Original Research Article

Perceptions of B.Ed students on the topic of understanding the disciplines and academic subjects available in Teacher Education Programs

Abstract: A comprehensive understanding of various disciplines and school subjects is essential to the educational journey, particularly for students pursuing a Bachelor of Education (B.Ed) degree to become teachers. It is essential to acknowledge that the perspectives of B.Ed students regarding their comprehension of disciplines and school subjects can exhibit significant variation, influenced by their unique experiences and educational philosophies. These perceptions may also change as educators accumulate teaching experience and actively participate in professional development opportunities. The primary objective of teacher education programs, such as the Bachelor of Education (B.Ed.), is to cultivate a profound and significant comprehension of various disciplines and academic subjects. Research objectives:To understand B.Ed students' perception of the subject 'Understanding Disciplines and School Subjects'. Population of the Study: All B.Ed. students of Tamil Nadu Teachers Education University studying in the Cuddalore district of Tamilnadu during the year 2023 constituted the study population. Thirty colleges are offering B.Ed programmes in the Cuddalore district of Tamilnadu—about three thousand students studying in these colleges.Sample of the Study: The investigators selected five hundred and twenty-three B.Ed. students of Tamil Nadu Teachers Education University studying in the Cuddalore district of Tamilnadu during the year 2023 were selected randomly as the study sample. Sampling technique: Cluster Sampling was used for this study. Five of thirty colleges were randomly selected for the investigation. Hypothesis of the Study: Null Hypothesis: There is no significant difference in the perceptions of B.Ed. students regarding the importance of learning the subject 'Understanding Disciplines and School Subjects'. Research Design: This is a quantitative type of study and uses a survey method to collect data. Tools for Data Collection: The questionnaire was used to collect data for this study. Findings: Most students indicated B.Ed students need 'Understanding Disciplines and School Subjects.' The 'life-oriented curriculum' was 'Neither Difficult nor Easy' for most students. Most students found 'Disciplines and Subjects in Sociocultural Perspectives' difficult. 'Discipline and Subject in Sociocultural Perspectives' challenged most pupils. Many students loved the unit's 'life-oriented curriculum'. Most students found discipline introduction, classification, and

cross-disciplinary education 'Easy'. Many students found the sub-'life-oriented curriculum" simple.

Keywords: Disciplines and school subjects, perspectives, professional development and comprehension

1. Introduction

A comprehensive understanding of various disciplines and school subjects is essential to the educational journey, particularly for students pursuing a Bachelor of Education (B.Ed) degree to become teachers. Bachelor of Education (B.Ed) students frequently hold varying perspectives on this subject, shaped by their experiences, educational history, and pedagogical preparation. Here are several prevalent perceptions and views that Bachelor of Education (B.Ed) students may hold regarding the topic of comprehending disciplines and school subjects:

The significance of adopting an interdisciplinary approach:

Numerous Bachelor of Education (B.Ed) students believe incorporating a multidisciplinary approach into teaching is paramount. They assert that comprehending the interrelationships among various disciplines can enhance student engagement and relevance in learning.

Pedagogy is a significant aspect of teaching school subjects, as highlighted by B.Ed students. They emphasise the importance of employing effective pedagogical strategies in their teaching practices. They may prioritise the significance of using innovative teaching methods and techniques to enhance the accessibility of intricate concepts for students.

The viewpoint expressed by Bachelor of Education (B.Ed) students is that educators should modify their instructional approaches to correspond with the distinct demands of the discipline or subject being taught. Effective learning can be facilitated by various techniques tailored to the subject matter.

The integration of real-life applications is advocated by certain B.Ed students to enhance the curriculum. It is believed that this approach aids students in comprehending the practical significance of their learning.

Addressing Student Interests: Bachelor of Education (B.Ed) students frequently acknowledge the significance of identifying and accommodating students' interests when instructing various subjects. Personalised instruction can potentially enhance students' engagement and motivation significantly.

Promoting Critical Thinking: Bachelor of Education students may argue that developing critical thinking abilities should be a fundamental objective in instructing diverse subjects. Students should be actively encouraged to question, analyse, and evaluate information independently.

B.Ed students in various educational environments may emphasise acknowledging and valuing cultural diversity in the classroom. This viewpoint is believed to enhance the educational process and foster a sense of inclusiveness.

Evolving Curriculum: Certain Bachelor of Education (B.Ed) students may articulate the necessity for a curriculum adaptable to societal and technological advancements. They assert that maintaining currency and relevance is imperative in the constantly evolving educational environment.

