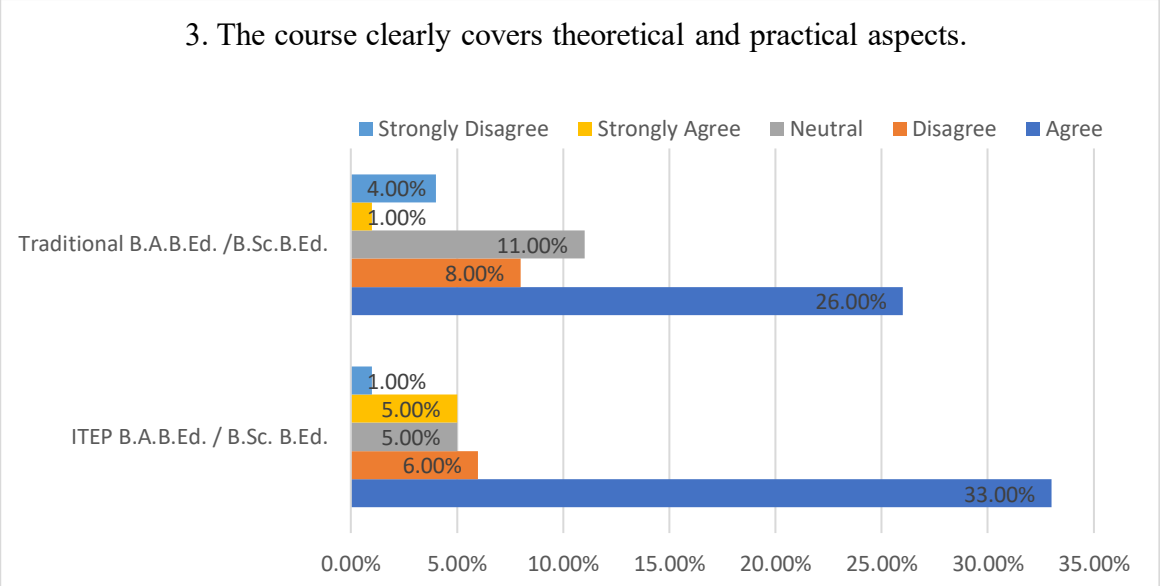

Figure 4.3 Student Perceptions on balance between theory and practice in Traditional Integrated Programs vs. ITEP

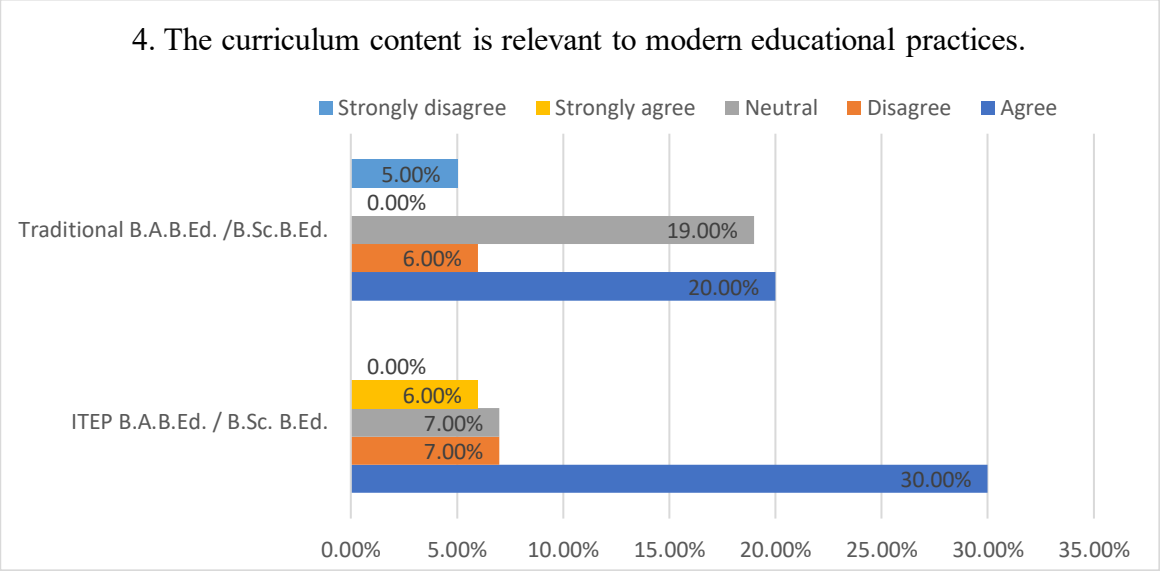

Figure 4.4 Student Perceptions on contemporary relevance in Traditional Integrated Programs vs. ITEP

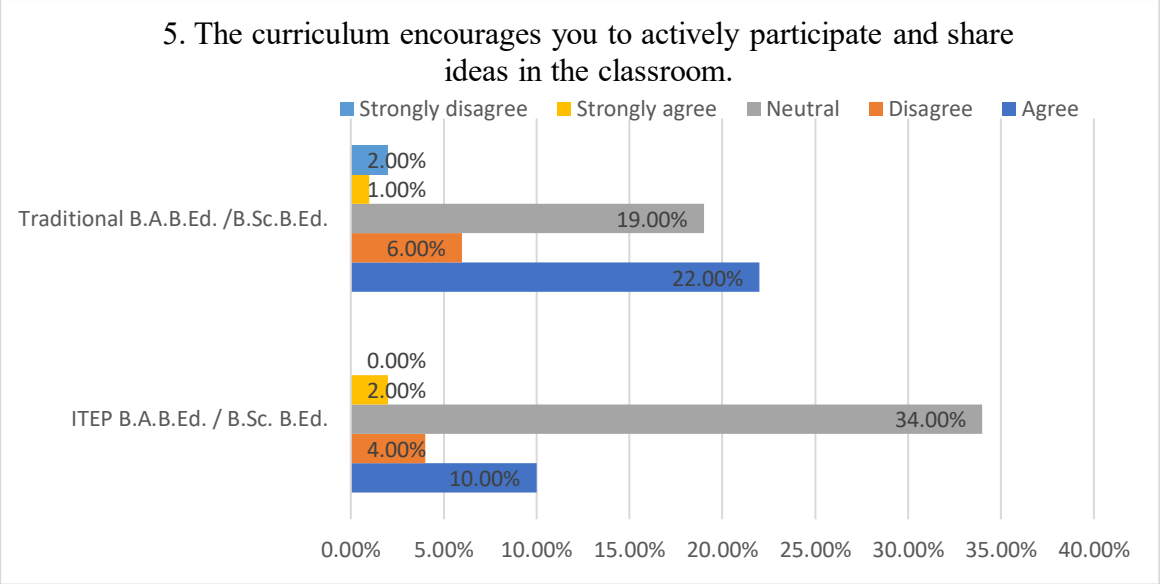

Figure 4.5 Student Perceptions on active classroom participation in Traditional Integrated Programs vs. ITEP

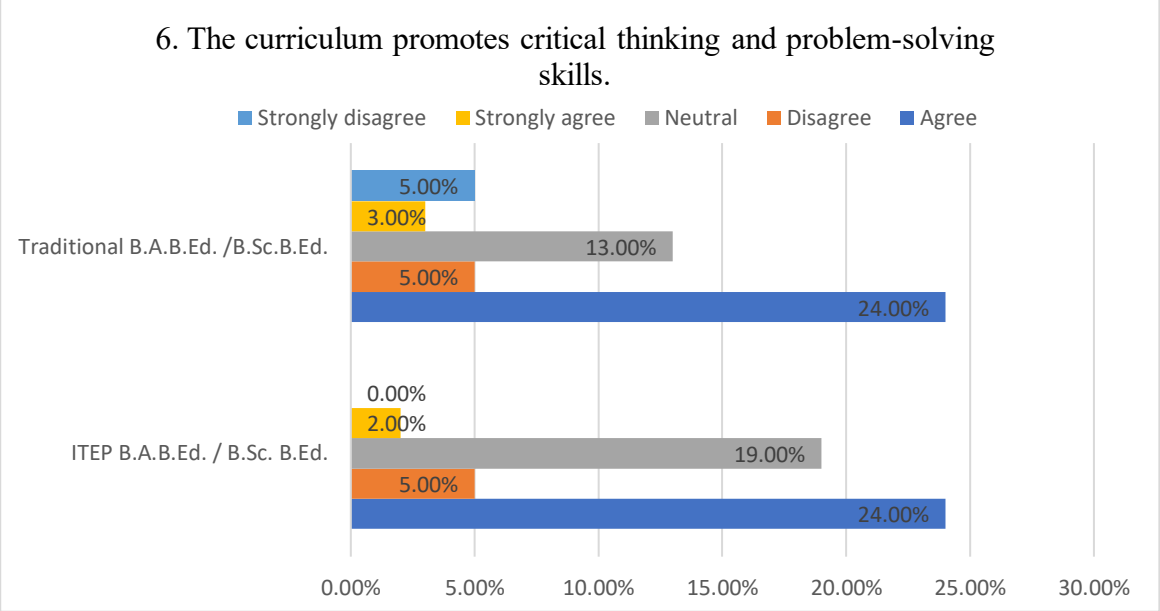

Figure 4.6 Student Perceptions on promotion of critical thinking and problem solving in Traditional Integrated Programs vs. ITEP

