

**TEACHING APTITUDE AND ATTITUDE TOWARDS
TEACHER EDUCATION PROGRAMMES OF ELEMENTARY
AND SECONDARY STUDENT TEACHERS IN MIZORAM**

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
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**TEACHING APTITUDE AND ATTITUDE TOWARDS TEACHER
EDUCATION PROGRAMMES OF ELEMENTARY AND SECONDARY
STUDENT TEACHERS IN MIZORAM**

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CERTIFICATE

This is to certify that the thesis entitled “Teaching Aptitude and Attitude towards Teacher Education Programmes of Elementary and Secondary Student Teachers in Mizoram” submitted by Eva Lalrampari, Regn. No. MZU/Ph.D./1213 of 23.07.2018 for the Degree of Doctor of Philosophy in Education of the Mizoram University, Aizawl, India embodies the record of original investigation carried out by her under my supervision. She has been duly registered and the thesis presented is worthy of being considered for the award of Ph.D. degree. This research work has not been submitted for any degree in other university.

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DECLARATION
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I **EVA LALRAMAPARI**, hereby declare that the subject matter of this thesis is the record of work done by me, that the contents of this thesis did not form basis of the award of any previous degree to me or to do the best of my knowledge to anybody else, and that the thesis has not been submitted by me for any research degree in any other University/Institute.

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CHAPTER I

CONCEPTUAL FRAMEWORK

Teaching is one of the most prominent and impressive professions as it shapes individuals thereby enriching them with knowledge, skills, critical thinking as well as creative thinking abilities. Through teaching an individual is inspired to learning leading to fostering one's curiosity which resulted in nurturing the potential of all students. H.C. Morrison describes teaching as "a process where a more developed personality interacts with a less developed one, guiding and advancing the latter".

"Teaching is intimate contact between a more mature personality and a less mature one which is designed to further the education of the latter" Morrison (1934). John Dewey (1934) also expressed the concept of teaching as "Teaching is learning as selling is to buying". According to John Brubacher (1939), "Teaching is arrangement and manipulation of a situation in which there are gaps or obstructions which an individual will seek to overcome and from which he will learn in the course of doing so".

Teaching, to be powerful, climbs beyond the traditional methods of one way lecture and instruction. It take the ability to realize the diverse needs, backgrounds and learning styles of students which is tailoring lessons in order to engage and prepare them for future. An efficient teacher needs to know and understand the varying ways students learn and also the colourful differences existing amongst the students.

The prominent element in teaching entails cultivating a positive as well as supportive classroom environment. This implies that the teacher's attitude, aptitude, dedication, passion, empathy and responsiveness highly influence the learning experience of the students. Teaching objectives are achieved in terms of behavioural changes among the students and it is the responsibility of the teachers to generate

learning situations wherein all desired behavioural changes may be brought about. This behavioural change of students is the means to achieve teaching objectives, henceforth, teaching has to be planned and delivered to attain the teaching objectives to the maximum level.

As education continues to evolve, it has been and will continue to be under the influence of growth and advancement in technology as well as the volatile societal needs. This shows that teaching in the years to come will be changed progressively by incorporating technology, digital tools and e-resources as an essential part of both classroom and remote learning. This in turn will help to foster multicultural education wherein students are prepared for an interconnected world to help them broaden their perspectives.

1.1.0 Teaching and its significance

Conceptually teaching today displays diverse hurdles and stepping stones which educators must navigate to provide significant learning experiences. One of the most significant challenges is to address the varying learning styles of students having their manifold preferences and needs. With regard to resource limitations, educators are also facing difficulty to access human, materials and technological support.

Edmund Amidon (1967) defined teaching as “an interactive process, primarily involving classroom talk which takes place between teacher and pupil and occurs during certain definable activities”. Teaching does not only confined to the act of spreading knowledge to children within the four walls of the classroom. However, it includes supervising, guiding, facilitating and encouraging the learners. Teaching is a goal-oriented activity which requires all activities to be driven towards the predetermined learning outcomes. Teaching involves a communication between two or more persons both in verbal and non-verbal manner. It is the systemic approach in which the learner, teacher, curriculum and all other related variables are organized in a structured way to achieve the expected learning outcome.

B.F. Skinner (1968) emphasized that learning is a sequence of repeated actions, highlighting the role of practice in teaching. H.C. Morrison (1946) describes teaching as a process where a more developed personality interacts with a less developed one, guiding and advancing the latter.

Freire (1968) believed that teaching should be dialogical, fostering critical thinking and reflection. He rejected traditional methods where the teacher "deposits" knowledge into students (the banking model) and instead promoted a co-constructivist approach, where knowledge is created collaboratively through dialogue.

Bruner (1960) defined teaching as the process of facilitating discovery and guiding students to uncover knowledge on their own. He emphasized the teacher's role in providing scaffolding—supporting students to solve problems and learn new concepts in a gradual, structured way.

B.S. Bloom (1956) stated that teaching activities: lecture, question answer, discussion, discovery and assignments aim to achieve cognitive, affective and psychomotor goals.

N.L. Gage (1969) considered that "the process of teaching and learning must be adapted to each other so as to make whatever combination of procedure pay off best. We should conceive teaching-learning as process for effective learning".

Teaching is a social activity and its importance cannot be restricted to one or two sections of the society. Teachers, through teaching, get a platform to show and apply their knowledge and skills in socially and morally desirable ways. They teach for bringing changes in the behaviour of students according to the pre-set aims of education. Students get the opportunity to be prepared for their social life by acquiring knowledge, skills and attitude. They get a sense of self-awareness, togetherness, community integration, emotional stability, intellectual strength, rationality, reflective thinking, creativity, social relationship, personal guidance and morality. Likewise, society is also benefitted by teaching which helps in inculcation

of democratic values in the members of the society. Teaching is directed towards the goals of education and these goals are determined keeping in view the needs and requirements of the society.

Teaching is one of the most important platforms to inculcate values, norms, tradition and culture at large from generation to generation. It is not confined only to the classroom teaching and learning process, however, it also entails many other outside classroom activities which provide the right set of circumstances for experiential learning that further enhances the all-round development of an individual. Teaching is crucial as it builds a facilitating and encouraging environment where students can explore, relate and learn and also it is notable to add that it enriches the creativity of teachers as well as students thereby giving freedom, opportunity and proper exposure. It also helps in diagnosing the learning problems of students and helps them in solving their problems.

In conclusion, it is important to mention that the view of teaching circle around art and science which often demanded adaptability, understanding and a directing towards the all-round development of the students. By comprehending the progressive role of teachers and the dynamic nature of teaching, it is important to teacher educators and student-teachers to create the teaching and learning process wherein learning experiences are more practical oriented, better influencing and inclusive. Therefore, the more one understands the significance of the roles played by teachers the better one will be for learning in the future.

1.1.1 Theories of teaching

The importance of teaching cannot be neglected and for teaching to be more effective different experts have laid down theories of teaching thereby deeply considering the differences existing amongst the learners. Some of the most common theories of teaching include:

1. **Behaviorism:** B.F. Skinner (1930) and John Watson(1913) focused on studying the observable behaviour of learners for which they laid emphasis

on the role external stimuli can play in order to make learners change their behaviour through learning. During the course of learning they also gave supreme importance to rewards and punishments. According to them, when learners are rewarded for their correct responses, it encourages them to repeat the same response in future. At the same time, when learners are punished for incorrect response with the help of drills and repetition, it serves as a crucial way to shape the students' learning.

2. **Constructivism:** Bruner (1960) demonstrated the importance of discovery learning and the spiral curriculum. According to him, students are actively constructing their own understanding through problem-solving and exploration. He also brought into light the idea of scaffolding, wherein teachers have to support the learning of students in an organised manner so as to help them gain better independence. Vygotsky (1943) sociocultural theory of learning centres on the role of social interaction in cognitive development. He introduced the concept of the Zone of Proximal Development (ZPD) which contains the range of tasks a learner can perform with guidance but cannot yet do independently. Vygotsky emphasized the importance of dialogue and collaboration in learning. Piaget (1920) also suggested that children zealously construct their own knowledge through interaction with their environment. According to Piaget, there existed different stages of cognitive development during which a child's thinking evolves through specific stages, from sensorimotor to formal operational thinking.
3. **Humanism:** Abraham Maslow (1954) and Carl Rogers (1940s & 1950s) primarily laid their focus on the whole person wherein they include the emotional, psychological and self-actualizing needs of an individual. As individuality and the actualization of one's self is of great significance they firmly believed that teaching should aim to support learners' personal growth and help them reach their full potential.

4. **Social Learning Theory:** Albert Bandura (1963) emphasized that observation, imitation and role modelling are the key factor to learning which demanded learners to learn through observing the actions of others. This theory presumed teachers to become the role models of their students thereby demonstrating all essential skills so that learners can observe and replicate.
5. **Cognitivism:** Jerome Bruner (1960) and David Ausubel (1968) had the idea that internal processing like memory, problem-solving and information processing play an active part for learning. For them, teacher should help learners to make connections between the existing and new knowledge which compelled them to bring out the advanced orgaizers and structured lessons as the key strategies accelerate understanding and retention.
6. **Critical Pedagogy:** Paulo Freire (1970) tries to empower students to critically examine and challenge societal structures and injustices. Teachers are expected to encourage students to question the prevailing power dynamics as well as to involve in social justice issues. For this both the teachers and students will engage in an open yet reflective dialogue in order to challenge the status quo.

1.1.2 Concept of teacher education

Teacher education refers to the proper and well organised process through which individuals are trained and equipped with the knowledge, skills, attitudes and practices necessary to become effective teachers. It encompasses various aspects of professional preparation, development and on-going learning throughout a teacher's career.

John Dewey (1904) defined “Teacher education is the process of equipping teachers with the skills, knowledge, and habits necessary to contribute to social and intellectual progress, focusing on both the content of teaching and the methodology of education”.

According to Herbert A. Simon (1965) “Teacher education is a field of study and practices that prepares individuals for the roles and responsibilities of teaching, with a focus on improving both their intellectual and emotional development for effective educational practice”.

Shulman (1987) interpreted that teacher education is an on-going process which aimed at developing a teacher’s content knowledge, pedagogical content knowledge, and professional knowledge to help them become reflective practitioners.

Dr. S. Radhakrishnan (1950) described “Teacher education is the process through which individuals develop the professional abilities and attitudes necessary to become competent and effective educators. It focuses on developing a teacher's intellectual, social, and moral qualities”.

Dr. D. S. Kothari (1964) propounded that teacher education should aim at developing the intellectual and emotional faculties of teachers, preparing them to respond to students' needs and the changing educational environment.

In the light of the above mentioned definitions it can be rightly remarked that teacher education encompasses the manifold activities ranging from professional development and classroom management to fostering personal growth through reflective practices. It emphasizes both theoretical learning and practical experiences, along with the on-going professional development which are imperative to adapt to evolving educational needs and societal changes.

1.1.3 Need and importance of teacher education programme

All teachers should be trained and there cannot be a single way or approach to education of teachers. Even people who have been claimed to be born with a natural aptitude towards teaching are required to undergo a certain level of education to help them internalise and practice the techniques of teaching craft. There are teachers who have acquired enormous success in teaching through training and experiences. As a result of which the expenditure and attempt can be saved if a

prospective teacher is subjected to teacher-education situations conducive for actualisation of his capability and potentials.

Competence and professional skills are the very heart of teacher education programme. The knowledge of the methods adopted by the teachers will encourage student teachers to have better understanding of various approaches during learning theory paper as well as the practical teaching sessions of the course. This, in turn, helps student teachers to evolve and polish his unique method of teaching. Teacher education programme also allows student teachers to acquire knowledge, skills, techniques, strategies and competencies which will mould them to become efficient teachers.

Teacher education programmes are crucial for preparing educators and student teachers with the necessary knowledge, skills and strategies to foster effective learning environments. These programmes ensure that student teachers understand curriculum design, classroom management, assessment methods and diverse learning needs. It is essential to promote professional development, enhance teaching quality and contribute to improve student learning outcomes. Well-trained teachers are better equipped to address challenges, inspire students and positively impact educational systems at large.

It is important for teacher educators to discover the methodology of how to obtain and build the different qualities to become a good teacher and also try to find several ways to inculcate amongst student teachers. This will lead both teacher educators and student teachers to involve themselves much deeper in the teaching and learning process. If a teacher incorporates the most appropriate content knowledge relating to essential qualities of a good teacher as relevant as possible both in theory papers and practice of teaching, it will be helpful to promote these traits in student teachers. The teacher education programme will be more nourishing if it allows the space wherein a teacher could have the chance to develop his personality in order to help him become “someone who is reflective, introspective

and capable of analyzing his own life and the process of teaching and learning at school so that he will become the envoy to bring changes as and when necessary.”

1.1.4 Historical background of teacher education in India

In the words of Prof. Humayun Kabir, “Teachers are literally the arbiters of a nation’s destiny. It may sound a truism, but it still needs to be stressed that the teacher is the key to any educational reconstruction”. The Secondary Education Commission (1952) rightly pointed out “we are convinced that the most important factor in the contemplated educational reconstruction is the teacher – his personal qualities, his educational qualifications, his professional training and the places that he occupies in the school as well as the community”.

Teacher education in India can be rightly said to be as old as the history of Indian education dating back to the times when teaching was executed through a one on one mode. The teacher serves as the guru who imparted knowledge to the learner in oral tradition. During the Gurukul system imparting of knowledge was predominantly centered on religious and philosophical teachings.

With the arrival of the British during the 19th century the system of education became more formal with the establishments of schools and other educational institutions with a prime intention to educate Indian children in the British system. The formal system of teacher education was initiated by the Britishers and the first step in the field of teacher education was found with the establishment of a formal training centre at Serampur (West Bengal).

The Wood’s Despatch (1894) popularly known as the “Magna Charta of Education in India” advocated the need of establishing teachers’ training institutions and of giving stipends to pupil-teachers for the first time. It laid the foundation for the initiation of primary schools as well as the establishment of teacher training institutions. After which the first teacher training college in India was established in 1856 in Calcutta.

In the post-independence period the development of teacher education in India was seen and accepted as crucial to shaping the future of the nation through quality education. The emphasis on teacher education grew significantly with the recognition that competent teachers were essential for the country's progress and development.

1.1.5 Kothari Commission (1964-1966)

The Kothari Commission (1964-66), formally known as the Education Commission, was a significant turning point for the development of teacher education in post-independence India. The Commission, chaired by Dr. D. S. Kothari, prepared momentous recommendations with a hope to strengthen the education system, keeping teacher education being one of its key focal areas.

Key recommendations of the Kothari Commission on teacher education:

1. **Comprehensive Teacher Training:** The Commission recommended a two-year teacher education program after the completion of a degree course. It emphasized that teacher education should provide both theoretical knowledge and practical training. The aim was to make teachers not only knowledgeable but also skilled in teaching practices.
2. **Improvement in Curriculum:** The Commission stressed the need for a revised curriculum for teacher education. This curriculum should cover not only subject knowledge but also pedagogical techniques, child psychology, sociology, and the social responsibilities of a teacher. It emphasized developing a more student-centered approach in teaching and incorporating modern teaching methods.
3. **In-service Training:** The Commission highlighted the importance of continuous professional development for teachers. In-service training programs were recommended to help teachers stay updated with the latest developments in education and improve their teaching practices.

4. **Establishment of Teacher Education Institutions:** It called for the expansion and establishment of teacher education institutions across the country. These institutions should have well-qualified staff and adequate infrastructure to provide quality training to teachers.
5. **Standardization and Regulation:** The Commission suggested the need for standardized criteria for teacher education programs and proposed the creation of a central body to regulate and monitor teacher education institutions to ensure consistency and quality.

The recommendations of Kothari Commission remained the bedrock for bringing notable reforms in teacher education in India. This led to the establishment of institutions wherein teacher training programmes became more formalized. It also contributed to offering more priority to professional development have shaped modern teacher education in the country. The impact of Kothari Commission immensely influenced working on better policies as well as the establishment of the National Council for Teacher Education (NCTE) in 1995.

1.1.6 National Council for Teacher Education (NCTE, 1995)

As a consequence of the recommendations of Kothari Commission, the National Council for Teacher Education (NCTE), as a statutory body of Government of India, came into existence in pursuance of the National Council for Teacher Education Act, 1993 on 17th August, 1995 with the mandate to achieve planned and coordinated development of teacher education throughout the country and to govern the regulation and proper maintenance of norms and standards for teacher education. The organization (NCTE) is a pan-India jurisdiction and comprises of various divisions along with four (4) Regional Committees namely Northern Regional Council, Eastern Regional Council, Southern Regional Council and Western Regional Council which are all stationed in New Delhi. The gamut of functions performed by NCTE is very broad covering all the teacher education programmes e.g. Diploma in Elementary Education (D.El.Ed), Bachelor of Education (B.Ed), Master of Education (M.Ed) etc. It includes research and training of students-

teachers for equipping them to teach at foundational, preparatory, middle and secondary level of the new school system in alignment with NEP 2020.

NCTE has been given a very significant role and has taken up various national mandates such as Integrated Teacher Education Programme (ITEP), National Professional Standards for Teachers (NPST) and National Mission for Mentoring (NMM). Revision of other teacher education programmes i.e. regulation, curricula and digital architecture are being undertaken by NCTE in line with NEP 2020. With such initiatives NCTE not only strives for the professional development of teachers but also aims to achieve the goal of quality teacher education in our country. The NEP 2020 envisages a paradigm shift in the role of teachers with particular emphasis on pre-service teacher education and in-service teacher capacity building.

The main objective of the NCTE is to achieve systematic and interconnected growth of the teacher education system throughout the country, the regulation and proper maintenance of norms and standards in the teacher education system. The injunction given to the NCTE is very broad and covers the whole spectrum of teacher education programmes including research and training of persons for enriching them to teach at different levels viz. pre-primary, primary, secondary and senior secondary stages in schools, and non-formal education, part-time education, adult education and distance (correspondence) education courses.

1.1.7 Importance of NCTE

The NCTE has been playing a significant role in setting the standards for teacher training and education throughout India. Thus, it upholds uniformity in moulding quality teachers through the implementation of various measures to fulfil the demands of NEP 2020. It is a regulatory body in teacher education throughout the country to ensure that teachers are trained and educated thereby following a certain standard. The National Council for Teacher Education (NCTE) is important for several reasons:

1. **Regulation of Teacher Education:** The most important task of NCTE is to formulate and maintain the standards as well as guidelines for teacher education programs in India. It ensures that teacher education institutions cohere to these standards, in order to help in improving the quality of teacher training and, consequently, the overall quality of education in the country.
2. **Ensuring Quality Teachers:** Rigorous standards for teacher education have been set up by NCTE as a crucial role in producing well-qualified and competent teachers. This quality maintenance role ensures that teachers are equipped with the necessary knowledge, skills, and pedagogical training to effectively impart education to students.
3. **Enhancing Professionalism:** The NCTE promotes professionalism in the teaching profession by setting benchmarks for teacher preparation and continuous professional development. It encourages teachers to engage in lifelong learning and stay updated with the latest teaching methodologies and best practices.
4. **Accreditation and Recognition:** The NCTE grants recognition and accreditation to teacher education institutions, ensuring that only institutions meeting the prescribed standards are authorized to offer teacher training programs. This helps in weeding out substandard institutions and maintaining a reputable and accountable teacher education system.
5. **Fostering Research and Innovation:** The NCTE encourages research and innovation in teacher education, pedagogy, and educational practices. It supports initiatives that lead to the advancement of teaching methods, curriculum development, and educational technologies.
6. **Promoting Inclusive Education:** The NCTE advocates for inclusive education practices, ensuring that teachers are trained to cater to the diverse learning needs of students, including those with disabilities and from marginalized backgrounds.

7. **Developing Teaching Policies:** The NCTE actively collaborates with other educational bodies and government agencies in the formulation of policies related to teacher education and the teaching profession. It provides valuable insights and recommendations for educational reforms.
8. **Continuous Evaluation and Improvement:** The NCTE regularly reviews and evaluates teacher education programs to identify areas of improvement. This helps in addressing emerging challenges and adapting teacher education to the evolving needs of the education system.
9. **Global Recognition:** The NCTE's efforts in maintaining high-quality teacher education standards also contribute to India's recognition in the global education community. It ensures that Indian teachers are well-prepared to meet international standards, enhancing the credibility of Indian education abroad.

In summary, the NCTE plays a crucial role in enhancing the quality of teacher education in India, ensuring that teachers are well-trained to meet the demands of modern classrooms. Through accreditation, curriculum development, and research, it strives to maintain high standards in the education system, which is essential for the country's progress.

1.1.8 Education in Mizoram

In the history of Mizoram, it is a well known fact that Mizo Alphabet in the form of Roman Script was introduced by the Missionaries in the last decade of the 19th Century. The Mizo's pioneer Missionaries J.H. Lorrain and F.W. Savidge made a contribution in the field of education that they started learning Lushai (now Mizo) language and reduced it to writing by the introduction of the Roman Alphabet. The provision of a script to the language laid the foundation of the education of the Mizos. These two pioneer missionaries may be considered to be the fathers of Mizo education. They opened a school soon after they reached Aijal (now Aizawl) on 1st

April, 1894 with two pupils. However, the school was abandoned as they wanted to concentrate on translation.

The two pioneer missionaries were replaced by D.E. Jones (Zosaphluia) in 1897 and he re-opened the school in February 1898. D.E. Jones was soon accompanied by another missionary Edwin Rowlands (Zosaphthara), who was a skilful teacher and he was made incharge of mission education in the hills. From this time onwards, formal education was taking root which continued in the subsequent years.

1.1.9 Teacher education in Mizoram

Teacher education in Mizoram, like much of India, has evolved significantly over time, influenced by both historical and socio-political developments. The region, located in the north eastern part of India, has a unique educational landscape shaped by its indigenous cultures, missionary influence, and modern educational reforms.

Mizoram, historically inhabited by the Mizo people, had an informal system of education before the advent of formal schooling. Traditional education was primarily oral, passed down through storytelling, cultural practices and communal activities. It was during the British colonial era that Western-style education began to take root in Mizoram. Christian missionaries, particularly from Wales, played a pivotal role in introducing formal education in the early 20th century. The first school in Mizoram was established by the Welsh Missionaries in 1894 in Aizawl, the capital city of Mizoram.

After India's independence in 1947, Mizoram was part of Assam and the state government continued the work started by missionaries, albeit with more focus on mainstreaming formal education. Teacher training during this period remained rudimentary, largely centered in the Assam region in which Mizoram had limited access to formal teacher training institutions. Teacher preparation was mostly conducted through short-term training programs run by government agencies and

teacher education lacked a comprehensive framework for professional development. The following are the teacher education institutions in Mizoram:

1) District Institute of Education and Training (DIET)

DIET Aizawl was originally established as Junior Basic Training Centre for untrained Primary School teachers on September 1, 1953. It was amalgamated with Normal Training School (NTS) which was meant for untrained Middle School teachers on September 19, 1974 as Under Graduate Teachers Training Institute (UGTTI). Then, the name changed to Teacher Training Institute (TTI) in July 1, 1980. Finally it was upgraded to District Institute of Education and Training (DIET) in December 1988.

The main aim of establishing DIETs was to provide in-service training, pre-service training for elementary teachers and other educational programmes. DIETs were also envisioned to serve as centres for curriculum development, educational research and innovations in pedagogy, especially in the primary sector.

Since its inception in 1988, DIETs Mizoram made a remarkable contribution thereby improving the quality of elementary education within the state. The main focus of DIETs remained to build the capacity of the teachers as well as prospective teachers so as they will be able to serve as the vital instrument to enhance the pedagogical skills to achieve most productive learning outcome. The DIETs also work closely with local schools and education departments to ensure that the training provided aligns with the state's educational needs.

Apart from providing both in-service and pre-service training, DIET Mizoram has collaborated with other educational bodies within and outside the state. It is notable to mention that the collaborative work between DIET and the National Council for Teacher Education (NCTE) which brings the training programmes of the state at par with the national standards.

Currently, there are eight (8) District Institute of Education and Training (DIETs) located in eight (8) different district capitals. The main aim of DIETs

Mizoram is to provide improved and valuable teacher education which in turn will help to maximize the capacity, knowledge, skills and competency of prospective teachers particularly for elementary schools. Nonetheless, a phenomenal journey has been advanced along by two (2) DIETs namely – Aizawl DIET and Lunglei DIET as a consequence of which they initiated B.Ed. programme along the D.El.Ed. programme. Over the years, DIET Mizoram has undertaken various educational projects with the hope to increase the efficiency with regard to language education, inclusive education and child-centered teaching practices.

2) Institute of Advanced Studies in Education (IASE)

At the time of its inception in 1975 IASE was firstly known as the Mizoram Institute of Education (MIE). It was upgraded to College of Teacher Education (CTE) in 1997 as per National Policy on Education, 1986 recommendation, thereby confirming its status as the lone existing CTE in the State.

Further it was upgraded to its present status of an IASE in 2005 upon receiving the 11th Meeting Minutes of the Teacher Education Approval Board (TEAB), held on 12th September 2005 which stated that “Upgradation of CTE, Aizawl into IASE was approved, subject to a written commitment by the State Government that this institution will continue to perform functions of CTE as well. Funding of the Institution will be on IASE pattern and no additional Central assistance would be provided to the institution for performing CTE functions”. Following this, consent of the State Government to upgrade CTE into IASE taking up the dual functions of CTE & IASE to offer both B.Ed. and M.Ed. courses apart from other vested functions was issued by the Government of Mizoram.

The upgradation of the CTE to a fulfledged IASE is a remarkable milestone in Teacher Education in Mizoram. The first initiative for fulfilling the required functions of an IASE was to apply for the M.Ed. course of study which was succeeded by granting of the final approval and recognition to IASE/ CTE to run the M.Ed. Course after which IASE began functioning officially from 3rd March, 2012.

In an Evaluation of Centrally Sponsored Schemes on Teacher Education in States/UTs conducted by Tata Institute of Social Sciences (TISS) sponsored by Ministry of Human Resource Development in 2017, IASE, Aizawl received extremely high commendation and is said to " Showcase features of a model IASE in the country" among the fifteen (15) actually functioning IASEs in the country which came under its evaluation.

Besides offering the M.Ed course, IASE started offering both M.Phil. and Ph.D courses in Education since 2019 and IASE, Aizawl landed on one of the most prominent milestones for being the only Government Institute in the state to offer Ph.D. Course.

3) Department of Education, Mizoram University

The Department was commenced with one year M.Ed. programme in the year 1980, which was replaced by a two year M.Ed. programme for one academic session in 1985-86. Since then, the M.Ed. programme has been replaced by M.A. Education programme of four semesters – duration. Along with this, the Department has been offering Ph.D. programme. M.Phil. programme which was started from 2009-2010 sessions has been stopped since 2020. In 2013 UGC Sanctioned for Establishment of School of Education. The University authorities resolved to upgrade Department of Education to School of Education and on 12th August 2022, School of Education became functional. Department has started Two Years B. Ed. Programme from the session 2016-17 and Two Years M. Ed. Programme from the academic session 2018-2019. ITEP in Science as well as Arts was started in 2024.

1.2.0 Concept of aptitude

An aptitude is generally thought as the ability of an individual to acquire a specific skill or knowledge. It is also regarded as a component of a competence to do a certain kind of work at a certain level. When looking into the original broad definition aptitude means aptness, inclination, tendency, prosperity, predisposition,

fitness or suitability for performance in some situation usually involving formal and informal learning.

Francis Galton (1869) a pioneer in the study of human abilities, suggested that aptitude is a natural, inherited ability to perform tasks and solve problems, particularly in areas like reasoning and sensory abilities.

Alfred Binet (1905) while developing his intelligence testing tool found aptitude as a person's capacity to perform tasks that require mental abilities such as reasoning, judgment, and problem-solving.

David Wechsler (1958) defined aptitude in terms of an individual's potential to learn new skills and perform tasks, often measured through intelligence tests and other psychological assessments.

Freeman (1971) defined an aptitude as “a combination of characteristics indicative of an individual's capacity to acquire (with training) some specific knowledge, skill or set of organized responses, such as the ability to speak a language, to become a musician, to do mechanical work”.

Bennett, Seashore and Weisman (1940) pointed out “Aptitude embraces any characteristic which predisposes to learning, including intelligence, achievement, personality, interests, and special skills”.

Aptitude refers to the inborn traits of an individual which can be regarded as the natural ability or capability to develop specific skills, talents and competencies in a particular area. It wraps around the cognitive, physical and emotional abilities that influences a person to achieve success in various tasks or domains. Being an inherent trait, Aptitude can be nurtured and developed through several series of experience and learning. The intellectual abilities such as logical reasoning, problem-solving, and learning capacity, as well as specific talents in areas like music, language, or sports comprised the aptitude of an individual. Unlike achievement, which measures what a person has already learned, aptitude is seen as a predictor of future learning success or skill acquisition. Various theories of aptitude emphasize different aspects

of human potential, including cognitive intelligence, multiple intelligences, personality traits, and even emotional intelligence. Aptitude tests are frequently used in educational and career settings to assess a person's potential for success in particular fields or tasks.

1.2.1 Concept of teaching aptitude and its significance

Teaching aptitude refers to the qualities, traits and skills pertaining to teaching which a person possesses naturally or acquires through self-effort and which gets reflected in his inclination towards teaching and are helpful to him in performing his job dexterously (Srivastava 1981). So, teaching aptitude ordinarily refers to the specific ability, potentiality, interest, satisfaction and fitness of an individual in teaching profession.

Benjamin Bloom (1956) specified teaching aptitude involves understanding the cognitive levels of students and using appropriate methods to engage them in higher-order thinking.

Gagne (1965) defined teaching aptitude as the ability to design instructional strategies that optimize learning outcomes. According to him, teachers should be capable of structuring lessons to facilitate the learning process.

Gage and Berliner (1992) argued that teaching aptitude is a combination of cognitive skills, communication abilities, and personal traits (such as empathy, patience, and motivation). They suggested that an effective teacher must be able to engage students and inspire learning.

Ramesh (2022) defined teaching aptitude as “the ability to gain proficiency with a certain level of teacher education training. It refers to a person's ability to become a skilled teacher through formal or informal training. Thus, after giving suitable opportunity and training, teaching aptitude might assist an individual's future performance in the teaching sector”.

According to Dahiya and Singh (2004) “Aptitude for teaching is a condition or set of characteristics including Knowledge, understanding and attitude regarded as symptomatic or indicative of individual’s ability to acquire with training abilities for teaching work”.

Sharma and Bedi (2016) describe aptitude as “One of the most crucial aspects of the teaching profession is teaching ability especially for them to successfully do their sacred duty”.

Eysenk and Derakshan (2011) defined teaching aptitude as “extremely important in the teaching area, as teaching is an art form, and personality is a stable and durable synthesis of a person's many physical and mental aspects”.

According to S.C. Ghakhar and Dr. Rajanish (2011), “Teaching Aptitude helps the individual to acquire a required degree of proficiency or achievement in the teaching profession”.

Teaching aptitude is fundamental for effective education as it determines the ability of a teacher to engage, motivate and support students in the teaching and learning process. A teacher possessing a potent aptitude has the ingenuity to understand diversified styles of learning, the willingness to adapt to as well as incorporate multifarious teaching methods and also to create an environment which is inclusive to nurture intellectual and emotional growth. It also heightens the ability of teachers to express complex concepts, furnishing constructive feedback and also inspiring learners to perform critical thinking.

Teachers with strong teaching aptitude are able to create a positive, inclusive learning environment that supports diverse learning styles and abilities. Their ability to explain complex concepts in simple, easy to comprehend method helps students grasp difficult content, fostering academic success. Furthermore, teachers with high teaching aptitude know how to manage classroom behaviour effectively, maintaining discipline while encouraging a respectful and collaborative atmosphere.

In addition, teaching aptitude is essential for adapting teaching methods to meet the evolving needs of students. It helps teachers respond to challenges in the classroom, from varying learning speeds to different levels of student engagement, ensuring that every learner has the opportunity to thrive. Ultimately, teaching aptitude enhances student motivation, confidence, and curiosity, contributing significantly to educational outcomes and the broader development of future generations. A teacher with strong aptitude is a key factor in shaping quality education and inspiring lifelong learning.

1.2.2 Key indicators for assessing teaching aptitude

Assessing teaching aptitude is essential to ensure that educators possess the qualities, skills, and knowledge necessary to foster effective learning environment. Teaching aptitude is not just about subject knowledge, but also about the ability to engage, motivate, and support students through various teaching strategies. Here are the key indicators to assess teaching aptitude:

- a.) Communication Skills:** Effective communication is fundamental to teaching. Teachers should be able to explain complex ideas in a clear and concise manner, tailored to the students' level of understanding.
- b.) Classroom Management:** Classroom management skills are essential for creating a productive and respectful learning environment. Teachers with strong teaching aptitude should be able to maintain a consistent discipline and also should clearly lay down the expected behavioural changes amongst the learners. Teachers should also be capable to create learning environment in which students feel secured, respected and also motivated to learn.
- c.) Adaptability and Flexibility:** Most respectable and efficient teachers are adaptable, adjusting their approach based on students' needs, learning styles and the dynamics of the classroom. The teachers' ability to modify teaching methods and the capacity to accommodate different learners by creating an inclusive classroom will therefore proof the efficiency of the teacher.

d.) Student Engagement: Engagement is a key aspect of teaching aptitude. A teacher's ability to captivate and maintain student interest is essential for effective learning. It is crucial for teachers to have the ability to make learning more interactive and also to provide much opportunity for engaging students in different activities during the teaching learning process.

e.) Assessment and Evaluation: Effective teachers use assessments not only to grade students but to guide their teaching practice and improve learning outcomes. The ability to design fair, effective assessments for measuring students' performance and also to provide constructive feedback at the right time will help to improve students' performance.

f.) Subject Knowledge and Expertise: A teacher's knowledge of their subject matter forms the foundation of effective teaching. A teacher should enable students to develop a deep understanding of the content, including different developments modern day education system which further nurtures the ability of students to relate their learning to real life situation.

g.) Empathy and Emotional Intelligence: Emotional intelligence is critical in understanding and responding to students' emotional and psychological needs. Teachers with strong emotional intelligence will help students to build strong and positive relationships with students based on trust and respect.

h.) Professional Development and Lifelong Learning: A teacher's commitment to their own growth is a vital indicator of teaching aptitude. Teachers with high aptitude will reflect on their own teaching practices and seek ways to improve it time to time. It will also urge them to actively engage in professional development opportunities for better refinement of their skills.

i.) Collaboration and Teamwork: A teacher's ability to collaborate with colleagues, parents and the broader school community enhances the learning environment. Teachers should build cordial relationship with parents to keep them informed about student progress and challenges.

Teaching aptitude is a multifaceted quality that includes skills in communication, classroom management, adaptability, assessment, subject expertise, empathy and collaboration. Teachers who demonstrate strength in these areas are better equipped to create a dynamic and supportive learning environment. By assessing these indicators, educational institutions can ensure that teachers possess the necessary skills to foster student success and contribute to the advancement of quality education.

1.2.3 Can aptitude be enhanced?

Teaching aptitude can certainly be enhanced with targeted effort, self-reflection and professional development. While some aspects of teaching aptitude, such as natural communication skills or empathy, may come more easily to some individuals, many critical elements can be developed and strengthened over time. Most common ways to enhance teaching aptitude are as under:

- a.) Continuous Learning and Professional Development:** One of the most effective ways to enhance teaching aptitude is through continuous professional development. Teachers can attend workshops, seminars, and courses that focus on teaching strategies, classroom management, and new educational technologies. Staying updated with the latest research in education allows teachers to implement new methodologies and adapt to changes in teaching practices.
- b.) Reflective Practice:** Self-reflection is a powerful tool for improving teaching aptitude. By regularly evaluating their own teaching, identifying strengths, and acknowledging areas for improvement, teachers can refine their skills. This might involve recording lessons, seeking feedback from students or colleagues, and setting specific goals to address weaknesses in teaching methods.
- c.) Collaboration and Peer Feedback:** Collaboration with colleagues is an effective way to enhance teaching aptitude. Sharing strategies, discussing challenges, and observing one another's classes can provide valuable insights into improving one's approach. Peer feedback offers constructive criticism, which can highlight

areas for growth, such as communication, classroom management, or engagement techniques.

d.) Adaptability and Experimentation: Aptitude can also be improved by being open to experimenting with new teaching methods and being adaptable to diverse student needs. Trying new technologies, teaching tools, or pedagogical approaches can help a teacher find more effective ways of engaging students and managing the classroom.

e.) Emotional Intelligence Development: Teachers can also improve their emotional intelligence through training in empathy, active listening, and conflict resolution. Developing these skills helps in understanding students better and creating a supportive learning environment.

1.3.0 Concept and types of attitude

Gordon Allport (1935) defined attitude as "a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related."

Krech, Crutchfield, and Ballachey (1962) defined attitude as "a learned tendency to evaluate things, people, and situations in a positive or negative manner."

McGuire (1989) and Wood (2000) believed "attitudes are formed and manifested at the level of three fundamental dimensions: cognitive, affective and behavioural. The cognitive component of attitudes includes perceptions, beliefs and assumptions of the individual facts and events. The affective component describes emotional experiences and emotional responses to various facts and events. Regarding the behavioural component, it shows intentions and predictions of the way a person can act in relation to a fact or event based on his assumptions and beliefs".

Anderson (1980) points out that attitudes are formed after receiving different information about facts, events or people. Thus, the nature of the attitudes that an individual forms is determined by the number information received as well as the

combination formed thereafter. In the light of which it can be concluded that attitude can be shaped by how one gives importance to different pieces of information, the order in which they were perceived and the values assigned to it.

Feldman (1985) defined attitude as “made up of three components affective, behavioural and cognitive hence acts as a yardstick of the individual behaviour”.

Eagly and Chaiken (1993) defined attitudes as “a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour”.

Abric (2002) considers attitude as “a mental and neurophysiological state determined by experience, and which exerts a dynamic influence on the individual, preparing him to act in a specific way”.

Oral (2004) and Bozdogen et. al. (2007) stated that “teacher’s attitude towards the subject and student is significant in creating desire to learn in the students. Gender and type of training are the paramount factors influencing the attitude of the teacher”.

Therefore, it can be said that attitude is a mental readiness which is often persuaded by an individual’s experiences. It helps one to make judgement according to one’s preferences. Attitude is evaluative in nature which convinced the individual to give response grounded on one’s feelings, experience as well as beliefs. It is crucial for a teacher to possess a strong attitude towards teaching so as to satisfy the thirst of learners in different areas of learning. The three broad types of attitude are mentioned below:

- 1. Positive Attitude:** A positive attitude comprises having a positive mind set and thinking about the most good in as many different circumstances as possible. It helps and encourage a person to learn that strength always lie beyond the weaknesses. A positive attitude ensures to bring excellence in both academic and professional success. When someone is happy, reliable, optimistic and possess a high level of confidence, it can be claimed that person to have a positive attitude.

2. Negative Attitude: A negative attitude keeps people to look far and beyond with hope or happiness. It often leads people to feel inferior amongst peers and possess a very low confidence level. If a person constantly has negative feelings, it can affect one's mental and physical well-being.

3. Neutral Attitude: People with a neutral attitude often remain complacent and self-satisfied. They always try to let things work out on their own and they either not or hardly express their emotions. One of the most unique types of attitudes, neutrality could be helpful to maintain stability in the face of setbacks, at the same time it can also make one to feel detach from other people and from your goals.

1.3.1 Measurement of attitude

Belief or disbelief, acceptance or rejection and favouring or not favouring some aspect of the environment is all involved to measure an attitude. In order to measure attitudes, scales have been constructed consisting of short statements dealing with several aspects of some issue or institution under consideration. The five most important tools/scales of attitude measurement accounted to Guttman, Thurstone's equal-appearing interval, Semantic Differential, Likert's and the Q-sort technique.