The issue of balancing depth and breadth is a common challenge faced by B.Ed students. They often find it difficult to strike a harmonious equilibrium between imparting a comprehensive understanding of a particular subject and fostering a broader knowledge across multiple disciplines. The individuals may engage in a discussion regarding strategies to achieve this balance effectively.

The advantages of fostering collaboration among teachers from various disciplines can be emphasised by B.Ed students. The individual holds the belief that the act of sharing ideas and resources has the potential to foster a more comprehensive and cohesive approach to teaching.

It is essential to acknowledge that the perspectives of B.Ed students regarding their comprehension of disciplines and school subjects can exhibit significant variation, influenced by their unique experiences and educational philosophies. These perceptions may also change as educators accumulate teaching experience and actively participate in professional development opportunities. The primary objective of teacher education programs, such as the Bachelor of Education (B.Ed.), is to cultivate a profound and significant comprehension of various disciplines and academic subjects.

2. Research Significance

Researching the perspectives of B.Ed (Bachelor of Education) students regarding the comprehension of disciplines and school subjects is of considerable research significance for several reasons:

Preparation and Development: Bachelor of Education programs equip aspiring educators with the necessary skills and knowledge. Gaining insight into individuals' viewpoints regarding the instruction of different subjects can contribute to developing teacher training programs. The above point ensures that educators receive comprehensive preparation, encompassing the necessary knowledge and pedagogical abilities to teach various subjects proficiently.

Curriculum Design: The input of B.Ed students is valuable in shaping curriculum design at both the pre-service and in-service levels. Understanding the perspectives of these students regarding the significance of interdisciplinary approaches, pedagogy, and subject integration can provide valuable guidance for curriculum developers in designing instructional materials that are more relevant and effective.

Teaching Strategies: The perceptions of B.Ed students can provide valuable insights into the teaching strategies they perceive as most effective for various disciplines. This research has the potential to identify novel and student-focused methodologies that can be integrated into teaching practices to improve student learning outcomes.

Enhancing Student Engagement: Bachelor of Education (B.Ed) students frequently possess novel insights into effectively fostering student involvement within the educational journey. Gaining insights into individuals' perspectives on enhancing the interest and relevance of school subjects can offer valuable information on strategies to improve student engagement and motivation.

Examining B.Ed students' perspectives on comprehending disciplines and school subjects can shed light on their recognition of inclusivity and diversity within education. This research has the potential to provide valuable insights for developing strategies to foster culturally responsive and inclusive learning environments.

Interdisciplinary Education: The significance of multidisciplinary education is increasingly acknowledged as education evolves. The perspectives of Bachelor of Education (B.Ed) students regarding this matter can provide valuable insights for discussions regarding the advantages and obstacles associated with integrating interdisciplinary approaches into the curriculum.

In essence, it is essential to investigate the perspectives of B.Ed students regarding their comprehension of disciplines and school subjects. This research can provide valuable insights for teacher education, curriculum development, and the formulation of educational policies.

3. Review of Related Literature

The Investigators reviewedfour studies related to the following topics

i. Research related to different subjects in B.Ed.
ii. Research related to ‘understanding disciplines and school subjects’in B.Ed.

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Fatima, Naaz (2015) B.Ed. geography achievement and subject enrichment through interactive learning are assessed. The goal was to compare B.Ed. trainees' mean content exam scores between experimental and control groups and men and women. The study used a "two-group post-test design. Purposeful sampling. 70 of 130 B.Ed. Geography students were tested. The experimental group was treated to learn and enrich information, while the control group was taught. This study found that interactive learning improved B.Ed. topic knowledge and achievement.

ii. Research related to ‘understanding disciplines and school subjects’ in B.Ed.

Register cartography, and Giovanni Parodi's Registerial profiles of school topics and university specialties were studied by Matthiessen (2021). School and university enrollments are covered. Giovanni Parodi's university discipline registerial profiles and systematic functional school topic profiles complement. These pioneering contributions the comprehensive approach so future study might fill gaps as personal registerial repertoires grow. They compared register and 'genre' approaches to situational language functional variation for conceptual clarity.

Subject Disciplines and the Construction of Teachers' Identities, edited by Thompson (2023). This chapter analyses how topic disciplinary identification changes teachers' identities. The chapter opens with the premise that teachers must teach their well-studied subjects morally and methodically. Teachers must understand subject principles and evidence regardless of speciality. This chapter posits that conceptual understanding of teaching a topic in specific settings influences instructors' sociocultural identities. Beginning English teachers show how subject disciplines, school subjects, and teacher identities are challenged throughout the chapter.