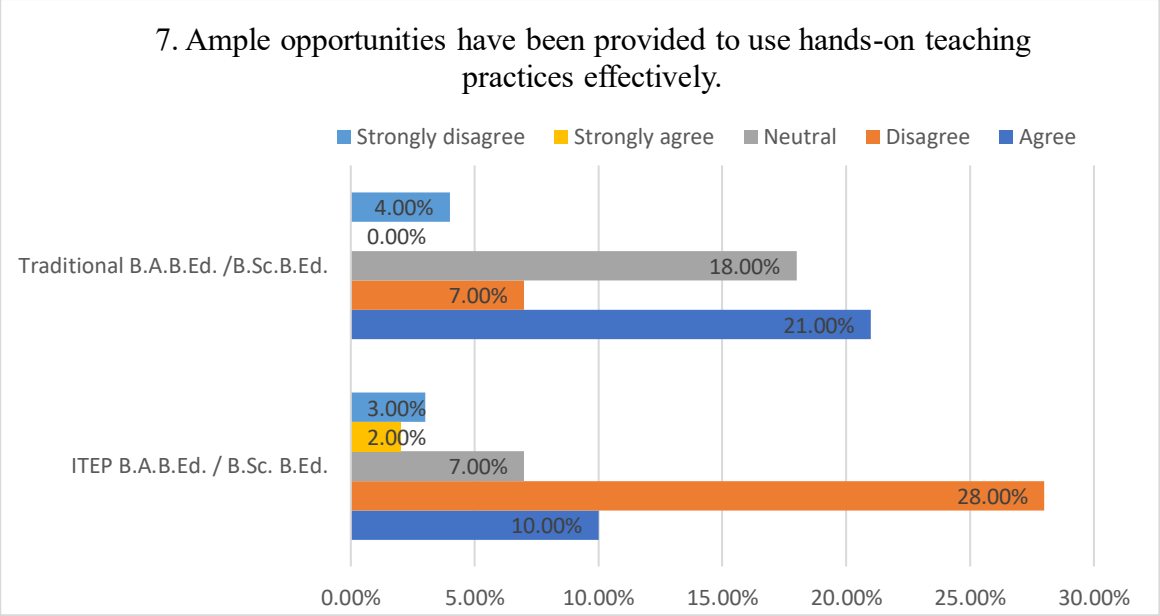

Figure 4.7 Student Perceptions on opportunities for hands-on practices in Traditional Integrated Programs vs. ITEP

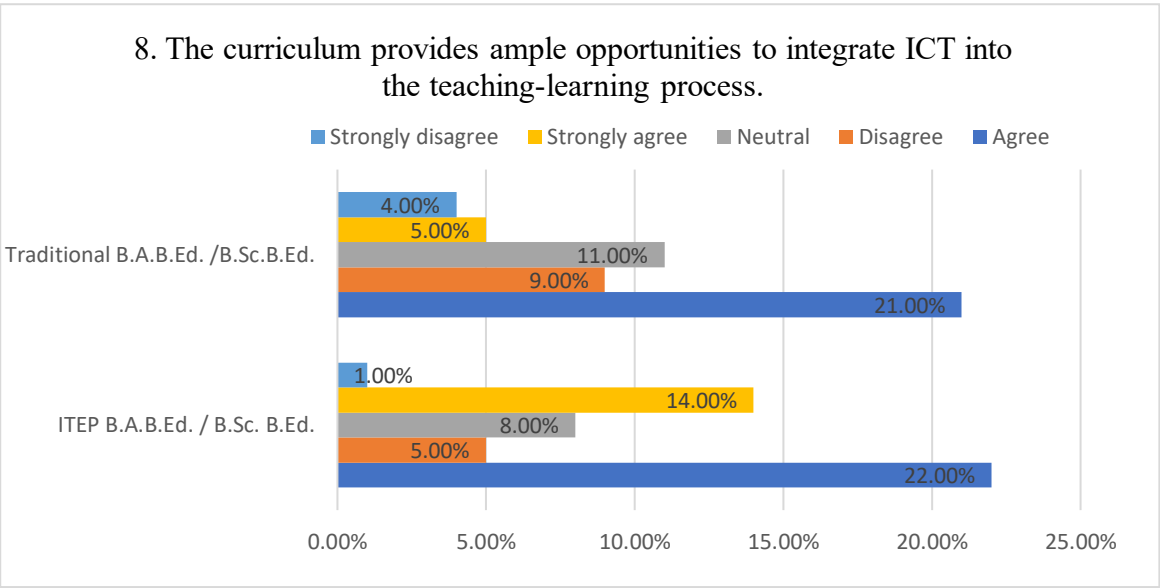

Figure 4.8 Student Perceptions on ICT integration in Traditional Integrated Programs vs. ITEP

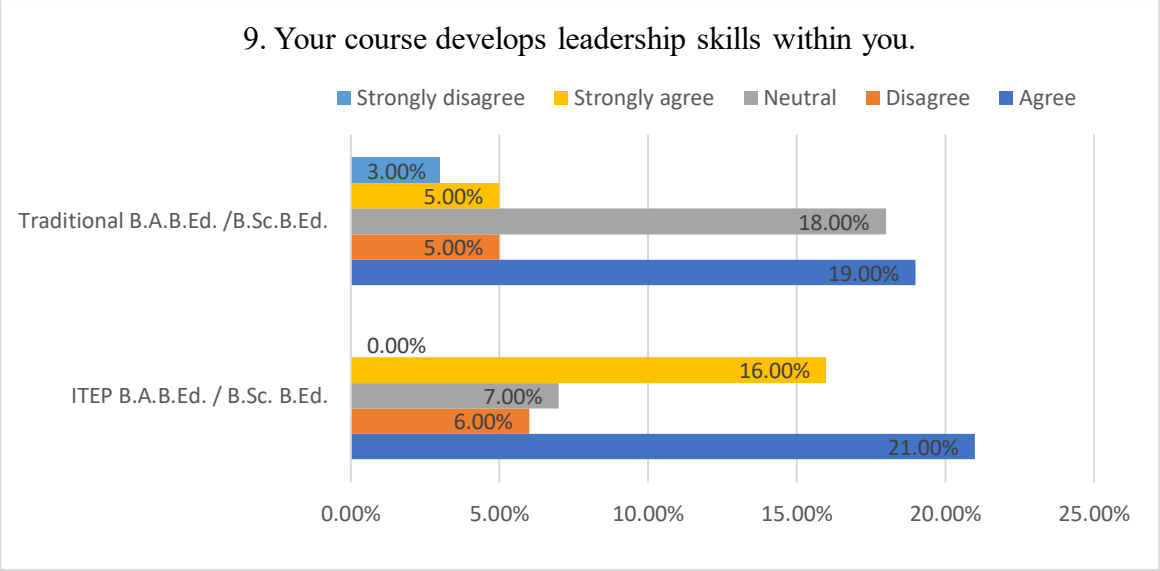

Figure 4.9 Student Perceptions on leadership development in Traditional Integrated Programs vs. ITEP