One of the most widely used is the Likert scale through which respondents are ask to indicate their level of agreement with a statement on a scale (typically from "strongly disagree" to "strongly agree"). On this scale the subjects express the degree (one to five) of their personal agreement or disagreement with each of the statements. The items which best distinguish the high scorers and the low scorers of the sample subjects are retained to collect data from a specific sample. To measure the attitude of a specific group of respondents, every respondent indicates his choice of answer to each statement. It can be concluded that the respondent's attitude is the sum of her/his ratings of all the statements. For this reason, the Likert scale is also known as the scale of Summated Ratings.

1.3.2 Importance of student teachers' attitude towards teacher education programme

Understanding the attitudes of student teachers towards a teacher education program is essential for several reasons, as it directly impacts the quality and effectiveness of the education system. These attitudes shape how student teachers engage with the program, how they perceive their roles in education and their readiness to implement what they have learned. By gaining insights into their attitudes, educational institutions can better align their teaching strategies, support systems and curricula to enhance learning outcomes for both teachers and students.

1. Influence on Engagement and Motivation: The attitude of student teachers towards the teacher education program significantly affects their level of engagement and motivation. Positive attitudes can lead to greater enthusiasm for learning, active participation in coursework, and a deeper commitment to developing the skills necessary to become effective educators. On the other hand, negative attitudes might lead to disengagement, disinterest in the program, or a lack of effort in mastering teaching strategies. Understanding these attitudes allows institutions to identify and address factors contributing to dissatisfaction or disengagement, ensuring that student teachers remain motivated and committed to their professional growth.

2. Impact on Teaching Quality: The beliefs and perceptions that student teachers hold about teacher education programs influence the quality of teaching they will eventually deliver. If student teachers view the program positively, they are more likely to implement learned methodologies with enthusiasm, confidence, and creativity in their own classrooms. In contrast, if they feel that the program is irrelevant or inadequate, they may carry this negativity into their teaching practice, impacting the quality of their instruction. Understanding attitudes helps institutions tailor their programs to meet the needs and expectations of future educators, ultimately leading to more effective teaching practices in the long run.

3. Curriculum Improvement: Student teachers' attitudes provide valuable feedback on the strengths and weaknesses of teacher education programs. If students express

frustration with specific aspects of the curriculum or feel that certain skills are not being adequately addressed, this feedback can guide curriculum revisions. For example, if students feel the program lacks practical teaching experiences, institutions can adjust their programs to incorporate more hands-on training, internships, or field experiences. Conversely, if students express positive attitudes towards certain aspects of the program, such as interactive teaching methods or exposure to innovative educational technologies, these elements can be further integrated into the curriculum.

4. Addressing Challenges and Barriers: By understanding the attitudes of student teachers, educators and administrators can better identify and address any barriers or challenges faced by these individuals during their training. For instance, if student teachers express negative attitudes towards the workload, time management challenges, or perceived gaps in support, these concerns can be addressed through program modifications, additional resources, or mentoring systems. Understanding attitudes also allows for early identification of students who may be struggling emotionally or psychologically, enabling institutions to provide the necessary support, such as counselling or mentorship, to foster a healthier learning environment.

5. Preparing Future Educators for the Profession: A teacher education program not only equips student teachers with the necessary skills and knowledge but also shapes their mindset towards teaching as a profession. Understanding their attitudes helps institutions foster a more positive outlook towards teaching, encouraging future educators to view teaching as a rewarding, impactful career. It also helps student teachers align their personal values with professional expectations, which is crucial for creating motivated, empathetic, and effective teachers.

6. Building Positive Teacher-Student Relationships: Attitudes towards teacher education programs also influence how student teachers build relationships with future students. A teacher who enters the profession with a positive attitude towards their training is more likely to value student engagement, empathy, and respect.

Understanding these attitudes ensures that teacher education programs emphasize the importance of building strong teacher-student relationships, promoting a culture of respect and inclusivity in classrooms.

In conclusion, understanding the attitudes of student teachers towards teacher education programs is crucial for improving both the educational experience of future educators and the effectiveness of the programs themselves. It allows for the identification of potential issues and provides an opportunity to make informed decisions about program improvements, engagement strategies, and support mechanisms. Ultimately, fostering positive attitudes in student teachers enhances the quality of teacher preparation, ensuring that new educators are equipped to inspire and impact future generations of learners.

1.4.0 Rationale of the study

India has been known to possess one of the largest systems of teacher education in the world within which the university departments of education and their affiliated colleges, government and aided institutions, private and self-financing colleges and open universities are all engaged in this venture. Teacher education today is facing many challenges because of the specific mandate of “education for all” and the constitutional programme of “Right to Education”. It has to shift its system into a process that is practical in its approach, research based in its transaction, value based in its outlook and with learning to learn as its motto. In essence teacher education is not a matter of simply acquiring degree rather it is more a matter of orientation of the minds of young teachers towards services to their country. This, in fact, reflected the importance of training of teachers.

Teacher education or teacher training refers to the policies, procedure and provisions designed to equip and nurture the prospective teacher with the knowledge, attitudes, behaviour and skills they require to perform their tasks effectively in the classroom, school as well as the wider community. It is well known that the quality and extent of learners’ achievements are determined primarily by teacher competency, sensitivity and their level of motivation. The academic and professional

standard of a teacher mirror reflecting the critical components of the essential learning conditions for achieving the educational goal. The duration of academic preparation, the height and attribute of subject matter knowledge, different pedagogical skills of the teacher in order to meet the needs of diverse learning situation, the degree of commitment to the profession, sensitivity to contemporary issues and problems of the learners and the level of motivation critically influence the quality of curriculum transaction in the classroom and thereby pupil learning. This greatly affects the larger process of social transformation.

Education is a lifelong process. In this process of education, the teacher plays an important role. Without the teacher the process of education is ineffective. The teacher is the backbone of the educational system, maker of mankind and the architect of the nation. He trains the minds, cultivates manners and shapes the morals of the members of the community at their most impressionable age. Attitudes are the key to improving the quality of education. Student teachers attitude towards teacher education programme have a great influence on their learning and commitment to become a competent teacher. It also determines their will and dedication to teach and bring out notable progress in the teaching-learning processes in particular and the education system as a whole. This is important as teachers are the nation builders and the development of a nation to a large extent actually depends on the teachers.

In the state of Mizoram there are eight (8) DIETs to provide teacher education at elementary level. After years of functioning, two secondary teacher training institutions have been opened at Aizawl and Lunglei DIETs. Prior to the opening of these two secondary teacher training institutes, there were only two secondary teacher training institutes in Mizoram i.e, Institute of Advanced Studies in Education (IASE) and Department of Education, Mizoram University. In all these institutions there are more than 500 student teachers at elementary level and more than 400 student teachers at secondary level. It has been found that not many studies pertaining to teacher education programme have been conducted in Mizoram.

Studying the teaching aptitude of student teachers is crucial to understand their readiness and potential to become efficient teachers. Teaching aptitude encompasses critical skills such as communication, classroom management, problem-solving, and subject knowledge. The assessment of these skills will help us to clearly identify the strengths and areas for improvement, ensuring that student teachers are well-equipped to meet the diverse needs of students. The study will also magnify the worth of teacher education as it will enhance teacher preparation programs, fostering professional growth and ensuring that future educators possess the necessary competencies to positively impact student learning outcomes and contribute to the development of the education system.

At the same time, the evaluation of student teachers perception, motivation and determination during teacher education programme is vitally important. In this regard the study will be helpful to know and understand the predisposition of student teachers towards teacher education programme. Further, it will also display the relevance as well as reliability of the programme. An understanding of their attitude helps identify factors that influence their learning, teaching methods and overall effectiveness. Positive attitudes towards the programme can lead to better learning outcomes, while negative attitudes may hinder professional growth. This study is also undertaken with the aspiration to provide invaluable insights into curriculum design, teaching methods and the overall effectiveness of teacher education programs, allowing educators and policymakers to make informed decisions to improve teacher preparation and ensure that student teachers are fully motivated and prepared for their teaching careers.

Till date, there were no studies conducted to find out the teaching aptitude of these student teachers nor has there been any study pertaining to the attitude of teacher trainees towards teacher education programme. Besides, an in depth studies of the perception of teacher trainees on the different components of teacher education has not been researched upon. Therefore, it is felt that these issues need to be researched upon. If such study can be taken up, it would provide a better understanding of the teaching aptitude as well as the attitude and opinion of student

teacher on teacher education programme which would greatly enhance the development of teacher education in Mizoram. In view of the above discussions, the following research questions arise:

1. Has attitude scale towards teacher education programme ever been constructed for student teachers in Mizoram?
2. What is the teaching aptitude and attitude of elementary and secondary student-teacher towards teacher education programme?
3. Does any significant difference exist between the teaching aptitude of elementary and secondary student teachers with reference to various selected independent variables?
4. Does any significant difference exist in the attitude of student teachers towards teacher education programme with reference to various selected independent variables?
5. Are there any relationship between the attitude of student teachers towards teacher education programme and their teaching aptitude?
6. What is the opinion of student teachers on some aspect of teacher education?

1.5.0 Statement of the problem

In the light of the above discussions on the importance of teacher education and the fact that no studies have been conducted on teaching aptitude and attitude towards teacher training programme in Mizoram, the present research will be entitled, **“Teaching Aptitude and Attitude towards Teacher Education Programmes of Elementary and Secondary Student Teachers in Mizoram”**.

1.6.0 Operational definition of the key terms used

Teaching aptitude: Teaching aptitude refers to the natural ability, skills, and competencies required for effective teaching and facilitating learning. Teaching

aptitude for the present study will be represented by the score which is obtained from the Teaching Aptitude Test developed by S.C.Gakhar and Rajnish (2004).

Attitude: Attitude refers to the way a person views something or tends to behave towards it, often in an evaluative way.

Teacher Education Programme: Teacher education programme refers to the process by which a person attains education or training in an institution of learning in order to become a teacher. It refers to the policies, procedures, and provision designed to equip (prospective) teachers with the knowledge, attitudes, behaviours and skills they require to perform their tasks effectively in the classroom, school, and wider community. In the present study, the attitude towards Teacher Education Programme will be represented by the score obtained through the Attitude Scale developed by the investigator.

Elementary Student Teachers: Elementary student teachers refer to the individuals who undergo training programme for attaining a diploma or degree to qualify themselves for teaching at elementary level of education.

Secondary Student Teachers: Secondary student teachers refer to the individuals who undergo training programme for attaining a degree to qualify themselves for teaching at middle and secondary level of education.

Mizoram: Mizoram is one of the state of India. It is located in the north eastern part of the country.

1.7.0 Objectives of the Study

The following objectives have been proposed for the present study:

1. To construct an attitude scale towards teacher education programme.
2. To find out the attitude towards teacher education programmes of student teachers (elementary and secondary) in Mizoram.

3. To compare the attitude towards teacher education programmes of student teachers (elementary and secondary) with reference to their specific programmes i.e. B.Ed. and D.El.Ed., marital status, gender, locale, teaching experience, fathers working status, fathers' level of education, student teachers educational qualification and previous academic stream.
4. To compare the different dimensions of attitude towards teacher education programmes of student teachers (elementary and secondary) with reference to their specific programmes i.e. B.Ed. and D.El.Ed., marital status, gender, locale, teaching experience, fathers working status, fathers' level of education, student teachers educational qualification and previous academic stream.
5. To find out the teaching aptitude of student teachers (elementary and secondary) in Mizoram.
6. To compare the teaching aptitude of student teachers (elementary and secondary) with reference to their specific programmes i.e. B.Ed. and D.El.Ed., marital status, gender, locale, teaching experience, fathers working status, fathers' level of education, student teachers' educational qualification and previous academic stream.
7. To find out the relationship between attitude towards teacher education programmes and teaching aptitude of student teachers (elementary and secondary) in Mizoram.
8. To find out the opinion of student teachers (elementary and secondary) on some aspects of teacher education.
9. To suggest measures for improving the existing elementary and secondary teacher education programmes.

1.8.0 Hypotheses of the study

1. There is no significant difference in the student-teachers' attitude towards teacher education programmes with reference to their specific programmes.
2. There is no significant difference in student-teachers' attitude towards teacher education programmes with reference to their marital status.
3. There is no significant difference in student-teachers' attitude towards teacher education programmes with reference to their gender.
4. There is no significant difference in student-teachers' attitude towards teacher education programmes with reference to their locale.
5. There is no significant difference in student-teachers' attitude towards teacher education programmes with reference to their previous teaching experiences.
6. There is no significant difference in student-teachers' attitude towards teacher education programmes with reference to their fathers' employment status.
7. There is no significant difference in student-teachers' attitude towards teacher education programmes with reference to their fathers' level of education.
8. There is no significant difference in student-teachers' attitude towards teacher education programmes with reference to their educational qualification.
9. There is no significant difference in student-teachers' attitude towards teacher education programmes with reference to their previous academic streams.
10. There is no significant difference in the student-teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their specific programmes, i.e. B.Ed. and D.El.Ed.
11. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their marital status.

12. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their gender.
13. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their locale.
14. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their previous teaching experiences.
15. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their fathers' employment status.
16. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their fathers' level of education.
17. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their educational qualification.
18. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their previous academic streams.
19. There is no significant difference in the student-teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their specific programmes, i.e. B.Ed. and D.El.Ed.

20. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their marital status.
21. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their gender.
22. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their locale.
23. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their previous teaching experiences.
24. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their fathers' employment status.
25. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their fathers' level of education.
26. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their educational qualification.
27. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their previous academic streams.
28. There is no significant difference in the student-teachers' attitude towards teacher education programmes on the dimension of resources, facilities and

programme management with reference to their specific programmes, i.e. B.Ed. and D.El.Ed.

29. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their marital status.
30. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their gender.
31. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their locale.
32. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their previous teaching experiences.
33. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their fathers' employment status.
34. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their fathers' level of education.
35. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their educational qualification.
36. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their previous academic streams.

37. There is no significant difference in the student-teachers' attitude towards teacher education programme on the dimension of pre-internship with reference to their specific programmes, i.e. B.Ed. and D.El.Ed.
38. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their marital status.
39. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their gender.
40. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their locale.
41. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their previous teaching experiences.
42. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their fathers' employment status.
43. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their fathers' level of education.
44. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their educational qualification.
45. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their previous academic streams.

46. There is no significant difference in the student-teachers' attitude towards teacher education programme on the dimension of school internship with reference to their specific programmes, i.e. B.Ed. and D.El.Ed.
47. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their marital status.
48. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their gender.
49. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their locale.
50. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their previous teaching experiences.
51. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their fathers' employment status.
52. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their fathers' level of education.
53. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their educational qualification.
54. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their previous academic streams.

55. There is no significant difference in the student-teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their specific programmes, i.e. B.Ed. and D.El.Ed.
56. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their marital status.
57. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their gender.
58. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their locale.
59. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their previous teaching experiences.
60. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their fathers' employment status.
61. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their fathers' level of education.
62. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their educational qualification.
63. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their previous academic streams.

64. There is no significant difference in the student-teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their specific programmes, i.e. B.Ed. and D.El.Ed.
65. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their marital status.
66. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their gender.
67. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their locale.
68. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their previous teaching experiences.
69. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their fathers' employment status.
70. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their fathers' level of education.
71. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their educational qualification.
72. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their previous academic streams.

73. There is no significant difference in the student-teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their specific programmes, i.e. B.Ed. and D.El.Ed.
74. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their marital status.
75. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their gender.
76. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their locale.
77. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their previous teaching experiences.
78. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their fathers' employment status.
79. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their fathers' level of education.
80. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their educational qualification.
81. There is no significant difference in student-teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their previous academic streams.

82. There is no significant difference in the student-teachers' aptitude towards teaching with reference to their specific programmes.
83. There is no significant difference in student-teachers' aptitude towards teaching with reference to their marital status.
84. There is no significant difference in student-teachers' aptitude towards teaching with reference to their gender.
85. There is no significant difference in student-teachers' aptitude towards teaching with reference to their locale.
86. There is no significant difference in student-teachers' aptitude towards teaching with reference to their having previous teaching experiences.
87. There is no significant difference in student-teachers' aptitude towards teaching with reference to their fathers' employment status.
88. There is no significant difference in student-teachers' aptitude towards teaching with reference to their fathers' level of education.
89. There is no significant difference in student-teachers' aptitude towards teaching with reference to their educational qualification.
90. There is no significant difference in student-teachers' aptitude towards teaching with reference to their previous academic streams.
91. There is no significant relationship between attitude towards teacher education programmes and teaching aptitude of student-teachers.

CHAPTER - II

REVIEW OF RELATED LITERATURE

The second chapter is confined to analyzing literature abiding to the study. By reviewing former research conducted relating to the present study a novel yet valuable research is aimed to be conducted. A review is indispensable for research as it provides better opportunity to discover a firm theoretical framework which supports the research design thereby enriching the appropriateness of the study. This review has been done with a view to come up with refined objectives and hypotheses which will serve as an important pathway for the researcher to fill in the research gap found during the reviewing process.

The literature review is classified into two broad sections namely- Studies conducted in India and Studies conducted abroad.

2.1.0 STUDIES CONDUCTED IN INDIA

Fatima and Humera (2011) studied “the aptitude of B.Ed. trainee teachers towards teaching and academic achievement”. 143 teacher trainees were selected from Aurangabad and Teaching Aptitude test battery by Dr. R.P. Singh and Dr. S.N. Sharma was used for studying teaching aptitude. On the basis of findings a conclusion can be made that B.Ed. trainees have above average level teaching aptitude as well as high academic achievement. Results also displayed that the co-efficient of correlation between teaching aptitude and academic achievement was also positive and low. The findings also showed that there was no significant difference between male and female B.Ed. trainees for both the variables.

Pany (2013) administered a study to find out the teaching aptitude of primary level teacher trainees and collected data from primary school teacher trainees in DIET, Mandi. The study identified that male and female, graduate and undergraduate, graduate and post-graduate primary school teacher trainees do not differ in their aptitude towards teaching, however, the postgraduate and undergraduate primary school teacher trainees differ in their aptitude towards teaching.

Bala and Singh (2013) investigated the effect of B.Ed. Programme on the Teaching Competence of Prospective Teachers in relation to their Teaching Aptitude and conducted a study on 126 B.Ed. students from only one college of Education in Ludhiana. The experiment started with pre-test in first teaching practice followed by an exposure to B.Ed. Programme thereby concluding with post-test. The investigators employed General Teaching Competency Scale (2009) by Passi & Lalitha and Teaching Aptitude Test (2009) by Gakhar & Rajnish to collect data. From the results it can be mentioned that teaching competence of prospective teachers had improved significantly as a result of exposure to B.Ed. programme. Moreover, prospective teachers having high aptitude to teaching had better teaching competencies as compared to prospective teachers with a lower aptitude.

Upadhyaya (2014) investigated the aptitude of B.Ed. trainees towards teaching. The objectives of the study were - to compare teaching aptitude of - male and female B.Ed. students, students of arts and science stream, students studying in self-financed and government aided institutions. The study was conducted on a sample of 100 B.Ed. students of Allahabad city. Teaching Aptitude Test developed by S. S. Dahiya and L.C. Singh was used as a tool for the study. The findings of the study revealed that there was no significant difference in the teaching aptitude of male and female as well as arts and science B.Ed. students. Similarly there existed no significant difference in the teaching aptitude of B.Ed. students studying in self- financed and government aided institutions.

Chandel and Dhiman (2014) executed a study on teaching aptitude of prospective teachers towards teaching profession with regard to teaching variables like Teaching Profession, Interest towards Students, Social Contacts, Innovation Regarding Activities of the School, Professional Ethics and Teaching Potentialities and Current Knowledge. The sample consisted of 200 B.Ed. Students selected from 10 Colleges of Education in District Hamirpur, Himachal Pradesh. A simple random sampling technique was adopted. The teaching aptitude test developed and standardized by Dr. S.C. Gakhar and Dr. Rajnish (1971) was used for data collection. The study helped to find that male and female prospective teachers differ significantly in their overall teaching aptitude as well as in four areas of teaching aptitude. It was also found that

there were no differences in two areas, viz. teaching profession and interest towards students.

Borase (2014) was mainly concerned with teaching attitude of the B.Ed. teacher trainees and secondary school teachers. The sample consists of 60 B.Ed. teacher trainees and 60 secondary school teachers from Nasik. The data was collected by using Teacher Attitude Inventory developed by Dr .S.P. Ahluwalia. The findings revealed that there was a significant difference in the teaching attitude of the male and female B.Ed. teacher trainees. There were no significant differences among male and female secondary school teachers. The investigator also concluded that was no significant difference in the teaching attitude of the B.Ed. teacher trainees and secondary school teachers.

Kaur et al., (2014) intended to predict the Teaching Skills on the basis of Teaching Aptitude and Attitude towards Teaching. The sample consisted of 100 Prospective Science Teachers from Colleges of Education having permanent affiliation with Panjab University, Chandigarh. General Teaching Competence Scale by Passi and Lalitha (2009), Teaching Aptitude Test (TAT) by Gakhar and Rajnish (2009), and Teacher Attitude Inventory by Ahluwalia, (2006) were used to collect the data. The results of the study depicted that Teaching Aptitude and Attitude towards Teaching conjointly predicted Teaching Skills significantly higher as compared to their separate prediction for Prospective Science Teachers.

Vasanth and Ushalaya (2014) conducted a study with the objectives to find out the teaching goals and teaching competency of B.Ed. teacher trainees with respect to gender. A normative survey method was adopted wherein random sampling technique was employed to conduct the study on a sample size of 182 B.Ed. teacher trainees from IASE, Saidapet, Chennai. The findings of the study showed that mean score of teaching goals of male B.Ed. trainees was comparatively higher as compared to female B.Ed. trainees. It was also found that there was a significant difference in teaching competency of B.Ed., trainees based on gender.

Sahayarani and Stanly (2014) investigated the “Attitude Towards Teaching Profession of B.Ed Trainees in Pondicherry” and collected data from 104 B.Ed

trainees from four different Colleges of B.Ed in Pondicherry town. The purpose was to find out the attitude towards teaching of B.Ed trainees in Pondicherry region and to find out the significant differences in the attitude towards teaching, if any, with respect to sex, subject and locality amongst B.Ed trainees. Results revealed that the attitude of B.Ed trainees towards teaching was high. Significant differences were also found in the attitude towards teaching between Male and Female and Arts and Science B.Ed trainees.

Rana (2015) studied teaching aptitude of B.Ed. trainees with respect to their academic achievement, residential background and stream in Colleges of Education in Jammu City. The sample consisted of total 250 B.Ed. trainees from five randomly selected colleges. The Teaching Aptitude Test (2010) by S.C. Gakhar and Rajnish was used to collect the data. The findings highlighted that most of the B.Ed. trainees were having average teaching aptitude. No trainee was found to have very low or very high teaching aptitude. It was observed that there were significant differences in teaching aptitude of B.Ed. trainees in relation to their academic achievement. In addition, there were no significant differences found in teaching aptitude of B.Ed. trainees with respect to their residential background and streams.

Singh (2015) carried out a study on “Teaching Aptitude of B.Ed. Teacher Trainees of Himachal Pradesh in Relation to Their Gender and Stream” for which the investigator purposively selected 320 sample students (boys and girls) from B.Ed. Colleges of the district Solan, Shimla, and Una in Himachal Pradesh. The findings showed that there existed no significant difference between the teaching aptitude of male and female teacher trainees while it differed significantly between arts and science teacher trainees. Lastly, teaching aptitude also indicated no significant difference between female arts and science teacher trainees as well as male arts and science teacher trainees.

Malik and Sindhu (2015) explored the relation between teaching aptitude and intelligence of B.Ed. pupil teachers for which they randomly selected a representative sample of 600 (300 male and 300 female) teachers from urban and

rural B.Ed. colleges of three districts in Haryana. The investigators used Teaching Aptitude Scale (2002) By L.C. Singh and Dahiya and Test Of General Intelligence (2012) By S.K.Pal & K.S.Mishra to collect the data. The study displayed that a significant difference was found between teaching aptitude and intelligence of rural male B. Ed. Pupil teachers. However, results were reversed for urban male and female B.Ed. pupil teachers for the same comparison of teaching aptitude and intelligence.

Nataraja (2016) studied “Attitude of Teacher Trainees Towards Two Year B.Ed. Programme and Their Future” and purposively selected one aided and one private B.Ed. college from Hassan city, Karnataka, India. 120 teacher trainees were selected for the study and findings revealed that most trainees joined the course out of their own interest. However, nearly half of the trainees were of the opinion that two years is time consuming at the same time, 90% of teacher trainees were also of the view that two year B.Ed. programme will improve the quality of teachers which will in turn enhance better job opportunity in the future.

Sao and Behera (2016) studied student-teachers’ attitude towards Two-Year B.Ed. Programme with special reference to NCTE New Regulation, 2014 in Purulia district, West Bengal. A total of 260 Student-Teachers from 1 Government Sponsored and 3 Self Financing / Private B.Ed. Colleges (both Urban and Rural areas) affiliated to Sidho-Kanho-Birsha University in Purulia District of West Bengal were taken as a sample to represent the whole population. Purposive sampling technique was employed for selecting the B.Ed. Colleges and stratified random sampling was also employed to select student-teachers. An attitude scale was used for collecting data and statistical technique like t-test and correlation were used for data tabulation. The study depicted that the attitude of B.Ed. Student-Teachers in Purulia District of West Bengal is neither more favourable nor unfavourable towards Two-year B.Ed. Programme i.e., satisfactory or average in attitude towards Two – Year B.Ed. Programme. The study also showed that Male and Female, Pre-service and In-service, General and SC, General and ST, General and SC/ST, General and OBC including Less than 5 years and Above 5 years teaching experience student-teachers attitude towards two-year B.Ed. programme did not differ significantly.

However, student-teachers in Rural and Urban areas as well as Government and Private B.Ed. college attitude towards two –year B.Ed Programme differed significantly.

Topal and Pant (2016) carried out a study on the aptitudes of pupil-teachers for which they collected data from 50 samples in Government Degree College, Nainidanda, Pauri Garhwal. The study showed that there was no significant difference between teaching aptitude of male and female pupil-teachers. In addition there was no significance difference between the teaching aptitude of pupil-teachers based on their caste, living area, and family type and there existed a significant difference on the basis of subject stream.

Saleem and Leema (2016) had done a study intending to evaluate teaching aptitude of D.Ed. trainees in Kerala. The sample consisted of 1129 freshly joined, elementary teacher trainees from fourteen districts of Kerala. Analysis of the results showed that majority of the trainees has average teaching aptitude. It was also found that trainees from urban areas were found to be significantly better than their rural counter parts in teaching aptitude test. In addition trainees from Government or Aided institution were also found to be significantly better than those belonging to Unaided institutions.

Kumari and Naik (2016) conducted an experimental study on 34 D.Ed. students randomly selected from Uttara Kannada district. Data collection consisted of measuring Teaching Skills by observing lessons and rating the Teaching Skills during the Practicum. The findings of the study displayed that reflective teaching strategy had significant effect on developing teaching skills. In addition, there was no significant effect of teaching aptitude in developing teaching skills as the interaction of reflective teaching strategy and teaching aptitude also had no significant effect on teaching skills.

Adhikary (2017) investigated the “Perception of the Teacher Trainees Towards Two Year B.Ed. Programme Implemented in the Teacher Education Institutions in Assam” and took 100 sample trainees randomly selected from different B.Ed. colleges of Assam consisting of 50 male trainees and 50 female trainees. Findings

revealed that majority of the trainee were dissatisfied with the curriculum distribution. Further, having teacher education paper as an option is also a strong point of dissatisfaction and negative perception was also found in economic compatibility as the fee structure is very high. Most trainees preferred one year B.Ed. course at the same time study also highlighted that lack of warranty in getting the desired profession is yet another factor creating disinterest amongst the trainees.

Sudha (2017) aimed to study the attitude of student teachers and teacher educators towards two years B.Ed. programme. In the study Convenience sampling technique was employed to select a sample of 50 male student trainees and 50 female student trainees along with more than 30 male and female teacher educators selected from two government/ two government aided/two private colleges from Kattankulathur, Tamil Nadu, India. The results indicated that there was no significant difference among teacher trainees with reference to locality, level of education but there was significant difference with respect of gender. It was also obtained that there was no significant difference among teacher educators with respect to level of experience and locality. Meanwhile, it was added that there was no correlation between the attitude of student teachers and teacher educators.

Devi and Sharma (2017) investigated the teaching aptitude and attitudes of prospective- primary school teachers towards teaching profession in relation to their gender, type of institution and stream of study. A total of 640 prospective primary school teachers, 320 from private and 320 from government institutions (DIET) of junior basic teacher training colleges of Himachal Pradesh had been selected as sample through random sampling method. The “Teaching Aptitude Test Battery” by Dr. R.P. Sharma and S.N. Sharma and the “Attitude towards teaching profession scale” by Umme kulsum were used to collect the data. The research findings revealed that there was a significant difference in the teaching aptitude of male and female prospective primary school teachers. Likewise there existed a significant difference in the teaching aptitude between prospective primary school teachers studying in government (DIET) and private institutions. Further the study also displayed that there was significant difference in the attitudes of male/female, and arts/science stream prospective primary school teachers towards teaching profession.

Sharma (2017) had done an investigation to study the teaching aptitude of prospective teachers in relation to gender, qualification, stream of study, medium and family annual income and selected 200 prospective teachers belonging to different colleges of education of Ghaziabad District. The study displayed that there was a significant positive correlation between the teaching aptitude and the academic background of prospective teachers. This meant that if a student had better academic background it led them to have a better teaching aptitude. Therefore, teaching aptitude of teacher trainees of Gautama Buddha Nagar in relation to their gender and stream along with mental ability of teaching aptitude was depending on the academic background of the prospective teachers.

Joseph (2017) investigated the “Attitude of Secondary Teacher Trainees towards Teaching Post-Internship Programme” and was selecting Secondary Trainee Teachers from Mysore City of Karnataka State. In this study 150 Secondary Trainee Teachers from two institutes were selected by using stratified random sampling technique. The results showed that the level of secondary trainee teachers’ attitude towards teaching after internship was high and that there existed no significant difference between male and female secondary trainee teachers in their attitude towards teaching after internship programme. However, it was found that there was a significant difference between secondary trainee teachers of arts and science streams in their attitude towards teaching after internship programme while there was no significant difference between secondary trainee teachers with UG and PG qualification in their attitude towards teaching after internship programme.

Pakira and Khan (2018) conducted a study to find out the perception of trainee teachers towards two years B.Ed. programme with special reference to NCTE New Regulation, 2014 in West Bengal and purposively selected B.Ed. colleges. 100 trainees were selected with stratified random sampling from Government Sponsored and Self-Financing B.Ed. colleges (both Urban and Rural areas) affiliated to WBUTTPA, University of Calutta, Burdwan University of West Bengal. It was revealed that there was no significant difference in the perception of trainee teachers towards the ‘Two-years B.Ed. programme’ with regard to their Educational Qualification, Caste, Habitat, Status of Training (pre-service and in-service).

Besides, married and unmarried trainee teachers showed no significant difference in their perception towards two years B.Ed. programme. It was also found that Unmarried trainee teachers possessed a more favourable perception towards 'two years B. Ed programme.

Ghosh and Das (2018) undertook a study to investigate the Perception of Teacher Trainees towards B.Ed. Course in terms of its effectiveness on factors like - Gender, Academic stream, Service type and college variations. 100 samples were purposively selected from one government and one private B.Ed. College from Nadia district in West Bengal. From the findings of the research it can be concluded that the Perception of Teacher Trainees towards B.Ed. Programme in terms of its effectiveness depended on different variations like, gender, service type, college and academic stream. It also showed that there was a positive and significant relationship between scores on Teacher trainees Perception and Efficiency.

Ishwarbhai (2018) studied the attitude towards the teaching profession of B.Ed. trainees in relation to gender and area. The study revealed that the mean score of boys B.Ed. trainees was 4.64 while the mean score of girls B.Ed. trainees was 4.78 which further indicated that the attitude towards teaching profession was truly affected by gender. The study showed that the impact of the area on the attitude towards teaching profession of girls rural B.Ed. trainees and urban girls B.Ed. trainees of Sardar Patel University cannot be seen. It was also found that both rural and urban B.Ed. trainees were seen to be equal in their attitude towards teaching profession.

Jain (2018) undertook an investigation on "Teaching Aptitude of Pupil Teachers in Relation to Their Intelligence, Gender and Locality" for which 200 pupil teachers from different colleges of education affiliated to Maharshi Dayanand University, Rohtak were selected. The study depicted that there was a significant difference in teaching aptitude between high intelligent and low intelligent pupil teachers whereby the study revealed that high intelligent group had high teaching aptitude than low intelligent group. It was also found that teaching aptitude had no relevance to gender of the individual but affected by the family background or place of living.

Kanaparthi and Rani (2018) attempted to study the teaching aptitude of 250 prospective teachers in Prakasam district of Andhra Pradesh. A Normative Survey Method was adopted and the Teaching Aptitude Test developed and standardized by Gakhar, S. C. and Rajnish (2010) was used to collect the data. The findings displayed that prospective teachers made significant difference in their teaching aptitude due to variation in their gender at the same time no significant difference was found in their teaching aptitude due to variation in their locality, management and academic stream.

Nayak and Das (2018) operated a study on “Teaching Aptitude of B.Ed. Pupil Teachers in Relation to Their Teaching Competency and Intelligence” and stratified sampling technique was adopted for the study. The sample consisted of 600 B.Ed. (300 male and 300 female) pupil teachers from the colleges of Baripada, Balasore, Bhadrak Jajpur. Out of which 150 from Baripada, 150 from Balasore, 150 from Bhadrak and 150 from Jajpur districts of Odisha were taken as a sample on the basis of random sampling method. The sample also comprised of 300 pupil teachers from rural areas and 300 pupil teachers from urban areas. It appeared from the study that there occurred a significant difference in teaching aptitude between high intelligence and low intelligence of B.Ed. pupil teachers. In addition it was found that high and low intelligent groups of B.Ed. pupil teachers (both male and female) differed significantly in teaching aptitude when the sample was drawn from urban locality. Meanwhile, high and low intelligent group of B.Ed. pupil teachers (both male and female) did not differ significantly in teaching aptitude with the sample from rural locality.

Mahapatra (2018) undertook a study to observe the teaching aptitude among teacher trainees from Abhanpur Block of Raipur District (CG). A total sample of 180 teacher trainees 60 each from 3 Teachers’ Education Institution were selected randomly using the Table of Random Numbers (Fisher and Yates 1963). The findings of the study interpreted that the aptitude of the teacher trainees from rural areas were found to be quite low and that significant differences were found among the sexes towards teaching profession.

Patel (2018) studied dealing with the perceptions, experiences and challenges of the pupil teachers during their internship and sessional work. The sample for the study consisted of 100 student-teachers selected through random sampling from B.Ed. college in Veer Narmad of south Gujarat University, Surat. The results showed that student teachers viewed the internship programme as a real opportunity to refine and improve their teaching skills in an actual school setting. The findings of the study also revealed that hands-on experiences and longer duration of field experience helped the students in understanding the classroom teaching process in a better manner. The challenges perceived by student-teachers were mainly found in the area of classroom management, long distance of practice school from home, a large number of lesson plans, conducting constructivist approach-based lessons at the school level, administration, scoring and interpretation of psychological tests, data collection for action research, preparing presentations for sessional work, etc.

Mahato and Behera (2018) studied B.Ed. student-teachers attitude towards Practicum in Purulia district of West Bengal, India. 250 B.Ed. Student-Teachers of one Govt. Sponsored (47) and four Self Financing / Private (203) B.Ed. Colleges (both Urban and Rural areas) affiliated to SidhoKanho-Birsha University in Purulia District of West Bengal was taken as representative sample of the whole population. The study revealed that the attitude of B.Ed. Student-Teachers in Purulia District of West Bengal is neither more favourable nor unfavourable towards Practicum i.e., satisfactory or average in attitude. The study also displayed that attitude of Male and Female, Rural and Urban, as well as Government Sponsored and Private B.Ed College B.Ed. student-teachers towards Practicum differed significantly. On the other hand, attitude of Pre-service and In-service, 2nd Semester and 4th Semester, Less than 5years and Above 5 years teaching experience, Arts and Science, less than 5 years, above 5 years and Fresher teaching experience as well as General, SC, ST and OBC B.Ed. student-teachers towards Practicum did not differ significantly.

Thangarajan (2018) carried out a study in which the main purpose was to find out the relationship between Teacher attitude and Teaching aptitude of prospective secondary school teachers. The researcher selected 650 prospective secondary school teachers from 10 colleges of education under Nagarjuna University by adopting

stratified random sampling. Teacher attitude inventory by Dr. S.P. Ahluwalia and Teaching aptitude test developed by S.C Gakhar and Dr. Rajnish were used to measure the required areas amongst the prospective teachers. The major findings showed that Teacher attitude and Teaching aptitude of prospective secondary school teachers had a significant positive correlation. In the meantime, the academic qualifications displayed no significant influence on the relationship between Teacher attitude and Teaching aptitude of prospective secondary school teachers. Further, the methodology did not have any significant influence on the relationship between Teacher attitude and Teaching aptitude of the prospective secondary school teachers.

Markandeyulu (2018) studied the teaching aptitude of elementary teacher trainees on a sample of 120 Elementary Teacher Trainees from Prakasam district of Andhra Pradesh. Normative Survey Method was used for this study. Teaching Aptitude Test developed and standardized by Gakhar, S. C. and Rajnish (2010) was used in this study. The findings revealed that there was a significant difference in the teaching aptitude of elementary teacher trainees with regard to gender as well as with regard to management. Meanwhile, it was also found that there was no significant difference in the teaching aptitude of elementary teacher trainees with regard to locality.

Varanasi and Aruna (2018) selected a sample of 100 B.Ed. Prospective teachers from Krishna district of Andhra Pradesh. Teaching Aptitude Test developed and standardized by Gakhar, S. C. and Rajnish (2010) was used in this study. The findings displayed that there was no significant difference in the teaching aptitude of prospective teachers with regard to gender and locality. But there existed a significant difference in the teaching aptitude of prospective teachers with regard to management.

Nath (2019) conducted a study titled “Perception of Prospective Teachers Towards B. El. Ed. Training Programme: A Case Of Central University” for which 35 sample prospective teachers were selected from central university, Chandigarh. A self-made tool by the researcher containing 40 items was used to collect data. The results indicated that majority of prospective teachers were of the view that B.El.Ed.

curriculum met the local needs and that the evaluation procedure is appropriate, unbiased and transparent. Prospective teachers also held the view that the classrooms were adequate enough to meet their requirements.

Srinivasan (2019) focused on the attitude of student-teachers towards two year B.Ed. programme. The objectives of the study were to find out the locality and type of family wise analysis of attitude towards two year B.Ed., programme of student-teachers. Survey method was used for the investigation wherein 30 student-teachers of Dindigul district, Tamil Nadu were used as sample of the study. The investigators had adopted the Attitude scale towards two year B.Ed. Programme developed and validated by V. Rajeswari and P. Shanmugavadivu (2015). The study revealed that there was a significant difference between rural and urban student-teacher in the teaching learning process which inferred that the urban student-teachers had better attitude for the same. It was also found that there was a significant difference between nuclear and joint family student-teachers towards teaching learning for which student- teachers from joint family had better attitude towards the teaching learning process.

Patel (2019) investigated the opinions of B.Ed. teacher trainees towards the two year B.Ed. Programme in Gujarat. The investigator randomly selected 85 B.Ed. College in Gujarat from which 1465 sample was drawn for the study with the help of cluster sampling method. Findings depicted that teacher trainees found the B.Ed. Programme is a comprehensive training which is very essential for preparation of TAT/TAT. It also enhanced quality improvement in the teaching-learning process in real classroom. At the same time, findings showed that the financial burden is too high leading to wastage of time, energy and youth of the trainees.