Hudson et al. (2023) examined 'Trajectories of powerful knowledge and epistemic quality: assessing the transitions from disciplines throughout school subjects'. A comparative topic didactics research paradigm is used to assess academic discipline changes across school topics. The theoretical framework describes classroom-to-society transfer as 'powerful knowledge', 'transformation', and 'epistemic quality'. The approach analyses empirical studies on KOSS network knowledge and quality across school disciplines and teacher education.Footnote1 After defining *powerful knowledge* as specialized creation and transfer of information, the study studies discipline transitions across school topics. Frontier empirical study data is analysed using broad subject groups. Biglan categorization is used to compare higher education subjects to their equivalents. We conclude with curriculum planning, teacher education policies, and subject-specific educational material comprehension.

4. Identifying the Research Gap and Rationale of the Study

Investigators examined literature by Matthiessen (2021), Thompson (2023), Hudson, Gerickeb, Schellerc, & Political (2023) related to Understanding Disciplines and School Subjects to understand their unique challenges and requirements. Although studies are conducted at the B.Ed level, no studies are related to 'Understanding Disciplines and School Subjects'. Therefore, it is imperative to study the perceptions of B.Ed students in the issue 'Understanding Disciplines and School Subjects'.

5. Research Purpose

The research aims to investigate the perspectives of B.Ed (Bachelor of Education) students regarding the comprehension of disciplines and school subjects. This study is characterized by its multifaceted nature and encompasses various essential objectives:

Notification for Teacher Preparation Programs: We would like to inform you about a study aimed at gaining insights into the perceptions of B.Ed students regarding the significance of comprehending disciplines and school subjects as an integral component of their training. This data can be utilized to improve teacher preparation programs, guaranteeing that they sufficiently equip prospective educators with the knowledge and skills to instruct various subjects proficiently.

Title: Exploring B.Ed Students' Perspectives on the Relevance and Integration of Subjects in Curriculum Development Objective: The study aims to obtain a comprehensive understanding of the perspectives held by B.Ed students regarding the importance and integration of various subjects within the curriculum. This knowledge can offer valuable

guidance to curriculum developers in the development of instructional materials that are effective, engaging, and in line with the perspectives of future educators.

Objective: The objective of this study is to examine the teaching strategies that Bachelor of Education (B.Ed) students perceive as the most effective for different academic disciplines. This research holds the potential to generate valuable insights into innovative and student-centered approaches that can be seamlessly incorporated into teaching practices to enhance student learning outcomes.

Promoting Inclusivity and Diversity: This study aims to examine the awareness level among B.Ed students regarding inclusivity and diversity in education, as well as their perceptions of teachers' role in addressing these critical issues. This knowledge can provide valuable insights for developing strategies to foster culturally responsive and inclusive learning environments.

Supporting Interdisciplinary Education: This study aims to investigate the perspectives of Bachelor of Education (B.Ed) students regarding interdisciplinary education and its potential advantages and obstacles. The findings of this research have the potential to make valuable contributions to ongoing discussions regarding the significance of multidisciplinary approaches in equipping students with the necessary skills to navigate the intricacies of the contemporary world.

In essence, this research aims to investigate the perspectives of B.Ed students regarding their comprehension of disciplines and school subjects. The aim is to acquire significant insights that can contribute to teacher education, curriculum development, and educational policies. The objective is to enhance the quality of education by aligning teacher training and teaching practices with the perspectives of aspiring educators.

6. Research Problem and Objectives:

Research Problem: Perceptions of B.Ed students on the topic of understanding the disciplines and academic subjects available in Teacher Education Programs

Research Questions:

- What is the perception of B.Ed students regarding the subject ‘Understanding Disciplines and School Subjects’?

Research objectives:

- To understand B.Ed students' perception of the subject ‘Understanding Disciplines and School Subjects’.

7. Operationalization of Terms

Understanding Disciplines and School Subjects: Curriculum and Pedagogic Studies offered in B.Ed. Degree Programme in Tamil Nadu Teachers Education University.

Perceptions: Perception meansSubjective views, thoughts, and beliefs of B.Ed students regarding the subject‘Understanding Disciplines and School Subjects’ offered in the teacher education progrogramme.

