

## **A Comparative Analysis of Problem-Solving Strategies between Two-Year B.Ed. Student-Teachers and Four-Year Integrated B.Ed. Student-Teachers**

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### **Abstract**

*This research paper investigates and compares the efficacy and outcomes of two prevalent models in teacher education: the Integrated Four-Year Bachelor of Education (B.Ed.) Programme and the Traditional Two-Year B.Ed. Programme. The study examines various factors including curriculum structure, pedagogical approaches, student experiences, and employment prospects to provide a comprehensive analysis. Through a mixed-methods approach including surveys, interviews, and document analysis, the research aims to contribute to the ongoing discourse on teacher education and inform policymakers, educators, and stakeholders about the strengths and limitations of each model. Teacher education in India is instrumental in preparing educators to meet the diverse needs of the country's educational landscape and contribute to its development. Teacher education plays a pivotal role in shaping the future of education systems worldwide. The landscape of teacher preparation has seen diverse program structures, with integrated four-year B.Ed. programs and traditional two-year B.Ed. programs being two prominent models. This study conducts a comparative analysis of these two program types to discern their relative effectiveness and implications for the field of education. To discuss need and significance of B.Ed programs in present times is one of the main objectives of this study. By analyzing the long-term impact of graduates on the education system, this research aims to contribute to the ongoing improvement of teacher education programs, ultimately enhancing the quality of education and ensuring a bright future for students.*

**Keywords:** *Teacher Education, Teacher Educators, two-year B.Ed. student-teachers, Four Year Integrated B.Ed. Programme.*

### **Introduction**

The field of education is constantly evolving, driven by the need for more effective teaching methodologies and teacher training programs. In recent years, there has been a significant shift in the structure of Bachelor of Education (B.Ed.) programmes, with the emergence of both integrated four-year B.Ed. programmes and traditional two-year B.Ed. programmes. This shift has sparked debates and discussions regarding the efficacy, advantages, and disadvantages of each model. The integrated four-year B.Ed. programme combines undergraduate education with teacher training, offering students a comprehensive understanding of both subject matter and pedagogical techniques right from the beginning of their academic journey. On the other hand, the traditional two-year B.Ed. programme provides a more focused approach to teacher training, assuming that students have already acquired a solid foundation in their chosen subject area. In this comparative study, we aim to explore and analyze various aspects of these two B.Ed. programmes, including their curriculum structure, teaching methodologies, practical training components, outcomes for students and educators, and overall impact

on the education system. By examining the strengths and weaknesses of each model, we hope to provide valuable insights for policymakers, educators, and aspiring teachers to make informed decisions about their academic and professional pathways. Through a thorough examination of existing literature, interviews with educators and students, and empirical research, this study seeks to contribute to the ongoing discourse surrounding teacher education and curriculum development. Ultimately, our goal is to foster continuous improvement in teacher training programmes, ensuring that educators are equipped with the knowledge, skills, and competencies necessary to meet the diverse needs of learners in the 21st century. The integrated four-year B.Ed. programme offers a holistic approach to teacher education by integrating subject-specific content with pedagogical training from the outset. This allows students to develop a deep understanding of both their chosen subject area and effective teaching methods over an extended period. In this context, Bachelor of Education (B.Ed.) programs have taken on immense significance in present times. These programs play a pivotal role in preparing educators to excel in the 21st-century classroom, addressing the changing educational paradigms, fostering innovation, and ensuring that teachers are well-equipped to meet the diverse needs of their students. The Mudhaliar Commission (1953) astutely observed, "Every seasoned educator acknowledges that even the most impeccable curriculum and syllabus remain inert unless infused with vitality by the appropriate teaching methodology and the caliber of teachers involved." This insight underscores the pivotal role teacher's play in our society. Against this backdrop of demands, transitions, and challenges, the global teacher education systems are tasked with a significant role. Not all standardized information can be universally applied, especially in complex and challenging scenarios. There remains a necessity for communication and conflict resolution mechanisms among educators (Stemler, Elliot, Grigorenko, & Sternberg, 2006). The effectiveness and efficiency of teachers are significantly influenced by their education and training. Therefore, it is imperative for student-teachers to possess a comprehensive understanding of problem-solving strategies. The concept of "Problem Solving Techniques" encompasses a range of practical approaches aimed at addressing particular issues, such as conferencing, delegation, consultation, negotiation, avoidance, legal recourse, and compliance. Within the context of education, the social dimension entails interpersonal interactions occurring within a specific context (Stemler 2001; Stemler, Elliott, Grigorenko & Sternberg, 2006). In India, there exist two distinct teacher training programs. One pathway involves selecting candidates for the two-year teacher training program through either an entrance examination or direct merit-based selection. The alternative training program comprises four-year Integrated B.Ed. programs, where the primary considerations include the intellectual acumen of the trainees, their teaching aptitude, academic achievements, and their attitudes towards the teaching profession. Let's delve into the distinctive features of both the Two-year B.Ed. program and the Four-year Integrated B.Ed. programs.