Parh (2019) conducted a study on “Teaching Aptitude of B.Ed. Student-Teachers of the Institute of Advanced Studies in Education and College of Teacher Education in Odisha” for which the objective was to find out the level of teaching aptitude of student-teachers continuing their Bachelor of Education programme in Odisha. A sample of 180 student-teachers was taken from six institutions of two types and the study was conducted using the standardized tool “Teaching Aptitude Test Battery”

developed by Singh and Sharma. It was revealed that all student-teachers could not qualify for high teaching aptitude level and the mean scores of teaching aptitude of female student-teachers were more than the male student-teachers.

Ramzan (2019) undertook a study to have an understanding of the relationship between teaching aptitude and teaching competencies of teacher-trainees with respect to their academic background. The investigator took 200 trainee teachers within Aurangabad city as a sample for the study. From the results it was found that there was a significant correlation between teaching competency and teaching aptitude among trainee teachers of Aurangabad city. It was also pointed out that there had been a positive co-relationship between academic background and teaching aptitude of trainee teachers.

Acharya and Roy (2019) performed a study on of 104 D.El.Ed trainee teachers studying in different Government and private colleges in Purba Midnapur district of West Bengal. Teaching Aptitude Test developed by Dr. R. P. Singh and Dr. S. N. Sharma was used to collect data and descriptive research method was employed for the study. The findings exhibited that gender or locality did not have any impact on the teaching aptitude of trainee teachers of Purba Midnapur district of West Bengal.

Azmi and Kader (2020) aimed to find out the effectiveness of B.Ed. Curriculum in enhancing professional capacities and engagement with field among prospective teachers. A descriptive survey method was employed in which the sample consisted of 66 student-teachers selected through purposive sampling from the Department of Education, Aligarh Muslim University. The findings of the result indicated that the two year B.Ed. Curriculum proved to enhance professional capacities as well as engagement with field thereby leading the investigator to conclude that the two year B.Ed. Curriculum had been good enough to prepare prospective teachers for their future endeavor.

Gupta and Rakwal (2020) assessed the perceptions of teacher trainees towards the two-year teacher education programme being run in Jammu (India). The Teacher Trainees Perceptions Assessment Questionnaire (TTPAQ) was developed by the researchers for achieving the objectives of the study. The questionnaire consisted of

four scales namely, Duration, Pedagogical Aspects, Curriculum and Innovation. A sample of 200 students enrolled in the two-year B.Ed. and M.Ed. programmes of a private and Government College of education were chosen for the study in Jammu. The results of the study showed that the TTPAQ was a reliable and valid instrument for assessing the perceptions of the teacher trainees towards the two-year teacher education programme. The study indicated that teacher trainees of the B.Ed. and M.Ed. programmes had positive perceptions towards the duration, pedagogical aspects, curriculum and innovativeness of the programme. At the same time, no gender differences were observed in the results of the study but significant differences were observed between the students of private and government colleges and also between the teacher trainees of B.Ed. and M.Ed. classes on all the four scales of the TTPAQ.”

Adhikary and Mohakud (2020) focused on the study of teaching aptitude of women trainee teachers with regard to age, caste, type of trainee teachers, year of course, stream and type of institutions. In this study a cross-sectional survey research method was adopted and the data was collected from 202 women trainee teachers purposively selected from five teacher education institutions in Kolkata city. The result revealed that there were significant differences in teaching aptitude among women trainee teachers with regard to their age, caste, years of course and types of institution whereas no significant differences had been observed with regard to stream of education and type of trainee teachers.

Abdullah et al. (2020) investigated the teaching aptitude of trained and un-trained secondary school teachers. The sample for the present study consisted of 400 teachers including 200 trained secondary school teachers and 200 un-trained secondary school teachers who were selected through stratified random sampling technique from different secondary schools of Kashmir valley. The investigators employed Teaching Aptitude Test Battery developed by Smt. Shamim Karim and Prof. Ashok Kumar Dixit for data collection. The results of the study displayed that trained secondary school teachers possessed better teaching aptitude than un-trained secondary school teachers.

Kulkarni (2021) conducted “A Study of Teaching Aptitude among B.Sc. B.Ed. student-teachers” for which the investigator took a sample of 175 student-teachers (male and female) from B.Sc. B.Ed. stream of college of education. Purposive sampling was the method of sampling used in this study. Teaching Aptitude Test Battery (TAT-DS) developed by Dr. Surendra Singh Dahiya and Dr. L. C. Singh was used to collect data. The study uncovered that no student-teachers could be determined to have an extremely high level of teaching aptitude and that female student-teachers had a higher mean scores of teaching aptitude than male student teachers.

Rani (2021) carried out a study on the teaching aptitude among B.Ed. students-teachers and obtained the data from 60 purposively selected student-teachers nearby Ludhiana. The investigator found that there was no significant difference on the teaching aptitude based on gender.

Das (2021) studied the teaching aptitude of trainee teachers in West Bengal for which a total of 204 trainee teachers were selected from Kolkata and South 24 Parganas District in the state of West Bengal drawn on the basis of purposive and accidental sampling techniques. Teaching Aptitude Test (TAT) developed by Gakhar & Rajnish (1971) was used for collecting data. The researcher concluded that experience can enhance inner potentialities as the findings revealed that deputed and fresher trainee teachers had statistically significant difference wherein deputed or in-service teachers possessed higher teaching aptitude. The result of the study also displayed that gender, caste and stream of education had no significant influence on teaching aptitude of the trainee teachers.

Rajeeva and Venkatesha (2021) undertook a study to find out the relationship between teaching aptitude and Achievement motivation among 100 prospective teachers from two teacher training colleges of Davanagere district which were affiliated to Davanagere University, Davanagere and also recognised by NCTE and state government. For the collection of data the teaching aptitude test battery by Psychom Services and Achievement motivation Scale by Bhargava and Shah were utilized. The findings revealed that teaching aptitude and its variable were

significantly related to Achievement motivation which showed the importance of these variables in the selection of teaching profession.

Rahman and Saikia (2021) carried out “A Study of Teacher Effectiveness and Teaching Aptitude among B.Ed. Student Teachers in Kamrup (M) District Of Assam” for which a total of 153 samples were randomly selected. Out of which 63 sample were from Government B.Ed. college and 90 sample were from Private B.Ed. college from Kamrup (M) district of Assam. Majority of the students had high teacher effectiveness. The results showed that majority of students teachers had above average teaching aptitude. The study further displayed that there existed a positive and significant relationship between teacher effectiveness and teaching aptitude among B.Ed. student teachers.

“Parmar and Tripathi (2021) studied the perceptions of Pupil Teachers of DIETs and Self-financed College in the state of Himachal Pradesh for which 275 pupil teachers were randomly selected from the 6 self-financed colleges and 6 DIETs in Himachal Pradesh. The results showed that prospective teachers of both DIETs and Self-Financed Institutions considered Diploma in Elementary Education (D.El.Ed.) programme to be successful as it helped to increase their confidence and enhancing teaching skills,. Taking the dimensions of physical resources the results revealed that self-financed institutions have better premises and infrastructure. At the same time, a majority of pupil teachers of all institution were of the opinion that there is lack of trained teachers and laboratory assistants and pupil teachers of DIETs perveived that the Diploma in Elementary Education (D.El.Ed.) programme is more appropriate for two years and that different aspects of the school internship have scope of improvement. The findings also revealed that simulation and micro teaching was widely practiced in self-financed institutions.

Halder (2021) conducted a comparative study on “Students Teacher Attitude towards Two Year B.Ed Programme in West Bengal” in which a comparison was made between attitude of rural and urban as well as boys and girls students teacher towards B.Ed programme. Samples of 30 student teachers were selected from B.Ed college of West Bengal. The findings revealed that there existed significant

differences between rural and urban as well as boys and girls student teachers attitude towards two year B.Ed programme of west Bengal.

Pechimuthu and Ramachandran (2022) tried to find out the level of interest in teaching among B.Ed. students with respect to gender, sub-sample optional subjects and to find out the relationship of interest of B.Ed. students towards and the sub-sample optional subjects. The study revealed that the interest in teaching among B.Ed. students is average and that there was no significant difference between male and female B.Ed. students with respect to the interest in teaching and that there was no significant difference between arts and science (optional subject) of B.Ed. students with respect to the interest in teaching. It was found that there was no significant difference between science and language (Optional subject) of B.Ed. students towards the interest in teaching. No significant difference between arts and language (Optional subject) towards teaching existed. It was also revealed that the obtained correlation values of the sub- sample (arts with science, science with language and arts with language) had significant relation.

Sonowal and Kalhotra (2022) explored to find out the teaching attitude of B.Ed. trainees with regard to Gender, Locality, Management, Social category. A representative sample of 300 B.Ed. trainees was randomly selected. Teaching Attitude Scale (2002) By S.P. Allhuwalia was used to collect the data for which statistical technique like t –test was employed to compute the data. The results indicated that there was no significant difference in the attitude of B.Ed. trainees with respect to gender (male and female), locality (urban and rural), management (govt. and private), social category (General, OBC, ST and SC), teaching specialty and age studying under Dibrugarh University of Assam.

Vanishya and Shah (2022) conducted a research on the “Study of Teaching Aptitude of B.Ed. Student Teachers” among student teachers studying in B.Ed. colleges of South Gujarat. The researchers adopted a standardized tool of Teaching Aptitude Test which was constructed and standardized by Satishprakash Shukla. The sample comprised of 2066 (158 male and 1908 female) student teachers from self-financed B.Ed. colleges from south Gujarat region of Gujarat state. The research

showed that teaching aptitude of student teachers in urban area was higher than teaching aptitude of student teachers in rural area. The research also revealed that the teaching aptitude of student teachers from science stream was higher as compared to the teaching aptitude of student teachers from general stream. However, the effect of gender on teaching aptitude was not found which indicated that both male and female student teachers had equal teaching aptitude.

Jeevanantham and Muthuchamy (2022) carried out a study to determine the level of perception of B.Ed. trainees toward the internship. The investigator selected 94 B.Ed. Trainees from a teacher education institution in Tiruchirappalli district of Tamil Nadu. The tool for collecting data consisted of 26 items constructed by the investigators. According to the findings, B.Ed. students were found to have generally an average perception regarding the internships programme.

Kumari (2022) The present study was done to find out the study of teaching aptitude of prospective teachers in relation to gender, qualification, stream of study, medium and family annual income. The investigator utilized the standardized tool “Teaching Aptitude Test Battery” developed by R.P.Singh and S.N.Sharma and collected data from 200 prospective teachers purposefully selected from teachers training colleges of Patna, Bihar. From the findings the investigator concluded that there was no significant difference in teaching aptitude between male and female as well as between graduate and post-graduate prospective teachers. At the same time there was no significant difference between Arts and Science stream and also between English Medium and Hindi Medium prospective teachers in their teaching aptitude. The investigator also found that there existed no significant difference among prospective teachers with respect to their family annual income.

Periasamy and Ananthi (2022) had the objective to study the relationship between teaching aptitude and teaching effectiveness among the B.Ed. trainees. The investigator adopted a normative survey and selected 400 B.Ed. trainees from Thanjavur district of Tamil Nadu. The investigators found that there was no high level of mean score of teaching aptitude and teaching effectiveness among the B.Ed. trainees. The study also revealed that there existed a significant difference in the

mean scores of teaching aptitude between B.Ed. trainees with regard to gender, fathers' educational qualification, fathers' occupation, mothers' educational qualification and mothers' occupation. The investigator also found a significant as well as a highly positive correlation between teaching aptitude and teaching effectiveness among the B.Ed. trainees.

Jan (2022) attempted to make assessment and comparison on the Teaching Aptitude of In-service Male and In-service Female B.Ed. Pupil Teachers of Kashmir division. The investigator had drawn a sample of 120 In-service B.Ed. Pupil Teachers (60 Male and 60 Female) from Government college of education, M.A. Road, Srinagar and Directorate of Distance Education University of Kashmir (J&K) and the data was collected by using Dr. S.C. Gakhar and Dr. Rajnish Teaching Aptitude Inventory (TATGR). The results depicted that the in-service male and in-service female B.Ed. Pupil Teachers had the same Teaching Aptitude. However, when looked into the factors wise analysis Male In-service B.Ed. Pupil Teachers had better Teaching Aptitude on factors like Innovations regarding Activities of the School and professional ethics as compared to their Female In-service B.Ed. Pupil teachers counterpart. It was also found that both Male and Female In-service Pupil Teachers had the same aptitude on other factors of teaching Aptitude like Teaching Profession, Interest towards Students, Social Contacts, and Teaching Potentiality and Current Knowledge.

Sen et.al. (2022) conducted "A study of Teaching Aptitude of B.Ed Pupil Teachers in Relation to their Gender, Location, Stream and Type of Institutions" among 100 samples (50 Govt. and 50 Private B.Ed college pupil teachers) who were randomly selected from Purulia and Birbhum districts, West Bengal. Based on the findings the investigators concluded that female students had a comparatively high teaching aptitude than the male students and that students from rural areas had comparatively high teaching aptitude than the urban students. It was also found that science students had a comparatively high teaching aptitude as compared to the arts students of B.Ed colleges of West Bengal.

Perumal and Chary (2022) conducted a study on “B.Ed Student Teachers Perception on School Internship Program” for which 337 B.Ed II year student teachers served as the sample for the investigation. The study analyzed B.Ed II year student -teachers’ perception of school internship with the self-developed Perception on School Internship Scale (PSIS). The study depicted that there was a significant difference between the mean scores of perception on school internship among the age groups fewer than 21 years and more than 21 years of B.Ed student-teachers. It was also found that there was a significant difference between the mean scores of perception on school internship among languages and science stream student teachers.

Bano (2023) studied the Teachers Aptitude towards Teaching in B.Ed. as well as Degree College Kishtwar District, Jammu and Kashmir. The Investigator collected 200 samples - 100 from B.Ed. College and 100 from Degree College, Kishtwar. The sample comprised students from Science and Arts background. The study revealed that there was a slight difference in aptitude of teachers of different colleges, i.e. there was a significant difference in teachers’ aptitude among B.Ed. College and Degree college of Kishtwar. It was found that Degree college Teachers’ aptitude level was higher than the B. Ed College Teachers. In addition, there was a significant difference in teachers’ aptitude among B. Ed College and Degree College teachers. It was also found that there existed significant difference between type and gender of teachers towards teaching aptitude.

Mili (2023) conducted a research on teaching aptitude of B.Ed. trainees of Upper Assam, India. A total of 52 B.Ed. trainees (24 male and 28 female) undergoing B.Ed. course from two teacher training institutions of Lakhimpur District of Upper Assam were selected for the study. Teaching Aptitude Test developed by Gakhar and Rajnish (2010), consisting of 35 items was administered and the data was analysed using percentages, mean, SD and t-test. The study revealed that there was a significant positive correlation between teaching aptitude and success in teaching and teaching effectiveness. The study also indicated that majority of the B.Ed. trainees were having above average teaching aptitude. Female B.Ed. trainees were found to had higher teaching aptitude than male trainees. Further, both arts and science

background B.Ed. trainees and graduate and post graduate B.Ed. trainees have the same aptitude towards teaching.

Reddy (2023) studied teaching aptitude of prospective teachers and employed a simple random sample of 50 prospective teachers in Guntur district. The investigator used the standardized tool adopted by Teaching Aptitude Test Battery developed by Dr R.P. Sing & Dr. S. N. Sharma for data collection. The findings of the study exhibited that the teaching aptitude of prospective teachers was found to be at an average level. It should also be noted that the gender variable was not significantly influencing the teaching aptitude of the prospective teachers.

Mandal and Mete (2023) conducted a research to “understand and find out the differences between the three B.Ed. curricula”. The study was based on Documentary Analysis and the data was collected from the syllabus of B.Ed. 1-year, 2-year & 4-year Integrated B.A. B.Ed. and B.Sc. B.Ed. Courses. The findings revealed that in the 4-Year Integrated B.A. B.Ed. and B.Sc. B.Ed. programme student-teachers have to prepare two school subjects, the duration of the school internship will account to 20 weeks thereby requiring student-teachers to prepare 120 Lesson plans. In addition, the final teaching will be assessed only by internal evaluators. The investigators concluded that too much importance will be given to the subject of Education, which can hamper mastery of other subjects.

Selvam (2023) carried out “A Study on Perception Towards Teaching Practice Among B.Ed. Student-Teachers” and confined to six self-finance B.Ed. colleges only in Erode district of Tamil Nadu for which a sample of 303 student-teachers were selected. The investigator adopted survey method for which a rating scale was employed to collect data from the respondents. The objectives of the study were-

- a. To find out the level of B.Ed. student-teachers, as a whole perceived from the teaching practice programme as effectively.
- b. To find out the level of B.Ed., student-teachers of various sub-samples perceived from the teaching practice programme as effectively.

c. To find out whether there is any difference between any two sub-samples of B.Ed., student-teachers taken at a time in respect of the perception of the effectiveness of B.Ed., teaching practice programme.

The study findings displayed that all the sub-samples other than language and arts group had the same perception. The investigator also concluded that language group B.Ed. student-teachers had less perception as compared to the arts group B.Ed. student-teachers. Hence, it was found that the language group and arts group B.Ed. student-teachers were significantly different in their perception towards teaching practice programme.

Verma et.al. (2023) compared the perspectives of the respondents regarding teacher training infrastructure for which 109 trainees were selected from different teacher education colleges in Lucknow, Uttar Pradesh. The findings revealed that there was a favourable opinion among the different groups of sample respondents towards the infrastructure of a teacher's training college. The researcher also found that there existed no significant difference in the perspective of teacher educators and pupil teachers regarding the infrastructure of their college. The sample trainees responded 5 most important infrastructure features in a teacher's training college such as laboratories, library, classrooms, washrooms and land-building of the college. Majority of the respondents selected classrooms, libraries and laboratories as the most unique feature of the infrastructure in a teacher's training college. This study also pointed out the importance of various features of the teacher training infrastructure from the point of view of the respondents and encouraged the respondents to express their opinion on better use of the infrastructure.

Qamar et.al. (2023) undertook a study to find out the difference between teaching practices in rural and urban secondary school teachers along with the influence of teaching practices on learner's academic performance. The study was delimited to secondary school teachers of Sindh province and the sample of the study consisted of 210 teachers from rural and urban area of Hyderabad selected on random basis. A self-developed questionnaire was used as a research instrument. The study concluded that the effective teaching practices reinforce to achieve high learners' academic

performance and that there was no significant difference among the rural area and urban area teachers. Besides, from the study the investigators recommended that government may give better incentives to the teachers for their effective teaching practices and manage refresher courses and workshops time to time.

Ray et.al. (2023) aimed to find out the challenges of practice-teaching. The researcher conducted a review technique related to practice-teaching to explore the challenges of teaching-practice among the prospective teachers and it was found that majority of the prospective teachers said that practice-teaching was ineffective in improving their teaching skill and few prospective teachers indicated that they were not benefitted much from the practice-teaching.

Singh et.al. (2024) selected a group of 855 student-teachers enrolled in CTEs, Manipur and SCERT Manipur during academic year 2022 to 2023 thereby focusing on ascertaining their attitudes towards the teaching profession. A mixed-methods approach was utilized by the researcher. The findings displayed that student-teachers generally held positive attitudes towards the teaching profession; however, they were not free from challenges and concerns. Through the findings it was also revealed that factors like personal experiences, societal perceptions and career aspirations were highly influencing their attitude. The study also depicted that the importance of addressing these factors in teacher education programmes is essential in order to enhance more positive attitude towards teaching and improve teacher retention rates.

Singha (2024) conducted a study on the “Aptitude of B.Ed Trainees towards Teaching Profession: A Case Study” on 100 B.Ed trainees from a college in Purba Medinipur district, West Bengal. The investigator assessed the aptitude of B.Ed trainees towards teaching profession and also compared the aptitude level of male – female, rural – urban and arts – commerce B.Ed trainees towards teaching profession. The results indicated that majority B.Ed trainees had moderate aptitude towards teaching. At the same time, a significant difference was also found in the aptitude between arts and science B.Ed trainees where arts B.Ed trainees had more favourable aptitude towards teaching profession.

Debbarma and Bhattacharaya (2024) compared the attitudes of student teachers enrolled in the one-year and two-year Bachelor of Education (B.Ed.) programmes at the Institute of Advanced Studies in Education (IASE), Tripura. The research investigated how student teachers perceive the curriculum, assessments, practical training and overall effectiveness of each programme. The study used a structured questionnaire to obtain data from 110 participants, including both student teachers and instructors. The findings depicted that the two-year B.Ed. programme is generally perceived more favourably in terms of the effectiveness of assessments, development of practical skills and deeper learning experiences. However, students in the two-year programme were also found to have higher levels of mental strain due to tasks and assignments, as well as challenges with time management for teaching strategies. In contrast, the one-year programme, while more compact, was appreciated for its more effective implementation of teaching strategies but perceived as insufficient for comprehensive teacher preparation.

Rastogi (2024) examined trainees' attitudes towards internships in the B.El.Ed. curriculum based on gender. The research utilized a descriptive survey method. A sample of 240 trainees was obtained from five universities in the Bareilly division affiliated with Mahatma Jyotiba Phule Rohilkhand University. It was found that the attitudes of both male and female trainees towards internships in the B.El.Ed. curriculum were similarly positive. Therefore, it was concluded that there was no significant gender-based difference in attitudes towards internships in the B.El.Ed. curriculum, and both groups' attitudes were positive.

2.2.0 STUDIES CONDUCTED ABROAD

Choudhry et al. (2011) aimed to study the attitude and perception of teacher educators towards secondary school teacher training programme in Pakistan. To get the desired end a questionnaire of 82 items was constructed which was divided into 5 sub-sectors which are- Admission criterion, Objectives of teacher training, Facilities available, Content of the courses and Methodology used by the teacher educators, Teaching practice and Evaluation procedure adopted by the teacher educators. The data was collected from 325 teacher educators from 26 institutions throughout the

country and further analyzed using mean score t-test and ANOVA to compare the different variables i.e. age, gender, residence, institution, province, academic qualification, professional qualification, teaching experience, administrative experience. The study revealed that there was a significant difference among the attitude and perception of teacher educators on the selected variables i.e. age, gender, residence, institution, province, academic qualification, professional qualification, teaching experience, administrative experience.

Alexiadou and Essex (2015) conducted a research on “Teacher education for inclusive practice – Responding to policy” in one teacher education course in England and examined the ways in which the program prepares student teachers for inclusive practice in science teaching. The data was obtained from official sources, lecture material, interviews, as well as arguments in order to achieve real inclusion in teacher education programmes. Results of the findings raised two important issues in relation to teacher education and inclusion. First, teacher education could act as an important agency in achieving inclusion within classrooms. Secondly, an observation relating to the ways in which the teacher education program incorporates the requirement for inclusion should be stressed for which students could be invited to reflect on what they could actually incorporate in the classroom contexts what they had encountered as well as the difficulties they faced for applying such principles when faced with school structures that are not necessarily supporting them.

Aung (2019) investigated the relationship between teaching aptitude and emotional intelligence of student teachers. The research was a descriptive research survey method and the data was collected using random sampling technique. The sample comprised of 150 student teachers from Yangon University of Education and Sagaing University of Education in Myanmar. The researcher constructed Teaching Aptitude Test based on the teacher aptitude tests of the researchers in India. This test consisted of 80 items with four points Likert scale covering five subscales: mental ability, interest in teaching profession, attitude towards children/students, adaptability and moral character. An Emotional Intelligence scale developed by Nutan Kumar Thigujam and Usha Ram (2000) was also used for data collection. In this study it was found that there was no gender difference on teaching aptitude and

emotional intelligence among student teachers. This had evidently shown that there is a positive relationship between teacher aptitude and emotional intelligence.

Chit (2020) assessed the teaching aptitude of Myanmar teacher trainees and selected 263 teacher trainees in Sagaing University of Education, Myanmar. It was a longitudinal study for which B.Ed. teacher trainees of 2016 December intake were used to collect data at four different times using Teaching Aptitude of Indian Competitive Exams of Chhattisgarh (TAICE). The study demonstrated that there was no significant effect of gender and there was also no significant effect of previous achievement. The researcher also concluded that aptitude of teacher trainees significantly improved during three academic years which could be due to the effective teaching learning activities of teacher trainers in Sagaing University of Education.

Rudio et.al. (2020) aimed to assess the student teachers' perceptions toward the Elementary Education Student Teaching Program in Don Mariano Marcos Memorial State University, Philippines. It was a descriptive research and sample comprised of 91 student teachers enrolled under the Bachelor of Elementary Education (BEED) program in the Don Mariano Marcos Memorial State University - North La Union Campus, Philippines for the calendar year 2015-2016 of which 10 were males and 81 were females belonging to age 19 and above. Data were analyzed using frequency counts, percentages and weighted means. The findings revealed that student interns for CY 2015-2016 were dominated by females with a ratio of 1:9 and most of them were more than 20 years old. It was also found that all PSE student interns experienced teaching in the pre-elementary level only while the student interns specialized in general education were exposed teaching in both the primary and intermediate grades, still in the elementary level. As to the perceptions of students along student teaching program offered by the department, orientation tasks is 4.49 (HO), rapport with academic community 4.49 (HO), practicum environment 4.49 (HO), auxiliary services 4.41 (HO), activities of the student 4.56 (HO) with a mean of 4.49 (HO). All are described as highly observed.

Olatunde-Aiyedun (2021) conducted a study on “Student Teachers’ Attitude towards Teaching Practice” and selected a sample of 163 student teachers in University of Abuja, Nigeria. The findings indicated that student teachers had negative attitude towards teaching practice. It was also displayed that there existed a significant difference in performance of student teachers’ based on their attitude while a non-significant difference existed between male and female student teachers given their attitude.

2.3.0 Conclusion

Hence, it is noteworthy to mention that the literature for review had been collected between the years 2011 and 2024. During the review, it was found that no standardised tool was used to study the attitude of student-teachers towards teacher education programme, in the light of which the researcher has been deeply compelled to construct a standardised tool for the same. With a hope to help other researchers in future, the objectives were selected with utmost care.

CHAPTER – III

METHODOLOGY

Research involves a logical and systematic quest for new and useful information on a particular subject. It involves investigating and finding solutions to scientific and social issues through objective and methodical analysis. Essentially, research is a pursuit of knowledge and the discovery of hidden truths. This knowledge can be gathered from various sources such as experiences, people, books, journals, and nature. Research can contribute new insights to existing knowledge, and it is through research that progress in any field is possible. The process of research includes studying, experimenting, observing, analyzing, comparing, and reasoning. Research is everywhere, aiming to predict events and explain their relationships and theories.

Research methods refer to the different techniques used to study a specific phenomenon. They are carefully planned, scientific, and unbiased. Effective research methods are not accidental but are intentionally employed to ensure the accuracy of results. These methods can include theoretical approaches, numerical techniques, experimental procedures, and other relevant data and tools necessary for the study. Not all theories, techniques, and information related to a research topic are useful for a specific problem. Therefore, a researcher must identify and select materials that are relevant to their study. The primary purpose of research methods is to gather relevant information efficiently, with minimal effort, time, and cost.

The methodology and procedure used for the current study is discussed and presented as follows:

1. Method of study
2. Population and sample
3. Tools used for data collection
4. Collection and tabulation of data and
5. Statistical techniques for analysis

3.1.0 Method of study

Descriptive research studies are designed to obtain information of the current status of things, events and phenomenon under investigation and draw valid general conclusions. It also involves measurement, classification, analysis, comparison, and interpretation. In the present study descriptive survey method has been adopted as the objective is to construct and standardize an attitude scale towards teacher education programme, to find the level of student-teachers' attitude towards teacher education programmes and compare them with reference to different independent variables, to find the levels of teaching aptitude of student-teachers and compare them based on different independent variables and to find the relationship between the attitude and teaching aptitude of student-teachers. The objective also includes finding out the opinion of student-teachers on some aspect of teacher education and suggest measures for improving the existing elementary and secondary teacher education programmes.

3.2.0 Population and sample

The population of the present study comprised of all student-teachers from every teacher training institutes in Mizoram covering both elementary and secondary levels. There are eight District Institute of Education and Training (DIETs) that provide D.El.Ed programme, with two of these DIETs providing B.Ed programme. In addition, Institute of Advanced Studies in Education (IASE) and Mizoram University (MZU) also offered B.Ed Programme. The total number of student-teachers in all the teacher training institutes is 1589. The following table – 3.1 shows the teacher training institutes in Mizoram along with programmes offered and the number of student-teachers in each institution.

Table – 3.1
Training Institutes, Programmes offered and number of student-teachers

S.N	Institutes	Programmes	Student-teachers
1	Institute of Advanced Studies in Education, Aizawl	B.Ed	266
2	Mizoram University, Tanhril	B.Ed	189
3	District Institute of Education and Training, Aizawl	B.Ed D.El.Ed	99 234
4	District Institute of Education and Training, Lunglei	B.Ed D.El.Ed	100 165
5	District Institute of Education and Training, Serchhip	D.El.Ed	95
6	District Institute of Education and Training, Kolasib	D.El.Ed	84
7	District Institute of Education and Training, Champhai	D.El.Ed	94
8	District Institute of Education and Training, Lawngtlai	D.El.Ed	89
9	District Institute of Education and Training, Mamit	D.El.Ed	83
10	District Institute of Education and Training, Saiha	D.El.Ed	91
Total			1589

A sample is a smaller section chosen from a larger population. It represents a manageable portion of the bigger group and contains the same characteristics as the larger population. Samples are utilized in statistical tests when the population is too large to include all members or observations. The sample should accurately reflect the entire population and should not show any bias towards any particular attribute. The present study employs stratified random sampling method. The population is

divided into subgroups or strata, i.e. the districts from the North, South, East, West and Central represent the different strata and institutes are selected from each stratum to ensure that each geographical area is represented in the sample. The total sample consisted of 523 student-teachers. The name of the selected institutes, programmes and number of selected samples are presented in the following table – 3.2

Table – 3.2
Selected Institutes, Programmes offered and number of selected samples

S.N.	Institutes	Programmes	Male	Female	Urban	Rural	Total
1	IASE	B.Ed	43	76	75	44	119
2	MZU	B.Ed	26	45	28	43	71
3	DIET, Aizawl	B.Ed	20	15	27	8	35
		D.El.Ed	20	64	46	38	84
4	DIET, Lunglei	B.Ed	19	25	24	20	44
		D.El.Ed	26	28	13	41	54
5	DIET, Serchhip	D.Ed.Ed	18	26	42	2	44
6	DIET. Kolasib	D.El.Ed	4	16	9	11	20
7	DIET, Champhai	D.El.Ed	8	30	12	26	38
8	DIET, Mamit	D.El.Ed	3	11	0	14	14
Total			187	336	276	247	523

3.3.0 Tools used for data collection

The following tools were used for the present study

1. Attitude Scale towards Teacher Education Programme (2024) developed and standardized by the investigator.
2. Teaching Aptitude Scale developed by S.C. Gakhar and Rajnish (2004).
3. Opinionnaire on some aspects of Teacher Education developed by the investigator.

3.3.1. Attitude Scale towards Teacher Education Programme

With the objective of finding out student-teachers attitude towards Teacher Education Programme, the investigator developed and standardized a Likert type attitude scale towards Teacher Education Programme. This scale consists of 37 items with 25 positive and 12 negative statements.

Reliability: Reliability was established using the test-retest method and the reliability coefficient was calculated by means of Product Moment Correlation and it was found to be .996.

Validity: This scale was validated as well by ten experts in the field of education and psychology with respect to its content. All experts agreed on the content validity.

Norms: Norms was also established by converting the raw scores into z-score. Using the z-score, student teachers were classified into three categories, Favourable attitude, Neutral attitude and Unfavourable attitude.

The newly constructed Attitude Scale towards Teacher Education Programme is attached in APPENDIX – 1.

3.3.2 Teaching Aptitude Test

In order to find out student-teachers teaching aptitude, one readymade test known as ‘Teaching Aptitude Test’ developed by S.C. Gakhar and Rajnish (2004) was utilized to find out the teaching aptitude of the student-teachers. The test consists of 35 statements with five alternatives for the respondents to answer. Discriminating value of the statements was found and difficulty value of the statements was also calculated. For scoring purpose 1 mark is given to the correct answer.

Reliability: Reliability was established by test-retest method and it was found to be .76.

Validity: Criterion related validity was found with that of Shah’s Teaching Aptitude Test and the validity co-efficient was found to be .68.

Norms: Norms was established by converting the raw scores into z-score. Using the z-score, student teachers were classified into three categories, High aptitude, Moderate aptitude and Low aptitude.

The Teaching Aptitude Test developed by Gakhar and Rajnish (2004) is attached in APPENDIX – 2.

3.3.3 Opinion on some aspects of Teacher Education

With the intention of finding out the opinion of student-teachers on some aspects of teacher education programme, the investigator developed an opinion questionnaire consisting of nine items. Respondents had to tick their opinion out of some alternatives given in the opinion questionnaire, as this opinion questionnaire is not a standardized scale, reliability, validity and norms were not established.

Opinion Questionnaire developed by the investigator is attached in APPENDIX – 3.

3.4.0 Collection and tabulation of data

All three tools were directly administered to the student-teachers during visits to the selected training institutes. The purpose of the study and response instructions was clearly explained to them. Student-teachers were assured that their responses would be kept confidential and used only for research purposes. When collecting the completed responses, it was ensured that all questions were answered and the required personal information was provided. The collected data were scrutinized, classified, and scored according to the procedures outlined by the tool creator. The data were tabulated, and each respondent was assigned a serial number. Their scores were entered into an Excel sheet and subsequently transferred to SPSS for statistical analysis by employing the following statistical techniques.

3.5.0 Statistical techniques for analysis

Keeping in view the nature of data and objectives of the study, the investigator employed the following statistical techniques for analyzing the data.

- 1. Descriptive statistical measures:* Measures of central tendency, measures of variability, Percentages and z-scores were employed to find out the nature of score distribution as well as for the purpose of categorizing the respondents into different groups.

2. ***Test of significance for mean difference:*** The differences between the mean scores of the groups, based on variables such as gender, locale, training programme, teaching experience, marital status, employment status, stream of study, educational qualification, and academic stream, were tested for significance using the t-test and ANOVA.
3. ***Pearson Product Moment Correlation:*** The Pearson Product Moment Correlation Method was applied to compute the correlation between Attitude and Aptitude scores of the respondents and for calculating the reliability and validity of the scale.

CHAPTER – IV

ANALYSIS AND INTERPRETATION OF DATA

The present chapter focuses on the analysis and interpretation of data gathered for the study. The objectives of the present study were 1) To construct an attitude scale towards the teacher education programme; 2) To find out the attitude towards teacher education programme of student teachers (elementary and secondary) of Mizoram and to compare them based on variables such as their specific programme, marital status, gender, locale, teaching experience, fathers' working status, fathers' level of education, student teachers educational qualification and previous academic stream; 3) To compare the different dimensions of attitude towards teacher education programme of student teachers (elementary and secondary) with reference to their programme, marital status, gender, locale, teaching experience, fathers working status, fathers' level of education, student teachers educational qualification and previous academic stream; 4) To find out the teaching aptitude of student teachers (elementary and secondary) in Mizoram and to compare them based on variables such as their specific programme, marital status, gender, locale, teaching experience, fathers' working status, fathers' level of education, student teachers' educational qualification and previous academic stream; 5) To find out the opinion of student teachers on some aspects of teacher education; and 6) To suggest measures for improving the existing elementary and secondary teacher education programme.

Data collection for this study involved three key instruments: 1) The Attitude Scale towards Teacher Education Programme (2023) developed and standardized by the investigator, 2) The Teaching Aptitude Test (2010) developed by Dr. S.C. Gakhar and Dr. Rajnish, and 3) The Opinionnaire on some aspects of Teacher Education also developed by the investigator. The responses gathered from these three tools were scored with the help of standard procedures. The scored data was then systematically categorized, organized into tables, and subjected to comprehensive analysis. Using standard statistical methods, the data was analysed to extract meaningful insights. With the objectives of the study serving as a guiding framework, the findings were carefully interpreted and presented in a manner that

aligns with the predefined objectives. This meticulous approach ensured that the analysis was thorough, reliable, and effectively addressed the research questions, providing a solid foundation for drawing informed conclusions and making evidence-based recommendations.

The findings of the study are organized and discussed in this chapter as per the objectives as follows:

4.1.0 Construction and Standardization of Attitude scale towards Teacher Education Programme

The first objective of the present study is to construct and standardize attitude scale towards teacher education programme for elementary and secondary student teachers. The methods employed for developing and standardizing this scale is outlined below:

4.1.1 Compilation and refinement of statements:

The initial step in developing an attitude scale for the teacher education program involves gathering and refining statements that will make up the scale. The investigator begins with a thorough literature review and consultations with experts in the field of education and psychology to identify the key dimensions of the teacher education programme. These carefully selected dimension includes chosen: Content and Relevance, Teaching Methods and Faculty Support, Collaboration and Networking, Resources and Facilities, Programme Organization and Management, Pre-internship, School-internship, Post-internship, Assessment and Feedback, and Career Prospects. The investigator then collects a series of statements that reflect various aspects of these dimensions. These statements are subsequently edited to ensure they are clear, relevant, and suitable for the target audience. This meticulous editing process is crucial for creating a comprehensive and reliable scale for teacher education programme that accurately measures the intended constructs.

Initially, approximately 64 statements related to attitudes toward teacher education programmes were generated for the initial draft of the scale. These statements were then reviewed by 10 experts in the field of teacher education. The experts assessed the content validity of each statement and made necessary revisions.

Based on their feedback, some statements were modified, while others were removed due to irrelevance. The revised second draft consisted of 50 statements, capturing both positive and negative attitudes toward teacher education programmes. The instructions for the scale required subjects to respond to each item on a 5-point scale, the response categories being ‘strongly agree’, ‘agree’, ‘undecided’, ‘disagree’ and ‘strongly disagree’.

4.1.2 Pre-testing of the tentative draft:

Before administering the final try-out with student teachers, the investigator tested the draft attitude scale on 10 student teachers from IASE (Institute of Advanced Studies in Education). These student teachers were asked to consider whether the language was easily understandable and whether they encountered any problems while responding to the items. Based on their feedback, small adjustments were made to the instructions and language. This process aimed to ensure that the scale would be suitable and relevant for the proposed population.

4.1.3 Try out:

The 50 item attitude scale was then prepared for the final try-out. It was administered to 100 student teachers randomly selected from the Institute of Advanced Studies in Education (IASE) in Aizawl. The instructions on the front cover of the scale were clear and needed no further explanation. Student teachers were encouraged to respond honestly. After administering the scale to 100 student teachers at IASE, the collected data was subjected to item analysis, which included calculating the discrimination values for each item on the scale.

4.1.4 Item discrimination:

After administering the attitude scale to 100 student teachers, scoring was conducted using the Likert method. Scores were arranged in ascending order, with the top 27% and bottom 27% separated for item analysis and discrimination assessment. For each statement, the mean and standard deviation were calculated separately for these two groups. t-values were then computed for all 50 statements to determine the significance of differences between the mean attitude scores of the top

and bottom groups. Statements with t-values above 2.01, indicating significance at the .05 confidence level, were retained for the final scale. As a result, 13 statements were discarded, leaving a final scale with 37 statements.

Detailed information on the mean, standard deviation, and discrimination values (t-values) of high and low groups for each statement is provided in Table No. 4.1.