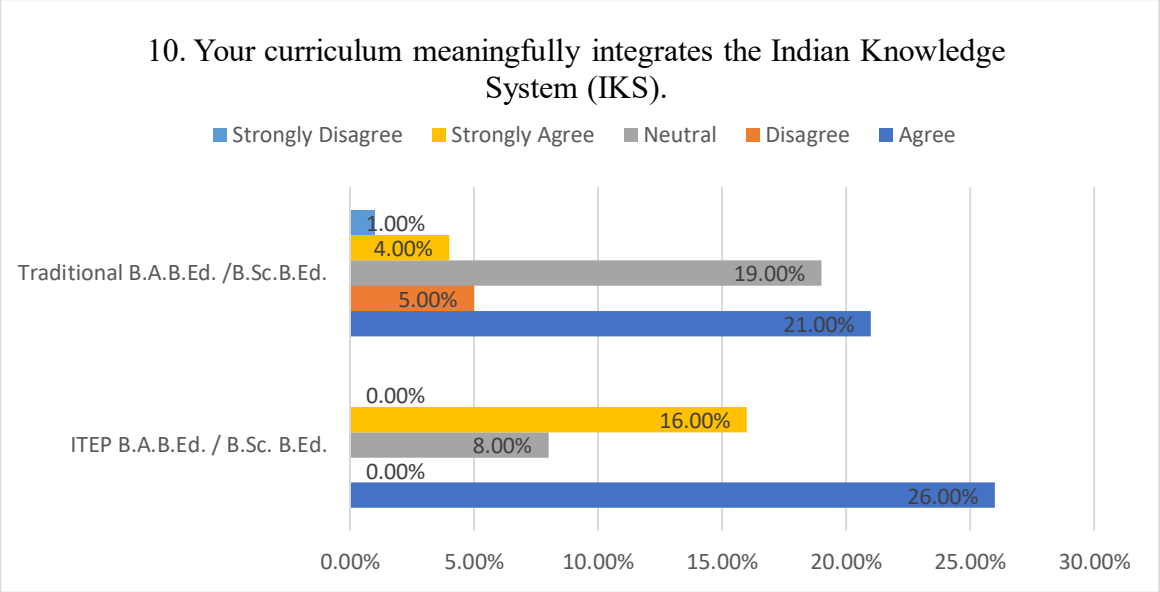

Figure 4.10 Student Perceptions on IKS integration in Traditional Integrated Programs vs. ITEP

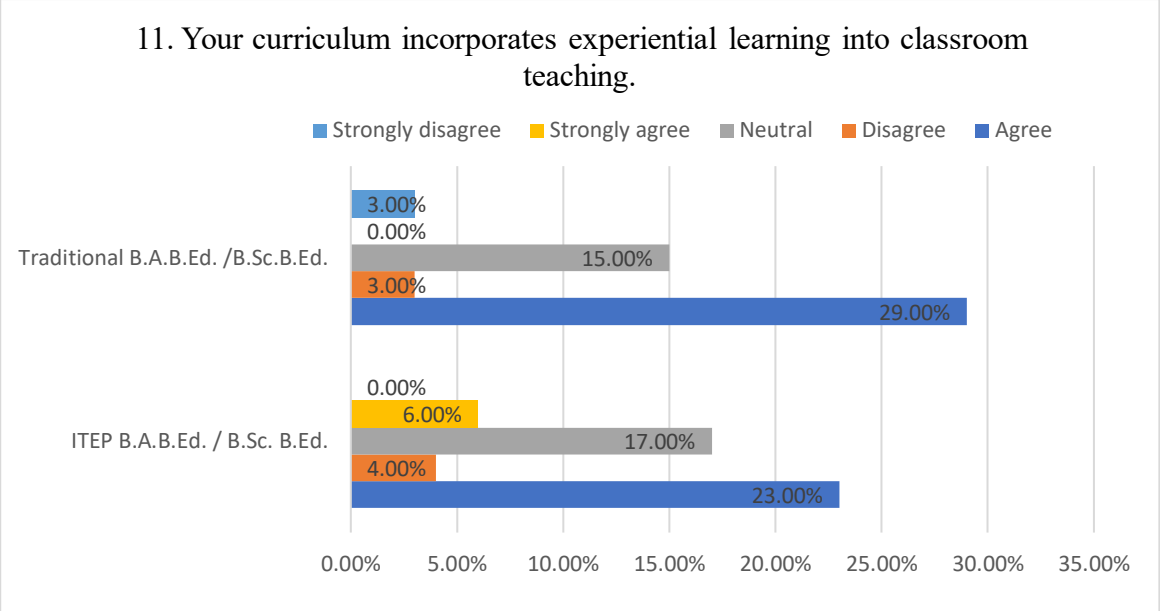

Figure 4.11 Student Perceptions on integrating experiential learning in Traditional Integrated Programs vs. ITEP

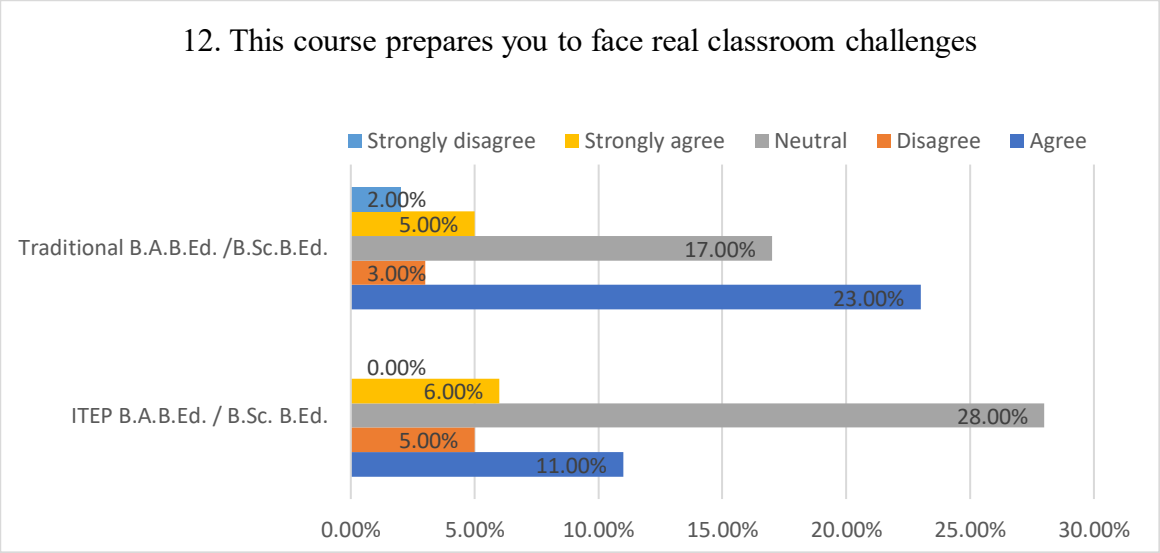

Figure 4.12 Student Perceptions on classroom preparedness in Traditional Integrated Programs vs. ITEP

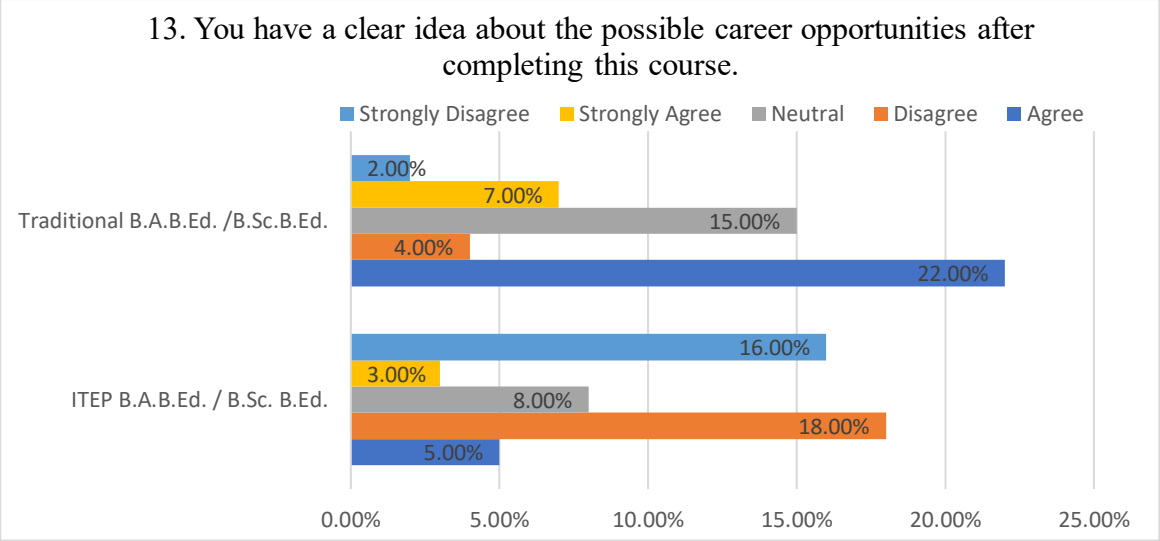

Figure 4.13 Student Perceptions on career opportunities in Traditional Integrated Programs vs. ITEP