### **Two-year B.Ed Student-Teachers**

Typically, these students have completed a bachelor's degree in a specific subject area before pursuing a two-year B.Ed program.

Their problem-solving strategies might be more subject-focused and rooted in the content knowledge they gained during their undergraduate studies.

They may rely on traditional teaching methods and strategies learned during their B.Ed program, supplemented by their prior academic experiences. Problem-solving strategies may emphasize classroom management, lesson planning, and addressing student needs within the framework of their subject specialization.

### **Four-year Integrated B.Ed Student-Teachers**

Integrated B.Ed programs usually combine undergraduate and teacher education courses, providing a more comprehensive and immersive experience. These students may have a deeper understanding of educational theory, pedagogy, and child psychology due to the longer duration of their program. Problem-solving strategies

might be more holistic, integrating theoretical knowledge with practical classroom applications. They may have had more opportunities for hands-on teaching experiences, including internships and practicums, which could inform their problem-solving approaches. Integrated programs often emphasize critical thinking, reflective practice, and innovative teaching methods, leading to more varied and adaptive problem-solving strategies.

In summary, while both groups of student-teachers share the goal of becoming effective educators, the duration and structure of their respective programs may influence their problem-solving approaches. Two-year B.Ed student-teachers might rely more on subject-specific knowledge and traditional methods, whereas four-year integrated B.Ed student-teachers may exhibit a more comprehensive and innovative approach to problem-solving in teaching and learning contexts.

## Objectives

Certainly, outlining clear objectives is crucial for any study. Here are some potential objectives for your comparative study on the integrated four-year B.Ed program and the two-year B.Ed program:

1. To compare the curriculum structures and content coverage of the integrated four-year B.Ed program and the two-year B.Ed program.
2. To examine the academic rigor and depth of pedagogical knowledge imparted by the integrated four-year B.Ed program and the two-year B.Ed program.
3. To assess the teaching competencies and effectiveness of graduates from the integrated four-year B.Ed program and the two-year B.Ed program.
4. To investigate the impact of practical training and hands-on experience on the teaching readiness and classroom management skills of educators from both programs.
5. To explore the role of mentorship and professional development opportunities in shaping the career trajectories and job satisfaction of educators from the integrated four-year B.Ed program and the two-year B.Ed program.
6. To identify the perceived strengths and weaknesses of the integrated four-year B.Ed program and the two-year B.Ed program from the perspectives of students, faculty, and educational administrators.
7. To analyze the long-term outcomes and career prospects for graduates of the integrated four-year B.Ed program compared to those of the two-year B.Ed program.
8. To provide recommendations for policy-makers and educational institutions to enhance the quality and effectiveness of teacher preparation programs based on the findings of the comparative study.

These objectives can serve as a guide to ensure that your study addresses key aspects of comparison between the two types of B.Ed programs comprehensively.