Table - 4.1
Mean, Standard Deviation and t-value of High and Low groups on all Items of Attitude towards Teacher Education Programme

Item No.	High Group		Low Group		t value	Significance
	Mean	SD	Mean	SD		
1	4.52	0.36	4.78	0.40	2.60	*
2	3.56	0.83	2.19	0.98	6.23	**
3	4.22	0.56	2.33	0.81	11.1	**
4	3.04	1.07	3.22	1.03	0.64	NS
5	4.40	0.75	2.56	1.23	7.08	**
6	4.30	0.52	4.04	0.96	1.30	NS
7	4.48	0.50	3.40	0.92	0.90	NS
8	4.40	0.64	4.40	0.92	0.00	NS
9	3.63	0.55	2.22	1.03	6.40	**
10	4.63	0.48	3.52	0.99	5.05	**
11	4.59	0.50	2.89	1.12	7.08	**
12	4.33	0.62	3.22	1.16	4.60	**
13	4.56	0.56	2.67	1.28	7.30	**
14	4.19	0.94	3.22	1.23	32.3	**
15	4.48	0.63	3.22	1.00	5.70	**
16	3.40	0.71	3.30	1.33	0.33	NS
17	1.85	0.93	4.15	1.14	8.20	**
18	4.60	0.58	2.48	1.20	8.83	**
19	2.15	0.90	2.70	1.20	2.00	NS
20	4.22	0.70	3.19	1.24	3.70	**

Item No.	High Group		Low Group		t value	Significance
	Mean	SD	Mean	SD		
21	4.81	0.32	3.36	1.00	5.90	**
22	4.33	0.40	3.90	0.80	2.70	**
23	3.55	0.60	2.70	0.90	4.25	**
24	4.50	0.40	3.40	1.40	3.90	**
25	4.30	0.40	3.40	1.40	3.00	**
26	3.07	0.60	3.40	1.31	1.30	NS
27	4.30	0.72	2.20	1.20	0.08	NS
28	1.82	0.80	1.30	0.70	2.60	*
29	4.67	0.40	3.04	1.10	7.80	**
30	4.70	0.60	3.22	1.20	6.20	**
31	4.63	0.40	3.26	1.32	5.30	**
32	4.50	0.60	2.89	1.30	6.20	**
33	4.60	0.50	2.74	1.32	7.60	**
34	4.40	0.70	2.78	1.32	5.80	**
35	4.50	0.70	3.04	1.30	5.20	**
36	4.50	0.50	3.11	1.20	5.80	**
37	4.60	0.90	3.19	1.20	5.00	**
38	4.60	0.50	3.40	1.13	5.00	**
39	3.18	1.00	2.89	1.50	0.90	NS
40	4.40	0.60	3.07	1.20	4.70	**
41	4.50	0.50	2.93	1.30	6.00	**
42	4.10	0.70	3.80	1.40	1.00	NS
43	4.60	0.40	4.60	1.00	0.00	NS
44	3.07	0.70	2.60	1.00	2.00	NS
45	4.60	0.40	3.40	0.90	6.00	**

Item No.	High Group		Low Group		t value	Significance
	Mean	SD	Mean	SD		
46	2.60	0.80	2.60	1.00	0.00	NS
47	4.30	0.00	3.20	1.00	5.50	**
48	4.60	0.50	2.40	1.20	9.20	**
49	4.60	0.60	2.60	1.20	8.30	**
50	2.40	1.20	4.11	1.00	5.70	**

NS = not significant, * significant at 0.5 level, ** significant at 0.1 level

4.1.5 Establishment of reliability

Reliability refers to the consistency with which an assessment tool produces stable results. For any standardized scale, reliability is crucial to ensure the results are dependable. In this study, the researcher used the test-retest method to determine the scale's reliability. The attitude scale was initially given to 119 student teachers at the Institute of Advanced Studies in Education (IASE). After two weeks, the same scale was administered again to the same group. The reliability coefficient was calculated using the Product Moment Correlation between the first and second tests and the reliability coefficient for the entire scale was found to be .996, indicating a high level of reliability for an attitude scale. The Test re-test scores for establishing reliability co-efficient of the scale had been given in Table No. 4.2

Table - 4.2

Test-retest Scores for Determining the Reliability of the Attitude Scale towards Teacher Education Programme

Sl. No.	Score on the first test	Score on the second test	Sl. No.	Score on the first test	Score on the second test
1	137	136	61	136	134
2	139	138	62	151	151
3	154	155	63	136	136
4	151	151	64	146	147
5	167	165	65	149	149

Sl. No.	Score on the first test	Score on the second test	Sl. No.	Score on the first test	Score on the second test
6	148	147	66	154	153
7	143	144	67	154	154
8	150	150	68	117	120
9	136	136	69	160	161
10	147	146	70	155	156
11	148	148	71	154	152
12	145	146	72	177	176
13	143	143	73	147	147
14	139	138	74	148	148
15	174	174	75	148	149
16	146	146	76	150	150
17	155	153	77	152	154
18	157	155	78	132	133
19	143	143	79	144	142
20	159	158	80	137	135
21	150	150	81	142	142
22	154	154	82	132	131
23	152	152	83	138	138
24	158	157	84	145	145
25	142	143	85	158	157
26	144	142	86	150	150
27	138	139	87	145	146
28	141	141	88	150	149
29	128	129	89	160	160
30	132	132	90	147	147
31	148	148	91	151	151
32	141	140	92	152	153
33	151	151	93	134	134
34	139	139	94	150	150

Sl. No.	Score on the first test	Score on the second test	Sl. No.	Score on the first test	Score on the second test
35	152	152	95	140	141
36	164	162	96	140	142
37	139	140	97	141	141
38	147	147	98	142	141
39	144	143	99	146	147
40	136	136	100	148	146
41	138	138	101	152	150
42	143	143	102	139	139
43	142	142	103	135	135
44	147	146	104	126	127
45	145	144	105	155	155
46	148	148	106	169	168
47	144	143	107	128	128
48	141	141	108	142	142
49	143	143	109	137	137
50	159	159	110	140	141
51	164	165	111	174	173
52	147	146	112	117	119
53	144	144	113	160	160
54	144	144	114	155	155
55	142	141	115	154	155
56	145	145	116	133	133
57	139	139	117	170	170
58	126	126	118	141	141
59	146	145	119	145	144
60	144	142			

4.1.6 Establishment of validity:

Validity is the degree to which an instrument accurately measures what it aims to measure and performs as intended. Ensuring a scale's validity is crucial for obtaining precise results. For this attitude scale, content validity was established by consulting experts in the field of test construction from University department of education and colleges of teacher education. Ten experts reviewed the scale and provided feedback to confirm its content validity. All experts agreed on the validity of the items.

The names of the 10 experts were 1) Prof. Lalhmasai Chuango, 2) Prof. Lalbiakdiki Hnamte, 3) Prof. Lalianzuali Fanai, 4) Dr. Donna Lalnunfeli, 5) Dr. F.Lalrinzuali, 6) Dr. Vanlalruatfela Hlondo, 7) Dr. Zairemmawia Renthlei, 8) Dr. Lalrammawia Tochhawng, 9) Dr. Hmingthansiami, 10) Dr Vanlaltanpuui, all from Teacher Education Institutes under Mizoram University.

4.1.7 Scoring procedure and Serial Number of Positive and Negative Items

The scoring pattern for the Attitude scale, as suggested by Likert, was employed for the current attitude scale. Participants were requested to express their opinions on each statement using a five-point rating scale: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. For scoring, Positive statements were rated as 5, 4, 3, 2, and 1, whereas negative statements were rated as 1, 2, 3, 4, and 5, respectively. With 37 statements on the scale, the maximum possible score is 185 (37 statements \times 5 points), and the minimum possible score is 37 (37 statements \times 1 point). The item numbers for positive and negative statements are listed in Table 4.3.

Table - 4.3
Item Numbers for Positive and Negative Statements

Sl. No.	Types of statements	Item Numbers	Total
1	Positive	1,4,6,9,10,11,13,14,15,16,18,21,22,23,25,26,28,29,30,31,32,33,34,35,36	25
2	Negative	2,3,5,7,8,12,17,19,20,24,27,37	12

4.1.8 Norms and interpretation for Attitude towards Teacher Education Programme:

Norms are crucial for interpreting test scores accurately and minimizing interpretive errors of measurement tools. To establish norms for this attitude scale, the researcher administered the newly developed attitude scale to 523 student teachers from different teacher education institutes in Mizoram. Thereafter, scoring was done following the established scoring method.

The raw scores of all 523 respondents were converted into z-scores using SPSS. The raw score along with the corresponding z-score is presented in Table 4.4

Table - 4.4
Raw score along with the corresponding z-score for Attitude towards Teacher Education Programme

Mean: 139.15		SD: 11.55		N: 523			
Raw score	z-score	Raw score	z-score	Raw score	z-score	Raw score	z-score
99	-3.48	123	-1.40	139	-0.01	155	1.37
103	-3.13	124	-1.31	140	0.07	156	1.46
108	-2.70	125	-1.22	141	0.16	157	1.55
110	-2.52	126	-1.14	142	0.25	158	1.63
111	-2.44	127	-1.05	143	0.33	159	1.72
112	-2.35	128	-0.97	144	0.42	160	1.81
113	-2.26	129	-0.88	145	0.51	161	1.89
114	-2.18	130	-0.79	146	0.59	162	1.98
115	-2.09	131	-0.71	147	0.68	163	2.07
116	-2.00	132	-0.62	148	0.77	164	2.15
117	-1.92	133	-0.53	149	0.85	166	2.32
118	-1.83	134	-0.45	150	0.94	167	2.41
119	-1.74	135	-0.36	151	1.03	169	2.58
120	-1.66	136	-0.27	152	1.11	170	2.67
121	-1.57	137	-0.19	153	1.20	173	2.93

Raw score	z- score	Raw score	z- score	Raw score	z- score	Raw score	z- score
122	-1.48	138	-0.10	154	1.29		

The norms for interpretation of attitude towards teacher education programme is presented in the following Table 4.5

Table - 4.5
Norms and interpretation of Attitude Scale

Sl. No.	Range of raw score	Range of z- Score	Attitude towards teacher education programme
1	163 & above	+ 2.01 and above	Extremely high attitude
2	154 to 162	+ 1.26 to +2.00	Very high attitude
3	145 to 153	+ 0.51 to + 1.25	High attitude
4	134 to 144	- 0.50 to + 0.50	Neutral attitude
5	125 to 133	- 1.25 to -0.51	Low attitude
6	116 to 124	- 2.00 to – 1.26	Very low attitude
7	115 & below	- 2.01 and below	Extremely low attitude

4.2.0 Attitude of student teachers towards teacher education programme in Mizoram.

The second objective of the present study is to find out the attitude towards teacher education programme of student teachers (elementary and secondary) in Mizoram. To achieve this, the investigator utilised the newly constructed Attitude Scale towards Teacher Education Programme which was administered to a sample of 523 student teachers from across various selected districts in Mizoram. After scoring and organizing the data, the scores were transformed into z-scores. These z-scores were used to classify student teachers' attitudes into seven different levels. For better clarity, these seven levels were further grouped into three broader categories. Table 4.6 illustrates the z-score ranges, the attitude levels of student teachers towards the

teacher education programme, and the percentage of student teachers in each of the three categories used for interpretation.

Table – 4.6
Range of score, Attitude levels, and Categories with Percentage of Student Teachers

SN	Range of Score	Attitude levels with number of student teachers	Categories and percentage of student teachers
1	163 & above	Extremely high attitude (13)	
2	154 to 162	Very high attitude (39)	Favourable attitude (30.21%)
3	145 to 153	High attitude (106)	
4	134 to 144	Neutral attitude (217)	Neutral attitude (41.49%)
5	125 to 133	Low attitude (90)	
6	116 to 124	Very low attitude (45)	Unfavourable attitude (28.30%)
7	115 & below	Extremely low attitude (13)	

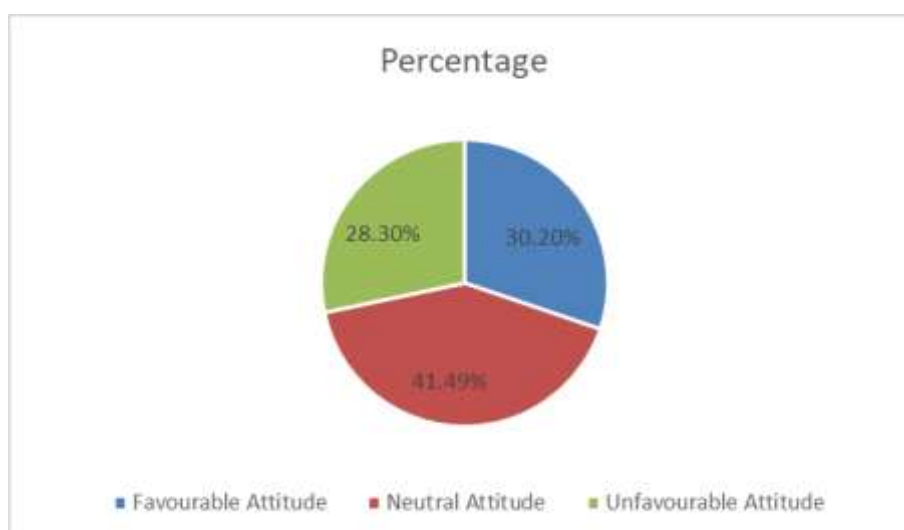


Figure 4.1: Student Teachers' Level of Attitude

Table 4.6 shows that 30.21 % of student teachers had favourable attitude towards the teacher education programmes, while 28.30 % had an unfavourable

attitude. The largest percentage of student teachers, (41.49 %) maintained a neutral attitude towards the programmes. Interestingly, there were more student teachers with a favourable attitude than those with an unfavourable attitude.

4.3.0 Comparison of student teachers' overall attitudes towards teacher education programmes with reference to different independent variables.

The third objective of the present study is to compare the overall attitude towards teacher education programme of student teachers (elementary and secondary) with reference to their programme, marital status, gender, locale, teaching experience, fathers' employment status, fathers' level of education, student teachers educational qualification and previous academic stream, The comparative details are outlined below.

4.3.1 Comparison of student teachers' overall attitudes towards teacher education programmes with reference to various independent variables

i) *With reference to their specific programmes:* The attitudes of student teachers towards the teacher education programmes were compared with reference to their specific programme, i.e. B.Ed. and D.El.Ed. The mean and standard deviation for each group were calculated. The differences between the means were tested using a 't' test. Detailed results are shown in Table 4.7.

Hypothesis no. 1 states that there is no significant difference in the student teachers' attitudes towards teacher education programme with reference to their specific programme.

Table – 4.7

Comparison of student teachers' attitude with reference to their programmes

Groups	Number	Mean	SD	MD	t-value	Sig level
B.Ed. students	269	141.03	11.084	3.876	3.887	.01
D.El.Ed. students	254	137.15	11.720			

A perusal of the result vide Table No - 4.7 reveals that the 't' value for the significance of difference between the attitude of B.Ed. student teachers and D.El.Ed student teachers towards teacher education programmes is 3.887. Since the calculated 't' value is greater than the criterion 't' value at .01 level, therefore, it can be concluded that there is a significant difference in student teachers' attitude towards teacher education programmes with reference to their programme. Therefore, the null hypothesis (No. 1) that assumes there is no significant difference in the student teachers' attitude towards teacher education programmes with reference to their specific programme is rejected, since the two groups differed significantly at .01 level of confidence. A comparison of their mean score shows that this difference is in favour of the B.Ed. student teachers, as their mean score is higher than the D.El.Ed. student teachers. The result indicates that B.Ed. student teachers had a more favourable attitude towards teacher education programmes as compared to D.El.Ed. student teachers.

ii) *With reference to their marital status:* The attitudes of student teachers towards the teacher education programmes were compared with reference to their marital status. The mean and standard deviation for each group were calculated. The differences between the means were tested using a 't' test. Detailed results are shown in Table 4.8.

Hypothesis no. 2 states that there is no significant difference in student teachers' attitude towards teacher education programmes with reference to their marital status.

Table – 4.8

Comparison of student teachers' attitude with reference to their marital status

Groups	Number	Mean	SD	MD	t- value	Sig level
Unmarried	491	139.06	11.515	1.474	.699	NS
Married	32	140.63	12.181			

Table No - 4.8 indicates that the 't' value for the significance of difference between unmarried and married student teachers' attitude towards teacher education programmes is .699. Since the calculated 't' value is less than the criterion 't' value

at .05 level, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes with reference to their marital status. Therefore, the null hypothesis (No. 2) that assumes there is no significant difference in student teachers attitude towards teacher education programmes with reference to their marital status is accepted, since the two groups do not differ significantly at any level of confidence.

iii) *With reference to their gender:* The attitudes of student teachers towards the teacher education program were compared with reference to their gender. The mean and standard deviation for each group were calculated. The differences between the means were tested using a 't' test. Detailed results are shown in Table 4.9.

Hypothesis no. 3 states that there is no significant difference in student teachers' attitude towards teacher education programme with reference to their gender.

Table – 4.9

Comparison of student teachers' attitude with reference to their gender

Groups	Number	Mean	SD	MD	t- value	Sig level
Female	336	139.39	11.081	.679	.644	NS
Male	187	138.71	12.368			

A perusal of the result vide Table No - 4.9 reveals that the 't' value for the significance of difference between female and male student teachers' attitude towards teacher education programmes is .644. Since the calculated 't' value is less than the criterion 't' value, therefore, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes with reference to their gender. Therefore, the null hypothesis (No. 3) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes with reference to their gender is accepted.

iv) *With reference to their locale:* The attitudes of student teachers towards the teacher education programmes were compared with reference to their locale. The mean and standard deviation for each group were calculated. The differences

between the means were tested using a ‘t’ test. Detailed results are shown in Table 4.10.

Hypothesis no. 4 states that there is no significant difference in student teachers’ attitude towards teacher education programmes with reference to their locale.

Table – 4.10

Comparison of student teachers’ attitude with reference to their locale

Groups	Number	Mean	SD	MD	t- value	Sig level
Urban	276	140.09	11.432	2.035	2.016	.05
Rural	247	138.06	11.613			

Table No - 4.10 shows that the ‘t’ value for the significance of difference between urban and rural student teachers attitude towards teacher education programmes is 2.016. Since the calculated ‘t’ value is greater than the criterion ‘t’ value at .05 level, it can be concluded that there is a significant difference in student teachers’ attitude towards teacher education programmes with reference to their locale. Therefore, the null hypothesis (No. 4) that assumes there is no significant difference in student teachers’ attitude towards teacher education programmes with reference to their locale is rejected, since the two groups differ significantly at .05 level of confidence. A look at their mean score tells us that urban student teachers had a more favourable attitude towards teacher education programmes than the rural student teachers since their mean is higher than the rural student teachers. Therefore, it can be inferred that urban student teachers exhibit a more positive attitude towards the teacher education programmes compared to their rural counterparts.

v) *Comparison with reference to their previous teaching experience:* The attitudes of student teachers towards the teacher education programmes were compared with reference to their previous teaching experience. The mean and standard deviation for each group were calculated. The differences between the means were tested using a ‘t’ test. Detailed results are shown in Table 4.11.

Hypothesis no. 5 states that there is no significant difference in student teachers' attitude towards teacher education programmes with reference to their previous teaching experiences.

Table – 4.11
Comparison of student teachers' attitude with reference to their previous teaching experience

Groups	Number	Mean	SD	MD	t-value	Sig level
Having teaching experience	189	139.85	12.462			
Not having teaching experience	334	138.75	11.001	1.095	1.006	NS

Table No - 4.11 depicts that the 't' value for the significance of difference in their attitude towards teacher education programmes between student teachers having and not having previous teaching experience is 1.006. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes with reference to their previous experience in teaching. Therefore, the null hypothesis (No. 5) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes with reference to their previous teaching experience is accepted since the two groups do not differ significantly at any level of confidence.

vi) *Comparison with reference to their fathers' employment status:* The attitudes of student teachers towards the teacher education programmes were compared with reference to their fathers' employment status. The mean and standard deviation for each group were calculated. The differences between the means were tested using a 't' test. Detailed results are shown in Table 4.12.

Hypothesis no. 6 states that there is no significant difference in student teachers' attitude towards teacher education programmes with reference to their fathers' employment status.

Table – 4.12
Comparison of student teachers' attitude with reference to fathers' employment status

Groups	Number	Mean	SD	MD	t- value	Sig level
Employed father	279	141.09	11.210	4.156	4.169	.01
Unemployed father	244	136.93	11.557			

Table No - 4.12 signify that the 't' value for the significance of difference in their attitude towards teacher education programmes between student teachers with employed and unemployed fathers is 4.169. Since the calculated 't' value is greater than the criterion 't' value at .01 level, it can be concluded that there is a significant difference in student teachers' attitude towards teacher education programmes with reference to their fathers' employment status. Therefore, the null hypothesis (No. 6) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes with reference to their fathers' employment status is rejected, since the two groups differ significantly at .01 level of confidence. Therefore, it can be concluded that student teachers whose fathers are employed show a more favourable attitude towards the teacher education programmes compared to those whose fathers are unemployed.

vii) *Comparison with reference to fathers' level of education:* The attitudes of student teachers towards the teacher education programmes were compared with reference to their fathers' level of education. The mean and standard deviation for each group were calculated. The differences between the means were tested using a 't' test. Detailed results are shown in Table 4.13.

Hypothesis no. 7 states that there is no significant difference in student teachers' attitude towards teacher education programmes with reference to their fathers' level of education.

Table – 4.13
Comparison of student teachers' attitude with reference to fathers' level of education

Groups	Number	Mean	SD	MD	t- value	Sig level
Under Matric	256	137.89	11.832	2.469	2.456	.05
Matric and above	267	140.36	11.162			

Table No - 4.13 signify that the 't' value for the significance of difference in their attitude towards teacher education programmes between student teachers whose fathers' level of education is under matriculate and whose fathers' level of education is matriculate and above is 2.456. Since the calculated 't' value is greater than the criterion 't' value at .05 level, it can be concluded that there is a significant difference in student teachers' attitude towards teacher education programmes with reference to their fathers' level of education. Therefore, the null hypothesis (No.7) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes with reference to their fathers' level of education is rejected, since the two groups differ significantly at .05 level of confidence. Therefore, it can be concluded that student teachers whose fathers are matric and above shows a more favourable attitude towards the teacher education programmes as compared to those whose fathers are under matric.

viii) *Comparison with reference to student teachers' educational qualification:* The attitudes of student teachers towards the teacher education programmes were compared with reference to their educational qualification. The educational qualification of student teachers are categorized into three levels, viz. Post-graduate, Graduate and Plus-2. Therefore comparison was done using ANOVA. Detailed results are presented in Table 4.14.

Hypothesis no. 8 states that there is no significant difference in student teachers' attitude towards teacher education programmes with reference to their educational qualification.

Table – 4.14

ANOVA on attitude towards teacher education programmes with reference to student teachers' educational qualification

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	1665.440	2	832.720		
Within Groups	67974.224	520	130.720	6.370	.002
Total	69639.663	522			

Significant at 0.01 level

The ANOVA results in Table 4.14 show a significant difference in student teachers' attitudes towards the teacher education programmes across various educational qualification levels with a confidence level of .01. Therefore, hypothesis (No.8), which states that there is no significant difference in student teachers' attitude towards teacher education programmes with reference to their educational qualification, is rejected. The significant difference observed at the .01 level led us to conduct a Tukey post hoc analysis to pinpoint the specific educational levels that exhibit this difference. The results of this analysis are presented in Table 4.15 below.

Table 4.15

Multiple Comparisons (Attitude towards teacher education programmes with reference to student teachers' educational qualification)

Tukey HSD

Dependent variable: Student teachers' attitude

Student teachers' qualification	Student teachers' qualification	Mean Difference	Std Error	Sig
Post-graduate	Graduate	2.396	1.160	.098

	Plus - 2	5.839*	1.647	.001
Graduate	Post-graduate	2.396	1.160	.098
	Plus - 2	3.443	1.488	.055
Plus - 2	Post-graduate	5.839*	1.647	.001
	Graduate	.3.443	1.488	.055

Mean difference is Significant at 0.01 level

The following Table – 4.16 shows the Number, Mean and SD of the three levels of student teachers' qualification:

Table 4.16

Descriptive statistics on student teachers' educational qualification (Attitude)

Sl. No.	Student teachers' educational qualification	Number	Mean	SD
1	Post - Graduate	142	141.37	10.896
2	Graduate	308	138.98	11.503
3	Plus - 2	73	135.53	12.139
4	Total	523	139.15	11.550

Table 4.15 shows a significant difference at the .01 level in attitudes towards the teacher education programmes between student teachers with Post-graduate qualifications and those with Plus-2 qualifications. Table 4.16 reveals that Post-graduate student teachers had a higher mean score than Plus-2 student teachers, indicating a more favourable attitude towards the teacher education programmes among the former. Additionally, there is no significant difference neither in attitudes between student teachers with Post-graduate and Graduate qualifications nor between Graduate and Plus-2 qualifications.

ix) *Comparison with reference to student teachers previous academic streams.* Student teachers' attitude towards teacher education programmes was also compared with reference to their previous academic streams. There were three academic streams namely Science, Commerce and Arts streams. Therefore comparison was done using ANOVA and the details are presented in the following table 4.17.

Hypothesis no. 9 states that there is no significant difference in student teachers' attitude towards teacher education programmes with reference to their previous academic streams.

Table – 4.17
ANOVA on attitude towards teacher education programmes with reference to previous academic streams

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	73.213	2	36.606		
Within Groups	69566.451	520	133.782	.274	.761
Total	69639.663	522			

The ANOVA results presented in Table 4.17 indicates no significant difference in student teachers' attitude towards teacher education programmes with reference to previous academic streams. Consequently, we accept hypothesis (No.9), which states that there is no significant difference in student teachers' attitude towards teacher education programmes with reference to their previous academic streams. Since there is no significant difference in student teachers' attitude towards teacher education programmes with reference to previous academic streams, there is no need to conduct any post hoc analysis.

4.4.0 Comparison on various dimensions of attitude towards teacher education programmes with reference to different independent variables.

The fourth objective of the present study is to compare student teachers on the different dimensions of attitude towards teacher education programme with reference to their programmes, marital status, gender, locale, teaching experience, fathers working status, fathers' level of education, student teachers educational qualification and previous academic stream.

The Attitude scale has eight dimensions namely Content and Relevance; Teaching method; faculty support and collaboration; Resources, facilities and

programme management; Pre-internship; School internship; Post-internship; Assessment and feedback and Career prospect. Student teachers were compared on these various dimensions of attitude with reference to the different independent variables. Details of comparison are presented as follows:

4.4.1. Comparison of student teachers' attitude on the dimension of 'Content and Relevance' with reference to various independent variables.

i) *With reference to their specific programme:* Student teachers' attitude towards teacher education programmes was compared on the dimension of content and relevance with reference to their specific programmes, i.e. B.Ed. and D.El.Ed. For this, the Mean and Standard Deviation of the scores of the two groups were obtained. The mean differences were then tested by applying 't' test and the details are presented in the following table 4.18.

Hypothesis no. 10 states that there is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their specific programmes, i.e. B.Ed. and D.El.Ed.

Table – 4.18
Comparison of student teachers' attitude on the dimension of content and relevance with reference to their specific programmes

Groups	Number	Mean	SD	MD	t- value	Sig level
B.Ed. students	269	15.08	1.921	.326	1.904	.05
D.El.Ed. students	254	14.75	1.991			

A perusal of the result vide Table No - 4.18 reveals that the 't' value for the significance of difference between B.Ed. student teachers' and D.El.Ed. student teachers' attitude towards teacher education programmes on the dimension of content and relevance is 1.904. Since the calculated 't' value is greater than the criterion 't' value at .05 level, therefore, it can be concluded that there is a significant difference in student teachers' attitude towards teacher education programmes on the dimension

of content and relevance with reference to their programmes. Therefore, the null hypothesis (No. 10) that assumes that there is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their specific programmes is rejected, since the two groups differed significantly at .05 level of confidence. A comparison of their mean score shows that this difference is in favour of the B.Ed. student teachers as their mean score is higher than the D.El.Ed. student teachers. The result indicates that B.Ed. student teachers had a more favourable attitude towards teacher education programmes on the dimension of content and relevance as compared to the D.El.Ed. student teachers.

ii) *With reference to their marital status:* The attitude of student teachers towards teacher education programmes on the dimension of content and relevance was compared with reference to their marital status. For this, the Mean and Standard Deviation of the scores were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.19.

Hypothesis no. 11 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their marital status.

Table – 4.19
Comparison of student teachers' attitude on the dimension of content and relevance with reference to their marital status

Groups	Number	Mean	SD	MD	t- value	Sig level
Unmarried	491	14.88	1.978	.618	1.731	.05
Married	32	15.50	1.586			

Table No - 4.19 indicates that the 't' value for the significance of difference between unmarried and married student teachers' attitude towards teacher education programmes on the dimension of content and relevance is 1.731. Since the calculated 't' value is greater than the criterion 't' value at .05 level, it can be concluded that

there is a significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their marital status. Therefore, the null hypothesis (No. 11) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their marital status is rejected, since the two groups differ significantly at .05 level of confidence. Hence, it can be pointed out that married student teachers had a more positive attitude towards teacher education programmes on the dimension of content and relevance rather than the unmarried student teachers.

iii) *With reference to their gender:* Student teachers' attitude towards teacher education programmes on the dimension of content and relevance was compared with reference to their gender. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.20.

Hypothesis no. 12 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their gender.

Table – 4.20
Comparison of student teachers' attitude on the dimension of content and relevance with reference to their gender

Groups	Number	Mean	SD	MD	t- value	Sig level
Female	336	15.00	1.896	.225	1.256	NS
Male	187	14.78	2.069			

A perusal of the result vide Table No - 4.20 reveals that the 't' value for the significance of difference between female and male student teachers' attitude towards teacher education programmes on the dimension of content and relevance is 1.256. Since the calculated 't' value is less than the criterion 't' value, therefore, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance

with reference to their gender. Therefore, the null hypothesis (No. 12) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their gender is accepted.

iv) *With reference to their locale:* Student teachers' attitude towards teacher education programmes on the dimension of content and relevance was compared with reference to their locale. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.21.

Hypothesis no. 13 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their locale.

Table – 4.21
Comparison of student teachers' attitude on the dimension of content and relevance with reference to their locale

Groups	Number	Mean	SD	MD	t- value	Sig level
Urban	276	15.01	1.927	.204	1.185	NS
Rural	247	14.81	1.997			

Table No - 4.21 shows that the 't' value for the significance of difference between urban and rural student teachers' attitude towards teacher education programmes on the dimension of content and relevance is 1.185. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their locale. Therefore, the null hypothesis (No. 13) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their locale is accepted, since the two groups do not differ significantly at any level of confidence. A look at their mean

score tells us that urban and rural student teachers had similar attitude towards teacher education programmes on the dimension of content and relevance. Therefore, it can be inferred that urban and rural student teachers exhibit a similar attitude towards the teacher education programmes on the dimension of content and relevance.

v) *With reference to their teaching experience:* The attitude of student teachers towards teacher education programmes on the dimension of content and relevance was compared with reference to whether they had any previous teaching experience or not. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying ‘t’ test and the details are presented in the following table 4.22.

Hypothesis no. 14 states that there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of content and relevance with reference to their previous teaching experiences.

Table – 4.22
Comparison of student teachers’ attitude on the dimension of content and relevance with reference to their previous teaching experience

Groups	Number	Mean	SD	MD	t- value	Sig level
Having teaching experience	189	14.90	2.017			
Not having teaching experience	334	14.93	1.931	.032	.177	.05

Table No - 4.22 depicts that the ‘t’ value for the significance of difference in their attitude towards teacher education programmes on the dimension of content and relevance between student teachers having and not having previous teaching experience is .177. Since the calculated ‘t’ value is greater than the criterion ‘t’ value at 0.5 level, it can be concluded that there is a significant difference in student teachers’ attitude towards teacher education programmes on the dimension of content and relevance with reference to their previous experience in teaching. Therefore, the

null hypothesis (No. 14) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their previous teaching experience is rejected since the two groups differ significantly at .05 level of confidence. Thus, it can be said that student teachers not having teaching experience had a more favourable attitude towards teacher education programmes on the dimension of content and relevance as compared to student teachers having teaching experience.

vi) *With reference to their fathers' employment status:* The attitude of student teachers towards teacher education programmes on the dimension of content and relevance was compared with reference to their fathers' employment status. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.23.

Hypothesis no. 15 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their fathers' employment status.

Table – 4.23
Comparison of student teachers' attitude on the dimension of content and relevance with reference to fathers' employment status

Groups	Number	Mean	SD	MD	t- value	Sig level
Employed father	279	15.05	1.940	.287	1.675	NS
Unemployed father	244	14.77	1.977			

Table No - 4.23 signify that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of content and relevance between student teachers with employed and unemployed fathers is 1.675. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to

their fathers' employment status. Therefore, the null hypothesis (No. 15) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their fathers' employment status is accepted, since the two groups do not differ significantly at any level of confidence. Therefore, it can be concluded that student teachers whose fathers are employed and unemployed show no difference in their attitude towards the teacher education programmes on the dimension of content and relevance.

vii) *With reference to fathers' level of education:* The attitude of student teachers towards teacher education programmes on the dimension of content and relevance was compared with reference to their fathers' level of education. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.24.

Hypothesis no. 16 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their fathers' level of education.

Table – 4.24
Comparison of student teachers' attitude on the dimension of content and relevance with reference to fathers' level of education

Groups	Number	Mean	SD	MD	t- value	Sig level
Under Matric	256	14.82	1.954	.195	1.135	NS
Matric and above	267	15.01	1.966			

Table No - 4.24 signify that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of content and relevance between student teachers with under matriculate and matriculate and above fathers is 1.135. Since the calculated 't' value is less than the criterion 't' value at, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their fathers' level of education. Therefore, the null hypothesis (No.

16) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their fathers' level of education is accepted, since the two groups do not differ significantly at any level of confidence. Therefore, it can be concluded that student teachers whose fathers are under matriculate as well as matriculate and above show a similar attitude towards the teacher education programme on the dimension of content and relevance.

viii) *With reference to student teachers' educational qualification:* Student teachers' attitude towards teacher education programmes on the dimension of content and relevance was also compared with reference to their educational qualification. Student teachers' educational qualification is categorized into three levels, therefore comparison was done using ANOVA and the details are presented in the following table 4.25.

Hypothesis no. 17 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their educational qualification.

Table – 4.25
ANOVA on attitude towards teacher education programmes on the dimension of content and relevance with reference to student teachers' educational qualification

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	26.551	2	13.275		
Within Groups	1980.076	520	3.808	3.486	.031
Total	2006.627	522			

Significant at 0.05 level

The ANOVA results presented in Table 4.25 indicates a significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance across various levels of their educational qualification with

a confidence level of .05. Consequently, we reject hypothesis (No.17), which states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their educational qualification. The significant difference observed at the .05 level prompted us to conduct a Tukey post hoc analysis to identify which specific level of education exhibit this difference. The results of this analysis can be found in Table 4.26 below.

Table 4.26

Multiple Comparisons (Attitude towards teacher education programmes on the dimension of content and relevance with reference to student teachers' educational qualification)

Tukey HSD		Dependent variable: Student teachers' attitude		
Student teachers' qualification	Student teachers' qualification	Mean Difference	Std Error	Sig
Post-graduate	Graduate	.522*	.198	.023
	Plus - 2	.391	.281	.346
	Post-graduate	.522*	.198	.023
Graduate	Plus - 2	.131	.254	.864
	Post-graduate	.391	.281	.346
Plus - 2	Graduate	.131	.864	.864
<i>Mean difference is Significant at 0.05 level</i>				

The following Table – 4.27 shows the Number, Mean and SD of the three levels of student teachers' educational qualification.

Table 4.27**Descriptive statistics on student teachers' educational qualification (Attitude)**

Sl.No.	Student teachers' educational qualification	Number	Mean	SD
1	Post - Graduate	142	15.28	1.656
2	Graduate	308	14.76	2.036
3	Plus - 2	73	14.89	2.112
4	Total	523	14.92	1.961

The above table 4.26 indicates that there is a significant difference at .05 level in the attitude towards teacher education programmes on the dimension of content and relevance between student teachers whose educational qualification are Post-graduate and Graduate. When their Means are compared by looking at Table 4.27, it becomes evident that student teachers whose educational qualification is Post-graduate had a higher Mean than student teachers whose educational qualification is Graduate. This indicates that student teachers whose educational qualification is Post-graduate had a more favourable attitude towards teacher education programme on the dimension of content and relevance as compared to those students-teachers whose educational qualification is Graduate. We can also see that there is no significant difference in the attitude towards teacher education between student teachers whose educational qualification are Post-graduate and Plus-2 as well as between Graduate and Plus-2.

ix) *With reference to student teachers previous academic streams.* Student teachers' attitude towards teacher education programmes on the dimension of content and relevance was also compared with reference to their previous academic streams. There were three academic streams namely Science, Commerce and Arts streams. Therefore, comparison was done using ANOVA and the details are presented in the following table 4.28.

Hypothesis no. 18 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their previous academic streams.

Table – 4.28

ANOVA on attitude towards teacher education programmes on the dimension of content and relevance with reference to student teachers' previous academic streams

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	5.392	2	2.696	.701	.497
Within Groups	2001.235	520	3.849		
Total	2006.627	522			

The ANOVA results presented in Table 4.28 indicates no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to previous academic streams. Consequently, we accept hypothesis (No.18), which states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their previous academic streams. Since there is no significant difference in student teachers attitude towards teacher education programmes on the dimension of content and relevance with reference to previous academic streams, there is no need to conduct any post hoc analysis.

4.4.2. Comparison of student teachers' attitude on the dimension of 'Teaching Method, Faculty Support and Collaboration' with reference to various independent variables.

i) *With reference to their specific programmes:* Student teachers' attitude towards teacher education programmes was compared on the dimension of teaching method, faculty support and collaboration with reference to their specific programme, i.e. B.Ed. and D.El.Ed. For this, the Mean and Standard Deviation of the scores of the two groups were obtained. The mean differences were then tested by applying 't' test and the details are presented in the following table 4.29.

Hypothesis no. 19 states that there is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of teaching

method, faculty support and collaboration with reference to their specific programme, i.e. B.Ed. and D.El.Ed.

Table – 4.29

Comparison of student teachers' attitude on the dimension of teaching method, faculty support and collaboration with reference to their specific programmes

Groups	Number	Mean	SD	MD	t- value	Sig level
B.Ed. students	269	19.29	2.436	.534	2.355	.05
D.El.Ed. students	254	18.75	2.733			

A perusal of the result vide Table No - 4.29 reveals that the 't' value for the significance of difference between B.Ed. student teachers and D.El.Ed. student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration is 2.355. Since the calculated 't' value is greater than the criterion 't' value at .05 level, therefore, it can be concluded that there is a significant difference in student teachers' attitude towards teacher education programme on the dimension of teaching method, faculty support and collaboration with reference to their programme. Therefore, the null hypothesis (No. 19) that assumes there is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their specific programmes is rejected, since the two groups differed significantly at .05 level of confidence. A comparison of their mean score shows that this difference is in favour of the B.Ed. student teachers, as their mean score is higher than the D.El.Ed. student teachers. The result indicates that B.Ed. student teachers had a more favourable attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration as compared to the D.El.Ed. student teachers.

ii) *With reference to their marital status:* The attitude of student teachers towards teacher education programmes on the dimension of teaching method, faculty support and collaboration was compared with reference to their marital status. For

this, the Mean and Standard Deviation of the scores were obtained. The mean differences were tested by applying ‘t’ test and the details are presented in the following table 4.30.

Hypothesis no. 20 states that there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their marital status.