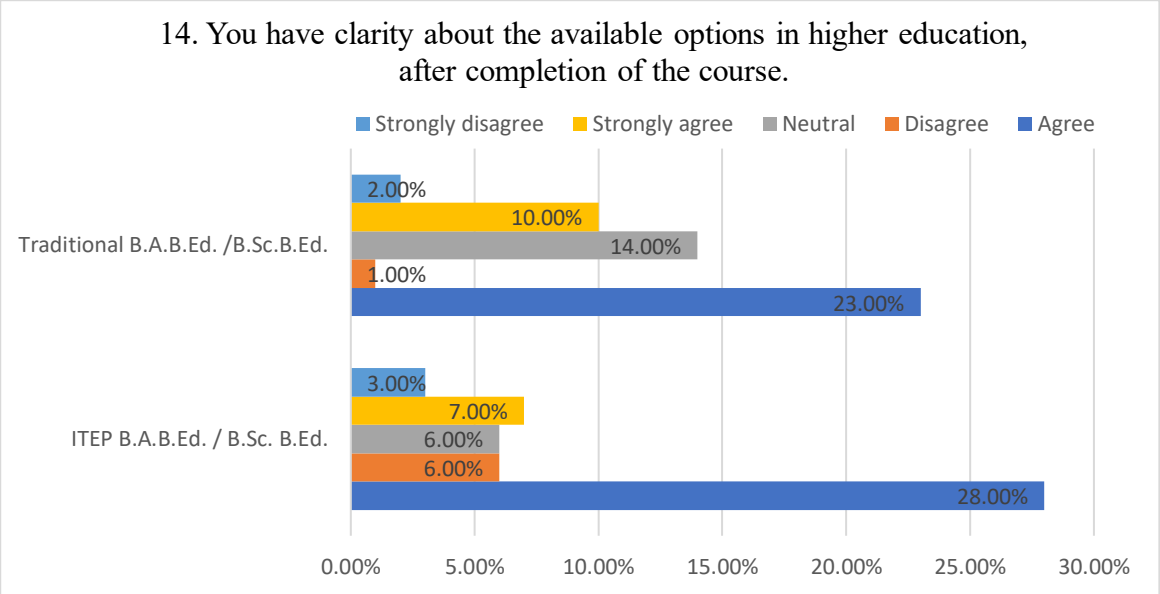

Figure 4.14 Student Perceptions on opportunities in higher education in Traditional Integrated Programs vs. ITEP

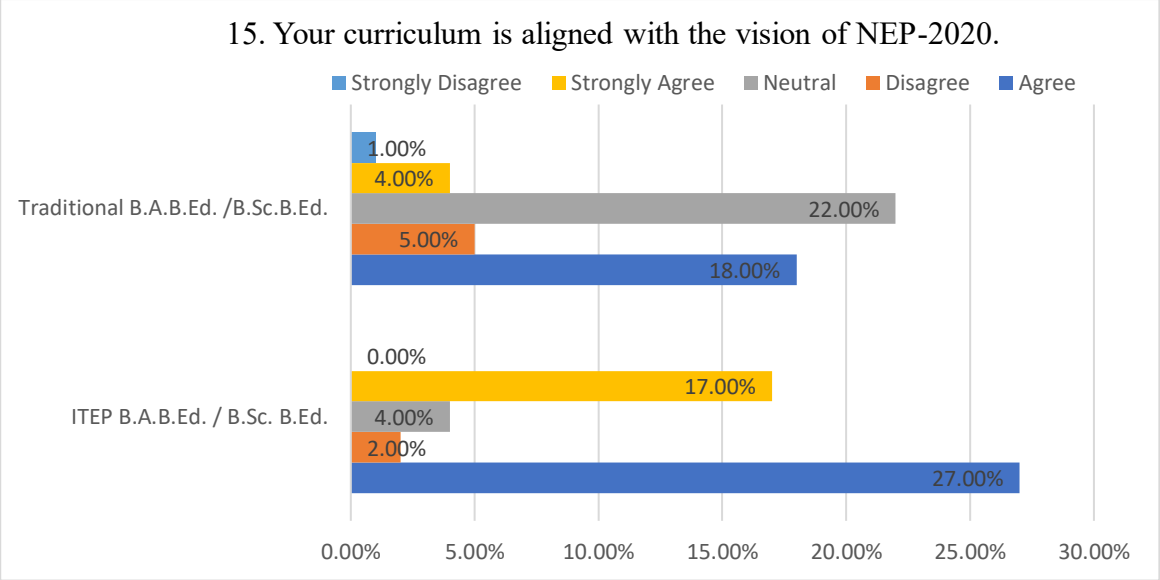

Figure 4.15 Student Perceptions on NEP-2020 alignment in Traditional Integrated Programs vs. ITEP

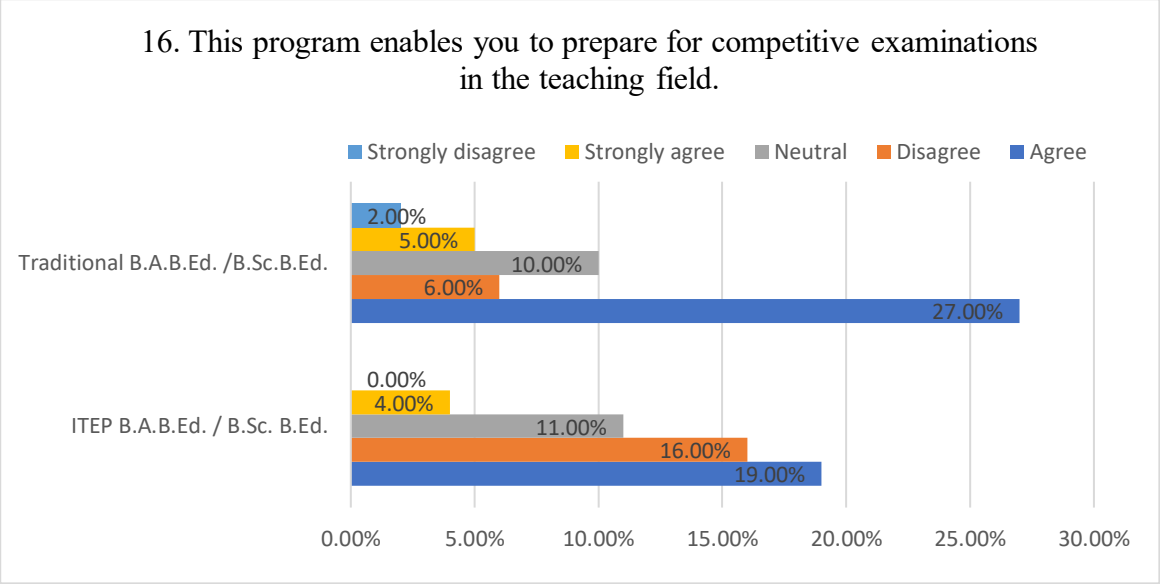

Figure 4.16 Student Perceptions on preparedness for competitive examinations in Traditional Integrated Programs vs. ITEP

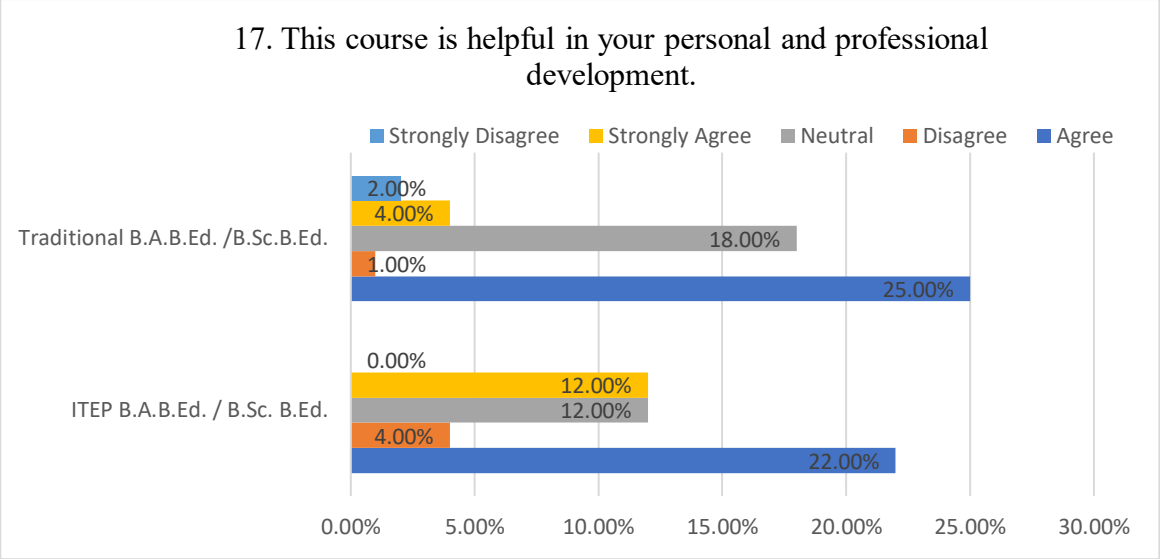

Figure 4.17 Student Perceptions on personal and professional development in Traditional Integrated Programs vs. ITEP