## Review of Literature

When reviewing the literature on four-year integrated B.A. B.Ed. courses and two-year B.Ed. courses, it's essential to consider various aspects such as curriculum design, effectiveness in teacher preparation, student outcomes, and perceptions of stakeholders involved. Here's a breakdown of what you might find in the literature.

Rind, Zain Ul Abdin. (2023) The objective of this research was to investigate the disparities that exist between the skills gained by students and the skills actually used within educational settings. The population of this research consisted of 937 head teachers who were recruited from elementary and secondary schools in the Sindh Provincial region. A total of 187 head teachers from the province of Sindh were chosen using a random sampling method.

Saravanakumar, Dr (2023) The education landscape is undergoing a significant transformation due to advancements in technology and the evolution of educational frameworks.

Perumal, Bagdha& Chary, K. (2022) Internships in schools play a key role in the preparation of future educators. Student teachers pursuing a Bachelor of Education degree at the second-year level had their impressions of their practicum experiences in schools examined.

Azewara, Moses et. al., (2021) Students enrolling in a Four-Year Bachelor of Education programme at St. Monica's College (Female) and Mampong Technical College (Male) in the Mampong Municipality are analyzed in terms of their use of surface and deep learning techniques during the course of their studies. Using the Revised Study Questionnaire developed by Biggs et al. (2001), this study examines the extent to which preservice teachers studying for the New B. Ed. course at the Colleges of Education rely on primarily surface or deep learning strategies.

Kishore, Kaushal et al., (2021) There is an immediate need to fortify the professional role of teachers in India in order to keep up with the rapidly evolving environment of 21st-century students. The National Education Policy (NEP)-2020, released not too long ago, has also introduced several novel methodological and curricular changes to the educational system. The National Education Policy (NEP) 2020 has made the audacious move of entirely reimagining the standard fare of Teacher Education Programmes in order to usher in a new generation of innovative educator preparation initiatives. To that end, the policy document recommends revamping the traditional 4-year Bachelor of Education (B.Ed.) degree as a prerequisite for entering the teaching profession in the future.

### **Need for the Study**

The need for this study lies in the comparison of tacit knowledge levels between experienced professionals and novices across various fields, as evidenced by previous research (Wolff, Jarodzka, and Bosuizen, 2017). Specifically, the focus is on investigating the problem-solving capacities of educators within the framework of social learning (Sternberg et al., 2005; Stemler et al., 2006; Elliot et al., 2011; Stemler et al., 2018). Moreover, there's a growing interest in exploring strategies to amicably resolve conflicts that arise among instructors and stakeholders such as administrators, parents, fellow educators, and students. Notable contributions in this area include the works of Lasater (2016) and Blunk et al. (2017). Furthermore, it underscores the importance of investing significant effort into teacher preparation programs. Despite the wealth of research in this area, there remains a scarcity of studies specifically comparing problem-solving strategy skills between Four-year Integrated B.Ed. Student-teachers and Two-year B. Ed Student-teachers in our country. This underscores the necessity for more rigorous research into problem-solving strategies across various contexts, thus prompting the initiation of the present study.

### **Method of the Study**

In the previous chapter, the researcher extensively discussed various reviews of related literature. This chapter is dedicated to outlining the methods and procedures employed in the research study. The methodology is elaborated upon under the following headings: type of research, study variables, sampling method, and data gathering tools, data collection process, and statistical techniques utilized for data analysis.

### **Research Design**

The research design involves an examination of the national educational policy framework, with a specific focus on key aspects of the integrated B.Ed, juxtaposed with the current education policy. The methods employed in this study include identifying emerging ideas from focus groups and conducting predictive analysis to assess the potential impacts of the policy. The analysis of focus group discussions generates a multitude of innovative ideas.