Table – 4.30
Comparison of students’ attitude on the dimension of teaching method, faculty support and collaboration with reference to their marital status

Groups	Number	Mean	SD	MD	t- value	Sig level
Unmarried	491	18.99	2.606	.537	1.135	NS
Married	32	19.53	2.423			

Table No - 4.30 indicates that the ‘t’ value for the significance of difference between unmarried and married student teachers’ attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration is 1.135. Since the calculated ‘t’ value is less than the criterion ‘t’ value, it can be concluded that there is no significant difference in student teachers attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their marital status. Therefore, the null hypothesis (No. 20) that assumes there is no significant difference in student teachers attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their marital status is accepted, since the two groups do not differ significantly at any level of confidence. Hence, it can be pointed out that married and unmarried student teachers had similar attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration.

iii) *With reference to their gender:* Student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration was compared with reference to their gender. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.31.

Hypothesis no.21 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their gender.

Table – 4.31

Comparison of student teachers' attitude on the dimension of teaching method, faculty support and collaboration with reference to their gender

Groups	Number	Mean	SD	MD	t- value	Sig level
Female	336	19.07	2.583	.133	.562	NS
Male	187	18.94	2.624			

A perusal of the result vide Table No - 4.31 reveals that the 't' value for the significance of difference between female and male student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration is .562. Since the calculated 't' value is less than the criterion 't' value, therefore, it can be concluded that there is no significant difference in student teachers attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their gender. Therefore, the null hypothesis (No. 21) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their gender is accepted.

iv) *With reference to their locale:* Student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration was compared with reference to their locale. For this, the Mean and

Standard Deviation of the two groups were obtained. The mean differences were tested by applying ‘t’ test and the details are presented in the following table 4.32.

Hypothesis no. 22 states that there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their locale.

Table – 4.32

Comparison of student teachers’ attitude on the dimension of teaching method, faculty support and collaboration with reference to their locale

Groups	Number	Mean	SD	MD	t- value	Sig level
Urban	276	19.11	2.422	.188	.819	NS
Rural	247	18.93	2.785			

Table No - 4.32 shows that the ‘t’ value for the significance of difference between urban and rural student teachers attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration is .819. Since the calculated ‘t’ value is less than the criterion ‘t’ value, it can be concluded that there is no significant difference in student teachers attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their locale. Therefore, the null hypothesis (No. 22) that assumes there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their locale is accepted, since the two groups do not differ significantly at any level of confidence. A glance at their mean scores tell us that urban and rural student teachers had similar attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration.

v) *With reference to their teaching experience:* The attitude of student teachers attitude towards teacher education programmes on the dimension of teaching

method, faculty support and collaboration was compared with reference to whether they had any previous teaching experience or not. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.33.

Hypothesis no. 23 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their previous teaching experiences.

Table – 4.33

Comparison of student teachers' attitude on the dimension of teaching method, faculty support and collaboration with reference to their previous teaching experience

Groups	Number	Mean	SD	MD	t-value	Sig level
Having teaching experience	189	19.41	2.609			
Not having teaching experience	334	18.81	2.567	.604	2.571	.05

Table No - 4.33 depicts that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration between student teachers having and not having previous teaching experience is 2.571. Since the calculated 't' value is greater than the criterion 't' value at 0.5 level, it can be concluded that there is a significant difference in student teachers attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their previous experience in teaching. Therefore, the null hypothesis (No. 23) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their previous teaching experience is rejected since the two groups differ significantly at .05 level of confidence. Thus, it can be

said that student teachers having teaching experience had a more favourable attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration as compared to student teachers not having teaching experience.

vi) *With reference to their fathers' employment status:* The attitude of student teachers towards teacher education programmes on the dimension of teaching method, faculty support and collaboration was compared with reference to their fathers' employment status. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.34.

Hypothesis no. 24 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their fathers' employment status.

Table – 4.34

Comparison of student teachers' attitude on the dimension of teaching method, faculty support and collaboration with reference to fathers' employment status

Groups	Number	Mean	SD	MD	t- value	Sig level
Employed father	279	19.32	2.437			
Unemployed father	244	18.69	2.732	.634	2.784	.01

Table No - 4.34 signify that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration between student teachers with employed and unemployed fathers is 2.784. Since the calculated 't' value is greater than the criterion 't' value at .01 level, it can be concluded that there is a significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their fathers' employment status. Therefore, the null hypothesis (No. 24) that assumes there is no significant difference in student teachers' attitude towards

teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their fathers' employment status is rejected, since the two groups differ significantly at .01 level of confidence. Accordingly, it can be concluded that student teachers whose fathers are employed displayed a more favourable attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration as compared to student teachers whose fathers are unemployed.

vii) *With reference to fathers' level of education:* The attitude of student teachers towards teacher education programmes on the dimension of teaching method, faculty support and collaboration was compared with reference to their fathers' level of education. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.35.

Hypothesis no. 25 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their fathers' level of education.

Table – 4.35

Comparison of student teachers' attitude on the dimension of teaching method, faculty support and collaboration with reference to fathers' level of education

Groups	Number	Mean	SD	MD	t- value	Sig level
Under Matric	256	18.86	2.662	.328	1.445	NS
Matric and above	267	19.19	2.526			

Table No - 4.35 signify that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration between student teachers with under matriculate and matriculate and above fathers is 1.445. Since the calculated 't' value is less than the criterion 't' value at, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the

dimension of teaching method, faculty support and collaboration with reference to their fathers' level of education. Therefore, the null hypothesis (No. 25) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their fathers' level of education is accepted, since the two groups do not differ significantly at any level of confidence. As a result, it can be concluded that student teachers whose fathers are under matric as well as matric and above show a similar attitude towards the teacher education programmes on the dimension of teaching method, faculty support and collaboration.

viii) *With reference to student teachers' educational qualification:* Student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration was also compared with reference to their educational qualification. Student teachers' educational qualification is categorized into three levels, therefore comparison was done using ANOVA and the details are presented in the following table 4.36.

Hypothesis no. 26 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their educational qualification.

Table – 4.36

ANOVA on attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to student teachers' educational qualification

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	45.842	2	22.921		
Within Groups	3471.783	520	6.677	3.433	.033
Total	3517.625	522			

Significant at 0.05 level

The ANOVA results presented in Table 4.36 indicates a significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration across various levels of their educational qualification with a confidence level of .05. Consequently, we reject hypothesis (No.26), which states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their educational qualification. The significant difference observed at the .05 level prompted us to conduct a Tukey post hoc analysis to identify which specific level of education exhibit this difference. The results of this analysis can be found in Table 4.37 below.

Table 4.37

Multiple Comparisons (Attitude towards teacher education programmes on the dimension teaching method, faculty support and collaboration with reference to student teachers' educational qualification)

Tukey HSD		Dependent variable: Student teachers attitude		
Student teachers' qualification	Student teachers' qualification	Mean Difference	Std Error	Sig
Post-graduate	Graduate	.472	.262	.170
	Plus - 2	.943*	.372	.031
	Post-graduate	.472	.262	.170
Graduate	Plus - 2	.471	.336	.341
	Post-graduate	.943	.372	.031
	Graduate	.471	.336	.341
<i>Mean difference is Significant at 0.05 level</i>				

The following Table – 4.38 shows the Number, Mean and SD of the three levels of student teachers' educational qualification

Table 4.38**Descriptive statistics on student teachers' educational qualification (Attitude)**

Sl. No.	Student teachers' educational qualification	Number	Mean	SD
1	Post - Graduate	142	19.44	2.482
2	Graduate	308	18.96	2.551
3	Plus - 2	73	18.49	2.897
4	Total	523	19.03	2.596

The above table 4.37 indicates that there is a significant difference at .05 level in the attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration between student teachers whose educational qualification are Post-graduate and Plus-2. Student teachers whose educational qualification is Post-graduate are found to had a higher Mean than student teachers whose educational qualification is Plus-2. This indicates that student teachers whose educational qualification is Post-graduate had a more favourable attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration as compared to those students-teachers whose educational qualification is Plus-2. We can also point out that there is no significant difference in the attitude towards teacher education between student teachers whose educational qualification are Post-graduate and Graduate as well as between Graduate and Plus-2.

ix) *With reference to student teachers previous academic streams.* Student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration was also compared with reference to their previous academic streams. There were three academic streams namely Science, Commerce and Arts streams. Therefore, comparison was done using ANOVA and the details are presented in the following table 4.39.

Hypothesis no. 27 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching

method, faculty support and collaboration with reference to their previous academic streams.

Table – 4.39

ANOVA on attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to previous academic streams

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	11.712	2	5.856		
Within Groups	3505.913	520	6.742	.869	.420
Total	3517.625	522			

The ANOVA results presented in Table 4.39 indicates no significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to previous academic streams. Consequently, we accept hypothesis (No.27), which states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their previous academic streams. Since there is no significant difference in student teachers' attitude towards teacher education programme on the dimension of teaching method, faculty support and collaboration with reference to previous academic streams, there is no need to conduct any post hoc analysis.

4.4.3. Comparison of student teachers' attitude on the dimension of 'Resources, Facilities and Programme Management' with reference to various independent variables.

i) *With reference to their specific programmes:* Student teachers' attitude towards teacher education programmes was compared on the dimension of resources, facilities and programmes management with reference to their specific programmes, i.e. B.Ed. and D.El.Ed. For this, the Mean and Standard Deviation of the scores of

the two groups were obtained. The mean differences were then tested by applying ‘t’ test and the details are presented in the following table 4.39.

Hypothesis no. 28 states that there is no significant difference in the student teachers’ attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their specific programme, i.e. B.Ed. and D.El.Ed.

Table – 4.40
Comparison of student teachers’ attitude on the dimension of resources, facilities and programme management with reference to their specific programmes

Groups	Number	Mean	SD	MD	t- value	Sig level
B.Ed. students	269	17.97	2.286	.246	1.107	NS
D.El.Ed. students	254	17.72	2.758			

A perusal of the result vide Table No - 4.40 reveals that the ‘t’ value for the significance of difference between B.Ed. student teachers and D.El.Ed. student teachers’ attitude towards teacher education programmes on the dimension of resources, facilities and programme management is 1.107. Since the calculated ‘t’ value is less than the criterion ‘t’ value, therefore, it can be concluded that there is no significant difference in student teachers attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their programme. Therefore, the null hypothesis (No. 28) that assumes there is no significant difference in the student teachers’ attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their specific programmes is accepted, since the two groups do not differed significantly at any level of confidence. A comparison of their mean score shows that this difference is neither in favour of the B.Ed. student teachers nor in favour of D.El.Ed. student teachers. The result indicates that B.Ed. student teachers and D.El.Ed. student teachers had an unvarying attitude

towards teacher education programmes on the dimension of resources, facilities and programme management.

ii) *With reference to their marital status:* The attitude of student teachers towards teacher education programmes on the dimension of resources, facilities and programme management was compared with reference to their marital status. For this, the Mean and Standard Deviation of the scores were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.40.

Hypothesis no. 29 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their marital status.

Table – 4.41
Comparison of student teachers' attitude on the dimension of resources, facilities and programme management with reference to their marital status

Groups	Number	Mean	SD	MD	t- value	Sig level
Unmarried	491	17.88	2.503	.503	1.091	NS
Married	32	17.38	2.871			

Table No - 4.41 indicates that the 't' value for the significance of difference between unmarried and married student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management is 1.091. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their marital status. Therefore, the null hypothesis (No. 29) that assumes there is no significant difference in student teachers attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their marital status is

accepted, since the two groups do not differ significantly at any level of confidence. Hence, it can be stated that married and unmarried student teachers had comparable attitude towards teacher education programmes on the dimension of resources, facilities and programme management.

iii) *With reference to their gender:* Student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management was compared with reference to their gender. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.42.

Hypothesis no. 30 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their gender.

Table – 4.42
Comparison of student teachers' attitude on the dimension of resources, facilities and programme management with reference to their gender

Groups	Number	Mean	SD	MD	t- value	Sig level
Female	336	17.87	2.450	.053	.231	NS
Male	187	17.81	2.666			

A perusal of the result vide Table No - 4.42 reveals that the 't' value for the significance of difference between female and male student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management is .231. Since the calculated 't' value is less than the criterion 't' value, therefore, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their gender. Therefore, the null hypothesis (No. 30) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their gender is accepted.

iv) *With reference to their locale:* Student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management was compared with reference to their locale. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.43.

Hypothesis no. 31 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their locale.

Table – 4.43
Comparison of student teachers' attitude on the dimension of resources, facilities and programme management with reference to their locale

Groups	Number	Mean	SD	MD	t- value	Sig level
Urban	276	17.98	2.543	.283	1.278	NS
Rural	247	17.70	2.506			

Table No - 4.43 shows that the 't' value for the significance of difference between urban and rural student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management is 1.278. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their locale. Therefore, the null hypothesis (No. 31) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their locale is accepted, since the two groups do not differ significantly at any level of confidence. A glance at their mean scores tell us that urban and rural student teachers had similar attitude towards teacher education programmes on the dimension of resources, facilities and programme management.

v) *With reference to their teaching experience:* The attitude of student teachers towards teacher education programmes on the dimension of resources, facilities and programme management was compared with reference to whether they had any previous teaching experience or not. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.44.

Hypothesis no. 32 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their previous teaching experiences.

Table – 4.44

Comparison of student teachers' attitude on the dimension of resources, facilities and programme management with reference to their previous teaching experience

Groups	Number	Mean	SD	MD	t- value	Sig level
Having teaching experience	189	17.60	2.600			
Not having teaching experience	334	17.99	2.478	.382	1.663	NS

Table No - 4.44 depicts that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of resources, facilities and programme management between student teachers having and not having previous teaching experience is 1.663. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their previous experience in teaching. Therefore, the null hypothesis (No. 32) that assumes there is no significant difference in student teachers' attitude towards teacher education

programmes on the dimension of resources, facilities and programme management with reference to their previous teaching experience is accepted since the two groups do not differ significantly at any level of confidence. Thus, it can be said that student teachers having and not having teaching experience had similar attitude towards teacher education programmes on the dimension of resources, facilities and programme management which means that they possessed the same attitude towards teacher education programmes on the dimension of resources, facilities and programme management.

vi) *With reference to their fathers' employment status:* The attitude of student teachers towards teacher education programmes on the dimension of resources, facilities and programme management was compared with reference to their fathers' employment status. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.45.

Hypothesis no. 33 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their fathers' employment status.

Table – 4.45

Comparison of student teachers' attitude on the dimension of resources, facilities and programme management with reference to fathers' employment status

Groups	Number	Mean	SD	MD	t- value	Sig level
Employed father	279	18.07	2.340	.482	2.182	.05
Unemployed father	244	17.59	2.707			

Table No - 4.44 signify that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of resources, facilities and programme management between student teachers with employed and unemployed fathers is 2.182. Since the calculated 't' value is greater than the

criterion 't' value at .05 level, it can be concluded that there is a significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their fathers' employment status. Therefore, the null hypothesis (No. 33) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their fathers' employment status is rejected, since the two groups differ significantly at .05 level of confidence. Accordingly, it can be concluded that student teachers whose fathers are employed depicted a more favourable attitude towards the teacher education programmes on the dimension of resources, facilities and programme management as compared to student teachers whose fathers are unemployed.

vii) *With reference to fathers' level of education:* The attitude of student teachers towards teacher education programmes on the dimension of resources, facilities and programme management was compared with reference to their fathers' level of education. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.46.

Hypothesis no. 34 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their fathers' level of education.

Table – 4.46
Comparison of student teachers' attitude on the dimension of resources, facilities and programme management with reference to fathers' level of education

Groups	Number	Mean	SD	MD	t- value	Sig level
Under Matric	256	17.70	2.825	.282	1.269	NS
Matric and above	267	17.99	2.200			

Table No - 4.46 signify that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of resources, facilities and programme management between student teachers with under matric and matric and above fathers is 1.269. Since the calculated 't' value is less than the criterion 't' value at, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their fathers' level of education. Therefore, the null hypothesis (No. 34) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their fathers' level of education is accepted, since the two groups do not differ significantly at any level of confidence. As a result, it can be concluded that student teachers whose fathers are under matriculate as well as matriculate and above show a similar attitude towards the teacher education programmes on the dimension of resources, facilities and programme management.

viii) *With reference to student teachers' educational qualification:* Student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management was also compared with reference to their educational qualification. Student teachers' educational qualification is categorized into three levels, therefore comparison was done using ANOVA and the details are presented in the following table 4.47.

Hypothesis no. 35 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their educational qualification.

Table – 4.47

ANOVA on attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to student teachers' educational qualification

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	19.602	2	9.801		
Within Groups	3314.161	520	6.373	1.538	.216
Total	3333.763	522			

The ANOVA results presented in Table 4.47 indicates no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to student teachers' educational qualification. Consequently, we accept the hypothesis (No.35), which states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their educational qualification. Since there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to student teachers' educational qualification, there is no need to conduct any post hoc analysis.

ix) With reference to student teachers previous academic streams. Student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management was also compared with reference to their previous academic streams. There were three academic streams namely Science, Commerce and Arts streams. Therefore, comparison was done using ANOVA and the details are presented in the following table 4.48.

Hypothesis no. 36 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources,

facilities and programme management with reference to their previous academic streams.

Table – 4.48

ANOVA on attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to previous academic streams

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	7.702	2	3.851		
Within Groups	3326.061	520	6.396	.602	.548
Total	3333.763	522			

The ANOVA results presented in Table 4.48 indicates no significant difference in student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to previous academic streams. Consequently, we accept hypothesis (No.36), which states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their previous academic streams. Since there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to previous academic streams, there is no necessity to conduct any post hoc analysis.

4.4.4. Comparison of student teachers' attitude on the dimension of 'Pre-Internship' with reference to various independent variables.

i) *With reference to their specific programmes:* Student teachers' attitude towards teacher education programmes was compared on the dimension of pre-internship with reference to their specific programmes, i.e. B.Ed. and D.El.Ed. For this, the Mean and Standard Deviation of the scores of the two groups were obtained.

The mean differences were then tested by applying ‘t’ test and the details are presented in the following table 4.49.

Hypothesis no. 37 states that there is no significant difference in the student teachers’ attitude towards teacher education programmes on the dimension of pre-internship with reference to their specific programme, i.e. B.Ed. and D.El.Ed.

Table – 4.49
Comparison of student teachers’ attitude on the dimension of pre-internship with reference to their specific programmes

Groups	Number	Mean	SD	MD	t- value	Sig level
B.Ed. students	269	43.57	4.318	1.447	3.770	.01
D.El.Ed. students	254	42.13	4.454			

A perusal of the result vide Table No - 4.49 reveals that the ‘t’ value for the significance of difference between B.Ed. student teachers and D.El.Ed. student teachers’ attitude towards teacher education programmes on the dimension of pre-internship is 3.770. Since the calculated ‘t’ value is greater than the criterion ‘t’ value at .01 level, therefore, it can be concluded that there is a significant difference in student teachers’ attitude towards teacher education programmes on the dimension of pre-internship with reference to their programme. Therefore, the null hypothesis (No. 37) that assumes there is no significant difference in the student teachers’ attitude towards teacher education programmes on the dimension of pre-internship with reference to their specific programme is rejected, since the two groups differed significantly at .01 level of confidence. A comparison of their mean score shows that the difference is in favour of the B.Ed. student teachers as compared to D.El.Ed. student teachers. The result indicates that B.Ed. student teachers had a more preferable attitude towards teacher education programmes as against D.El.Ed. student teachers on the dimension of pre-internship.

ii) *With reference to their marital status:* The attitude of student teachers towards teacher education programmes on the dimension of pre-internship was compared with reference to their marital status. For this, the Mean and Standard

Deviation of the scores were obtained. The mean differences were tested by applying ‘t’ test and the details are presented in the following table 4.50.

Hypothesis no. 38 states that there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of pre-internship with reference to their marital status.

Table – 4.50
Comparison of student teachers’ attitude on the dimension of pre-internship with reference to their marital status

Groups	Number	Mean	SD	MD	t- value	Sig level
Unmarried	491	42.85	4.396	.305	.376	NS
Married	32	43.16	5.138			

Table No - 4.50 indicates that the ‘t’ value for the significance of difference between unmarried and married student teachers’ attitude towards teacher education programmes on the dimension of pre-internship is .376. Since the calculated ‘t’ value is less than the criterion ‘t’ value, it can be concluded that there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of pre-internship with reference to their marital status. Therefore, the null hypothesis (No. 38) that assumes there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of pre-internship with reference to their marital status is accepted, since the two groups do not differ significantly at any level of confidence. Hence, it can be stated that married and unmarried student teachers possessed similar attitude towards teacher education programmes on the dimension of pre-internship.

iii) *With reference to their gender:* Student teachers’ attitude towards teacher education programmes on the dimension of pre-internship was compared with reference to their gender. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying ‘t’ test and the details are presented in the following table 4.51.

Hypothesis no. 39 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their gender.

Table – 4.51
Comparison of student teachers' attitude on the dimension of pre-internship with reference to their gender

Groups	Number	Mean	SD	MD	t- value	Sig level
Female	336	42.98	4.402	.305	.754	NS
Male	187	42.67	4.513			

A perusal of the result vide Table No - 4.51 reveals that the 't' value for the significance of difference between female and male student teachers' attitude towards teacher education programmes on the dimension of pre-internship is .754. Since the calculated 't' value is less than the criterion 't' value, therefore, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their gender. Therefore, the null hypothesis (No. 39) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their gender is accepted.

iv) *With reference to their locale:* Student teachers' attitude towards teacher education programmes on the dimension of pre-internship was compared with reference to their locale. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.52.

Hypothesis no. 40 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their locale.

Table – 4.52
Comparison of student teachers’ attitude on the dimension of pre-internship
with reference to their locale

Groups	Number	Mean	SD	MD	t- value	Sig level
Urban	276	43.05	4.394	.380	.975	NS
Rural	247	42.67	4.493			

Table No - 4.52 shows that the ‘t’ value for the significance of difference between urban and rural student teachers’ attitude towards teacher education programmes on the dimension of pre-internship is .975. Since the calculated ‘t’ value is less than the criterion ‘t’ value, it can be concluded that there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of pre-internship with reference to their locale. Therefore, the null hypothesis (No. 40) that assumes there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of pre-internship with reference to their locale is accepted, since the two groups do not differ significantly at any level of confidence. The glimpses of their mean scores tell us that urban and rural student teachers had similar attitude towards teacher education programmes on the dimension of pre-internship.

v) *With reference to their teaching experience:* The attitude of student teachers towards teacher education programmes on the dimension of pre-internship was compared with reference to whether they had any previous teaching experience or not. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying ‘t’ test and the details are presented in the following table 4.53.

Hypothesis no. 41 states that there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of pre-internship with reference to their previous teaching experiences.

Table – 4.53

**Comparison of student teachers' attitude on the dimension of pre-internship
with reference to their previous teaching experience**

Groups	Number	Mean	SD	MD	t- value	Sig level
Having teaching experience	189	43.11	4.775			
Not having teaching experience	334	42.74	4.241	.369	.914	NS

Table No - 4.53 depicts that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of pre-internship between student teachers having and not having previous teaching experience is .914. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their previous experience in teaching. Therefore, the null hypothesis (No. 41) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their previous teaching experience is accepted since the two groups do not differ significantly at any level of confidence. Thus, it can be said that student teachers having and not having teaching experience had an unvaried attitude towards teacher education programmes on the dimension of pre-internship which means that they possessed a comparable attitude towards teacher education programme on the dimension pre-internship.

vi) *With reference to their fathers' employment status:* The attitude of student teachers towards teacher education programmes on the dimension of pre-internship was compared with reference to their fathers' employment status. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.54.

Hypothesis no. 42 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their fathers' employment status.

Table – 4.54

Comparison of student teachers' attitude on the dimension of pre-internship with reference to fathers' employment status

Groups	Number	Mean	SD	MD	t- value	Sig level
Employed father	279	43.55	4.187	1.462	3.804	.01
Unemployed father	244	42.09	4.599			

Table No - 4.54 signify that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of pre-internship between student teachers with employed and unemployed fathers is 3.804. Since the calculated 't' value is greater than the criterion 't' value at .01 level, it can be concluded that there is a significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their fathers' employment status. Therefore, the null hypothesis (No. 42) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their fathers' employment status is rejected, since the two groups differ significantly at .01 level of confidence. Accordingly, it can be concluded that student teachers whose fathers are employed displayed a more favourable attitude towards the teacher education program on the dimension of pre-internship as compared to student teachers whose fathers are unemployed.

vii) *With reference to fathers' level of education:* The attitude of student teachers towards teacher education programmes on the dimension of pre-internship was compared with reference to their fathers' level of education. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.55.

Hypothesis no. 43 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their fathers' level of education.

Table – 4.55
Comparison of student teachers' attitude on the dimension of pre-internship with reference to fathers' level of education

Groups	Number	Mean	SD	MD	t- value	Sig level
Under Matric	256	42.34	4.419	1.038	2.690	.01
Matric and above	267	43.38	4.409			

Table No - 4.55 signify that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension pre-internship between student teachers with under matriculate and matriculate and above fathers is 2.690. Since the calculated 't' value is greater than the criterion 't' value at .01 level, it can be concluded that there is a significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their fathers' level of education. Therefore, the null hypothesis (No. 43) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension pre-internship with reference to their fathers' level of education is rejected, since the two groups differ significantly at .01 level of confidence. As a result, it can be concluded that student teachers whose fathers' level of education is matriculate and above holds a better attitude towards teacher education programmes on the dimension of pre-internship in comparison with student teachers whose fathers' educational level is under matriculate.

viii) *With reference to student teachers' educational qualification:* Student teachers' attitude towards teacher education programmes on the dimension of pre-internship was also compared with reference to their educational qualification. Student teachers' educational qualification is categorized into three levels, therefore

comparison was done using ANOVA and the details are presented in the following table 4.56.

Hypothesis no. 44 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their educational qualification.

Table – 4.56

ANOVA on attitude towards teacher education programmes on the dimension of pre-internship with reference to student teachers' educational qualification

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	223.600	2	111.800		
Within Groups	10067.559	520	19.361	5.775	.003
Total	10291.159	522			

Significant at 0.01 level

The ANOVA results presented in Table 4.56 indicates a significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship across various levels of their educational qualification with a confidence level of .01. Consequently, we reject hypothesis (No.44), which states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their educational qualification. The significant difference observed at the .01 level prompted us to conduct a Tukey post hoc analysis to identify which specific level of education exhibit this difference. The results of this analysis can be found in Table 4.57 below.

Table 4.57

Multiple Comparisons (Attitude towards teacher education programmes on the dimension of pre-internship with reference to student teachers' educational qualification)

Tukey HSD		Dependent variable: Student teachers' attitude		
Student teachers' qualification	Student teachers' qualification	Mean Difference	Std Error	Sig
Post-graduate	Graduate	.824	.446	.156
	Plus - 2	2.148*	.634	.002
Graduate	Post-graduate	.824	.446	.156
	Plus - 2	1.324	.573	.055
Plus - 2	Post-graduate	2.148*	.634	.002
	Graduate	.824	.573	.055

Mean difference is Significant at 0.01 level

The following Table – 4.58 shows the Number, Mean and SD of the three levels of student teachers' educational qualification.

Table 4.58

Descriptive statistics on student teachers' educational qualification (Attitude)

Sl. No.	Student teachers' educational qualification	Number	Mean	SD
1	Post - Graduate	142	43.65	4.365
2	Graduate	308	42.83	4.349
3	Plus – 2	73	41.51	4.679
4	Total	523	42.87	4.440

The above table 4.57 indicates that there is a significant difference at .01 level in the attitude towards teacher education programmes on the dimension of pre-internship between student teachers whose educational qualification are Post-graduate and Plus-2. Student teachers whose educational qualification is Post-

graduate are found to had a higher Mean in comparison with student teachers whose educational qualification is Plus-2. This indicates that student teachers whose educational qualification is Post-graduate had a more favourable attitude towards teacher education programmes on the dimension of pre-internship than those students-teachers whose educational qualification is Plus-2. It also displays that there is no significant difference in the attitude towards teacher education between student teachers whose educational qualification are Post-graduate and Graduate as well as between Graduate and Plus-2.

ix) *With reference to student teachers previous academic streams.* Student teachers' attitude towards teacher education programmes on the dimension of pre-internship was also compared with reference to their previous academic streams. There were three academic streams namely Science, Commerce and Arts streams. Therefore, comparison was done using ANOVA and the details are presented in the following table 4.59.

Hypothesis no. 45 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their previous academic streams.

Table – 4.59

ANOVA on attitude towards teacher education programmes on the dimension of pre-internship with reference to previous academic streams

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	25.330	2	12.665		
Within Groups	10265.829	520	19.742	.642	.527
Total	10291.159	522			

The ANOVA results presented in Table 4.59 indicates no significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to previous academic streams. Consequently, we accept hypothesis (No.45), which further shows that there is no

significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their previous academic streams. Since there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to previous academic streams, there is no necessity to conduct any post hoc analysis.

4.4.5. Comparison of student teachers' attitude on the dimension of 'School Internship' with reference to various independent variables.

i) *With reference to their specific programmes:* Student teachers attitude towards teacher education programmes was compared on the dimension of school internship with reference to their specific programme, i.e. B.Ed. and D.El.Ed. For this, the Mean and Standard Deviation of the scores of the two groups were obtained. The mean differences were then tested by applying 't' test and the details are presented in the following table 4.60.

Hypothesis no. 46 states that there is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their specific programme, i.e. B.Ed. and D.El.Ed.

Table – 4.60

Comparison of student teachers' attitude on the dimension of school internship with reference to their specific programmes

Groups	Number	Mean	SD	MD	t- value	Sig level
B.Ed. students	269	16.61	1.871	.310	1.788	NS
D.El.Ed. students	254	16.30	2.083			

A perusal of the result vide Table No - 4.60 reveals that the 't' value for the significance of difference between B.Ed. and D.El.Ed. student teachers' attitude towards teacher education programmes on the dimension of school internship is 1.788. Since the calculated 't' value is less than the criterion 't' value, therefore, it

can be concluded that there is a significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their programmes. Therefore, the null hypothesis (No. 46) that assumes there is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their specific programmes is accepted, since the two groups do not differ significantly at any level of confidence. The result indicates that B.Ed. and D.El.Ed. student teachers had similar attitude towards teacher education programmes on the dimension of school internship.

ii) *With reference to their marital status:* The attitude of student teachers towards teacher education programmes on the dimension of school internship was compared with reference to their marital status. For this, the Mean and Standard Deviation of the scores were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.61.

Hypothesis no. 47 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their marital status.

Table – 4.61
Comparison of student teachers' attitude on the dimension of school internship with reference to their marital status

Groups	Number	Mean	SD	MD	t- value	Sig level
Unmarried	491	16.46	1.987	.040	.110	NS
Married	32	16.50	1.918			

Table No - 4.61 indicates that the 't' value for the significance of difference between unmarried and married student teachers' attitude towards teacher education programmes on the dimension of school internship is .110. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their marital

status. Therefore, the null hypothesis (No. 47) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their marital status is accepted, since the two groups do not differ significantly at any level of confidence. Hence, it can be stated that married and unmarried student teachers possessed similar attitude towards teacher education programmes on the dimension of school internship.

iii) *With reference to their gender:* Student teachers' attitude towards teacher education programmes on the dimension of school internship was compared with reference to their gender. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.62.

Hypothesis no. 48 states that there is no significant difference in student teachers' attitude towards teacher education programme on the dimension of school internship with reference to their gender.

Table – 4.62
Comparison of student teachers' attitude on the dimension of school internship with reference to their gender

Groups	Number	Mean	SD	MD	t- value	Sig level
Female	336	16.46	1.914	.021	.114	NS
Male	187	16.48	2.100			

A perusal of the result vide Table No - 4.62 reveals that the 't' value for the significance of difference between female and male student teachers' attitude towards teacher education programmes on the dimension of school internship is .114. Since the calculated 't' value is less than the criterion 't' value, therefore, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their gender. Therefore, the null hypothesis (No. 48) that assumes there is no significant difference in student teachers' attitude towards teacher education

programmes on the dimension of school internship with reference to their gender is accepted.

iv) *With reference to their locale:* Student teachers' attitude towards teacher education programmes on the dimension of school internship was compared with reference to their locale. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.63.

Hypothesis no. 49 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their locale.

Table – 4.63
Comparison of student teachers' attitude on the dimension of school internship with reference to their locale

Groups	Number	Mean	SD	MD	t- value	Sig level
Urban	276	16.62	1.936	.342	1.972	.05
Rural	247	16.28	2.020			

Table No - 4.63 shows that the 't' value for the significance of difference between urban and rural student teachers' attitude towards teacher education programmes on the dimension of school internship is 1.972. Since the calculated 't' value is greater than the criterion 't' value at .05 level, it can be concluded that there is a significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their locale. Therefore, the null hypothesis (No. 49) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their locale is rejected, since the two groups differ significantly at .05 level of confidence. The glimpses of their mean scores tell us that urban student teachers had a more supportive attitude towards teacher education programmes on the dimension of school internship in comparison with student teachers from rural areas.

v) *With reference to their teaching experience:* The attitude of student teachers towards teacher education programmes on the dimension of school internship was compared with reference to whether they had any previous teaching experience or not. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.64.

Hypothesis no. 50 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their previous teaching experiences.

Table – 4.64
Comparison of student teachers' attitude on the dimension of school internship with reference to their previous teaching experience

Groups	Number	Mean	SD	MD	t- value	Sig level
Having teaching experience	189	16.59	2.008			
Not having teaching experience	334	16.39	1.965	.195	1.082	NS

Table No - 4.64 depicts that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of school internship between student teachers having and not having previous teaching experience is 1.082. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their previous experience in teaching. Therefore, the null hypothesis (No. 50) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their previous teaching experience is accepted since the two groups do not differ significantly at any level of confidence. Thus, it can be said that student teachers having and not having teaching experience had an unvaried attitude towards

teacher education programmes on the dimension school internship which means that they possessed a similar attitude towards teacher education programme on the dimension school internship.

vi) *With reference to their fathers' employment status:* The attitude of student teachers towards teacher education programmes on the dimension of school internship was compared with reference to their fathers' employment status. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.65.

Hypothesis no. 51 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their fathers' employment status.

Table – 4.65
Comparison of student teachers' attitude on the dimension of school internship with reference to fathers' employment status

Groups	Number	Mean	SD	MD	t- value	Sig level
Employed father	279	16.60	1.896	.299	1.725	NS
Unemployed father	244	16.30	2.066			

Table No - 4.65 signify that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of school internship between student teachers with employed and unemployed fathers is 1.725. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their fathers' employment status. Therefore, the null hypothesis (No. 51) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their fathers' employment status is accepted, since the two groups do not differ

significantly at any level of confidence. Accordingly, it can be concluded that student teachers whose fathers are employed displayed the same attitude towards the teacher education programmes on the dimension of school internship as that of student teachers whose fathers are unemployed.

vii) *With reference to fathers' level of education:* The attitude of student teachers towards teacher education programmes on the dimension of school internship was compared with reference to their fathers' level of education. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.66.

Hypothesis no. 52 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their fathers' level of education.

Table – 4.66
Comparison of student teachers' attitude on the dimension of school internship with reference to fathers' level of education

Groups	Number	Mean	SD	MD	t- value	Sig level
Under Matric	256	16.34	2.069	.241	1.390	NS
Matric and above	267	16.58	1.889			

Table No - 4.66 signify that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of school internship between student teachers with under matriculate and matriculate and above fathers is 1.390. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their fathers' level of education. Therefore, the null hypothesis (No. 52) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension school internship with reference to their fathers' level of education is accepted, since the two groups do not differ significantly at any level of confidence. As a result, it can be

concluded that student teachers whose fathers' level of education is matriculate and above holds a similar attitude towards teacher education programmes on the dimension of school internship with student teachers whose fathers' educational level is under matriculate.

viii) *With reference to student teachers' educational qualification:* Student teachers' attitude towards teacher education programmes on the dimension of school internship was also compared with reference to their educational qualification. Student teachers' educational qualification is categorized into three levels, therefore comparison was done using ANOVA and the details are presented in the following table 4.67.

Hypothesis no. 53 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their educational qualification.

Table – 4.67

ANOVA on attitude towards teacher education programmes on the dimension of school internship with reference to student teachers' educational qualification

	Sum of Squares	Df	Mean Square	F	Sig
Between Groups	15.103	2	7.552		
Within Groups	2032.920	520	3.909	1.932	.146
Total	2048.023	522			

The ANOVA results presented in Table 4.67 indicates no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to student teachers' educational qualification. Consequently, we accept hypothesis (No.53), which further shows that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to student teachers' educational qualification. Since there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of

school internship with reference to student teachers' educational qualification, there is no necessity to conduct any post hoc analysis.

ix) *With reference to student teachers' previous academic streams.* Student teachers' attitude towards teacher education programmes on the dimension of school internship was also compared with reference to their previous academic streams. There were three academic streams namely Science, Commerce and Arts streams. Therefore, comparison was done using ANOVA and the details are presented in the following table 4.68.

Hypothesis no. 54 states that there is no significant difference in student teachers' attitude towards teacher education programme on the dimension of school internship with reference to their previous academic streams.

Table – 4.68

ANOVA on attitude towards teacher education programmes on the dimension of school internship with reference to previous academic streams

	Sum of Squares	Df	Mean Square	F	Sig
Between Groups	1.744	2	.872		
Within Groups	2046.279	520	3.935	.222	.801
Total	2048.023	522			

The ANOVA results presented in Table 4.68 indicates no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to previous academic streams. Consequently, we accept hypothesis (No.54), which further shows that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their previous academic streams. Since there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to previous academic streams, it is not necessary to conduct any post hoc analysis.

4.4.6. Comparison of student teachers' attitude on the dimension of 'Post-Internship' with reference to various independent variables.

i) *With reference to their specific programmes:* Student teachers' attitude towards teacher education programmes was compared on the dimension of post-internship with reference to their specific programme, i.e. B.Ed. and D.El.Ed. For this, the Mean and Standard Deviation of the scores of the two groups were obtained. The mean differences were then tested by applying 't' test and the details are presented in the following table 4.69.

Hypothesis no. 55 states that there is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their specific programme, i.e. B.Ed. and D.El.Ed.

Table – 4.69

Comparison of student teachers' attitude on the dimension of post-internship with reference to their specific programmes

Groups	Number	Mean	SD	MD	t- value	Sig level
B.Ed. students	269	8.13	1.034	.414	4.277	.01
D.El.Ed. students	254	7.72	1.169			

A perusal of the result vide Table No - 4.69 reveals that the 't' value for the significance of difference between B.Ed. and D.El.Ed. student teachers' attitude towards teacher education programmes on the dimension of post-internship is 4.277. Since the calculated 't' value is greater than the criterion 't' value at .01 level, therefore, it can be concluded that there is a significant difference in student teachers attitude towards teacher education programmes on the dimension of post-internship with reference to their programme. Therefore, the null hypothesis (No. 55) that assumes there is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their specific programme is rejected, since the two groups differed significantly at

.01 level of confidence. A comparison of their mean score shows that the difference is favourably disposed to B.Ed. student teachers as compared to D.El.Ed. student teachers. The result indicated that B.Ed. student teachers had a better attitude towards teacher education programmes as against D.El.Ed. student teachers on the dimension of post-internship.

ii) *With reference to their marital status:* The attitude of student teachers towards teacher education programmes on the dimension of post-internship was compared with reference to their marital status. For this, the Mean and Standard Deviation of the scores were obtained. The mean differences were tested by applying ‘t’ test and the details are presented in the following table 4.70.

Hypothesis no. 56 states that there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of post-internship with reference to their marital status.