8. Methodology of the Study

i. Population of the Study

All B.Ed. students of Tamil Nadu Teachers Education University studying in the Cuddalore district of Tamilnadu during the year 2023 constituted the study population. Thirty colleges are offering B.Ed programmes in the Cuddalore district of Tamilnadu—about three thousand students studying in these colleges.

ii. Sample of the Study

The investigators selected five hundred and twenty-three B.Ed. students of Tamil Nadu Teachers Education University studying in the Cuddalore district of Tamilnadu during the year 2023 were selected randomly as the study sample.

iii. Sampling technique

Cluster Sampling was used for this study. Five of thirty colleges were randomly selected for the investigation.

iv. Hypothesis of the Study

Null HypothesisH_0: There is no significant difference in the perceptions of B.Ed. students regarding the importance of learning the subject 'Understanding Disciplines and School Subjects'.

v. Research Design

The investigators adopted a quantitative type of study and used a survey method to collect data.

vi. Tools for Data Collectionana

The questionnaire was used to collect data for this study.

vii. Procedure for Data Collection

Investigators created a 'Understanding Disciplines and School Subjects' questionnaire. Validity and reliability were examined on the questionnaire. Three experts evaluate its validity. The questionnaire was changed after a pilot trial. Data was collected using the modified questionnaire.

9. Data Analysis

The collected data was analysed quantitatively using percentages and chi-square.

Section 1: Demographic Information

34.8% of students were twenty-one years old. 13% of students were twenty-two years old. 17.4% of students were twenty-one years old. 13% of students were twenty-one years old.4.3% of students were twenty-five years old. 13% of students were twenty-seven years old. 4.3% of students were thirty-three years old.2% of students were male and 91.3% of students were female.

Section 2: Questions Related to the Course 'Understanding Disciplines and School Subjects '

Question 1: It is important for B.Ed students to have a solid knowledge of '**Understanding Disciplines and School Subjects**' as a subject.

52.2% of the students strongly agreed with the statement, 'B.Ed students need to have a solid knowledge of '**UnderstandingDisciplines and School Subjects**' as a subject'.

47.8% of the students agreed with the statement 'B.Ed students need to have a solid knowledge of '**Understanding Disciplines and School Subjects**' as a subject'.

0% of the students neither agreed nor disagreed with the statement 'B.Ed students need to have a solid knowledge of '**Understanding Disciplines and School Subjects**' as a subject'.

0% of the students disagreed with the statement 'B.Ed students need to have a solid knowledge of '**Understanding Disciplines and School Subjects**' as a subject'.

0% of the students strongly disagreed with the statement 'B.Ed students need to have a solid knowledge of '**Understanding Disciplines and School Subjects**' as a subject'.

Table 1: Chi-square value to the question 'It is important for B.Ed students to have a solid knowledge of 'UnderstandingDisciplines and School Subjects'

Row	Category	Observed	Expected
1	Strongly Agree	273	104.6
2	Agree	250	104.6
3	Neither agree	0	104.6
4	disagree	0	104.6
5	Strongly disagree	0	104.6

$\chi^2(4,N=523)= 787.029$, $p = 0.0001$. The calculated two-tailed P value is below the threshold of 0.0001. According to conventional criteria, the difference can considered highly statistically significant. The maximum number is 273 for the criteria strongly agree. Therefore, most students strongly agreed with the statement, 'B.Ed students need to have a solid knowledge of '**Understanding Disciplines and School Subjects**' as a subject.'

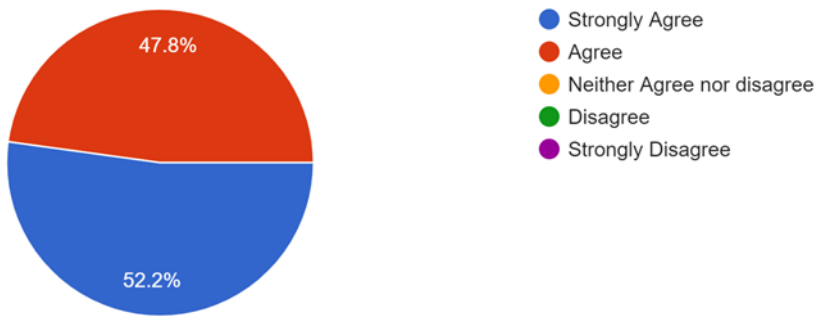

Figure 1: Question 1

Question 2: Which sub-unit of the subject 'Understanding Disciplines and School Subjects' do you find most challenging to comprehend?