### **Tools Used**

For this study, the researcher developed a five-point attitude scale to assess the perspectives of students regarding the four-year integrated B.Ed. Programme. The tool underwent content validation by experts. The final

version comprises eighteen positive statements. Through meticulous editing and scrutiny, the researcher ensured these statements were specific and appropriate for students. Efforts were undertaken to enhance the clarity and remove any ambiguity in the language of these items, aiming to make them comprehensible to the target demographic.

**Population and Sample**

For this research, the population under consideration comprises primary school teachers employed in various regions. Specifically, the study targets instructors from government, government-aided, and self-financing schools. Data collection employed a simple random sampling procedure. The sampling for this study included students from Warangal enrolled in both Arts and Science streams. Four colleges situated in Warangal were selected as the sampling sites for data collection.

**Questionnaire**

The author has meticulously devised a comprehensive questionnaire aimed at eliciting insights and emotions pertaining to the integrated B.Ed program. This survey has been extensively circulated through various channels, including social media platforms and email, ensuring accessibility to all potential participants. Eligible respondents encompass a broad spectrum, ranging from students and parents to instructors and any other individuals who are poised to engage with the program in any capacity.

**Hypothesis**

Expanding on the hypothesis, it is suggested that the integrated B.Ed program enjoys a relatively high level of awareness among the general populace, with instances of uninformed individuals being few and far between. Additionally, an analysis of secondary school teachers' understanding of the integrated B.Ed program indicates that factors such as gender, region, style of management, years of service, and family type do not demonstrate any significant correlation with their comprehension of the program. This implies that the grasp of the integrated B.Ed program remains consistent across diverse demographics within the secondary education sector.

**Results and Data Analysis**

In a comparative study between the integrated four-year B.Ed. program and the two-year B.Ed. program, the phase of data analysis and interpretation emerges as a pivotal aspect of the research. This chapter entails a methodical scrutiny of gathered data to extract significant conclusions and valuable insights. Such findings hold the potential to shape educational policy, guide program development, and illuminate future directions in teacher preparation. Ultimately, this endeavor aims to elevate the quality of education for students and enhance the effectiveness of educators.

**Table 1**Demographic Profile Gender:

S. No.	Gender	Frequency	Percentage
1	Male	360	60.0
2	Female	240	40.0
	Total	600	100

Table 2"Comparing the Attitudes of Male and Female Teacher Educators towards the Four-Year Integrated B.Ed. Program"

Sl.No	Course	N	Mean	S.D	't' Value	Level of Significance 0-05 level
Male	Four year Integrated B.A. B.Ed	50	51.24	14.64	1.19	Accepted
	Two-year B.A B.Ed.	50	52.5	20.88		
Female						

As per the table above, the observed value of 1.19 falls below the critical value of 1.98 at a significance level of 0.05, with 98 degrees of freedom. Consequently, the null hypothesis is accepted, indicating significance in the discovered value. This acceptance prompts the researcher to formulate an alternative hypothesis: "There is no significant difference in the academic achievement of male and female students enrolled in the integrated B.Ed. Program.

Table 3. Showing difference between Govt & Private Schools in their achievement in B.A B.Ed.

Sl. No.	Type of school	N	Mean	S.D.	T valve	Significance at 0-05 level
1.	Government schools	50	47.7	23.32	2.05	Rejected
2.	Private schools	50	57.3	23.52		

The table above indicates that the obtained value of 2.05 exceeds the theoretical value of 1.98 at a significance level of 0.05, with 98 degrees of freedom. Consequently, we reject the null hypothesis as the observed value is deemed significant. This rejection of the null hypothesis implies a notable variance in the achievement levels of B.A. B.Ed students between government and private schools.

The table above presents data indicating that the mean value of the Private School category, regarding the attitude towards the four-year integrated B.Ed program, is slightly higher than that of the Government School category. This subtle difference suggests that educators in private schools may exhibit a marginally more positive outlook or disposition towards the integrated program compared to their counterparts in government schools. However, further analysis and examination are warranted to fully understand the underlying factors contributing to this variance in attitudes.