Table – 4.70

Comparison of student teachers’ attitude on the dimension of post-internship with reference to their marital status

Groups	Number	Mean	SD	MD	t- value	Sig level
Unmarried	491	7.94	1.112	.224	1.098	NS
Married	32	7.72	1.224			

Table No - 4.70 indicates that the ‘t’ value for the significance of difference between unmarried and married student teachers’ attitude towards teacher education programmes on the dimension of post-internship is 1.098. Since the calculated ‘t’ value is less than the criterion ‘t’ value, it can be concluded that there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of post-internship with reference to their marital status. Therefore, the null hypothesis (No. 56) that assumes there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of post-internship with reference to their marital status is accepted, since the two groups do not differ significantly at any level of confidence. Hence, it can be

stated that married and unmarried student teachers possessed similar attitude towards teacher education programmes on the dimension of post-internship.

iii) *With reference to their gender:* Student teachers' attitude towards teacher education programmes on the dimension of post-internship was compared with reference to their gender. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.71.

Hypothesis no. 57 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their gender.

Table – 4.71
Comparison of student teachers' attitude on the dimension of post-internship with reference to their gender

Groups	Number	Mean	SD	MD	t- value	Sig level
Female	336	7.93	1.155	.015	.144	NS
Male	187	7.92	1.057			

A perusal of the result vide Table No - 4.71 reveals that the 't' value for the significance of difference between female and male student teachers' attitude towards teacher education programmes on the dimension of post-internship is .144. Since the calculated 't' value is less than the criterion 't' value, therefore, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their gender. Therefore, the null hypothesis (No. 57) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their gender is accepted.

iv) *With reference to their locale:* Student teachers' attitude towards teacher education programmes on the dimension of post-internship was compared with reference to their locale. For this, the Mean and Standard Deviation of the two

groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.72.

Hypothesis no. 58 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their locale.

Table – 4.72
Comparison of student teachers' attitude on the dimension of post-internship with reference to their locale

Groups	Number	Mean	SD	MD	t- value	Sig level
Urban	276	7.96	1.105	.068	.689	NS
Rural	247	7.89	1.138			

Table No - 4.72 shows that the 't' value for the significance of difference between urban and rural student teachers' attitude towards teacher education programmes on the dimension of post-internship is .689. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their locale. Therefore, the null hypothesis (No. 58) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their locale is accepted, since the two groups do not differ significantly at any level of confidence. The glimpses of their mean scores tell us that urban and rural student teachers attitude is both similar towards teacher education programmes on the dimension of post-internship.

v) *With reference to their teaching experience:* The attitude of student teachers towards teacher education programmes on the dimension of post-internship was compared with reference to whether they had any previous teaching experience or not. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.73.

Hypothesis no. 59 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their previous teaching experiences.

Table – 4.73

Comparison of student teachers' attitude on the dimension of post-internship with reference to their previous teaching experience

Groups	Number	Mean	SD	MD	t- value	Sig level
Having teaching experience	189	7.96	1.157			
Not having teaching experience	334	7.91	1.099	.044	.436	NS

Table No - 4.73 depicts that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of post-internship between student teachers having and not having previous teaching experience is .436. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their previous experience in teaching. Therefore, the null hypothesis (No. 59) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their previous teaching experience is accepted since the two groups do not differ significantly at any level of confidence. Thus, it can be said that student teachers having and not having teaching experience had an unchanging attitude towards teacher education programmes on the dimension of post-internship which means that they possessed similar attitude towards teacher education programme on the dimension of post-internship.

vi) *With reference to their fathers' employment status:* The attitude of student teachers' attitude towards teacher education programmes on the dimension of post-internship was compared with reference to their fathers' employment status. For this,

the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.74.

Hypothesis no. 60 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their fathers' employment status.

Table – 4.74

Comparison of student teachers' attitude on the dimension of post-internship with reference to fathers' employment status

Groups	Number	Mean	SD	MD	t- value	Sig level
Employed father	279	8.06	1.076	.282	2.896	.01
Unemployed father	244	7.78	1.151			

Table No - 4.74 signify that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of post-internship between student teachers with employed and unemployed fathers is 2.896. Since the calculated 't' value is greater than the criterion 't' value at .01 level, it can be concluded that there is a significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their fathers' employment status. Therefore, the null hypothesis (No. 60) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their fathers' employment status is rejected, since the two groups differ significantly at .01 level of confidence. Accordingly, it can be concluded that student teachers whose fathers are employed displayed a more favourable attitude towards the teacher education programmes on the dimension of post-internship as compared to that of student teachers whose fathers are unemployed.

vii) *With reference to fathers' level of education:* The attitude of student teachers towards teacher education programmes on the dimension of post-internship was compared with reference to their fathers' level of education. For this, the Mean and

Standard Deviation of the two groups were obtained. The mean differences were tested by applying ‘t’ test and the details are presented in the following table 4.75.

Hypothesis no. 61 states that there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of post-internship with reference to fathers’ level of education.

Table – 4.75

Comparison of student teachers’ attitude on the dimension of post-internship with reference to fathers’ level of education

Groups	Number	Mean	SD	MD	t- value	Sig level
Under Matric	256	7.85	1.170	.160	1.631	NS
Matric and above	267	8.01	1.065			

Table No - 4.75 signify that the ‘t’ value for the significance of difference in their attitude towards teacher education programmes on the dimension of post-internship between student teachers with under matriculate and matriculate and above fathers is 1.631. Since the calculated ‘t’ value is less than the criterion ‘t’ value, it can be concluded that there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of post-internship with reference to their fathers’ level of education. Therefore, the null hypothesis (No. 61) that assumes there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension post-internship with reference to their fathers’ level of education is accepted, since the two groups do not differ significantly at any level of confidence. As a result, it can be concluded that student teachers’ whose fathers’ level of education is matriculate and above holds a similar attitude towards teacher education programmes on the dimension of post-internship with student teachers whose fathers’ educational level is under matriculate.

viii) *With reference to student teachers’ educational qualification:* Student teachers’ attitude towards teacher education programmes on the dimension of post-internship was also compared with reference to their educational qualification.

Student teachers' educational qualification is categorized into three levels, therefore, a comparison was done using ANOVA and the details are presented in the following table 4.76.

Hypothesis no. 62 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their educational qualification.

Table – 4.76

ANOVA on attitude towards teacher education programmes on the dimension of post-internship with reference to student teachers' educational qualification

	Sum of Squares	Df	Mean Square	F	Sig
Between Groups	13.283	2	6.641		
Within Groups	641.100	520	1.233	5.387	.005
Total	654.382	522			

Significant at 0.01 level

The ANOVA results presented in Table 4.76 indicates a significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship across various levels of their educational qualification with a confidence level of .01. Consequently, we reject hypothesis (No.62), which states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their educational qualification. The significant difference observed at the .01 level prompted us to conduct a Dunnett post hoc analysis to identify which specific level of education exhibit this difference. The results of this analysis can be found in Table 4.77 below.

Table 4.77

Multiple Comparisons (Attitude towards teacher education programmes on the dimension of post-internship with reference to student teachers' educational qualification)

Dunnett T3

Dependent variable: Student teachers attitude

Student teachers' qualification	Student teachers' qualification	Mean Difference	Std Error	Sig
Post-graduate	Graduate	.309*	.107	.013
	Plus - 2	.464*	.150	.007
Graduate	Post-graduate	.309*	.107	.013
	Plus - 2	.155	.141	.616
Plus - 2	Post-graduate	.464*	.150	.007
	Graduate	.155	.141	.616

Mean difference is Significant at 0.01 level

The following Table – 4.78 shows the Number, Mean and SD of the three levels of student teachers' educational qualification

Table 4.78

Descriptive statistics on student teachers' educational qualification (Attitude)

Sl. No.	Student teachers' educational qualification	Number	Mean	SD
1	Post – Graduate	142	8.18	1.006
2	Graduate	308	7.87	1.166
3	Plus – 2	73	7.71	1.060
4	Total	523	7.93	1.120

The above table 4.77 indicates that there is a significant difference at .01 level in the attitude towards teacher education programmes on the dimension of post-internship between student teachers whose educational qualification are Post-graduate and Plus-2 as well as between student teachers whose educational qualification is Post-graduate and graduate. Looking at table 4.78, it is shown that the

mean of the post graduate student teachers are higher than the Plus -2 student teachers. Similarly, the mean of the post-graduate students are greater than the graduate students-teachers. This indicated that student teachers whose educational qualification is Post-graduate had a more favourable attitude towards teacher education programmes on the dimension of post-internship than those students-teachers whose educational qualification is Plus-2. Similarly, it showed that student teachers whose educational qualification is post-graduate had a more favourable attitude compared to student teachers whose educational qualification is Plus-2. It also displayed that there is no significant difference in the attitude towards teacher education on the dimension of post-internship between student teachers whose educational qualification are Graduate and 'lus-2.

ix) *With reference to student teachers previous academic streams:* Student teachers' attitude towards teacher education programmes on the dimension of post-internship was also compared with reference to their previous academic streams. There were three academic streams namely Science, Commerce and Arts streams. Therefore, comparison was done using ANOVA and the details are presented in the following table 4.79.

Hypothesis no. 63 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their previous academic streams.

Table – 4.79

ANOVA on attitude towards teacher education programmes on the dimension of post- internship with reference to their previous academic streams

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	9.724	2	4.862		
Within Groups	644.658	520	1.240	3.922	.020
Total	654.382	522			

Significant at 0.05 level

The ANOVA results presented in Table 4.79 indicates a significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship across various levels of their previous academic stream with a confidence level of .05. Consequently, we reject hypothesis (No.63), which states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their previous academic stream. The significant difference observed at the .05 level prompted us to conduct a Dunnett post hoc analysis to identify which specific level of education exhibit this difference. The results of this analysis can be found in Table 4.80 below.

Table 4.80

Multiple Comparisons (Attitude towards teacher education programmes on the dimension of post-internship with reference to student teachers' student teachers' previous academic stream)

Dunnett T3		Dependent variable: Student teachers attitude		
Student teachers' previous academic stream	Student teachers' previous academic stream	Mean Difference	Std Error	Sig
Arts	Science	.295*	.116	.035
	Commerce	.479	.262	.240
Science	Arts	.295*	.116	.035
	Commerce	.184	.276	.877
Commerce	Arts	.479	.262	.240
	Science	.184	.276	.877
<i>Mean difference is Significant at 0.05 level</i>				

The following Table – 4.81 shows the Number, Mean and SD of the three levels of student teachers' educational qualification.

Table 4.81**Descriptive statistics on student teachers' previous academic stream (Attitude)**

Sl. No.	Student teachers' previous academic stream	Number	Mean	SD
1	Arts	397	7.85	1.128
2	Science	114	8.15	1.083
3	Commerce	12	8.33	.888
4	Total	523	7.93	1.120

The above table 4.80 indicates that there is a significant difference at .05 level in the attitude towards teacher education programmes on the dimension of post-internship between student teachers whose previous academic streams are Arts and Science. Looking at table 4.81, It is shown that student teachers whose previous academic stream is Science are found to had a higher Mean in comparison with student teachers whose previous academic stream is Arts. This indicated that student teachers whose previous academic stream is Science had a more favourable attitude towards teacher education programme on the dimension of post-internship than those students-teachers whose previous academic stream is Arts. It also displayed that there is no significant difference in the attitude towards teacher education on the dimension of post-internship between student teachers whose previous academic streams are Arts and Commerce as well as between Science and Commerce.

4.4.7. Comparison of student teachers' attitude on the dimension of 'Assessment and Feedback' with reference to various independent variables.

i) *With reference to their specific programmes:* Student teachers' attitude towards teacher education programmes was compared on the dimension of assessment and feedback with reference to their specific programmes, i.e. B.Ed. and D.El.Ed. For this, the Mean and Standard Deviation of the scores of the two groups were obtained. The mean differences were then tested by applying 't' test and the details are presented in the following table 4.82.

Hypothesis no. 64 states that there is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their specific programmes, i.e. B.Ed. and D.El.Ed.

Table – 4.82

Comparison of student teachers' attitude on the dimension of assessment and feedback with reference to their specific programmes

Groups	Number	Mean	SD	MD	t- value	Sig level
B.Ed. students	269	8.23	.998	.002	.026	NS
D.El.Ed. students	254	8.22	1.082			

A perusal of the result vide Table No - 4.82 reveals that the 't' value for the significance of difference between B.Ed. and D.El.Ed. student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback is .026. Since the calculated 't' value is less than the criterion 't' value, therefore, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their programme. Therefore, the null hypothesis (No. 64) that assumes there is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their specific programmes is accepted, since the two groups do not differed significantly at any level of confidence. A comparison of their mean score showed that both B.Ed. student teachers as well as D.El.Ed. student teachers possess similar attitude towards teacher education programmes on the dimension of assessment and feedback.

ii) *With reference to their marital status:* The attitude of student teachers towards teacher education programmes on the dimension of assessment and feedback was compared with reference to their marital status. For this, the Mean and Standard Deviation of the scores of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.83.

Hypothesis no. 65 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their marital status.

Table – 4.83

Comparison of student teachers' attitude on the dimension of assessment and feedback with reference to their marital status

Groups	Number	Mean	SD	MD	t- value	Sig level
Unmarried	491	8.21	1.041	.192	1.015	NS
Married	32	8.41	1.012			

Table No - 4.83 indicates that the 't' value for the significance of difference between unmarried and married student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback is 1.015. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their marital status. Therefore, the null hypothesis (No. 65) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their marital status is accepted, since the two groups do not differ significantly at any level of confidence. Hence, it can be stated that married and unmarried student teachers possess similar attitude towards teacher education programmes on the dimension of assessment and feedback.

iii) With reference to their gender: Student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback was compared with reference to their gender. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.84.

Hypothesis no. 66 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their gender.

Table – 4.84

Comparison of student teachers' attitude on the dimension of assessment and feedback with reference to their gender

Groups	Number	Mean	SD	MD	t- value	Sig level
Female	336	8.22	1.043	.007	.071	NS
Male	187	8.23	1.035			

A perusal of the result vide Table No - 4.84 reveals that the 't' value for the significance of difference between female and male student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback is .071. Since the calculated 't' value is less than the criterion 't' value, therefore, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their gender. Therefore, the null hypothesis (No. 66) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their gender is accepted.

iv) *With reference to their locale:* Student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback was compared with reference to their locale. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.85.

Hypothesis no. 67 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their locale.

Table – 4.85

Comparison of student teachers' attitude on the dimension of assessment and feedback with reference to their locale

Groups	Number	Mean	SD	MD	t- value	Sig level
Urban	276	8.27	1.022	.099	1.083	NS
Rural	247	8.17	1.058			

Table No - 4.85 shows that the 't' value for the significance of difference between urban and rural student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback is 1.083. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension assessment and feedback with reference to their locale. Therefore, the null hypothesis (No. 67) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their locale is accepted, since the two groups do not differ significantly at any level of confidence. The glimpses of their mean scores tell us that urban and rural student teachers are both supportive towards teacher education programme on the dimension of assessment and feedback.

v) *With reference to their teaching experience:* The attitude of student teachers towards teacher education programmes on the dimension of assessment and feedback was compared with reference to whether they had any previous teaching experience or not. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.86.

Hypothesis no. 68 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their previous teaching experiences.

Table – 4.86**Comparison of student teachers' attitude on the dimension of assessment and feedback with reference to their previous teaching experience**

Groups	Number	Mean	SD	MD	t- value	Sig level
Having teaching experience	189	8.20	1.083			
Not having teaching experience	334	8.24	1.015	.038	.406	NS

Table No - 4.86 depicts that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of assessment and feedback between student teachers having and not having previous teaching experience is .406. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their previous experience in teaching. Therefore, the null hypothesis (No. 68) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their previous teaching experience is accepted since the two groups do not differ significantly at any level of confidence. Thus, it can be said that student teachers having and not having teaching experience had an unchanging attitude towards teacher education programmes on the dimension assessment and feedback which means that they possess similar attitude towards teacher education programme on the dimension of assessment and feedback.

vi) *With reference to their fathers' employment status:* The attitude of student teachers towards teacher education programmes on the dimension of assessment and feedback was compared with reference to their fathers' employment status. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.87.

Hypothesis no. 69 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their fathers' employment status.

Table – 4.87

Comparison of student teachers' attitude on the dimension of assessment and feedback with reference to fathers' employment status

Groups	Number	Mean	SD	MD	t- value	Sig level
Employed father	279	8.34	1.008	.246	2.721	.01
Unemployed father	244	8.09	1.060			

Table No - 4.87 signify that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of assessment and feedback between student teachers with employed and unemployed fathers is 2.721. Since the calculated 't' value is greater than the criterion 't' value at .01 level, it can be concluded that there is a significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their fathers' employment status. Therefore, the null hypothesis (No. 69) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their fathers' employment status is rejected, since the two groups differ significantly at .01 level of confidence. Accordingly, it can be concluded that student teachers whose fathers are employed displayed a more favourable attitude towards the teacher education programmes on the dimension of assessment and feedback in comparison with student teachers whose fathers are unemployed.

vii) *With reference to fathers' level of education:* The attitude of student teachers towards teacher education programmes on the dimension of assessment and feedback was compared with reference to their fathers' level of education. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.88.

Hypothesis no. 70 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their fathers' level of education.

Table – 4.88

Comparison of student teachers' attitude on the dimension of assessment and feedback with reference to fathers' level of education

Groups	Number	Mean	SD	MD	t- value	Sig level
Under Matric	256	8.19	1.072	.075	.821	NS
Matric and above	267	8.26	1.007			

Table No - 4.88 signify that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of assessment and feedback between student teachers whose fathers' level of education is under matriculate and between student teachers whose fathers level of education is matric and above is .821. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their fathers' level of education. Therefore, the null hypothesis (No. 70) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their fathers' level of education is accepted, since the two groups do not differ significantly at any level of confidence. As a result, it can be concluded that student teachers whose fathers' level of education is matric and above holds a similar attitude towards teacher education programmes on the dimension of assessment and feedback compared to student teachers whose fathers' educational level is under matric.

viii) *With reference to student teachers' educational qualification:* Student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback was also compared with reference to their educational qualification. Student teachers' educational qualification is categorized into three

levels, therefore comparison was done using ANOVA and the details are presented in the following table 4.89.

Hypothesis no. 71 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their educational qualification.

Table – 4.89

ANOVA on attitude towards teacher education programmes on the dimension of assessment and feedback with reference to student teachers' educational qualification

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	.492	2	.246		
Within Groups	562.885	520	1.082	.227	.797
Total	563.377	522			

The ANOVA results presented in Table 4.89 indicates no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to student teachers' educational qualification. Consequently, we accept hypothesis (No.71), which further shows that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to student teachers' educational qualification. Since there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to student teachers' educational qualification, there is no need to conduct any post hoc analysis.

ix) *With reference to student teachers previous academic streams.* Student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback was also compared with reference to their previous academic streams. There were three academic streams namely Science, Commerce

and Arts streams. Therefore, comparison was done using ANOVA and the details are presented in the following table 4.90.

Hypothesis no. 72 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their previous academic streams.

Table – 4.90

ANOVA on attitude towards teacher education programmes on the dimension of assessment and feedback with reference to previous academic streams

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	.286	2	.143		
Within Groups	563.090	520	1.083	.132	.876
Total	563.377	522			

The ANOVA results presented in Table 4.90 indicates no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to previous academic streams. Consequently, we accept hypothesis (No.72), which further shows that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their previous academic streams. Since there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to previous academic streams, there is no need to conduct any post hoc analysis.

4.4.8. Comparison of student teachers' attitude on the dimension of 'Career Prospect' with reference to various independent variables.

i) *With reference to their specific programmes:* Student teachers' attitude towards teacher education programmes was compared on the dimension of career prospect with reference to their specific programmes, i.e. B.Ed. and D.El.Ed. For

this, the Mean and Standard Deviation of the scores of the two groups were obtained. The mean differences were then tested by applying ‘t’ test and the details are presented in the following table 4.91.

Hypothesis no. 73 states that there is no significant difference in the student teachers’ attitude towards teacher education programmes on the dimension of career prospect with reference to their specific programme, i.e. B.Ed. and D.El.Ed.

Table – 4.91
Comparison of student teachers’ attitude on the dimension of career prospect with reference to their specific programmes

Groups	Number	Mean	SD	MD	t- value	Sig level
B.Ed. students	269	12.16	1.559	.597	3.906	.01
D.El.Ed. students	254	11.56	1.908			

A glance of the result vide Table No - 4.91 reveals that the ‘t’ value for the significance of difference between B.Ed. and D.El.Ed. student teachers’ attitude towards teacher education programmes on the dimension of career prospect is 3.906. Since the calculated ‘t’ value is greater than the criterion ‘t’ value at .01 level, therefore, it can be concluded that there is a significant difference in student teachers’ attitude towards teacher education programmes on the dimension of career prospect with reference to their programmes. Therefore, the null hypothesis (No. 73) that assumes there is no significant difference in the student teachers’ attitude towards teacher education programmes on the dimension of career prospect with reference to their specific programme is rejected, since the two groups differed significantly at .01 level of confidence. A comparison of their mean score showed that the difference is in favour of the B.Ed. student teachers as compared to D.El.Ed. student teachers. The result indicates that B.Ed. student teachers had a more preferable attitude towards teacher education programmes in the dimension of career prospect as against D.El.Ed. student teachers.

ii) *With reference to their marital status:* The attitude of student teachers towards teacher education programmes on the dimension of career prospect was

compared with reference to their marital status. For this, the Mean and Standard Deviation of the scores of the two groups were obtained. The mean differences were tested by applying ‘t’ test and the details are presented in the following table 4.92

Hypothesis no. 74 states that there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of career prospect with reference to their marital status.

Table – 4.92
Comparison of student teachers’ attitude on the dimension of career prospect with reference to their marital status

Groups	Number	Mean	SD	MD	t- value	Sig level
Unmarried	491	11.84	1.753	.509	1.586	NS
Married	32	12.34	1.842			

Table No - 4.92 indicates that the ‘t’ value for the significance of difference between unmarried and married student teachers’ attitude towards teacher education programmes on the dimension of career prospect is 1.586. Since the calculated ‘t’ value is less than the criterion ‘t’ value, it can be concluded that there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of career prospect with reference to their marital status. Therefore, the null hypothesis (No.74) that assumes there is no significant difference in student teachers’ attitude towards teacher education programmes on the dimension of career prospect with reference to their marital status is accepted, since the two groups do not differ significantly at any level of confidence. Hence, it can be stated that married and unmarried student teachers possess similar attitude towards teacher education programmes on the dimension of career prospect.

iii) With reference to their gender: Student teachers’ attitude towards teacher education programmes on the dimension of career prospect was compared with reference to their gender. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying ‘t’ test and the details are presented in the following table 4.93.

Hypothesis no. 75 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their gender.

Table – 4.93
Comparison of student teachers' attitude on the dimension of career prospect with reference to their gender

Groups	Number	Mean	SD	MD	t- value	Sig level
Female	336	11.86	1.717	.025	.157	NS
Male	187	11.88	1.842			

A glimpse of the result vide Table No - 4.93 reveals that the 't' value for the significance of difference between female and male student teachers' attitude towards teacher education programmes on the dimension of career prospect is .157. Since the calculated 't' value is less than the criterion 't' value, therefore, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their gender. Therefore, the null hypothesis (No. 75) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their gender is accepted.

iv) *With reference to their locale:* Student teachers' attitude towards teacher education programmes on the dimension of career prospect was compared with reference to their locale. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.94.

Hypothesis no. 76 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their locale.

Table – 4.94

**Comparison of student teachers' attitude on the dimension of career prospect
with reference to their locale**

Groups	Number	Mean	SD	MD	t- value	Sig level
Urban	276	12.09	1.695	.473	3.086	.01
Rural	247	11.61	1.804			

Table No - 4.94 shows that the 't' value for the significance of difference between urban and rural student teachers' attitude towards teacher education programmes on the dimension of career prospect is 3.086. Since the calculated 't' value is greater than the criterion 't' value at .01 level, it can be concluded that there is a significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their locale. Therefore, the null hypothesis (No.76) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their locale is rejected, since the two groups differ significantly at .01 level of confidence. An observation of their mean scores indicated that student teachers from urban area had a higher attitude towards teacher education programmes on the dimension of career prospect as against student teachers from rural area.

v) *With reference to their teaching experience:* The attitude of student teachers towards teacher education programmes on the dimension of career prospect was compared with reference to whether they had any previous teaching experience or not. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.95.

Hypothesis no. 77 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their previous teaching experiences.

Table – 4.95

**Comparison of student teachers' attitude on the dimension of career prospect
with reference to their previous teaching experience**

Groups	Number	Mean	SD	MD	t- value	Sig level
Having teaching experience	189	12.08	1.865			
Not having teaching experience	334	11.75	1.690	.334	2.090	.05

Table No - 4.95 depicts that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of career prospect between student teachers having and not having previous teaching experience is 2.090. Since the calculated 't' value is greater than the criterion 't' value at .05 level, it can be concluded that there is a significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their previous experience in teaching. Therefore, the null hypothesis (No. 77) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their previous teaching experience is rejected, since the two groups differ significantly at .05 level of confidence. Thus, it can be said that student teachers having teaching experience had a more favourable attitude towards teacher education programmes on the dimension of career prospect which means that they possess a higher attitude towards teacher education programme on the dimension of career prospect contrary to student teachers not having any teaching experience.

vi) *With reference to their fathers' employment status:* The attitude of student teachers towards teacher education programmes on the dimension of career prospect was compared with reference to their fathers' employment status. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.96.

Hypothesis no. 78 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their fathers' employment status.

Table – 4.96

Comparison of student teachers' attitude on the dimension of career prospect with reference to fathers' employment status

Groups	Number	Mean	SD	MD	t- value	Sig level
Employed father	279	12.08	1.657	.464	3.027	.01
Unemployed father	244	11.62	1.845			

Table No - 4.96 signify that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension of career prospect between student teachers with employed and unemployed fathers is 3.027. Since the calculated 't' value is greater than the criterion 't' value at .01 level, it can be concluded that there is a significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their fathers' employment status. Therefore, the null hypothesis (No. 78) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their fathers' employment status is rejected , since the two groups differ significantly at .01 level of confidence. Accordingly, it can be concluded that student teachers whose fathers are employed displayed a more favourable attitude towards the teacher education programmes on the dimension of career prospect as compared to student teachers whose fathers are unemployed.

vii) *With reference to fathers' level of education:* The attitude of student teachers towards teacher education programmes on the dimension of career prospect was compared with reference to their fathers' level of education. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.97.

Hypothesis no. 79 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their fathers' level of education.

Table – 4.97
Comparison of student teachers' attitude on the dimension of career prospect with reference to fathers' level of education

Groups	Number	Mean	SD	MD	t- value	Sig level
Under Matric	256	11.79	1.846			
Matric and above	267	11.94	1.676	.151	.980	NS

Table No - 4.97 signify that the 't' value for the significance of difference in their attitude towards teacher education programmes on the dimension career prospect between student teachers whose fathers level of education is under matriculate and student teachers whose fathers' level of education is matriculate and above is .980. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their fathers' level of education. Therefore, the null hypothesis (No. 79) that assumes there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension career prospect with reference to their fathers' level of education is accepted, since the two groups do not differ significantly at any level of confidence. As a result, it can be concluded that student teachers whose fathers' level of education is matriculate and above as well as under matriculate hold similar attitude towards teacher education programmes on the dimension of career prospect.

viii) *With reference to student teachers' educational qualification:* Student teachers' attitude towards teacher education programmes on the dimension of career prospect was also compared with reference to their educational qualification. Student teachers' educational qualification is categorized into three levels, therefore

comparison was done using ANOVA and the details are presented in the following table 4.98.

Hypothesis no. 80 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their educational qualification.

Table – 4.98

ANOVA on attitude towards teacher education programmes on the dimension of career prospect with reference to student teachers' educational qualification

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	68.154	2	34.077		
Within Groups	1550.477	520	2.982	11.429	.000
Total	1618.631	522			

Significant at 0.01 level

The ANOVA results presented in Table 4.98 indicates a significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect across various levels of their educational qualification with a confidence level of .01. Consequently, we reject hypothesis (No.80), which states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their educational qualification. The significant difference observed at the .01 level prompted us to conduct a Tukey post hoc analysis to identify which specific level of education exhibit this difference. The results of this analysis can be found in Table 4.99 below.

Table 4.99

Multiple Comparisons (Attitude towards teacher education programmes on the dimension of career prospect with reference to student teachers' educational qualification)

Tukey HSD		Dependent variable: Student teachers attitude		
Student teachers' qualification	Student teachers' qualification	Mean Difference	Std Error	Sig
Post-graduate	Graduate	.295	.175	.212
	Plus - 2	1.177*	.249	.000
Graduate	Post-graduate	.295	.175	.212
	Plus - 2	.882*	.225	.000
Plus - 2	Post-graduate	1.177*	.249	.000
	Graduate	.882*	.225	.000

Mean difference is Significant at 0.01 level

The following Table – 4.100 shows the Number, Mean and SD of the three levels of student teachers' educational qualification

Table 4.100

Descriptive statistics on student teachers' educational qualification (Attitude)

Sl. No.	Student teachers' educational qualification	Number	Mean	SD
1	Post - Graduate	142	12.20	1.481
2	Graduate	308	11.91	1.757
3	Plus - 2	73	11.03	2.021
4	Total	523	11.87	1.761

The above table 4.99 indicates that there is a significant difference at .01 level in the attitude towards teacher education programmes on the dimension of career prospect between student teachers whose educational qualification are Post-graduate and Plus 2 as well as between Graduate and Plus 2. Looking at table 4.100, it is shown that the mean of the student teachers whose educational qualification is Post-

graduate are found to be higher in comparison with student teachers whose educational qualification is Plus 2, similarly, student teachers whose educational qualification is Graduate are found to had a higher mean score as compared to those student teachers whose educational qualification is Plus 2. This indicated that student teachers whose educational qualification is Post-graduate had a more favourable attitude towards teacher education programmes on the dimension of career prospect than those students-teachers whose educational qualification is Plus 2. It also displayed that those student teachers whose educational qualification is Graduate had a more favourable attitude towards teacher education programmes on the dimension of career prospect than those students-teachers whose educational qualification is 'plus 2'. No significant difference is found in the attitude towards teacher education on the dimension of career prospect between student teachers whose educational qualification is 'post-graduate' and 'graduate'.

ix) *With reference to student teachers previous academic streams.* Student teachers' attitude towards teacher education programmes on the dimension of career prospect was also compared with reference to their previous academic streams. There were three academic streams namely Science, Commerce and Arts streams. Therefore, comparison was done using ANOVA and the details are presented in the following table 4.101.

Hypothesis no. 81 states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their previous academic streams.

Table – 4.101

ANOVA on attitude towards teacher education programmes on the dimension of career prospect with reference to previous academic streams

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	19.568	2	9.784		
Within Groups	1599.063	520	3.075	3.182	.042
Total	1618.631	522			

Significant at 0.05 level

The ANOVA results presented in Table 4.101 indicates a significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to previous academic streams with a confidence level of .05. Consequently, we reject hypothesis (No.81), which states that there is no significant difference in student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their previous academic stream. The significant difference observed at the .05 level prompted us to conduct a Tukey post hoc analysis to identify which specific previous academic stream exhibit this difference. The results of this analysis can be found in Table 4.102 below.

Table 4.102

Multiple Comparisons (Attitude towards teacher education programmes on the dimension of career prospect with reference to previous academic stream)

Tukey HSD

Dependent variable: Student teachers attitude

Stream of study	Stream of study	Mean Difference	Std Error	Sig
Arts	Science	.207	.186	.509
	Commerce	1.207*	.514	.050
Science	Arts	.207	.186	.509
	Commerce	1.000	.532	.146
Commerce	Arts	1.207*	.514	.050
	Science	1.000	.532	.146

Mean difference is Significant at 0.05 level

The following Table – 4.103 shows the Number, Mean and SD of the student teachers three previous academic streams.

Table 4.103**Descriptive statistics on student teachers' previous academic stream (Attitude)**

Sl. No.	Student teachers' previous academic stream	Number	Mean	SD
1	Arts	397	11.79	1.800
2	Science	114	12.00	1.629
3	Commerce	12	13.00	1.206
4	Total	523	11.87	1.761

The above table 4.102 indicates that there is a significant difference at .05 level in the attitude towards teacher education programmes on the dimension of career prospect between student teachers whose previous academic stream are Arts and Commerce. Looking at table 4.103, It is shown that the mean of the student teachers whose previous academic stream is Commerce are found to had a higher mean in comparison with student teachers whose previous academic stream is Arts. This indicated that student teachers whose previous academic stream is Commerce had a more favourable attitude towards teacher education programme on the dimension of career prospect than those students-teachers whose previous academic stream is Arts. It also indicated that no significant difference was found in the attitude towards teacher education on the dimension of career prospect between student teachers whose previous academic stream is Arts and Science as well as Commerce and Science.

4.5.0 Teaching aptitude of student teachers in Mizoram.

The fifth objective of the present study is to find out the teaching of student teachers (elementary and secondary) in Mizoram. To achieve this, the investigator employed the teaching aptitude scale developed by S.C. Gakhar and Rajnish (2004) which was administered to a sample of 523 student teachers from across various selected districts in Mizoram. After scoring and organizing the data, the scores were transformed into z-scores. These z-scores were used to classify student teachers' teaching aptitude into seven different levels. For better clarity, these seven levels were further grouped into three broader categories. Table 4.103 illustrates the z-score

ranges, the levels of teaching aptitude, and the percentage of student teachers in each of the three categories used for interpretation.

Table – 4.104
Range of score, Levels of teaching aptitude, and Categories with Percentage of Student teachers (N=523)

Sl. No.	Range of Score	Levels of Teaching aptitude with number of student teachers	Categories and % of student teachers'
1	31 & above	Extremely high aptitude (0)	High aptitude (36.52%)
2	29 to 30	Very high aptitude (43)	
3	26 to 28	High aptitude (148)	
4	22 to 25	Neutral aptitude (210)	Moderate aptitude (40.15%)
5	20 to 21	Low aptitude (56)	Low aptitude (23.33%)
6	17 to 19	Very low aptitude (42)	
7	16 & below	Extremely low aptitude (24)	

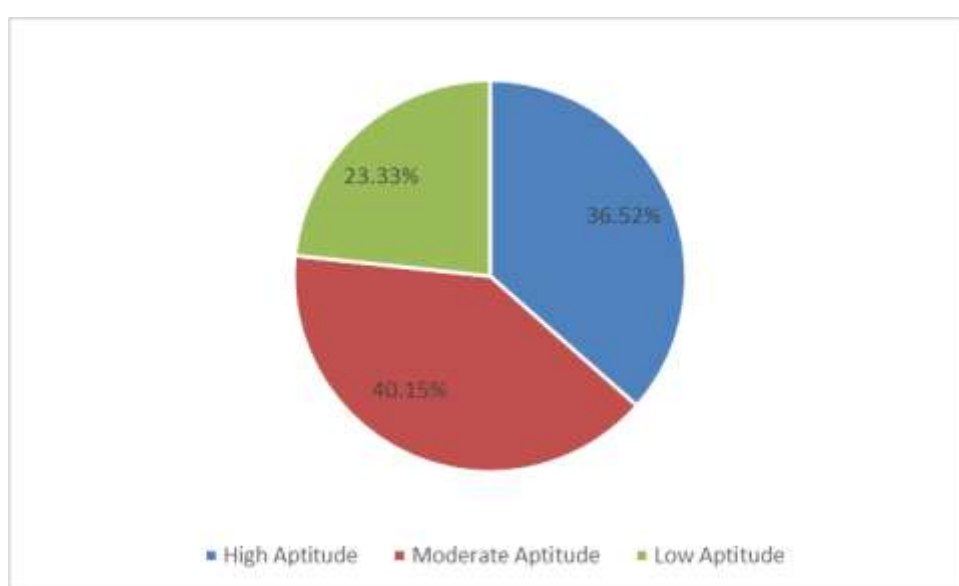


Figure – 4.2: Student Teachers' Level of Teaching Aptitude

Table 4.104 shows that 36.52% of student teachers had high teaching aptitude, while 40.15 % student teachers had moderate teaching aptitude, and 23.33% of student teachers in Mizoram had low teaching aptitude. Although most number of student teachers had moderate teaching aptitude, there were more student teachers with high teaching aptitude and lesser student teachers who had low teaching aptitude.

4.6.0 Comparison of student teachers' teaching aptitude with reference to different independent variables.

The sixth objective of the present study is to compare the teaching aptitude of student teachers (elementary and secondary) with reference to their programmes, marital status, gender, locale, teaching experience, fathers employment status, fathers' level of education, student teachers' educational qualification and previous academic stream, The comparative details are outlined below.

4.6.1 Comparison of student teachers' overall teaching aptitude with various independent variables

i) *Comparison with reference to their specific programmes:* Student teachers' teaching aptitude was compared with reference to their specific programmes, i.e. B.Ed. and D.El.Ed. For this, the Mean and Standard Deviation of the scores of the two groups were obtained. The mean differences were then tested by applying 't' test and the details are presented in the following table 4.105.

Hypothesis no. 82 states that there is no significant difference in the student teachers' teaching aptitude with reference to their specific programme.

Table – 4.105
Comparison of student teachers' teaching aptitude with reference to their programme

Groups	Number	Mean	SD	MD	t- value	Sig level
B.Ed students	269	24.52	3.670	1.457	4.449	.01
D.El.Ed students	254	23.06	3.822			

A glance of the result vide Table No - 4.105 reveals that the 't' value for the significance of difference between B.Ed. and D.El.Ed student teachers' teaching aptitude is 4.449. Since the calculated 't' value is greater than the criterion 't' value at .01 level, therefore, it can be concluded that there is a significant difference in the student teachers' teaching aptitude with reference to their specific programmes. Hence, the null hypothesis (No. 82) that assumes there is no significant difference in the student teachers' teaching aptitude with reference to their specific programme is rejected, since the two groups differed significantly at .01 level of confidence. A comparison of their mean score shows that the difference is supportive of B.Ed. student teachers, as their mean score is higher than the D.El.Ed. student teachers. The result indicated that B.Ed. student teachers had a higher teaching aptitude as compared to the D.El.Ed. student teachers.

ii) *Comparison with reference to their marital status:* The teaching aptitude of student teachers was compared with reference to their marital status. For this, the Mean and Standard Deviation of the scores of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.106.

Hypothesis no. 83 states that there is no significant difference in student teachers' teaching aptitude with reference to their marital status.

Table – 4.106
Comparison of student teachers' teaching aptitude with reference to their marital status

Groups	Number	Mean	SD	MD	t- value	Sig level
Unmarried	491	23.76	3.854	.865	1.245	NS
Married	32	24.63	3.013			

Table No - 4.106 indicates that the 't' value for the significance of difference between unmarried and married student teachers' teaching aptitude is 1.245. Since the calculated 't' value is less than the criterion 't' value, it can be concluded that there is no significant difference in student teachers' teaching aptitude with reference

to their marital status. Therefore, the null hypothesis (No. 83) that assumes there is no significant difference in student teachers' teaching aptitude with reference to their marital status is accepted, since the two groups do not differ significantly at any level of confidence.

iii) *Comparison with reference to their gender:* Student teachers' teaching aptitude was compared with reference to their gender. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.107.

Hypothesis no. 84 states that there is no significant difference in student teachers' teaching aptitude with reference to their gender.

Table – 4.107
Comparison of student teachers' teaching aptitude with reference to their gender

Groups	Number	Mean	SD	MD	t- value	Sig level
Female	336	23.91	3.704	.274	.789	NS
Male	187	23.64	4.001			

A perusal of the result vide Table No - 4.107 reveals that the 't' value for the significance of difference between female and male student teachers' teaching aptitude is .789. Since the calculated 't' value is less than the criterion 't' value, therefore, it can be concluded that there is no significant difference in student teachers' teaching aptitude with reference to their gender. Therefore, the null hypothesis (No. 84) that assumes there is no significant difference in student teachers' teaching aptitude with reference to their gender is accepted.

iv) *Comparison with reference to their locale:* Student teachers' teaching aptitude was compared with reference to their locale. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.108.