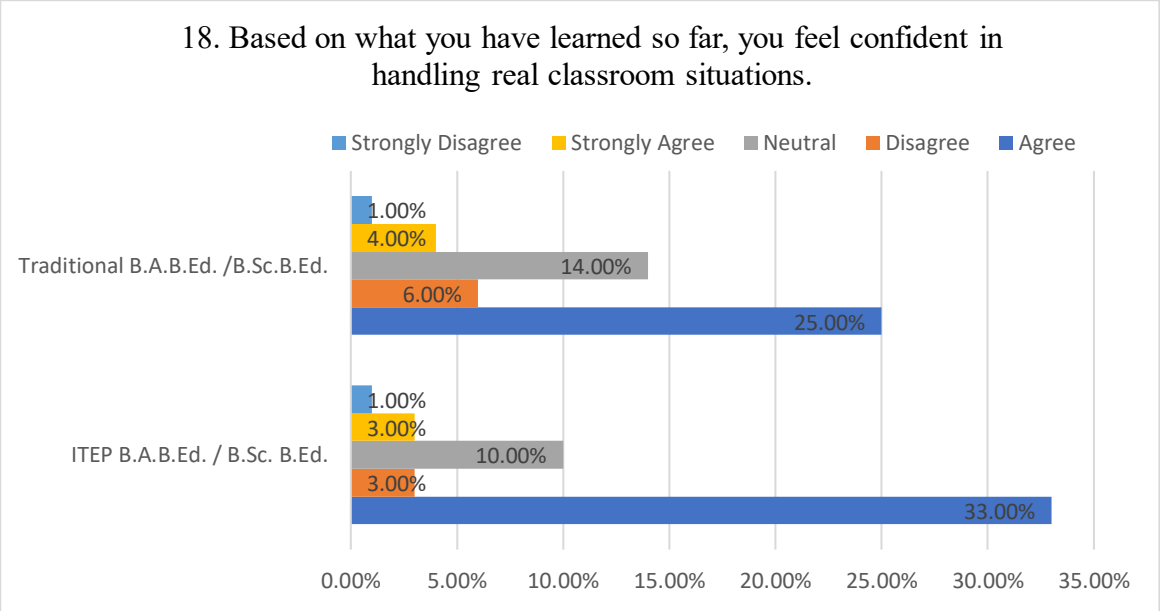

Figure 4.18 Student Perceptions on confidence boosting in Traditional Integrated Programs vs. ITEP

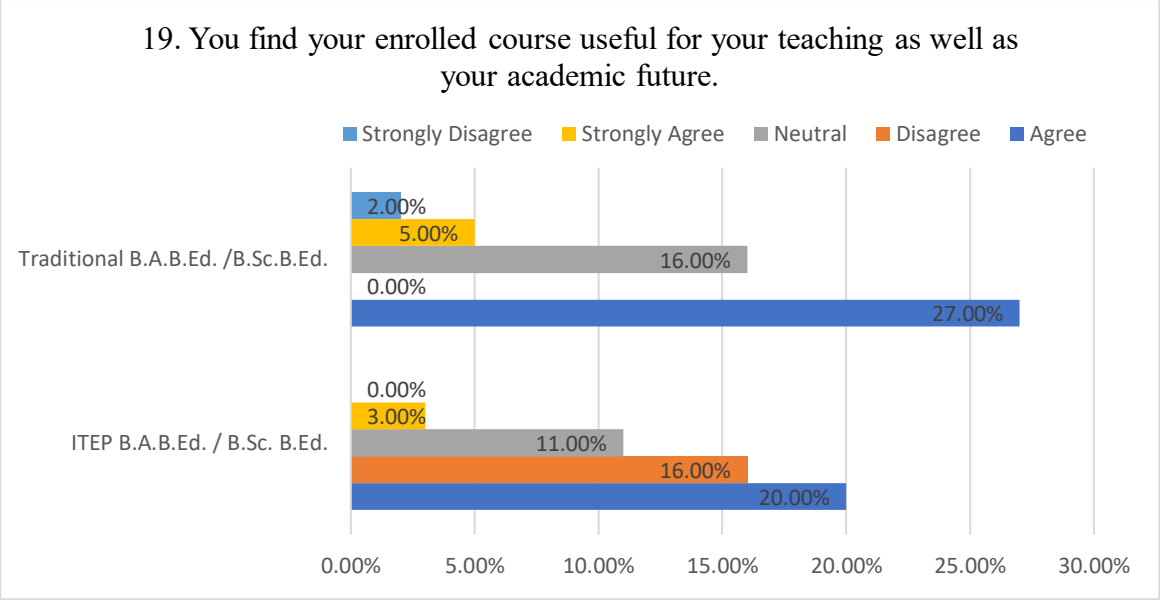

Figure 4.19 Student Perceptions on overall usefulness in Traditional Integrated Programs vs. ITEP

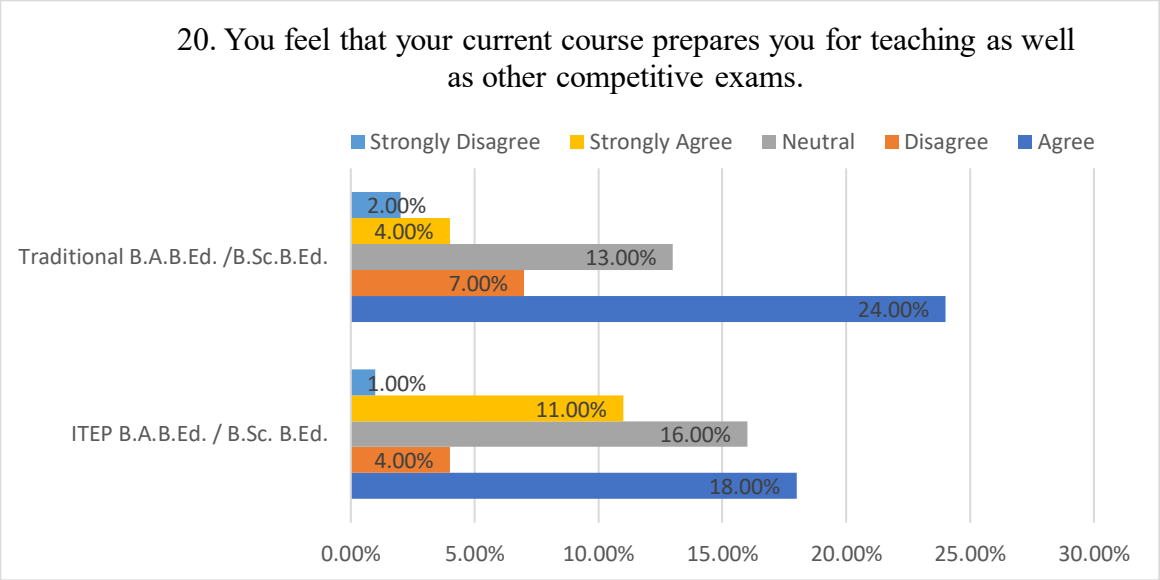

Figure 4.20 Student Perceptions on preparedness for other competitive examinations in Traditional Integrated Programs vs. ITEP