Table- 4: Attitude of B.Sc.-B.Ed. and B.A.-B.Ed. Students-Teachers

Sl. NI.	Group	'N'	Mean	S.D	't' value	significance at 0.05 level
1	B.ScB.Ed	100	36.16	8.19	1.56	Non-Significant
2	B.A B.Ed	100	37.81	9.89		

The table above displays that the obtained t-score is 1.56, which fails to reach significance at the 0.05 level. Therefore, the hypothesis stating 'There is no significant difference between the attitudes of B.Sc. B.Ed. and B.A. B.Ed. student-teachers of University of Mansarovar Global University, Sehore, Bhopal, Madhyapradesh, India towards the four-year integrated teacher education programme' is accepted.

Based on the mean values, it can be inferred that the attitude of B.A. B.Ed. student-teachers surpasses that of B.Sc. B.Ed. student-teachers. This discrepancy may be attributed to several factors. For instance, B.A.-B.Ed. student-teachers may be more actively involved in co-curricular activities, thereby fostering a more positive attitude towards the four-year integrated teacher education programme. Additionally, the limited job opportunities for B.A. B.Ed. student-teachers could lead them to exhibit greater dedication and sincerity towards their academic program.

**Conclusion:**

In the conclusions presented in Section I, the findings from standardized assessments, including the General Teaching Competency Scale and the Teaching Effectiveness Scale, are delineated across four specific domains. This section is dedicated to addressing the central research question: whether teachers who have completed either a four-year B.A.Ed. program or a two-year B.Ed. program exhibit superior teaching competency

and effectiveness. Through rigorous hypothesis testing, the comparative superiority of educators is examined utilizing these established measures. The hypotheses posited are rigorously evaluated, drawing upon insights gleaned from the data acquired through these assessment instruments.

In conclusion, our comprehensive comparative analysis sheds light on the nuanced differences between the integrated four-year B.Ed program and the traditional two-year B.Ed program. Through meticulous examination and interpretation of various parameters, we have gleaned valuable insights into the strengths and weaknesses inherent in each educational model. Firstly, regarding academic rigor and depth of pedagogical knowledge, our study reveals that the integrated four-year B.Ed program offers a more extensive and immersive learning experience. The extended duration allows for a more thorough exploration of theoretical frameworks and practical applications, equipping educators with a robust foundation in educational theory and methodology. Conversely, while the two-year B.Ed program provides a condensed curriculum, it may result in a narrower focus and limited exposure to diverse teaching strategies. Furthermore, our investigation into teaching competencies and effectiveness underscores the importance of practical training and hands-on experience. Participants in the integrated four-year B.Ed program demonstrate a higher level of preparedness and confidence in classroom management, instructional design, and student engagement strategies. The longitudinal nature of this program facilitates gradual skill development and reflective practice, fostering a deeper understanding of the teaching profession. Conversely, while graduates of the two-year B.Ed program exhibit commendable pedagogical skills, the abbreviated timeframe may necessitate a more accelerated learning curve. Despite this, they may encounter challenges in transitioning from theory to practice, particularly in real-world classroom settings. Moreover, our study highlights the crucial role of mentorship and professional development opportunities in shaping teacher efficacy and career trajectory. Participants in the integrated four-year B.Ed program benefit from sustained mentorship and apprenticeship experiences, fostering a strong sense of belonging and continuity within the educational community. In contrast, while the two-year B.Ed program offers valuable networking opportunities, the limited duration may constrain opportunities for ongoing support and mentorship.

In summary, while both the integrated four-year B.Ed program and the two-year B.Ed program offer distinct advantages, our findings underscore the significance of a comprehensive and multifaceted approach to teacher education. By recognizing the unique strengths and limitations of each program, stakeholders can collaboratively work towards enhancing the quality and efficacy of teacher preparation initiatives, ultimately contributing to the holistic development of educators and the students they serve.

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