Hypothesis no. 85 states that there is no significant difference in student teachers' aptitude towards teaching with reference to their locale.

Table – 4.108

Comparison of student teachers' teaching aptitude with reference to their locale

Groups	Number	Mean	SD	MD	t- value	Sig level
Urban	276	24.39	3.612	1.249	3.785	.01
Rural	247	23.14	3.930			

Table No - 4.108 shows that the 't' value for the significance of difference between urban and rural student teachers' teaching aptitude is 3.785. Since the calculated 't' value is greater than the criterion 't' value at .01 level, it can be concluded that there is a significant difference in student teachers' teaching aptitude with reference to their locale. Therefore, the null hypothesis (No. 85) that assumes there is no significant difference in student teachers' teaching aptitude with reference to their locale is rejected, since the two groups differ significantly at .01 level of confidence. A glimpse at their mean score showed us that urban student teachers had a better teaching aptitude than the rural student teachers since their mean is higher than the rural student teachers. Therefore, it can be inferred that urban student teachers exhibit a higher teaching aptitude when compared with their rural counterparts.

v) *Comparison with reference to their having teaching experience:* The teaching aptitude of student teachers was compared with reference to their having any previous teaching experience. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying 't' test and the details are presented in the following table 4.109

Hypothesis no. 86 states that there is no significant difference in student teachers' teaching aptitude with reference to their having previous teaching experiences.

Table – 4.109
Comparison of student teachers’ teaching aptitude with reference to their
having previous teaching experience

Groups	Number	Mean	SD	MD	t- value	Sig level
Having teaching experience	189	24.23	3.710			
Not having teaching experience	334	23.57	3.852	.658	1.901	NS

Table No - 4.109 depicts that the ‘t’ value for the significance of difference in their teaching aptitude between student teachers having and not having previous teaching experience is 1.901. Since the calculated ‘t’ value is less than the criterion ‘t’ value, it can be concluded that there is no significant difference in student teachers’ teaching aptitude with reference to their previous experience in teaching. Therefore, the null hypothesis (No. 86) that assumes there is no significant difference in student teachers’ teaching aptitude with reference to their previous teaching experience is accepted since the two groups do not differ significantly at any level of confidence.

vi) *Comparison with reference to their fathers’ employment status:* The teaching aptitude of student teachers was compared with reference to their fathers’ employment status. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying ‘t’ test and the details are presented in the following table 4.110.

Hypothesis no. 87 states that there is no significant difference in student teachers’ teaching aptitude with reference to their fathers’ employment status.

Table – 4.110
Comparison of student teachers’ teaching aptitude with reference to their fathers’ employment status

Groups	Number	Mean	SD	MD	t- value	Sig level
Employed father	279	24.32	3.616	1.085	3.279	.01
Unemployed father	244	23.23	3.951			

Table No - 4.110 signify that the ‘t’ value for the significance of difference in their teaching aptitude between student teachers with employed and unemployed fathers is 3.279. Since the calculated ‘t’ value is greater than the criterion ‘t’ value at .01 level, it can be concluded that there is a significant difference in student teachers’ teaching aptitude with reference to their fathers’ employment status. Therefore, the null hypothesis (No. 87) that assumes there is no significant difference in student teachers’ teaching aptitude with reference to their fathers’ employment status is rejected, since the two groups differ significantly at .01 level of confidence. A glimpse at their mean score displayed that student teachers whose fathers were employed had a higher mean score than those whose fathers were unemployed. Therefore it can be concluded that student teachers whose fathers are employed display a higher teaching aptitude as compared to those whose fathers are unemployed.

vii) *Comparison with reference to fathers’ level of education:* The teaching aptitude of student teachers was compared with reference to their fathers’ level of education. For this, the Mean and Standard Deviation of the two groups were obtained. The mean differences were tested by applying ‘t’ test and the details are presented in the following table 4.111.

Hypothesis no. 88 states that there is no significant difference in student teachers’ teaching aptitude with reference to their fathers’ level of education.

Table – 4.111
**Comparison of student teachers’ teaching aptitude with reference to fathers’
level of education**

Groups	Number	Mean	SD	MD	t- value	Sig level
Under Matric	256	23.39	3.993	.827	2.846	.05
Matric and above	267	24.22	3.590			

Table No - 4.111 signify that the ‘t’ value for the significance of difference in the teaching aptitude between student teachers whose fathers level of education is under matriculate and matriculate and above is 2.846. Since the calculated ‘t’ value is greater than the criterion ‘t’ value at .05 level, it can be concluded that there is a significant difference in student teachers’ teaching aptitude with reference to their fathers’ level of education. Therefore, the null hypothesis (No. 88) that assumes there is no significant difference in student teachers’ teaching aptitude with reference to their fathers’ level of education is rejected, since the two groups differ significantly at .05 level of confidence. A look at their mean score showed that student teachers whose fathers educational level is ‘matric and above’ had a higher mean than those student teachers whose fathers educational level is under matriculate. Therefore, it can be concluded that student teachers whose fathers are matriculate and above depicted a more favourable teaching aptitude than those student teachers whose fathers are under matriculate.

viii) *Comparison with reference to student teachers’ educational qualification:* Student teachers’ teaching aptitude was compared with reference to their educational qualification. Student teachers’ educational qualification is categorized into three levels, therefore comparison was done using ANOVA and the details are presented in the following table 4.112.

Hypothesis no. 89 states that there is no significant difference in student teachers’ teaching aptitude with reference to their educational qualification.

Table – 4.112**ANOVA on teaching aptitude with reference to student teachers' educational qualification**

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	235.056	2	117.528		
Within Groups	7346.580	520	14.128	8.319	.000
Total	7581.637	522			

Significant at 0.01 level

The ANOVA results presented in Table 4.112 indicates a significant difference in student teachers' teaching aptitude across various levels of their educational qualification with a confidence level of .01. Consequently, we reject hypothesis (No.89), which states that there is no significant difference in student teachers' teaching aptitude with reference to their educational qualification. The significant difference observed at the .01 level prompted us to conduct a Dunnett post hoc analysis to identify which specific level of education exhibit this difference. The results of this analysis can be found in Table 4.113 below.

Table 4.113**Multiple Comparisons (Teaching Aptitude with reference to student teachers' educational qualification)**

Dunnett T3		Dependent variable: Student teachers teaching aptitude		
Student teachers' qualification	Student teachers' qualification	Mean Difference	Std Error	Sig
Post-graduate	Graduate	.776	.381	.105
	Plus - 2	2.208*	.541	.000
Graduate	Post-graduate	.776	.381	.105
	Plus - 2	1.432*	.489	.010
Plus - 2	Post-graduate	2.208*	.541	.000
	Graduate	1.432*	.489	.010

Mean difference is Significant at 0.05 level

The following Table – 4.114 shows the Number, Mean and SD of the three levels of student teachers’ qualification

Table 4.114

Descriptive statistics on student teachers’ educational qualification (Aptitude)

Sl. No.	Student teachers’ educational qualification	Number	Mean	SD
1	Post – Graduate	142	24.58	3.677
2	Graduate	308	23.80	3.685
3	Plus – 2	73	22.37	4.202
4	Total	523	23.81	3.811

The above table 4.113 indicates that there is a significant difference at .01 level in teaching aptitude between student teachers whose educational qualification is Post-graduate and Plus- 2 as well as between student teachers whose educational qualification is Graduate and Plus 2. When their Mean scores are compared by looking at Table 4.114, it became evident that student teachers whose educational qualification is post-graduate had a higher Mean than student teachers whose educational qualification is Plus-2. Similarly, it can be seen that student teachers whose educational qualification is Graduate also had a higher mean than those whose educational qualification is Plus-2. This indicated that student teachers whose educational qualification is Post-graduate had a higher teaching aptitude as compared to those students-teachers whose educational qualification is Plus-2. It also indicated that Graduate student teachers also had a better teaching aptitude than those student teachers whose educational qualification is Plus-2. We can also see that there is no significant difference in the teaching aptitude between student teachers whose educational qualification is Post-graduate and Graduate.

ix) *Comparison with reference to student teachers previous academic streams.* Student teachers’ teaching aptitude was also compared with reference to their previous academic streams. There were three academic streams namely Science, Commerce and Arts streams. Therefore comparison was done using ANOVA and the details are presented in the following table 4.115.

Hypothesis no. 90 states that there is no significant difference in student teachers' teaching aptitude with reference to their previous academic streams.

Table – 4.115
ANOVA on aptitude towards teaching with reference to previous academic streams

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	35.963	2	17.981		
Within Groups	7545.674	520	14.511	1.239	.290
Total	7581.637	522			

The ANOVA results presented in Table 4.115 indicates no significant difference in student teachers' teaching aptitude with reference to previous academic streams. Consequently, we accept hypothesis (No.90), which states that there is no significant difference in student teachers' teaching aptitude with reference to their previous academic streams. Since there is no significant difference in student teachers' teaching aptitude with reference to previous academic streams, there is no need to conduct any post hoc analysis.

4.7.0 Relationship between attitude towards teacher education programmes and teaching aptitude of student teachers

The seventh objective is to find out the relationship between attitude towards teacher education programme and teaching aptitude of student teachers (elementary and secondary) in Mizoram. The Pearson's product moment correlation was used to determine the relationship between these two variables in order to find out how strong the relationship is, and the direction of the relationship and they are presented in the following table.

Hypothesis no. 91 states that there is no significant relationship between attitude towards teacher education programmes and teaching aptitude of student teachers.

Table No. 4.116
Correlation between Attitude towards teacher education programmes and
Teaching aptitude of student teachers in Mizoram (N=523)

		Total attitude score	Teaching aptitude
Total attitude score	Pearson Correlation	1	.377**
	Sig. (2-tailed)		.000
	N	523	523
Teaching aptitude	Pearson Correlation	.377**	1
	Sig. (2-tailed)	.000	
	N	523	523

** . Correlation is significant at the 0.01 level (2-tailed).

The above Table 4.116 shows that the relationship between ‘attitude towards teacher education programme’ and ‘teaching aptitude’ of student teachers in Mizoram are found to be positive and significant ($r = .337$) at 0.01 level of confidence. Therefore, the null hypothesis (No, 91) that states there is no significant relationship between attitude towards teacher education programmes and teaching aptitude of student teachers was rejected. Hence, there existed a low positive correlation between the two variables, which indicated that the higher the attitude towards teacher education programmes, the higher is their teaching aptitude and vice versa.

4.8.0 Opinion on some aspects of teacher education programme

The eighth objective of this study is to ascertain the views of elementary and secondary student teachers on various aspects of teacher education. To achieve this, the researcher created a survey consisting of nine items to gather student teachers' opinions. The collected responses were then analysed and interpreted, and the findings are presented in the following tables.

i) Opinion on revision of B.Ed and D.El.Ed syllabus

TABLE – 4.117
Syllabus for B.Ed. and D.El.Ed. programmes should be revised or updated (N=523)

<i>After every three years</i>	<i>After every four years</i>	<i>After every five years</i>
235 (44.7%)	134 (25.7%)	154 (29.6%)

Table – 4.117 reveals that 44.7% student teachers opined that B.Ed. and D.El.Ed syllabus should be revised every three years, 25.7% thought a revision should be done after every four years and 29.6% students had the opinion of revising the syllabus every five years.

ii) *Opinion on duration of B.Ed and D.El.Ed programmes*

TABLE – 4.118
Duration of B.Ed. and D.El.Ed. programmes should be

<i>One year</i>	<i>Two years</i>	<i>Three years</i>
125 (23.9%)	380 (72.6%)	18 (3.5%)

Table – 4.118 shows that 23.9% student teachers had the opinion that the duration of B.Ed. and D.El.Ed. course should be one year while 72.6% student teachers preferred two years of B.Ed. programme. Only 3.5% student teachers preferred three years of B.Ed. programme.

iii) *Opinion on conduct of B.Ed and D.El.Ed internship*

TABLE – 4.119
B.Ed. and D.El.Ed. Internship should be conducted in the

<i>Third Semester</i>	<i>Fourth Semester</i>
112 (21.5%)	411 (78.5%)

Table -4.119 reveals that 21.5% student teachers preferred to conduct the internship programme during the third semester while 78.5% student teachers preferred to had their internship programme during the fourth semester.

iv) *Opinion on responsibility for arranging job placements for students who had completed their teacher training course*

TABLE – 4.120
The institution should take responsibility for arranging job placements for students who had completed their teacher training course

<i>Yes</i>	<i>No</i>
376 (71.9%)	147 (28.1%)

Table – 4.120 portrays that 71.9% student teachers desired the institution to take responsibility for placement after completion of the B.Ed. and D.El.Ed. course. On the other hand, 28.1% student teachers had the opinion that the institution should not be responsible for future placement of the students for those having completed the B.Ed. and D.El.Ed. course.

v) *Opinion on teachers with natural aptitude not to undergo B.Ed. and D.El.Ed. training*

TABLE – 4.121
Teachers who had natural aptitude for teaching need not undergo B.Ed. and D.El.Ed. training

<i>Agree</i>	<i>Disagree</i>	<i>Undecided</i>
92 (17.6%)	357 (68.3%)	74 (14.1%)

Table – 4.121 indicates that 17.6% student teachers agreed that teachers possessing natural aptitude towards teaching do not need to undergo B.Ed. and D.El.Ed. training while 68.3% student teachers disagreed and 14.1% student teachers

do not had much opinion on B.Ed. and D.El.Ed. training for teachers having natural aptitude for teaching.

vi) *Opinion on mandatory training of teachers working in schools*

TABLE – 4.122

Do you think training of teachers should be made mandatory for all teachers working in schools?

<i>Yes</i>	<i>No</i>
487 (93.1%)	36 (6.9%)

Table – 4.122 demonstrates that 93.1% student teachers had a strong opinion that teachers working in schools should mandatorily undergo training through B.Ed. and D.El.Ed. course. At the same time, 6.9% student teachers thought that mandatory training of teachers is not necessary.

vii) *Opinion on the number of lessons to be planned*

TABLE – 4.123

The number of lesson to be planned should be

<i>Reduced</i>	<i>Increased</i>	<i>As usual</i>
223 (42.6%)	125 (23.9%)	175 (33.5%)

Table – 4.123 exhibits that 42.6% student teachers preferred to reduce the number of lessons to be planned at the same time 35.5% preferred the usual number as laid down by the syllabus. 23.9% student teachers had the opinion of increasing the number of lessons to be planned.

viii) *Opinion on the number of pedagogy papers*

TABLE – 4.124
Student teachers should had the option to choose

<i>One pedagogy paper</i>	<i>Two pedagogy papers</i>	<i>Three pedagogy papers</i>
220 (42.1%)	246 (47%)	57 (10.9%)

Table – 4.124 reflects that 42.1% student teachers would like to had one pedagogy paper while 47% student teachers preferred having two pedagogy papers. It was also found that 10.9% student teachers chose to had three pedagogy papers during internship.

ix) *Opinion on broadening the scope of the syllabus to emphasize preparation for NET examination*

TABLE – 4.125
The syllabus should be broader in scope and should emphasize preparation for the NET examination

<i>Agree</i>	<i>Disagree</i>
444(84.9%)	79 (15.1%)

Table – 4.125 unveils that 84.9% student teachers preferred the syllabus to be much broader so that it will help them in preparing for their NET examination. On the other hand, 15.1% student teachers had the opinion of not extending the scope of the syllabus.

4.9.0 Suggestive measures for improving the existing elementary and secondary teacher education programmes

The following measures are suggested for improving the existing elementary and secondary teacher education programme.

1. **Enhance Curriculum:** Updating the curriculum to include modern teaching methodologies, technology integration and inclusive education practices.
2. **Professional Development:** Providing more relevant and updated professional development opportunities for teachers, including workshops, seminars and access to the latest research in education.
3. **Infrastructure Improvement:** Investment in upgrading school infrastructure, such as classrooms, libraries and laboratories, to create a conducive learning environment.
4. **Mentorship Programs:** Establishing mentorship programs where experienced teachers guide and support new teachers, helping them navigate challenges and improve their teaching skills.
5. **Community Engagement:** Fostering stronger connections between schools and local communities to ensure that education is relevant to the local context and needs.
6. **Assessment and Feedback:** Implementing regular assessments and feedback mechanisms to monitor and improve teaching quality and student learning outcomes.
7. **Technology Integration:** Introducing and training of teachers in the use of educational technology to enhance teaching and learning experiences.
8. **Inclusive Education:** Promoting inclusive education practices to ensure that all students, including those with special needs, had access to quality education.
9. **Research and Innovation:** Encouraging research and innovation in teaching methods and educational practices to keep the program dynamic and effective.

CHAPTER V

MAJOR FINDINGS, DISCUSSIONS, RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

This chapter covers the key findings, discusses the probable causes of the findings, offers recommendations, and provides suggestions for future research.

5.1.0 MAJOR FINDINGS

The following are the major findings of the present study

5.1.1 Construction of Attitude scale towards Teacher Education Programme

Attitude Scale towards Teacher Education Programme was constructed and standardized. Item analysis was done by finding out the discrimination index. Coefficient of reliability was found to be .996 using Test re-test. Validity was established by ten experts in the field of Education and psychology. Norms was also established using z-Score.

5.1.2 Student teachers' attitude towards teacher education programmes

30.21% student teachers have favourable attitude towards teacher education programmes, 41.49% have neutral attitude and 28.30% have unfavourable attitude towards teacher education programmes.

5.1.3 Comparison of student teachers' attitude towards teacher education programmes with reference to different independent variables

(A) Overall Comparison

1) B.Ed. student teachers have a more favourable attitude towards teacher education programme as compared to D.El.Ed. student teachers.

2) There is no significant difference in student teachers' attitude towards teacher education programmes with reference to their marital status.

3) There is no significant difference in student teachers' attitude towards teacher education programmes with reference to their gender.

4) Urban student teachers exhibit a more positive attitude towards the teacher education programmes compared to their rural counterparts.

5) There is no significant difference in student teachers' attitude towards teacher education programmes with reference to their previous teaching experiences.

6) Student teachers whose fathers are employed show a more favourable attitude towards the teacher education programmes compared to those whose fathers are unemployed.

7) Student teachers whose fathers are matric and above shows a more favourable attitude towards the teacher education programmes as compared to those whose fathers are under matric.

8) Post-graduate student teachers have a more favourable attitude towards teacher education programmes than Plus-2 student teachers.

9) There is no significant difference in student teachers' attitude towards teacher education programmes with reference to their previous academic streams.

(B) Comparison on the dimension of Content and Relevance

1) B.Ed. student teachers have a more favourable attitude towards content and relevance as compared to D.El.Ed. student teachers.

2) Married student teachers have a more positive attitude towards content and relevance than the unmarried student teachers.

3) There is no significant difference in student teachers' attitude towards content and relevance with reference to their gender.

4) There is no significant difference in student teachers' attitude towards content and relevance with reference to their locale.

5) Student teachers not having teaching experience had a higher attitude towards content and relevance as compared to student teachers having teaching experience.

6) There is no significant difference in student teachers' attitude towards content and relevance with reference to their fathers' employment status.

7) There is no significant difference in student teachers' attitude towards content and relevance with reference to their fathers' level of education.

8) Post-graduate student teachers have a more favourable attitude towards content and relevance than Graduate student teachers.

9) There is no significant difference in student teachers' attitude towards content and relevance with reference to their previous academic streams.

(C) Comparison on the dimension of Teaching Method, Faculty Support and Collaboration

1) B.Ed. student teachers have a more favourable attitude towards teaching method, faculty support and collaboration as compared to the D.El.Ed. student teachers.

2) There is no significant difference in student teachers' attitude towards teaching method, faculty support and collaboration with reference to their marital status.

3) There is no significant difference in student teachers' attitude towards teaching method, faculty support and collaboration with reference to their gender.

4) There is no significant difference in student teachers' attitude towards teaching method, faculty support and collaboration with reference to their locale.

5) Student teachers having previous teaching experience had a higher attitude towards teaching method, faculty support and collaboration as compared to student teachers not having teaching experience.

6) Student teachers whose fathers are employed displayed a more favourable attitude towards teaching method, faculty support and collaboration as compared to student teachers whose fathers are unemployed.

7) There is no significant difference in student teachers' attitude towards teaching method, faculty support and collaboration with reference to their fathers' level of education.

8) Post-graduate student teachers had a more positive attitude towards teaching method, faculty support and collaboration compared to Plus-2 student teachers.

9) There is no significant difference in student teachers' attitude towards teaching method, faculty support and collaboration with reference to their previous academic streams.

(D) Comparison on the dimension of Resources, Facilities and Programme Management

1) There is no significant difference in the student teachers' attitude towards resources, facilities and programme management with reference to their specific programme.

2) There is no significant difference in student teachers' attitude towards resources, facilities and programme management with reference to their marital status.

3) There is no significant difference in student teachers' attitude towards teaching method, faculty support and collaboration with reference to their gender.

4) There is no significant difference in student teachers' attitude towards resources, facilities and programme management with reference to their locale.

5) There is no significant difference in student teachers' attitude towards resources, facilities and programme management with reference to their previous teaching experiences.

6) Student teachers whose fathers are employed depicted a more favourable attitude towards resources, facilities and programme management as compared to student teachers whose fathers are unemployed.

7) There is no significant difference in student teachers' attitude towards resources, facilities and programme management with reference to their fathers' level of education.

8) There is no significant difference in student teachers' attitude towards resources, facilities and programme management with reference to their educational qualification.

9) There is no significant difference in student teachers' attitude towards resources, facilities and programme management with reference to their previous academic streams.

(E) Comparison on the dimension of Pre-Internship

1) B.Ed. student teachers have a more favourable attitude towards pre-Internship as against D.El.Ed. student teachers.

2) There is no significant difference in student teachers' attitude towards pre-internship with reference to their marital status.

3) There is no significant difference in student teachers' attitude towards pre-internship with reference to their gender.

4) There is no significant difference in student teachers' attitude towards pre-internship with reference to their locale.

5) There is no significant difference in student teachers' attitude towards pre-internship with reference to their previous teaching experiences.

6) Student teachers whose fathers are employed displayed a more favourable attitude towards pre-internship as compared to student teachers whose fathers are unemployed.

7) Student teachers whose fathers' level of education is matriculate and above holds a better attitude towards pre-internship in comparison with student teachers whose fathers' educational level is under matriculate.

8) Post-graduate student teachers have a more favourable attitude towards pre-internship than those students-teachers whose educational qualification is Plus-2.

9) There is no significant difference in student teachers' attitude towards pre-internship with reference to their previous academic streams.

(F) Comparison on the dimension of School Internship

1) There is no significant difference in the student teachers' attitude school internship with reference to their specific programme.

2) There is no significant difference in student teachers' attitude towards school internship with reference to their marital status.

3) There is no significant difference in student teachers' attitude towards school internship with reference to their gender.

4) Urban student teachers have a more supportive attitude towards school internship in comparison with student teachers from rural areas.

5) There is no significant difference in student teachers' attitude towards school internship with reference to their previous teaching experiences.

6) There is no significant difference in student teachers' attitude towards school internship with reference to their fathers' employment status.

7) There is no significant difference in student teachers' attitude towards school internship with reference to their fathers' level of education.

8) There is no significant difference in student teachers' attitude towards school internship with reference to their educational qualification.

9) There is no significant difference in student teachers' attitude towards school internship with reference to their previous academic streams.

(G) Comparison on the dimension of Post-Internship

1) B.Ed. student teachers have a better attitude towards post-internship as against D.El.Ed. student teachers.

2) There is no significant difference in student teachers' attitude towards post-internship with reference to their marital status.

3) There is no significant difference in student teachers' attitude towards post-internship with reference to their gender.

4) There is no significant difference in student teachers' attitude towards post-internship with reference to their locale.

5) There is no significant difference in student teachers' attitude towards post-internship with reference to their previous teaching experiences.

6) Student teachers whose fathers are employed displayed a higher attitude towards post-internship compared to that of student teachers whose fathers are unemployed.

7) There is no significant difference in student teachers' attitude towards post-internship with reference to their fathers' level of education.

8) Post-graduate student teachers displayed a higher attitude towards post-internship as compared to both graduate and Plus-2 student teachers.

9) Student teachers whose previous academic stream is Science have higher attitude towards post-internship compared to student teachers whose previous academic stream is Arts.

(H) Comparison on the dimension of Assessment and Feedback

- 1) There is no significant difference in the student teachers' attitude towards assessment and feedback with reference to their specific programme.
- 2) There is no significant difference in student teachers' attitude towards assessment and feedback with reference to their marital status.
- 3) There is no significant difference in student teachers' attitude towards assessment and feedback with reference to their gender.
- 4) There is no significant difference in student teachers' attitude towards assessment and feedback with reference to their locale.
- 5) There is no significant difference in student teachers' attitude towards assessment and feedback with reference to their previous teaching experiences.
- 6) Student teachers whose fathers are employed displayed a higher attitude towards assessment and feedback in comparison with student teachers whose fathers are unemployed.
- 7) There is no significant difference in student teachers' attitude towards assessment and feedback with reference to their fathers' level of education.
- 8) There is no significant difference in student teachers' attitude towards assessment and feedback with reference to their educational qualification.
- 9) There is no significant difference in student teachers' attitude towards assessment and feedback with reference to their previous academic streams.

(I) Comparison on the dimension of Career Prospect

- 1) B.Ed. student teachers have a more preferable attitude towards career prospect as against D.El.Ed. student teachers.
- 2) There is no significant difference in student teachers' attitude towards career prospect with reference to their marital status.

3) There is no significant difference in student teachers' attitude towards career prospect with reference to their gender.

4) Student teachers from urban area have a higher attitude towards career prospect as against student teachers from rural area.

5) Student teachers having teaching experience have a more favourable attitude towards career prospect contrary to student teachers not having any teaching experience.

6) Student teachers whose fathers are employed displayed a more favourable attitude towards career prospect as compared to student teachers whose fathers are unemployed.

7) There is no significant difference in student teachers' attitude towards career prospect with reference to their fathers' level of education.

8) Student teachers whose educational qualification is Post-graduate and Graduate have a more favourable attitude towards career prospect compared to Plus-2 student teachers.

9) Student teachers whose previous academic stream is Commerce have a more positive attitude towards career prospect compared to student teachers whose previous academic stream is Arts.

5.1.4 Student teachers' Teaching Aptitude

36.52% student teachers have high teaching aptitude, 40.15% have moderate teaching aptitude and 23.33% student teachers have low teaching aptitude.

5.1.5 Comparison of student teachers' teaching aptitude with reference to different independent variables

(A) Overall Comparison

1) B.Ed. student teachers have a higher teaching aptitude as compared to the D.El.Ed. student teachers.

2) There is no significant difference in student teachers' teaching aptitude with reference to their marital status.

3) There is no significant difference in student teachers' teaching aptitude with reference to their gender.

4) Urban student teachers exhibit a more positive teaching aptitude when compared with their rural counterparts.

5) There is no significant difference in student teachers' teaching aptitude with reference to their having previous teaching experiences.

6) Student teachers whose fathers are employed display a higher teaching aptitude as compared to those whose fathers are unemployed.

7) Student teachers whose fathers are matriculate and above shows a more favourable teaching aptitude than those student teachers whose fathers are under matriculate.

8) Post-graduate and Graduate student teachers have a higher teaching aptitude compared to student teachers whose educational qualification is Plus-2.

9) There is no significant difference in student teachers' teaching aptitude with reference to their previous academic streams

5.1.6 Opinion of student teachers on some aspects of teacher education programme

1) Most student teachers wanted to revise and update their syllabus after every three years.

2) Majority of student teachers wished the duration of teacher training programme should be two years.

3) Majority of student teachers preferred to conduct the internship programme during the fourth semester.

4) Majority of student teachers wanted their institution should take responsibility for arranging job placements for student teachers who have completed their teacher training course.

5) Majority of student teachers disagreed that teachers possessing a natural aptitude for teaching need not undergo teacher training programme.

6) Majority of student teachers strongly view that teachers working in schools should mandatorily undergo teacher training course.

7) Most number of student teachers preferred the number of lessons to be planned should be reduced.

8) The largest number of student teachers would like to have two pedagogy papers.

9) Majority of the student teachers preferred that the scope of the teacher training syllabus should be much broader and should emphasize on preparation for the NET examination.

5.2.0 DISCUSSIONS ON SOME OF THE FINDINGS

Some of the findings in the present study are discussed along with their probable reasons

5.2.1 Discussion on the findings relating to student teachers level of attitude towards teacher education programme

1) It was found that 30.21% student teachers have favourable attitude towards teacher education programme, 41.49% have neutral attitude and 28.30% have unfavourable attitude towards teacher education programmes

Discussions: Those having favourable attitude probably find the teacher education programme relevant and well-structured, meeting their expectations, those having neutral attitude most likely see some benefits but recognize areas needing improvement, possibly due to inconsistencies in teaching methods or curriculum, and

those having unfavourable attitude perhaps are dissatisfied, likely due to perceived lack of practical training, resources, or adequate support

5.2.2 Discussion on the findings relating to comparison of student teachers overall and dimension wise attitude towards teacher education programme with reference to selected variables

1) It was found that B.Ed. student teachers have a more favourable attitude towards teacher education programme as compared to D.El.Ed. student teachers.

Discussions: This could probably be due to differences in programme content and structure. B.Ed programmes often offer more comprehensive coursework, greater opportunities for practical teaching experience, and better career prospects. Besides, B.Ed students might perceive their program as more prestigious and aligned with higher educational standards. On the other hand, D.El.Ed programmes might be viewed as less rigorous and more limited in scope, leading to less enthusiasm and satisfaction among its students. These factors could contribute to the differing attitudes towards their respective teacher education programmes.

2) It was found that Urban student teachers exhibit a more positive attitude towards the teacher education programme compared to their Rural counterparts.

Discussions: In line with the present research finding, Sao and Behera (2016) and Srinivasan (2019) found that urban student teachers had more positive attitude as compared to rural student teachers. Halder (2021) inferred that urban student teachers had a more positive attitude towards two year B.Ed programme.

Urban student teachers might have access to more comprehensive resources, such as better-equipped schools, libraries, and technology, enhancing their educational experience. They often benefit from more experienced teachers and diverse extracurricular activities, making their education more engaging and relevant. In addition, urban areas might provide more networking opportunities and exposure to varied teaching methods, fostering a positive outlook towards the programme. On the other hand, rural student teachers may face resource limitations, less exposure to

advanced teaching techniques, and fewer opportunities, leading to a less favourable perception of the teacher education program.

3) It was found that student teachers whose fathers are employed show a more favourable attitude towards the teacher education program compared to those whose fathers are unemployed.

Discussions: Student teachers whose fathers are employed may have a more favourable attitude towards the teacher education program because they likely experience better financial stability and support. This stability can reduce stress and allow them to focus more on their studies. Employed fathers might also serve as role models, demonstrating the value of education and hard work, which can positively influence their children's attitudes towards their own education. Additionally, employed fathers might be able to provide more educational resources and opportunities, further enhancing their children's educational experiences and satisfaction with the teacher education program.

4) It was found that student teachers whose fathers' educational qualifications are matriculate and above shows a more favourable attitude towards the teacher education program as compared to those whose fathers are under matriculate.

Discussions: This could be due to the value placed on education. Educated fathers can offer better academic support, guidance, and encouragement to their children, demonstrating the benefits of higher education through their own experiences. Their higher educational status often correlates with better financial stability, providing access to educational resources and opportunities, which can enhance the learning experience. This supportive environment probably fosters a positive perception and attitude towards the teacher education program among their children.

5) It was found that Post-graduate student teachers have a more favourable attitude towards teacher education programme than Plus-2 student teachers

Discussions: The probable reasons for this finding could be due to their advanced academic experience and higher career aspirations. Post-graduate student teachers

often have a clearer understanding of the programme's relevance to their professional goals and appreciate the specialized training it offers. Their maturity and previous educational successes also contribute to a positive outlook. In contrast, plus-2 student teachers, being less experienced and possibly uncertain about their career paths, may not fully recognize the programme's benefits, leading to a less favourable attitude. These differences in perspective and experience probably contribute to the varying attitudes.

6) *It was found that B.Ed. student teachers have a more positive attitude towards the content and relevance of teacher training programme as compared to D.El.Ed. student teachers.*

Discussions: The probable reason why B.Ed student teachers have a more positive attitude towards the content and relevance of the teacher training programme could be due to its comprehensive curriculum and advanced training. B.Ed programmes often provide more in-depth theoretical knowledge and practical experience, aligning well with their career goals in teaching. These programmes also tend to have higher academic and professional standards, which can boost student confidence and satisfaction. In contrast, D.El.Ed programmes may be perceived as less rigorous and more limited in scope, leading to a less favorable attitude among its students. These differences in program structure and perceived value might have contributed to the varying attitudes.

7) *It was found that married student teachers have a more positive attitude towards content and relevance of the teacher education programmes than the unmarried student teachers.*

Discussions: The plausible reason for this finding could be due to married student teachers life experience and responsibilities. They may perceive the program as crucial for their career advancement and family support, enhancing their commitment and appreciation. Their maturity and life skills could also help them better understand and relate to the programme's practical aspects. In contrast, unmarried student teachers might have fewer responsibilities and may not fully grasp the

programme's relevance, leading to a less positive attitude. These differences in life circumstances and priorities might have contributed to the varying attitudes.

8) It was found that student teachers not having any teaching experience had a higher attitude towards content and relevance of the teacher education programmes as compared to student teachers having teaching experience.

Discussions: In contrary to this finding Sao and Behera (2016) indicated that student teachers having and not having teaching experience did not possess significant difference in their attitude.

Student teachers without teaching experience may have a higher attitude towards the content and relevance of the teacher education programme because they are eager to gain new knowledge and skills. They might view the programme as a valuable resource to prepare for their future careers. In contrast, student teachers with teaching experience may already have practical insights and could find the programme less impactful or redundant. Their existing knowledge might lead to higher expectations, and if the programme does not meet these, it can result in a lower attitude towards its content and relevance.

9) It was found that Post-graduate student teachers have a more favourable attitude towards content and relevance of the teacher education programmes than Graduate student teachers.

Discussions: The likely reason why post-graduate student teachers have a more favourable attitude towards the teacher education programme could be due to their advanced academic background and greater appreciation for specialized knowledge. They may see the programme as more aligned with their professional development goals and more relevant to their higher-level academic and career aspirations. Besides, their prior educational experiences might make them better equipped to understand and value the depth and breadth of the programme's content. In contrast, graduate student teachers might find the program less challenging or redundant, leading to a less favourable attitude. These differences in educational background and expectations might have contributed to the different attitudes.

10) *It was found that B.Ed. student teachers have a more favourable attitude towards teaching method, faculty support and collaboration in the teacher training programme as compared to the D.El.Ed. student teachers.*

Discussions: B.Ed student teachers might have a more favourable attitude towards teaching methods, faculty support, and collaboration in the teacher education programme because of the advanced and comprehensive nature of B.Ed programmes. These programmes typically offer more in-depth pedagogical training, experienced faculty, and ample opportunities for collaboration and practical application. In contrast, D.El.Ed programmes might be perceived as less rigorous and lacking in these areas, leading to less favourable attitudes among its students. The higher academic standards and enhanced resources in B.Ed programmes might have contributed to the more positive perceptions amongst B.Ed student teachers.

11) *It was found that student teachers having previous teaching experience had a higher attitude towards teaching method, faculty support and collaboration in the teacher education programmes as compared to student teachers not having teaching experience*

Discussions: Student teachers with prior teaching experience have a higher attitude towards teaching methods, faculty support, and collaboration in the teacher education programme most probably because of their practical understanding and appreciation of these elements. Their experience allows them to better recognize the value of effective teaching strategies, strong faculty support, and collaborative learning environments. They can see how these aspects directly impact classroom success and student outcomes. Conversely, those without teaching experience may not fully grasp the importance or benefits, leading to a lower attitude. These differences in perspective and appreciation could have contributed to their differences in attitudes.

12) *It was found that student teachers whose fathers are employed displayed a more favourable attitude towards teaching method, faculty support and collaboration in teacher education programmes as compared to student teachers whose fathers are unemployed.*

Discussions: The probable explanation why student teachers whose fathers are employed exhibit a more favourable attitude towards teaching methods, faculty support, and collaboration could be due to better financial stability and emotional support. Employed fathers might have provided role models of work ethic and professional engagement, fostering a positive outlook. This stability can enhance the student teachers' overall educational experience, making them more appreciative of the programme's resources and support. In contrast, those with unemployed fathers might face more stress and less support, affecting their perception and attitude towards the programme. These factors could have contributed to the differing attitudes observed

13) *It was found that Post-graduate student teachers had a more positive attitude towards teaching method, faculty support and collaboration in teacher education programme compared to Plus-2 student teachers*

Discussions: The probable reason for the above finding could be because of the Post-graduate student teachers' advanced academic background and greater appreciation for educational quality. They have more experience in academic settings and understand the value of effective teaching and strong faculty support. Their maturity and commitment to their professional goals could have enhanced their engagement with the programme. In contrast, Plus-2 student teachers may have less academic experience and might not fully appreciate the depth and benefits of these aspects, leading to a less favourable attitude. These differences in experience and expectations could have contributed to the differences in attitudes.

14) It was found that student teachers whose fathers are employed depicted a more favourable attitude towards resources, facilities and programme management in the teacher education programmes as compared to student teachers whose fathers are unemployed

Discussions: The plausible reason why student teachers whose fathers are employed have a more favourable attitude towards resources, facilities, and program management in the teacher education program could be because of better financial stability and support. Employed fathers can provide a more secure and conducive environment for learning, allowing their children to appreciate the available resources and facilities more. This stability reduces stress and enables student teachers to focus on their education. In contrast, those with unemployed fathers might experience financial challenges and stress, which can negatively impact their perception and satisfaction with the programme's resources and management.

15) It was found that B.Ed. student teachers have a more favourable attitude towards pre-Internship phase of the teacher education programmes as against D.El.Ed. student teachers

Discussions: The most likely reason why B.Ed student teachers have a more favourable attitude towards the pre-internship phase of the teacher education programme could be because it aligns well with their advanced training and career goals. The B.Ed curriculum typically includes comprehensive theoretical and practical components that prepare students for real-world teaching, making them more appreciative of the pre-internship experience. In contrast, D.El.Ed programme, which focus more on foundational education for elementary levels, might offer less depth and preparation for practical teaching experiences. This can result in a less favourable attitude towards pre-internship among D.El.Ed student teachers.

16) *It was found that student teachers whose fathers are employed displayed a more favourable attitude towards the pre-internship phase of the teacher education programme as compared to student teachers whose fathers are unemployed.*

Discussions: Student teachers whose fathers are employed may have a more favourable attitude towards pre-internship phase of the teacher education programmes due to better financial support and stability. Employed fathers can provide a secure environment, reducing stress and allowing students to focus more on their education. This stability can lead to a greater appreciation for the pre-internship experience, as it aligns with their career aspirations. In contrast, those with unemployed fathers might face financial challenges and stress, affecting their perception and attitude towards the pre-internship phase.

17) *It was found that student teachers whose fathers' level of education is matriculate and above holds a better attitude towards pre-internship phase of the teacher education programme in comparison with student teachers whose fathers' educational level is under matriculate.*

Discussions: The most likely reason for the above findings could be that Student teachers whose fathers have a "matric and above" level of education might have benefited from a home environment that values education. Educated fathers can provide guidance, support, and a positive perspective on the importance of educational and professional development. This encouragement and understanding can enhance student teachers' engagement and appreciation for the pre-internship experience. In contrast, those whose fathers have a lower level of education might not receive the same level of support and value placed on educational pursuits, affecting their attitude towards the pre-internship phase.