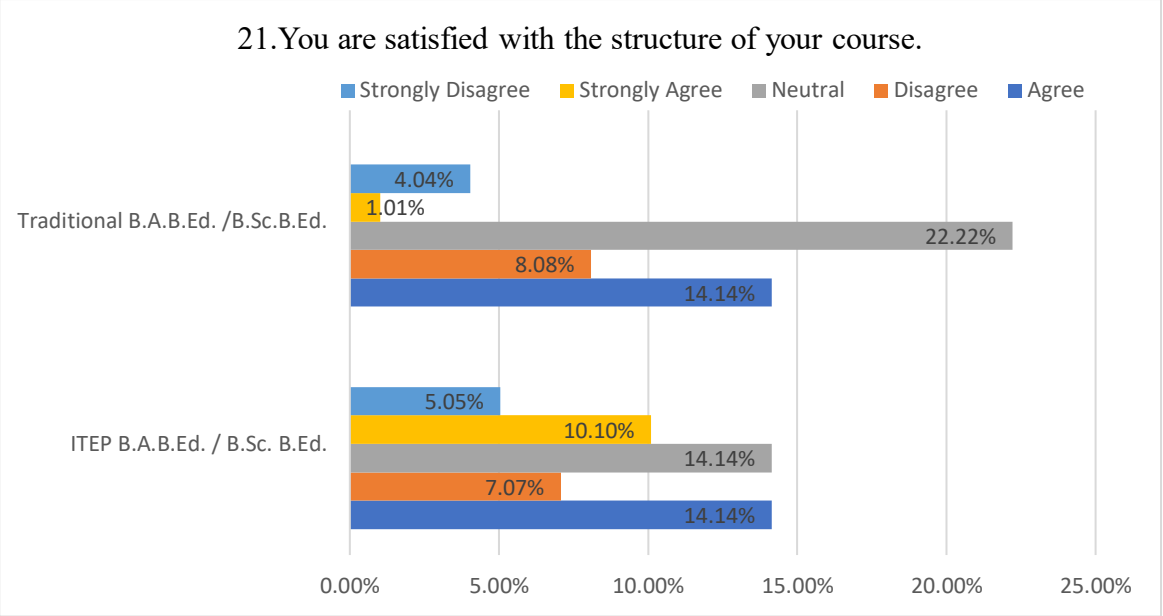

Figure 4.21 Student Perceptions on overall satisfaction in Traditional Integrated Programs vs. ITEP

Table 4.45 Mean scores of student perceptions towards curriculum

(a= Traditional Integrated B.A.B.Ed./ B.Sc.B.Ed. Program

b= ITEP Program)

Statements	Program Name	N	Mean	Std. Deviation
1. The curriculum is well structured.	a	50	3.20	0.904
	b	50	2.40	1.294
2. The curriculum is easy to understand.	a	50	3.60	0.808
	b	50	3.12	1.023
3. The course clearly covers theoretical and practical aspects.	a	50	3.24	1.021
	b	50	3.70	0.886
4. The curriculum content is relevant to modern educational practices.	a	50	3.08	0.966
	b	50	3.70	0.863
5. The curriculum encourages you to actively participate and share ideas in the classroom.	a	50	3.28	0.858
	b	50	3.20	0.639
6. The curriculum promotes critical thinking and problem-solving skills.	a	50	3.30	1.074
	b	50	3.46	0.734
7. Ample opportunities have been provided to use hands-on teaching practices effectively.	a	50	3.12	0.940
	b	50	2.60	1.010
8. The curriculum provides ample opportunities to integrate ICT into the	a	50	3.28	1.126
	b	50	3.86	1.010

teaching-learning process.				
9. Your course develops leadership skills within you.	a	50	3.36	1.005
	b	50	3.94	0.978
10. Your curriculum meaningfully integrates the Indian Knowledge System (IKS).	a	50	3.44	0.861
	b	50	4.16	0.681
11. Your curriculum incorporates experiential learning into classroom teaching.	a	50	3.40	0.857
	b	50	3.62	0.805
12. This course prepares you to face real classroom challenges.	a	50	3.52	0.909
	b	50	3.36	0.827
13. You have a clear idea about the possible career opportunities after completing this course.	a	50	3.56	0.972
	b	50	2.22	1.183
14. You have clarity about the available options in higher education, after completion of the course.	a	50	3.76	0.938
	b	50	3.60	1.069
15. Your curriculum is aligned with the vision of NEP-2020.	a	50	3.38	0.855
	b	50	4.18	0.748
16. This program enables you to prepare for competitive examinations in the teaching field.	a	50	3.54	0.973
	b	50	3.22	0.996

17. This course is helpful in your personal and professional development.	a	50	3.56	0.837
	b	50	3.84	0.889
18. Based on what you have learned so far, you feel confident in handling real classroom situations.	a	50	3.50	0.886
	b	50	3.68	0.768
19. You find your enrolled course useful for your teaching as well as your academic future.	a	50	3.66	0.823
	b	50	3.20	0.969
20. You feel that your current course prepares you for teaching as well as other competitive exams.	a	50	3.42	0.971
	b	50	3.68	0.978
21.You are satisfied with the structure of your course.	a	49	3.00	0.935
	b	50	3.34	1.239

Table 4.46 Independent Samples Test

Statements		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Significance		Mean Difference
						One-Sided p	Two-Sided p	
1. The curriculum is well structured.	Equal variances assumed	13.166	0.000	3.585	98	0.000	0.001	0.800
	Equal variances not assumed			3.585	87.616	0.000	0.001	0.800
2. The curriculum is easy to understand.	Equal variances assumed	2.678	0.105	2.603	98	0.005	0.011	0.480
	Equal variances not assumed			2.603	93.015	0.005	0.011	0.480
3. The course clearly covers theoretical and practical aspects.	Equal variances assumed	3.309	0.072	-2.405	98	0.009	0.018	-0.460
	Equal variances not assumed			-2.405	96.095	0.009	0.018	-0.460
4. The curriculum content is relevant to	Equal variances assumed	0.309	0.580	-3.385	98	0.001	0.001	-0.620

modern educational practices.	Equal variances not assumed			-3.385	96.792	0.001	0.001	-0.620
5. The curriculum encourages you to actively participate and share ideas in the classroom.	Equal variances assumed	6.744	0.011	0.529	98	0.299	0.598	0.080
	Equal variances not assumed			0.529	90.555	0.299	0.598	0.080
6. The curriculum promotes critical thinking and problem-solving skills.	Equal variances assumed	5.616	0.020	-0.870	98	0.193	0.387	-0.160
	Equal variances not assumed			-0.870	86.603	0.193	0.387	-0.160
7. Ample opportunities have been provided to use hands-on teaching practices effectively.	Equal variances assumed	1.333	0.251	2.665	98	0.005	0.009	0.520
	Equal variances not assumed			2.665	97.494	0.005	0.009	0.520
8. The curriculum provides ample opportunities to	Equal variances assumed	2.254	0.136	-2.711	98	0.004	0.008	-0.580

integrate ICT into the teaching-learning process.	Equal variances not assumed			-2.711	96.879	0.004	0.008	-0.580
9. Your course develops leadership skills within you.	Equal variances assumed	0.490	0.485	-2.925	98	0.002	0.004	-0.580
	Equal variances not assumed			-2.925	97.923	0.002	0.004	-0.580
10. Your curriculum meaningfully integrates the Indian Knowledge System (IKS).	Equal variances assumed	4.366	0.039	-4.638	98	0.000	0.000	-0.720
	Equal variances not assumed			-4.638	93.062	0.000	0.000	-0.720
11. Your curriculum incorporates experiential learning into classroom teaching.	Equal variances assumed	0.028	0.868	-1.323	98	0.095	0.189	-0.220
	Equal variances not assumed			-1.323	97.622	0.095	0.189	-0.220
12. This course prepares you to face real	Equal variances assumed	0.397	0.530	0.921	98	0.180	0.360	0.160

classroom challenges.	Equal variances not assumed			0.921	97.141	0.180	0.360	0.160
13. You have a clear idea about the possible career opportunities after completing this course.	Equal variances assumed	1.371	0.244	6.188	98	0.000	0.000	1.340
	Equal variances not assumed			6.188	94.455	0.000	0.000	1.340
14. You have clarity about the available options in higher education, after completion of the course.	Equal variances assumed	0.975	0.326	0.795	98	0.214	0.428	0.160
	Equal variances not assumed			0.795	96.373	0.214	0.428	0.160
15. Your curriculum is aligned with the vision of NEP-2020.	Equal variances assumed	2.362	0.128	-4.983	98	0.000	0.000	-0.800
	Equal variances not assumed			-4.983	96.297	0.000	0.000	-0.800
16. This program enables you to prepare for	Equal variances assumed	0.761	0.385	1.625	98	0.054	0.107	0.320

competitive examinations in the teaching field.	Equal variances not assumed			1.625	97.949	0.054	0.107	0.320
17. This course is helpful in your personal and professional development.	Equal variances assumed	0.069	0.793	-1.622	98	0.054	0.108	-0.280
	Equal variances not assumed			-1.622	97.646	0.054	0.108	-0.280
18. Based on what you have learned so far, you feel confident in handling real classroom situations.	Equal variances assumed	2.684	0.105	-1.085	98	0.140	0.280	-0.180
	Equal variances not assumed			-1.085	96.042	0.140	0.280	-0.180
19. You find your enrolled course useful for your teaching as well as your academic future.	Equal variances assumed	5.330	0.023	2.558	98	0.006	0.012	0.460
	Equal variances not assumed			2.558	95.514	0.006	0.012	0.460
20. You feel that your current course prepares you	Equal variances assumed	0.000	0.988	-1.334	98	0.093	0.185	-0.260

for teaching as well as other competitive exams.	Equal variances not assumed			-1.334	97.994	0.093	0.185	-0.260
21. You are satisfied with the structure of your course.	Equal variances assumed	8.102	0.005	-1.539	97	0.064	0.127	-0.340
	Equal variances not assumed			-1.543	91.111	0.063	0.126	-0.340

Interpretation:

1. The curriculum is well structured.

Interpretation: A statistically significant difference was found between Group A and Group B, $t(87.62) = 3.585$, $p < 0.05$, indicating that students in Group A perceived the curriculum to be significantly better structured than those in Group B. This suggests that Group A experienced a more systematically designed curriculum that facilitated their academic engagement.