Table 1 represents the percentage of answers to the question 'Which sub-unit of the subject 'Understanding Disciplines and School Subjects' do you find most challenging to comprehend?'

Table 2: Percentage of answers to the question 'Which sub-unit of the subject 'Understanding Disciplines and School Subjects' do you find most challenging to comprehend? '

Topic	Very Difficult	Difficult	Neither Difficulty nor Easy	Easy	Very Easy
'Introduction to Disciplines and School Subjects'	0%	21.73%	43.47%	26.08%	8.69%
'Disciplines and Subjects in Sociocultural Perspectives	8.69%	26.08%	39.13%	17.39%	8.69%
'Classification and Teaching Across Disciplines	4.34%	21.73%	39.13%	26.08%	8.69%

'Selection of Content for School Education	4.34%	17.39%	43.47%	17.39%	17.39%
'life-oriented curriculum'	0%	8.70%	**52.17%**	17.39%	21.74%
'Approaches to Curriculum Designing'	4.34%	21.73%	47.82%	13.04%	13.04%

From table 1 it is clear that for the sub unit 'life-oriented curriculum', the maximum percentage (52.17%) of students replied that it is 'Neither Difficulty nor Easy ' to comprehend.

Table 2 represents the number of students' answers to the question 'Which sub-unit of the subject 'Understanding Disciplines and School Subjects' do you find most challenging to comprehend? '

Table 3: Number of students' answers to the question 'Which sub-unit of the subject 'Understanding Disciplines and School Subjects' do you find most challenging to comprehend?'

Topic	Very Difficult	Difficult	Neither Difficulty nor Easy	Easy	Very Easy
1. 'Introduction to Disciplines and School Subjects'	0	114	227	136	45
2. 'Disciplines and Subjects in Sociocultural Perspectives	45	136	205	91	45
3. 'Classification and Teaching Across Disciplines	23	114	205	136	45
4. 'Selection of Content for School Education'	23	91	227	91	91
5. 'life-oriented curriculum'	0	45	273	91	114
6. 'Approaches to Curriculum Designing'	23	114	250	68	68
Total	114	614	1387	614	409

i. The chi-square calculation for students' answers to the category 'very difficult' to the subunits is given below.

Table 4: chi-square calculationfor students' answers to the category 'very difficult'

Topic	Observed	Expected #	Expected
1	0	19	16.667%
2	45	19	16.667%
3	23	19	16.667%
4	23	19	16.667%
5	0	19	16.667%
6	23	19	16.667%

$\chi^2(5,N=114)= 76.105$, $p = 0.0001$. The calculated two-tailed P value is below the threshold of 0.0001. According to conventional criteria, the difference can considered highly statistically significant. The maximum number is 45 for the sub-unit Disciplines and Subjects in Sociocultural Perspectives. Therefore, a maximum number of students felt that the unit'

Disciplines and Subjects in Sociocultural Perspectives' is very demanding and challenging to comprehend.

ii. The chi-square calculation for students' answers to the category 'difficult' to the subunits is given below.

Table 5: chi square calculation for students' answers to the category 'difficult'

Topic	Observed	Expected	Expected
1	114	102.3333	16.667%
2	136	102.3333	16.667%
3	114	102.3333	16.667%
4	91	102.3333	16.667%
5	45	102.3333	16.667%
6	114	102.3333	16.667%

χ^2(5,N=614)= 48.443, p = 0.0001. The calculated two-tailed P value is below the threshold of 0.0001. According to conventional criteria, the difference can considered highly statistically significant. The maximum number is **136** for the sub-unit Disciplines and Subjects in Sociocultural Perspectives. Therefore, a maximum number of students felt that the unit' Disciplines and Subjects in Sociocultural Perspectives' is demanding and challenging to comprehend.

iii. The chi-square calculation for students' answers to the category ' Neither Difficulty nor Easy ' to the subunits is given below.

Table 6: chi square calculation for students' answers to the category 'Neither Difficulty nor Easy'

Topic	Observed	Expected	Expected
1	227	231.1667	16.667%
2	205	231.166733	16.667%
3	205	231.166733	16.667%
4	227	231.1667	16.667%
5	273	231.166733	16.667%
6	250	231.1667	16.667%

χ^2(5,N=1387)= 15.179, p = 0.0096. The calculated two-tailed P value is below the threshold of 0.0096. According to conventional criteria, this difference is highly statistically significant.The maximum number is 273 for the sub-unit 'life-oriented curriculum'. Therefore, a maximum number of students felt that the unit 'life-oriented curriculum' is Neither Difficult nor Easy ' to comprehend.

iv. The chi-square calculation for students' answers to the category 'Easy ' to the subunits is given below.