2. The curriculum is easy to understand.

Interpretation: The result revealed a significant difference, $t(98) = 2.603$, $p < 0.05$, where Group A rated the curriculum as easier to comprehend compared to Group B. This reflects better clarity and accessibility in the presentation and delivery of course content for Group A.

3. The course clearly covers theoretical and practical aspects.

Interpretation: A significant difference was observed, $t(98) = -2.405$, $p < 0.05$. Group B perceived a stronger integration of theoretical and practical components in the course, indicating more effective curricular design in bridging theory with classroom application.

4. The curriculum content is relevant to modern educational practices.

Interpretation: The t-test result showed a significant difference, $t(98) = -3.385$, $p < 0.05$. Group B considered the curriculum more aligned with current educational practices. This

finding highlights a potential area for curriculum improvement in Group A's program to make it more contemporary and practice-oriented.

5. The curriculum encourages you to actively participate and share ideas in the classroom.

Interpretation: No significant difference was found, $t(90.56) = 0.529$, $p > 0.05$. Both groups reported similar experiences in terms of opportunities to participate and share ideas, indicating equitable instructional practices in this regard.

6. The curriculum promotes critical thinking and problem-solving skills.

Interpretation: The result was not statistically significant, $t(86.60) = -0.870$, $p > 0.05$, suggesting that both groups held comparable views on the development of critical thinking and problem-solving skills through their curriculum.

7. Ample opportunities have been provided to use hands-on teaching practices effectively.

Interpretation: The analysis yielded a significant difference, $t(98) = 2.665$, $p < 0.05$, indicating that Group A experienced significantly more opportunities for hands-on teaching practices. This suggests a stronger emphasis on experiential learning in Group A's training.

8. The curriculum provides ample opportunities to integrate ICT into the teaching-learning process.

Interpretation: A statistically significant difference, $t(98) = -2.711$, $p < 0.05$, was observed with Group B indicating greater opportunities for ICT integration. This highlights the need for improved technological integration in the teaching practices of Group A.

9. Your course develops leadership skills within you.

Interpretation: There was a significant difference, $t(98) = -2.925$, $p < 0.05$, with Group B rating this aspect more favourably. This suggests that the curriculum experienced by Group B included more components geared toward leadership development.

10. Your curriculum meaningfully integrates the Indian Knowledge System (IKS).

Interpretation: The findings showed a highly significant difference, $t(98) = -4.638$, $p < 0.05$. Group B students strongly perceived the integration of the Indian Knowledge System in their curriculum, whereas Group A perceived this to a lesser extent.

11. Your curriculum incorporates experiential learning into classroom teaching.

Interpretation: No significant difference was found, $t(98) = -1.323$, $p > 0.05$. Both groups believed that experiential learning was similarly integrated into their programs, indicating uniformity in the inclusion of experiential methods.

12. This course prepares you to face real classroom challenges.

Interpretation: There was no significant difference, $t(98) = 0.921$, $p > 0.05$. Both groups expressed similar levels of preparedness for managing classroom realities, suggesting consistency in this aspect across programs.

13. You have a clear idea about the possible career opportunities after completing this course.

Interpretation: A highly significant difference was found, $t(98) = 6.188$, $p < 0.05$. Group A reported significantly greater clarity regarding career prospects post-completion, suggesting more effective guidance or orientation related to professional pathways.

14. You have clarity about the available options in higher education, after completion of the course.

Interpretation: The result was not statistically significant, $t(98) = 0.795$, $p > 0.05$. Students from both groups were similarly aware of higher education opportunities available upon course completion.

15. Your curriculum is aligned with the vision of NEP-2020.

Interpretation: The test revealed a significant difference, $t(98) = -4.983$, $p < 0.05$. Group B perceived a stronger alignment of their curriculum with the National Education Policy (NEP) 2020 guidelines, implying greater policy relevance in their academic framework.

16. This program enables you to prepare for competitive examinations in the teaching field.

Interpretation: There was no significant difference, $t(98) = 1.625$, $p > 0.05$. Both groups viewed their curriculum as similarly effective in preparing them for competitive exams related to the teaching profession.

17. This course is helpful in your personal and professional development.

Interpretation: The difference between groups was not significant, $t(98) = -1.622$, $p > 0.05$. The course was equally perceived as beneficial for personal and professional growth by students from both groups.

18. Based on what you have learned so far, you feel confident in handling real classroom situations.

Interpretation: No significant difference was observed, $t(98) = -1.085$, $p > 0.05$. This implies both groups felt similarly confident in their ability to manage classroom dynamics effectively.

19. You find your enrolled course useful for your teaching as well as your academic future.

Interpretation: A significant difference was noted, $t(98) = 2.558$, $p < 0.05$. Group A reported higher usefulness of the course in terms of preparing them for both academic and teaching careers, highlighting a stronger perceived value in their training program.

20. You feel that your current course prepares you for teaching as well as other competitive exams.

Interpretation: The result was not statistically significant, $t(98) = -1.334$, $p > 0.05$. Both groups found their course similarly helpful in preparing for both teaching roles and competitive examinations.

21. You are satisfied with the structure of your course.

Interpretation: No significant difference was observed, $t(91.11) = -1.543$, $p > 0.05$. This indicates comparable levels of satisfaction with the course structure among students from both groups.

Summary of Findings

The independent samples t-test revealed that 11 out of 21 items are significantly different from each other between the two groups, which means these items are rated higher by one of the two groups. Traditional Integrated B.A.B.Ed./B.Sc.B.Ed. student showed more satisfaction in terms of curriculum structure, ease of understanding, hands-on teaching opportunities, clarity about career opportunities, usefulness for teaching and academic future while ITEP course students showed higher agreement in aspects like integration of theoretical and practical aspects, relevance to modern educational practices, ICT integration, leadership development, integration of IKS and alignment with NEP-2020.

No significant differences were found in the remaining 10 items, suggesting areas of comparable educational experience across the two groups. These insights are crucial in

informing curriculum revisions, policy alignment, and institutional improvements to ensure equitable and effective teacher preparation programs.

CHAPTER V:
SUMMARY, FINDINGS AND SUGGESTIONS

5.1 Introduction

Teacher education is fundamental to building an effective and equitable school education system. The quality of teachers directly influences the quality of learning in schools, and this, in turn, is determined by the rigor and relevance of teacher education programs. In India, traditional four-year integrated programs like B.A.B.Ed./B.Sc.B.Ed. have long served this purpose, especially through institutions such as the Regional Institutes of Education (RIEs). However, with the introduction of the Integrated Teacher Education Programme (ITEP) under the National Education Policy (NEP) 2020, a shift has occurred toward a more integrated, multidisciplinary, and practice-oriented framework. This study examines student perceptions of these two co-existing models, aiming to provide evidence-based insights into their effectiveness and areas for improvement. The findings have relevance for policymakers, teacher educators, curriculum developers, and institutional administrators who are engaged in shaping future-ready teacher education systems.

5.2 Statement of the problem

A Comparative Study of ITEP and Traditional Integrated B.A.B.Ed./B.Sc.B.Ed. Programs: Student Perspectives.

5.3 Objectives of the study

1. To explore the perceptions of students enrolled in the traditional four-year integrated B.A. B.Ed. and B.Sc. B.Ed. programs regarding various aspects of their course curriculum.
2. To examine the perceptions of students enrolled in the Integrated Teacher Education Programme (ITEP) regarding various aspects of their course curriculum.
3. To compare the traditional B.A. B.Ed./B.Sc. B.Ed. and the ITEP course based on students' perceptions of various aspects of their course curriculum.

5.4 Research Questions

1. What are the perceptions of students enrolled in the traditional four-year integrated B.A. B.Ed. and B.Sc. B.Ed. programs regarding various aspects of their course curriculum?
2. What are the perceptions of students enrolled in the ITEP regarding various aspects of their course curriculum?

3. In what ways do the traditional B.A. B.Ed./B.Sc. B.Ed. programs and ITEP differ, as perceived by students?

5.5 Sample

The sample consisted of 100 student-teachers enrolled in either ITEP or traditional B.A.B.Ed./B.Sc.B.Ed. courses at the Regional Institute of Education (RIE), Bhopal. Participants were selected using simple random sampling.

5.7 Research tools used

A structured questionnaire based on a 5-point Likert scale was developed on Google Forms. It contained 21 items assessing student perceptions across various dimensions such as curriculum structure, ICT integration, Indian Knowledge Systems, leadership development, NEP alignment, and overall satisfaction. One open-ended question and one checkbox question was included to gather qualitative insights.

5.8 Research methodology

The study employed a descriptive survey method. Quantitative data were collected and analysed using descriptive statistics and independent samples t-tests to identify significant differences between the two groups. The analysis aimed to highlight areas of similarity and difference in students' perceptions of the curriculum.

5.9 Major findings of the study

21 items curriculum items were analysed using the student perception scale questionnaire out of which, 11 showed statistically significant differences.

- Traditional integrated program students rated higher in:
  - Curriculum structure
  - Hands-on teaching opportunities
  - Ease of understanding
  - Clarity about career options
  - Usefulness for teaching and academic careers
- ITEP students rated higher in:
  - Integration of theory and practice
  - Alignment with NEP-2020

- Use of ICT in teaching
- Development of leadership skills
- Integration of Indian Knowledge Systems (IKS)

- No significant difference was found in aspects like experiential learning, critical thinking, personal development, and exam readiness.

5.10 Educational implications

The findings carry significant implications for curriculum planners, teacher educators, and institutional administrators:

- ITEP's emphasis on modern teaching strategies, ICT integration, and leadership development presents a progressive model. However, it needs stronger implementation of hands-on teaching opportunities and clearer career guidance mechanisms.
- Teacher educators across both programs should receive ongoing training to bridge the gap between theory and practice, ensuring that student-teachers are confident and classroom-ready.
- Institutions should adopt a more structured approach to career counselling and exam preparation to support students in navigating diverse career pathways.
- Curriculum developers should prioritize interactive, reflective, and student-centred pedagogies, enhancing engagement and learning outcomes.

5.11 Suggestions for further study

To deepen the understanding of teacher education models and enhance their effectiveness, the following directions are suggested for future research:

- Longitudinal studies should be conducted to assess the sustained impact of ITEP and traditional programs on graduates' teaching effectiveness, adaptability, and career progression.
- Expanding the study to include a more diverse set of institutions across regions and program types which will provide a more generalizable perspective.
- A qualitative inquiry involving interviews or focus group discussions can enrich quantitative data, offering deeper insights into student experiences and program implementation.
- Further research may explore faculty perceptions, administrative challenges, and institutional readiness for delivering integrated teacher education programs.

- Comparative international studies could also be considered to benchmark Indian teacher education practices against global standards and innovations.

5.12 Conclusion

The study revealed both shared and distinctive features in student perceptions of ITEP and traditional integrated teacher education programs. While ITEP reflects innovative pedagogical features aligned with NEP 2020, traditional programs continue to offer strengths in clarity, structure, and academic preparedness. A balanced approach that synthesizes the best of both models can create a future-ready teacher education system. Continued feedback from student-teachers should guide future reforms to ensure that programs remain responsive to classroom realities and policy visions.

REFERENCES

- Mandal, R., & Mete, J. (2023). A comparative study of the three B.Ed. curricula: Emphasizing on the teacher education in post-independence era. *International Journal of Research - Granthaalayah, 11(8), 71–90.*
- Mandal, S. K. (2024). Four-year integrated teacher education programme: A policy perspective of India. *International Journal for Innovative Research in Multidisciplinary Field, 10(2), 1–7.*
- Sultana, S., & Pandey, P. (2024). Integrated B.Ed. programme implemented in teacher education in respect to NEP-2020. *International Journal of Scientific Research in Science and Technology, 11(4), Article 1135.*
- Suresh, K., Balamurugan, R., & Lavanya, M. (2025). ITEP: An idiosyncratic programme for generating teachers with 21st century skills. *International Research Journal of Multidisciplinary Scope, 6(1), 790–802.*
- Gupta, P. (2021). Perception of prospective teachers towards four-year integrated teacher education programme. *Voices of Teachers and Teacher Educators, 10(1), 168–176.*
- Jabbar, S. A., & Barkati, M. G. (2024). The Integrated Teacher Education Program (ITEP): Shaping the future of education. *International Journal of Research in Educational Sciences, 7(4), Article 10.*
- Kaur, Nitu. (2019). Integrated Teacher Education Programme: An analysis through Comparative Perspective. *Mizoram Education Journal, Vol. VII.*
- Menaga Sri, P.et al. (2023) Four-Year Integrated Teacher Education Programme (ITEP): A Holistic Approach To Teacher Training. Implementation of NEP 2020: *Challenges and Opportunities in Teacher Education.*

APPENDIX

Students Perception Scale

INSTRUCTIONS:

Dear Participant,

You are kindly requested to fill out this perception scale. Your honest responses will help us to understand students' perceptions about teacher education programs. The information provided by you will be used for research purposes only and kept confidential. Thank you for your time and support.

Please read each statement carefully and respond by selecting the option that best represents your opinion. Answer all sections to the best of your ability.

Name: _____

Gender: _____

Social category:

General	OBC	SC	ST	EWS	Other:___

Father's Qualification:

Illiterate	8th class	10th class	12th class	Graduation	Post Graduation	Other:__

Mother's Qualification:

Illiterate	8th class	10th class	12th class	Graduation	Post Graduation	Other:__

Parent's income:

0-10 thousand per month	10-20 thousand per month	20-30 thousand per month	30-40 thousand per month	40-50 thousand per month	Above 50 thousand per month

The program you are enrolled in:

Traditional B.A.B.Ed. /B.Sc.B.Ed.	ITEP B.A.B.Ed. / B.Sc. B.Ed.

In which year are you studying at present:

1st	2nd	3rd	4th

Sr. No.	Questions	Responses				
1	The curriculum is well structured.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
2	The curriculum is easy to understand.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
3	The course clearly covers theoretical and practical aspects.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
4	The curriculum content is relevant to modern educational practices.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
5	The curriculum encourages you to actively participate and share ideas in the classroom.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
6	The curriculum promotes critical thinking and problem-solving skills.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
7	Ample opportunities have been provided to use hands-on teaching practices effectively.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
8	The curriculum provides ample opportunities to integrate ICT into the teaching-learning process.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree

9	Your course develops leadership skills within you.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
10	Your curriculum meaningfully integrates the Indian Knowledge System (IKS).	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
11	Your curriculum incorporates experiential learning into classroom teaching.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
12	This course prepares you to face real classroom challenges -	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
13	You have a clear idea about the possible career opportunities after completing this course.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
14	You have clarity about the available options in higher education, after completion of the course.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
15	Your curriculum is aligned with the vision of NEP-2020.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
16	This program enables you to prepare for competitive examinations in the teaching field.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
17	This course is helpful in your personal and professional development.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree

18	Based on what you have learned so far, you feel confident in handling real classroom situations.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
19	You find your enrolled course useful for your teaching as well as your academic future.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
20	You feel that your current course prepares you for teaching as well as other competitive exams.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
21	You are satisfied with the structure of your course.	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
22	Keeping in mind, the structure of the course, which of the following courses do you think will be more useful in providing teaching as well as academic opportunities?	B.Sc. B.Ed. Traditional				
		B.A. B.Ed. Traditional				
		B.Sc. B.Ed. ITEP				
		B.A. B.Ed. ITEP				
		B. Sc. Three Years and Two Years B.Ed.				
		B. A. Three Years and Two Years B.Ed.				
23	In your opinion what are the contrasting features that differentiates ITEP from traditional integrated B.A. B.Ed. and B.Sc. B.Ed. batches. (open-ended question)					