Table 7: chi square calculation for students' answers to the category 'Easy'

Topic	Observed	Expected #	Expected
1	136	102.1667	16.667%
2	91	102.1667	16.667%
3	136	102.1667	16.667%
4	91	102.1667	16.667%
5	91	102.1667	16.667%
6	68	102.1667	16.667%

χ^2(5,N=613)= 37.496, p = 0.0001. The calculated two-tailed P value is below the threshold of 0.0001. According to conventional criteria, the difference can considered highly statistically significant. The maximum number is 136 for two sub-units'Introduction to Disciplines and School Subjects' and 'Classification and Teaching across Disciplines'. Therefore, a maximum number of students felt that the sub-units'Introduction to Disciplines and School Subjects' and 'Classification and Teaching across Disciplines'is 'Easy' to comprehend.

v. The chi-square calculation for students' answers to the category 'Very Easy ' to the subunits is given below.

Table 8: chi square calculation for students' answers to the category 'Very Easy'

Topic	Observed	Expected #	Expected
1	45	68	16.667%
2	45	68	16.667%
3	45	68	16.667%
4	91	68	16.667%
5	114	68	16.667%
6	68	68	16.667%

χ^2(5,N=408)=62.235, p = 0.0001. The calculated two-tailed P value is below the threshold of 0.0001. According to conventional criteria, the difference can considered highly statistically significant. The maximum number is 114 for thesub-unit 'life-oriented curriculum'. Therefore, a maximum number of students felt that the sub-'life-oriented curriculum'is 'very Easy' to comprehend.

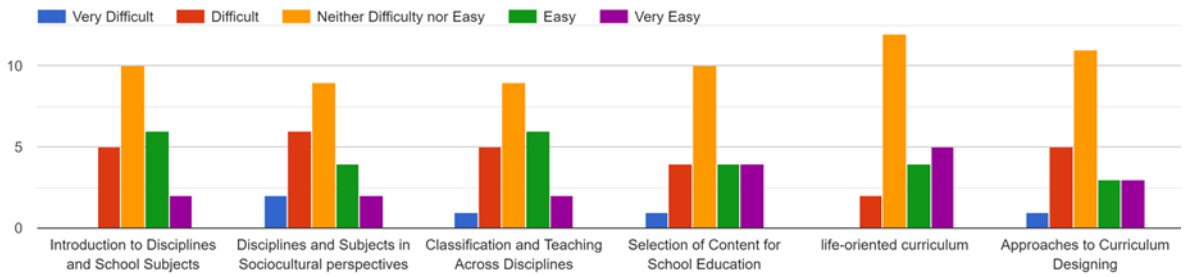

Figure 2: Question 2

10. Findings of the Study

Most students strongly agreed that B.Ed students must thoroughly understand the topic 'Understanding Disciplines and School Subjects.'

Most students said the 'life-oriented curriculum' subunit is 'Neither Difficult nor Easy' to comprehend. Most students thought the 'Disciplines and Subjects in Sociocultural Perspectives' unit was highly demanding and challenging to understand. Most students thought the 'Discipline and Subject in Sociocultural Perspectives' unit was rigorous and challenging to understand. Most students believed the unit's 'life-oriented curriculum' was neither problematic nor straightforward.

Most students said it was 'Easy' to understand the sub-units 'Introduction to Disciplines and School Subjects' and 'Classification and Teaching across Disciplines.' Most pupils said it was 'very Easy' to understand the sub-'life-oriented curriculum'.

11. Discussion and Conclusion

Many respondents emphasised the significance of educational approaches and a straightforward curriculum design in improving their comprehension of academic subjects. They underlined the importance of having well-organized courses and teaching resources. Support from the Faculty: It became clear that the faculty had a big part in influencing the students' views. Clarity in the curriculum: Many respondents emphasised the significance of educational approaches and a straightforward curriculum design in improving their comprehension of academic subjects. They underlined the importance of having well-organized courses and teaching resources. Support from the Faculty: It became clear that the faculty had a big part in influencing the students' views. For educational institutions and politicians, understanding the perceptions of B.Ed students on the subjects they study is essential. The findings of this study highlight the significance of developing curricula, training staff, and support systems to ensure that students can get the most out of their Teacher Education Programs.

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