18) *It was found that Post-graduate student teachers have a more favourable attitude towards pre-internship phase of the teacher education programme than those students-teachers whose educational qualification is Plus-2.*

Discussions: Post-graduate student teachers have a more favourable attitude towards the pre-internship phase of the teacher education programme most probably due to their advanced academic experience and understanding of the importance of practical training. They recognize the value of integrating theoretical knowledge with real-world teaching practice, which is crucial for their professional development. In contrast, Plus-2 student teachers, with less academic and professional exposure, might not fully appreciate the significance of pre-internship experiences. Their limited educational background could make them less aware of how essential practical training is for their future careers.

19) *It was found that urban student teachers have a more supportive attitude towards school internship programme in comparison with student teachers from rural areas.*

Discussions: The probable reason why urban student teachers have a more positive attitude towards school internships programme could be due to better access to resources and facilities in urban schools. Urban student teachers may benefit from more diverse and experienced faculty, modern infrastructure, and varied teaching opportunities. Urban environments also offer more professional networking opportunities and exposure to innovative teaching methods. In contrast, rural student teachers might face challenges like limited resources, less advanced facilities, and fewer professional development opportunities. These disparities can lead to differing attitudes towards school internships, with urban student teachers feeling more positive and supported in their internship experiences.

20) *It was found that B.Ed. student teachers have a better attitude towards post-internship phase of the teacher education programmes as against D.El.Ed. student teachers.*

Discussions: The possible reason why B.Ed student teachers have a more positive attitude towards post-internship phase of the teacher education programmes could be because their training is more advanced and comprehensive. B.Ed programs typically include more rigorous theoretical and practical components, preparing students for real-world teaching challenges and making them value the post-internship experience more. On the other hand, D.El.Ed. programmes focus more on foundational education for elementary levels and may provide less depth and breadth in practical training, leading to a less favourable attitude towards the post-internship phase. These differences in programme structure and preparation could be the cause for the varying attitudes.

21) *It was found that student teachers whose fathers are employed displayed a higher attitude towards post-internship phase compared to that of student teachers whose fathers are unemployed.*

Discussions: Student teachers whose fathers are employed display a higher attitude towards post-internship phase of teacher education programme probably because of the financial and emotional support they receive. Employment provides stability, enabling students to focus more on their education and career development. This support can lead to a greater appreciation of the post-internship phase as they can fully engage with and benefit from the experience. In contrast, those with unemployed fathers might face financial stress and instability, affecting their ability to fully appreciate and engage with the post-internship opportunities.

22) *It was found that Post-graduate student teachers displayed a higher attitude towards post-internship phase of the teacher education programme as compared to both graduate and Plus-2 student teachers.*

Discussions: Post-graduate student teachers exhibit a higher attitude towards post-internship programme may be due to their advanced academic background and greater understanding of the importance of practical experience in their professional growth. They are more matured, committed, and better equipped to appreciate the value of integrating theoretical knowledge with real-world teaching. Therefore, this academic experience could have enhanced their engagement with post-internship activities. In contrast, graduate and Plus-2 student teachers, with less academic and professional exposure, might not fully grasp the significance of post-internship experiences. These differences in educational levels and maturity could have led to the varying attitudes observed.

23) *It was found that student teachers whose previous academic stream is Science have higher attitude towards post-internship programmes compared to student teachers whose previous academic stream is Arts.*

Discussions: Student teachers with a Science background may have a higher attitude towards post-internship programme due to their familiarity with rigorous, structured learning and practical applications. Science education often involves hands-on experiments and real-world problem-solving, making them more appreciative of practical training experiences. Also, they may value the systematic approach and critical thinking skills honed during their studies, which align well with the demands of post internships. In contrast, Arts students, who may focus more on theoretical and interpretative studies, might not see the immediate practical benefits of internships, leading to a lower attitude towards post-internship experiences. These differences in academic training and mindset might have contributed to the varying attitudes.

24) *It was found that student teachers whose fathers are employed showed a higher attitude towards assessment and feedback provided in the teacher education programmes in comparison with student teachers whose fathers are unemployed.*

Discussions: Student teachers whose fathers are employed exhibit a higher attitude towards assessment and feedback perhaps due to the stability and support provided by their family environment. Employed fathers can offer financial and emotional stability, allowing students to focus more on their education and appreciate constructive feedback. This support helps students recognize the value of assessments in improving their skills and knowledge. In contrast, those with unemployed fathers might experience financial stress and less emotional support, affecting their ability to engage positively with assessments and feedback. These differences in family dynamics and support may contribute to the varying attitudes observed.

25) *It was found that B.Ed. student teachers have a more positive attitude towards career prospect offered in the teacher education programmes as against D.El.Ed. student teachers.*

Discussions: The likely reason why B.Ed student teachers have a more positive attitude towards career prospects in the teacher education program could be because B.Ed programme offers an advanced and specialized training. B.Ed programmes provide a more comprehensive curriculum that includes in-depth theoretical knowledge and practical teaching skills, making graduates more competitive in the job market. This thorough preparation enhances their confidence in securing better career opportunities. In contrast, D.El.Ed programmes focus on elementary education, which may offer fewer career advancement options and less comprehensive training, leading to a less optimistic outlook on career prospects. These differences in training and perceived career opportunities may have contributed to the differences in attitudes.

26) *It was found that student teachers from urban areas have a higher attitude towards career prospect offered by the teacher education programmes as against student teachers from rural areas.*

Discussions: Consistent with the ongoing research finding, Mahato and Behera (2018) and Srinivasan (2019) revealed that urban student teachers had more favourable attitude towards teacher education programme.

Most probably, the reason why student teachers from urban areas have a higher attitude towards career prospects offered by the teacher education programs could be because they have better access to resources, facilities, and networking opportunities. Urban environments often provide more advanced educational institutions, professional development workshops, and exposure to diverse teaching methods. These advantages could have enhanced their confidence in securing promising careers. In contrast, student teachers from rural areas might face limitations in resources and opportunities, which can affect their perception of career prospects. The disparities in exposure and access to professional growth opportunities thus could have contributed to the differing attitudes

27) *It was found that student teachers having teaching experience have a more favourable attitude towards career prospect offered by teacher education programmes contrary to student teachers not having any teaching experience.*

Discussions: Why student teachers with teaching experience have a more favourable attitude towards career prospects offered by the teacher education programs could be because mostly experienced teachers have a realistic understanding of the teaching profession. Their hands-on experience allows them to see the practical benefits of the program and how it enhances their skills and career opportunities. They are more confident and motivated, knowing that the training will directly impact their professional growth. In contrast, those without teaching experience might lack this perspective, leading to uncertainty and less optimism about the career prospects offered by the programme. These differences in practical experience and understanding could have resulted in the present findings.

28) *It was found that student teachers whose fathers are employed displayed a more favourable attitude towards career prospect offered by teacher education programmes as compared to student teachers whose fathers are unemployed.*

Discussions: Student teachers whose fathers are employed are found to display a more favourable attitude towards career prospects offered by teacher education programmes probably because of the financial stability and support provided by their families. This stability can reduce stress and enable students to focus on their career goals, enhancing their optimism about future opportunities. Employed fathers might also have more access to professional networks and resources, which can positively influence their children's outlook on career prospects. In contrast, student teachers with unemployed fathers might face financial challenges and limited support, impacting their confidence and outlook on future career opportunities. These factors contribute to the differing attitudes.

29) *It was found that student teachers whose educational qualification is Post-graduate and Graduate have a more favourable attitude towards career prospect offered by the teacher education programme compared to Plus-2 student teachers.*

Discussions: Student teachers with post-graduate and graduate qualifications have a more favourable attitude towards career prospects offered by the teacher education programmes presumably because they have advanced academic experience and broader skill sets. These qualifications often provide deeper knowledge and specialized training, enhancing their confidence in securing rewarding career opportunities. Their advanced education also aligns well with professional teaching requirements, making them more optimistic about their job prospects. In contrast, Plus-2 student teachers, with less advanced education, might feel less prepared and less optimistic about their career opportunities, leading to a less favourable attitude.

30) *It was found that student teachers whose previous academic stream is Commerce have a more positive attitude towards career prospect offered by the teacher education programmes compared to student teachers whose previous academic stream is Arts.*

Discussions: The most probable reason why student teachers with a Commerce background have a more positive attitude towards career prospects offered by the teacher education programmes could be because of their exposure to practical and analytical skills that are highly valued in the job market. Commerce students often engage with subjects like economics, business studies, and accounting, which develop a strong foundation in critical thinking and problem-solving. These skills could have enhanced their confidence in securing diverse and rewarding career opportunities. In contrast, Arts students might focus more on theoretical and interpretative subjects, which may offer fewer direct career paths, leading to a less optimistic outlook on career prospects. These differences in academic training and perceived career opportunities might have contributed to the varying attitudes.

5.2.3 Discussions on the findings relating to student teachers teaching aptitude

1) *It was found that 36.52% student teachers have high teaching aptitude, 40.15% have moderate teaching aptitude and 23.33% student teachers have low teaching aptitude.*

Discussions: In congruence to the present result, Rana (2015), Mili (2023) and Reddy (2023) found that most teacher trainees had average teaching aptitude. Singha (2024) also displayed that majority of student teachers had moderate teaching aptitude. Contrasting to the findings Rahman and Saikia (2021) depicted that majority of student teachers had above average teaching aptitude.

The distribution of teaching aptitude among student teachers could be influenced by several factors. High teaching aptitude in 36.52% of students may be due to strong academic backgrounds, intrinsic motivation, and positive attitudes towards teaching. These students might have a natural inclination towards the

profession and receive effective training. The moderate aptitude observed in 40.15% could result from adequate but not exceptional preparation, varied levels of engagement, and differing personal interests in teaching. The 23.33% with low aptitude might face challenges such as lack of motivation, insufficient support, or misalignment with the teaching profession, impacting their performance and attitude. These variations reflect diverse backgrounds and experiences among student teachers

5.2.4 Discussions on the findings relating to comparison of student teachers teaching aptitude with reference to selected variables

1) *It was found that B.Ed. student teachers have a higher teaching aptitude as compared to the D.El.Ed. student teachers*

Discussions: B.Ed student teachers have a higher teaching aptitude compared to D.El.Ed student teachers most probably due to the advanced and specialized nature of their training. B.Ed programmes typically provide more in-depth theoretical knowledge, pedagogical skills, and practical teaching experience, which better prepare students for the teaching profession. Additionally, B.Ed students may be more motivated and committed to a career in education, given the higher level of investment and effort required for a bachelor's degree. In contrast, D.El.Ed programmes focus on elementary education with a more basic curriculum, which may result in lower teaching aptitude among its students. These differences in program depth and student motivation may have contributed to the varying teaching aptitudes.

2) *It was found that urban student teachers exhibit a more positive teaching aptitude when compared with their rural counterparts.*

Discussions: In conformity to the present discovery, Saleem and Leema (2016) and Vanishya and Shah (2022) found that urban student teachers showed higher teaching aptitude than the student teachers from rural areas. Mahapatra (2018) also found that student teachers from rural areas displayed a low teaching aptitude. Vanishhya and Shah (2022) also showed that teaching aptitude of student teachers in urban areas is

higher than student teachers in rural areas. At the same time, contrary to the findings Topal and Pant (2016) and Karnapathy and Rani (2018) found that teaching aptitude remained the same for both urban and rural student teachers. Markandeyulu (2018) and Acharya and Roy (2019) exhibited that locality did not impact the teaching aptitude of trainee teachers. Varanasi and Aruna (2018) also displayed that there was no significant difference in the teaching aptitude of prospective teachers with regard to locality. Reversed to the findings Sen et.al. (2022) concluded that student teachers from rural areas had comparatively high teaching aptitude as compared to student teachers in urban areas.

The reason why urban student teachers exhibit a more positive teaching aptitude could be due to urban student's greater access to educational resources, advanced facilities, and diverse learning environments. Urban areas often provide exposure to innovative teaching methods, well-trained faculty, and ample opportunities for professional development. These advantages can enhance their teaching skills and confidence. In contrast, rural student teachers might face challenges such as limited access to quality educational resources, less experienced faculty, and fewer professional development opportunities. These disparities can impact their teaching aptitude. Therefore, differences in exposure, resources, and opportunities contribute to the differences in teaching aptitudes

3) *It was found that student teachers whose fathers are employed display a higher teaching aptitude as compared to those whose fathers are unemployed.*

Discussions: In conformity to the present research discovery, Periasamy and Ananthi (2022) found that student teachers having employed father depicted higher teaching aptitude.

The possible reason as to why student teachers whose fathers are employed display higher teaching aptitude may be because of the stable financial and emotional support provided by their families. Employment offers financial security, reducing stress and allowing students to focus more on their studies and professional development. Employed fathers may also encourage a positive work ethic and commitment to education. In contrast, those with unemployed fathers might face financial instability and stress, which can negatively impact their engagement and

performance in their training. These differences in family support and stability contribute to the differences of teaching aptitudes.

4) *It was found that student teachers whose fathers are matriculate and above shows a more favourable teaching aptitude than those student teachers whose fathers are under matriculate.*

Discussion: Accordingly, Periasamy and Ananthi (2022) showed that student teachers having fathers with higher educational qualification had more favourable teaching aptitude.

The reason why student teachers whose fathers are "matric and above" display more favourable teaching aptitude most probability due to the enhanced educational environment at home. Educated fathers can provide better academic guidance, support, and encouragement, fostering a positive attitude towards learning and teaching. This educational background helps student teachers develop a stronger foundation and confidence in their teaching abilities. Conversely, those with fathers "under matric" may lack the same level of academic support and motivation, which can impact their teaching aptitude. These differences in parental education levels and the resulting home environment could have contributed to the varying teaching aptitudes.

5) *It was found that Post-graduate and Graduate student teachers have a higher teaching aptitude compared to student teachers whose educational qualification is Plus-2.*

Discussions: In compliance with this finding, Pany (2013), found that post-graduate student teachers possessed higher teaching aptitude.

Post-graduate and graduate student teachers exhibit higher teaching aptitude may be because of their extensive academic experience and advanced skills. Their advanced education provides deeper theoretical knowledge and practical teaching skills, which enhance their confidence and effectiveness in the classroom. Additionally, these students are typically more mature and committed to their professional goals, making them more receptive to teaching methods and strategies. In contrast, Plus-2 student teachers, with less academic experience and training, may

lack the same level of preparedness and understanding of teaching practices. These differences in educational background and maturity may have contributed to the varying teaching aptitudes observed.

5.2.5 “Discussion on the findings on relationship between attitude towards teacher education programme and teaching aptitude of student teachers”

1) *It was found that there is a positive and significant correlation between attitude towards teacher education programmes and teaching aptitude among student teachers in Mizoram.*

Discussions: The positive and significant correlation between attitude towards the teacher education program and teaching aptitude among student teachers in Mizoram suggests that a favourable attitude towards their education directly influences their teaching skills. When student teachers have a positive perception of their training program, they are more engaged, motivated, and receptive to learning. This engagement enhances their teaching aptitude as they apply what they have learned more effectively in practical situations. Besides, a supportive and well-structured programme can foster confidence and competence, leading to improved teaching performance. These interconnected factors could have contributed to the observed correlation.

5.2.6 Discussions relating to the findings on opinion on some aspect of teacher education

1) *It was found that most student teachers wanted to revise and update their syllabus after every three years.*

Discussions: Most probably student teachers prefer to revise and update their syllabus every three years to ensure the content remains current and relevant. The rapid pace of educational research, technological advancements, and evolving teaching methodologies necessitates more frequent updates to keep the curriculum aligned with the latest trends and best practices. Regular revisions also help address emerging challenges and incorporate feedback from previous cohorts, thereby improving the quality of education. This proactive approach ensures that students

receive up-to-date knowledge and skills, better preparing them for the dynamic teaching environment.

2) *It was found that majority of student teachers wished the duration of teacher training programmes should be two years*

Discussions: Similarly, Nataraja (2016) found that two year B.Ed will improve the quality of teachers which in turn will enhance better job opportunity in the future.

The preference for a two-year teacher training programme among student teachers most likely stems from a balance between thorough training and time commitment. A two-year duration allows for a comprehensive curriculum, ample practical experience, and professional development without being overly lengthy. This period is long enough to cover essential theoretical knowledge and hands-on practice, ensuring well-rounded preparation. In contrast, a one-year programme may be too short to adequately cover all necessary components, while a three-year programme might be seen as too prolonged, delaying entry into the workforce. This balance of depth and duration probably makes a two-year programme more appealing to student teachers.

3) *It was found that majority of student teachers preferred to conduct the internship programme during the fourth semester.*

Discussions: The reason why student teachers prefer to conduct the internship program during the fourth semester could be because it allows for a more thorough preparation period. By the fourth semester, they have completed a significant portion of their coursework, giving them a stronger foundation of theoretical knowledge and pedagogical skills. This timing ensures they are better equipped to handle real-world teaching challenges and make the most of their internship experience. Also, conducting the internship in the fourth semester can provide a smoother transition from academic learning to practical application, enhancing their overall confidence and competence as future educators.

4) *It was found that majority of student teachers wanted their institution should take responsibility for arranging job placements for student teachers who have completed their teacher training course*

Discussions: Perhaps student teachers prefer their institutions to arrange job placements to ensure smoother transitions into the workforce. Institutions typically have better networks and connections with schools and educational organizations, increasing the chances of securing suitable positions. This support can reduce the stress and uncertainty associated with job hunting, allowing students to focus on their training. Besides, institutional placements can enhance the credibility of the training programme, reflecting positively on both the graduates and the institutions. These factors probably contribute to the preference for institutional involvement in job placements.

5) *It was found that majority of student teachers disagreed that teachers possessing a natural aptitude for teaching need not undergo teacher training programmes.*

Discussions: The reason why student teachers disagree with the notion that natural aptitude alone suffices without formal teacher training probably because they recognize the importance of comprehensive education and professional development. Teacher training programmes provide essential pedagogical skills, classroom management techniques, and theoretical knowledge that natural aptitude cannot fully replace. These programs also offer practical experiences and exposure to diverse teaching strategies, which are crucial for effective teaching. The student teachers understand that professional training enhances their natural talents, ensuring they are well-equipped to handle the complexities of the teaching profession. This awareness probably emphasizes their belief in the necessity of formal training for all teachers.

6) *It was found that majority of student teachers strongly view that teachers working in schools should mandatorily undergo teacher training course.*

Discussions: The plausible reason why student teachers believe that mandatory teacher training for current school teachers is essential is because they probably knew that it ensures quality education. Perhaps, they recognize that formal training equips teachers with updated pedagogical skills, classroom management techniques, and theoretical knowledge that improve teaching effectiveness. This professional development helps teachers address diverse student needs, implement innovative teaching methods, and stay up to date with educational advancements. The student teachers perhaps understand that well-trained teachers can significantly impact student learning outcomes and overall school performance, highlighting the importance of continuous professional development. These insights, in all probability contribute to their strong support for mandatory teacher training courses.

7) *It was found that most number of student teachers preferred the number of lessons to be planned should be reduced.*

Discussions: Perhaps the reason why most student teachers prefer a reduction in the number of lessons to be planned could be because it allows for more focused and in-depth preparation for each lesson. Planning fewer lessons can reduce stress and workload, enabling student teachers to dedicate more time and effort to developing high-quality, engaging, and effective lessons. This will enhance their understanding of the subject matter and improve their teaching skills. Apart from this, having fewer lessons to plan can provide more opportunities for reflection and feedback, which are essential for professional growth. These factors might have contributed to the preference for reducing the number of planned lessons.

8) *It was found that the largest number of student teachers would like to have two pedagogy papers.*

Discussions: The most likely reason why student teachers prefer having two pedagogy papers instead of one or three could be because it provides a balanced approach to their training. Two papers allow for a comprehensive yet focused exploration of teaching methodologies and strategies without overwhelming them. Having just one paper may not cover all essential topics, while three papers could lead to excessive workload and dilution of focus. Two pedagogy papers offer a middle ground, ensuring sufficient depth and breadth of knowledge while maintaining a manageable study load. This balance perhaps helps student teachers gain thorough understanding and effective teaching skills without feeling overburdened.

9) *It was found that majority of the student teachers preferred that the scope of the teacher training syllabus should be much broader and should emphasize on preparation for the NET examination.*

Discussions: In contrast to this finding Patel (2019) and Azmi and Kader (2020) concluded that the two year B.Ed programme had been good enough to enhance professional capacities as well as to prepare prospective teachers for their future endeavour.

Student teachers likely prefer a broader teacher training syllabus with an emphasis on NET (National Eligibility Test) examination preparation because it aligns with their career aspirations and future academic opportunities. The NET qualification is crucial for those aiming to become lecturers or pursue research in higher education. A comprehensive syllabus that prepares them for this exam ensures they are well-equipped with the necessary knowledge and skills. Moreover, a broader curriculum can provide a more well-rounded education, covering diverse topics and advanced concepts, enhancing their overall competence and readiness for various professional roles.

5.3.0 Recommendations:

The following recommendations were made for enhancing *Teaching Aptitude* and *Attitudes* of student teachers in Mizoram:

5.3.1 Enhancing Teaching Aptitude for B.Ed and D.El.Ed Student teachers

To improve the teaching aptitude of student teachers in Bachelor of Education (B.Ed) and Diploma in Elementary Education (D.El.Ed) programmes, several targeted strategies can be implemented. These recommendations focus on comprehensive training, practical experience, and continuous professional development to ensure that future educators are well-equipped to meet the demands of modern classrooms.

1. Curriculum Enhancement: Revise and update the curriculum regularly to include the latest educational theories, pedagogical practices, and technological advancements. Ensure that the curriculum covers a broad range of teaching methods, classroom management techniques, and inclusive education practices to cater to diverse learning needs. Integrating subjects like educational psychology, assessment and evaluation, and special education can provide a more holistic approach to teacher training.

2. Practical Teaching Experience: Increase the emphasis on practical teaching experience by incorporating more fieldwork and internship opportunities. Student teachers should be given ample opportunities to observe experienced teachers, engage in co-teaching, and lead classrooms under supervision. These hands-on experiences are crucial for developing confidence and teaching skills. Encouraging student teachers to reflect on their practical experiences and provide feedback can further enhance their learning.

3. Mentorship and Support: Establish a mentorship programme where experienced educators guide and support student teachers. Mentors can provide valuable insights, share best practices, and offer constructive feedback. This support system can help student teachers navigate challenges, build professional networks, and develop a

strong foundation in teaching. Creating a collaborative learning environment where student teachers can share experiences and learn from each other is also beneficial.

4. Professional Development Workshops: Organize regular professional development workshops and seminars to keep student teachers updated on the latest trends and innovations in education. Topics could include differentiated instruction, classroom technology integration, and strategies for teaching diverse learners. Workshops led by experts in the field can provide practical tips and techniques that student teachers can apply in their classrooms.

5. Assessment and Feedback Mechanisms: Implement robust assessment and feedback mechanisms to monitor the progress of student teachers. Regular evaluations through peer assessments, self-assessments, and mentor feedback can help identify areas of improvement and strengths. Constructive feedback should focus on specific teaching skills, lesson planning, and classroom management techniques. Continuous assessment can guide student teachers in their professional growth and development.

6. Focus on Soft Skills: Develop soft skills such as communication, empathy, and adaptability. These skills are essential for effective teaching and building positive relationships with students. Incorporate activities and exercises that promote emotional intelligence, conflict resolution, and teamwork into the training program. Encouraging student teachers to engage in community service and extracurricular activities can also help develop these skills.

7. Technology Integration: Integrate technology into the teacher training programs to enhance teaching and learning experiences. Train student teachers in the use of educational technologies such as interactive whiteboards, online learning platforms, and digital assessment tools. Familiarity with technology can help student teachers create engaging and dynamic learning environments, meeting the needs of tech-savvy students.

8. Promote Research and Innovation: Encourage student teachers to engage in research projects and innovative teaching practices. Providing opportunities for action research, where student teachers can investigate and address real classroom challenges, can foster a culture of continuous improvement and creativity.

Highlighting successful case studies and best practices in teaching can inspire student teachers to explore new methods and approaches.

9. Inclusive Education Practices: Promote inclusive education practices by training student teachers to address the needs of all students, including those with special needs. Providing knowledge and strategies on how to create inclusive classrooms can ensure that student teachers are prepared to teach diverse student populations effectively.

10. Strengthening Partnerships: Build strong partnerships with schools, educational institutions, and community organizations to provide student teachers with a supportive network. Collaborative efforts can enhance training programmes, provide additional resources, and create opportunities for professional growth.

By implementing these comprehensive measures, B.Ed and D.El.Ed programmes in Mizoram can significantly enhance the teaching aptitude of their student teachers, ensuring they are well-prepared for the dynamic and diverse demands of modern education.

5.3.2 Enhancing the Attitude towards Teacher Education Programmes for B.Ed and D.El.Ed Student teachers

To foster a positive attitude towards teacher education programs among B.Ed and D.El.Ed student teachers, it is essential to create an engaging, supportive, and inspiring learning environment. Here are several detailed recommendations to achieve this goal:

1. Improve Curriculum Relevance and Appeal: Ensure that the curriculum is up-to-date, relevant, and aligned with the latest educational trends and best practices. Incorporate engaging and interactive teaching methods, including project-based learning, case studies, and technology integration. This approach can make learning more dynamic and enjoyable, positively impacting student teachers' attitudes.

2. Provide Practical Experience Early: Integrate practical teaching experiences early in the programme. Student teachers who engage in classroom observation, co-teaching, and internships from the beginning are more likely to see the relevance and

impact of their training. Early exposure to real classroom settings can increase their confidence and enthusiasm for teaching.

3. Offer Continuous Professional Development: Organize regular workshops, seminars, and training sessions led by experienced educators and experts in the field. Topics should cover innovative teaching strategies, classroom management, and the use of educational technology. Continuous professional development opportunities can keep student teachers motivated and enhance their professional skills.

4. Mentorship and Support Systems: Establish mentorship programs where experienced teachers guide and support student teachers throughout their training. Mentors can provide valuable insights, share best practices, and offer encouragement, helping student teachers navigate challenges and stay motivated. Creating a strong support system within the institution can boost student teachers' confidence and positive attitudes.

5. Create a Collaborative Learning Environment: Promote a collaborative and inclusive learning environment where student teachers can share experiences, ideas, and resources. Group projects, peer assessments, and discussion forums can foster a sense of community and collective growth. Collaboration encourages mutual support and a positive learning culture.

6. Recognition and Rewards: Acknowledge and celebrate the achievements and progress of student teachers. Regular recognition through awards, certificates, and public acknowledgment can boost morale and reinforce positive attitudes. Celebrating small milestones can motivate student teachers to stay committed and enthusiastic about their training.

7. Focus on Career Opportunities: Highlight the diverse career opportunities available to graduates of teacher education programmes. Organize career fairs, job placement services, and networking events to connect student teachers with potential employers. Providing clear pathways to employment can enhance their optimism and attitude towards the programme.

8. Incorporate Feedback Mechanisms: Establish regular feedback mechanisms to gather input from student teachers about their experiences and suggestions for improvement. Actively involving them in the decision-making process can make

them feel valued and heard. Addressing their concerns and implementing their suggestions can lead to a more positive outlook on the programme.

9. Support Work-Life Balance: Recognize the importance of maintaining a healthy work-life balance for student teachers. Provide flexibility in scheduling, offer mental health support, and create a supportive environment that prioritizes well-being. Ensuring that student teachers can manage their personal and professional responsibilities effectively can enhance their overall attitude towards the programme.

10. Promote a Positive Institutional Culture: Cultivate a positive and inclusive institutional culture that values diversity, equity, and respect. Encourage open communication, collaboration, and a sense of belonging. A positive cultural environment can significantly impact student teachers' attitudes and their overall satisfaction with the programme.

11. Engage with the Community: Foster strong connections between the teacher education programme and the local community. Encourage student teachers to participate in community service projects and local educational initiatives. Engaging with the community can provide a sense of purpose and relevance, enhancing their commitment and positive attitude towards the programme.

By implementing these comprehensive measures, B.Ed and D.El.Ed programmes in Mizoram can enhance the attitudes of their student teachers, ensuring a more engaging, supportive, and inspiring educational experience.

5.4.0 Suggestion for further research

1. Explore how socio-economic background influences the attitudes of student teachers towards teacher education programs.
2. Study the impact of parental education levels on the teaching aptitude of student teachers.
3. Assess the impact of technology integration in teacher education programmes on the teaching aptitude and attitudes of student teachers.
4. Investigate how cultural factors and values influence the attitudes of student teachers in Mizoram.

5. Explore the role of mentorship and support systems in shaping the attitudes of student teachers.

6. Evaluate how the perceived relevance of the teacher education curriculum influences the teaching aptitude of student teachers.

APPENDIX-I

Please fill in the following information:

Date:

Name: _____

Marital status: Married / Unmarried

Father's name: _____

Gender: Male _____ Female _____

Educational _____ qualifications:

Subject - Arts/Science/Commerce: _____

Area: Urban _____ Rural _____

Name of Institute: IASE /MZU /DIET – Aizawl, Lunglei, Kolasib,
Champhai, Serchhip, Mamit

Teaching Experience: Yes / No

Parents' occupation: Paid worker / Unpaid worker

Parents' educational qualification: Under Matric / Above Matric

Attitude Scale towards Teacher Education Programme

Instructions: Below is a list of statements aimed to study the attitude of pre-service teacher trainees towards the teacher Education Programme. Please put a tick mark (✓) on any one of the five boxes given on the right side of each statement. If you **strongly agree**, put a tick mark below **SA**, if you **agree**, put a tick mark below **A**, if you are **undecided or uncertain**, put a tick mark under **U**, if you **disagree**, put a tick mark under **D** and if you **strongly disagree**, put a tick mark under **SD**. *Please respond to every item.* There is no time limit but you have to respond as quickly as possible. Your frank and sincere answers will be very much appreciated.

SN	S T A T E M E N T S	SA	A	U	D	SD
1	Teacher education provides me with knowledge that will be applicable to my future role as a school teacher.					
2	The content of pedagogical papers in teacher education programme lacks uniformity for all school subjects.					

3	The teacher education programme does not incorporate current educational practices relevant to the needs of school students.					
4	Planning of lessons in teacher education ensure that the instructional content aligns with the learning objectives.					
5	The teaching methods do not integrate innovative approaches to enhance learning.					
6	The faculty members are readily available to provide guidance to student teachers.					
7	The faculty members do not provide constructive feedback to help improve student teachers' teaching skills.					
8	Student teachers do not collaborate with each other to share their experiences during school internship.					
9	Participating in group activities exposed student teachers to different viewpoints on school education.					
10	The library provides a rich collection of resources that support professional growth of a teacher.					
11	Accessing important technology resources in the computer laboratory help student teachers improve their digital skills.					
12	Facilities provided in the resource room are insufficient.					
13	Detailed curriculum transaction guidelines are provided for the entire teacher education programme.					
14	The administrative procedures for the entire teacher education programme are highly efficient and well organised.					
15	Demonstration lessons conducted by experienced faculty provide student teachers valuable opportunities to witness the practical implementation of teaching strategies.					
16	The demonstration lessons serve to create a positive classroom environment for managing different learning needs.					
17	The feedback provided in simulated teaching sessions does not accurately mirror the feedback that student teachers would receive in an actual classroom environment.					
18	Simulated teaching experiences help student					

	teachers to experiment different instructional strategies thereby gaining confidence in their ability to motivate students.					
19	Simulated teaching practices do not facilitate student teachers in developing effective classroom management strategies.					
20	It is difficult for student teachers to apply the teaching skills in actual classroom teaching.					
21	As a result of the feedback received from teachers and peers during Micro-teaching, student teachers' overall performance underwent significant improvement.					
22	Peer observation of classroom teaching in the pre-internship phase provides valuable opportunities for collaborative learning as student teachers learn from each other's teaching practices.					
23	The constructive feedback received through peer observation, provides student teachers the ability to identify areas that require improvement.					
24	Peer observation of classroom teaching did not provide me with any innovative ideas to learn from.					
25	Developing teaching-learning materials helps student teachers to create resources tailored to the specific needs of the students.					
26	The process of developing teaching-learning materials enables student teachers to exercise creativity in designing effective instructional resources.					
27	School internship will not prepare student teachers to effectively address the challenges that may arise during teaching in real school environment.					
28	Observing the school environment during school internship helps student teachers to understand different facilities available in the schools.					
29	School internship will help student teachers apply the knowledge acquired during teacher education programme to real-world teaching situations.					
30	Observing the school environment enhances the awareness of student teachers on various support systems and services available for students.					
31	Examining school time table enables student teachers to make critical assessment on allocation of time for various subjects.					

32	Positive impact of co-curricular activities on students' overall wellbeing can be observed during the school internship programme.					
33	The feedback provided in the teacher education programme is constructive which will help student teachers identify areas for improvement in their teaching practice.					
34	Assessment promptly delivered helps student teachers to reflect on their performance and make the necessary adjustments to improve their teaching skills.					
35	The teacher education programme equips student teachers with the necessary knowledge and skills to pursue a successful career as a school teacher.					
36	Teacher education programme enhances student teachers' career prospects in the field of education.					
37	The teacher education programme decreases student teachers chances of securing employment after completion.					

APPENDIX-II

Teaching Aptitude Test

INSTRUCTIONS: Below is a list of statements aimed for Teaching Aptitude Test developed by Dr. S.C. Gakhar, Professor, Department of Education, Punjab University, Chandigarh and Dr. Rajnish, Lecturer, G. Senior Secondary School, Fazilka PB.

1. There are 35 statements in this test and for each statement 4 alternatives have been given. Please put a tick mark (✓) on the most appropriate answer. Your responses will be kept confidential.
2. Answer all the statements.
3. Though there is no time limit, please try to complete your answer within 15 minutes.

STATEMENTS

1. After you have become a teacher you will:
 - a) Postpone reading ☐
 - b) Read only newspapers ☐
 - c) Be a student for whole life ☐
 - d) Stop reading ☐
2. As a teacher, you should often visit:
 - a) Zoo ☐
 - b) Temple ☐
 - c) Bookshop ☐
 - d) Library ☐
3. In order to join teaching profession, which is more important?:
 - a) % of marks ☐
 - b) Teaching aptitude ☐
 - c) Certificate of activities ☐
 - d) Belonging to a family of teachers ☐
4. As a teacher, you shall be always poor. This is a big frustration. Are you still willing to become a teacher?
 - a) Yes ☐
 - b) No ☐
 - c) I'm not crazy ☐
 - d) You have forced me to think and revive my decision. ☐

5. You have taught for three to four years. There is an opportunity to change the profession. Would you?:
- a) Stick to teaching ☐
 - b) Undecided ☐
 - c) May change temporarily ☐
 - d) Avail the opportunity ☐
6. When you join teaching profession, people are going to laugh at you. But what will be your reaction:
- a) Ignore them ☐
 - b) Change the profession ☐
 - c) Feel proud in it ☐
 - d) Hit back at the people ☐
7. The attitude towards the students should be as:
- a) Helper and guide ☐
 - b) Friend ☐
 - c) Guardian ☐
 - d) Boss ☐
8. You will maintain discipline among your students by:
- a) Threatening them ☐
 - b) Beating them ☐
 - c) Giving them responsibility ☐
 - d) Appealing them ☐
9. Out of the following, the students which class you will like the most, those who are:
- a) Good in studies ☐
 - b) Not good in studies ☐
 - c) Obeying you ☐
 - d) All the students ☐
10. Would you like to solve some emotional problems of your students?:
- a) Yes ☐
 - b) No, never ☐
 - c) Indirectly ☐
 - d) I shall ignore ☐
11. If your students points out any of your mistake during teaching then you will:
- a) Accept it ☐
 - b) Say him to keep quiet ☐
 - c) Come prepared next day ☐
 - d) Say him to see you after the period ☐

12. The achievement of student in a class is not same:
- a) They do not study sincerely ☐
 - b) Teachers are often partial ☐
 - c) Abilities of each student are different ☐
 - d) Concentration and habit of hard work is different ☐
13. To have his right place in the society, the teacher should:
- a) Take part in politics ☐
 - b) Cut off himself from society ☐
 - c) Perform hi duty sincerely ☐
 - d) Go on strike ☐
14. What type of social relationship should be there among your colleagues in your school?:
- a) Pleasant and cooperative ☐
 - b) Pleasant ☐
 - c) I do not care for others ☐
 - d) There should be rivalry ☐
15. Who should be the members of education commission?:
- a) Teachers only ☐
 - b) Politician only ☐
 - c) Teachers and politicians both ☐
 - d) Teachers, Principals and Sociologists ☐
16. Parent teacher association is considered to be of much importance because through this:
- a) Parents and teachers know each other ☐
 - b) School improve ☐
 - c) Students' problems are solved ☐
 - d) All the above ☐
17. What type of social relationship should be there among your colleague teachers outside the school?:
- a) Pleasant and inspiring ☐
 - b) Pleasant but not much mixing ☐
 - c) We should associate with other groups ☐
 - d) Should not mix ☐
18. The most important value of co-curricular activity is:
- a) They secure good popularity ☐
 - b) They compensate dull classwork ☐
 - c) They build school spirit ☐
 - d) They develop attitude and skill ☐

19. When the headmaster wants too many co-curricular activities to develop the personality of his students, what will you do as a teacher?:
- a) Call PTA meeting ☐
 - b) Check the headmaster ☐
 - c) Abuse the headmaster ☐
 - d) Not cooperate with him ☐
20. Suppose the annual function is being celebrated in the school, then at that time you will:
- a) Work at home ☐
 - b) Go to see the function ☐
 - c) Take part in the function ☐
 - d) Will criticise it ☐
21. What is the importance of A.V. Aids (audio-visual aids) in teaching?:
- a) They make teaching easy ☐
 - b) They make teaching interesting ☐
 - c) Pupil participation is more ☐
 - d) All the above ☐
22. Suppose there are no teaching aids in the school for teaching a particular lesson, then you will:
- a) Teach without the aid ☐
 - b) Prepare them ☐
 - c) Tell the students there is no aid ☐
 - d) Insist the head to purchase ☐
23. You have read a new book full of ideas on education, what will you do?:
- a) Keep this ides to yourself ☐
 - b) Share it with one colleague ☐
 - c) Share it with all colleagues ☐
 - d) Will hide the book ☐
24. You do not get success to enter-upon B.Ed. Course. Then you will:
- a) Try for some other job ☐
 - b) Give up the idea ☐
 - c) Try again ☐
 - d) Criticise the procedure ☐
25. For the sake of money and other gifts, will you raise the marks of your students?:
- a) Yes ☐
 - b) No ☐
 - c) No, never ☐
 - d) I shall raise marks for friendship ☐

26. In your opinion what the teacher union should do?:
- a) It should organise seminar time to time ☐
 - b) It should try to solve the problems of the teacher ☐
 - c) It should build code of conduct ☐
 - d) All the above ☐
27. The primary job of a teacher is teaching. He has nothing to do with a child who is timid or thief:
- a) Agree ☐
 - b) Disagree ☐
 - c) Yes, he is not specialist ☐
 - d) Try to help him ☐
28. In order to enable pupils to pass in examination, you will:
- a) Allow them to copy ☐
 - b) Solve questions for them ☐
 - c) Sleep over ☐
 - d) None of the above ☐
29. As a teacher would you like to attend one or few seminars, workshop or orientation courses?:
- a) Yes ☐
 - b) No ☐
 - c) It is a wastage of time ☐
 - d) No, I know everything ☐
30. The headquarter of CBSE is at:
- a) Mohali ☐
 - b) Bombay ☐
 - c) New Delhi ☐
 - d) Trivandrum ☐
31. What makes teaching effective?:
- a) Keeping the school neat and clean ☐
 - b) School magazine ☐
 - c) Increase pay of teachers ☐
 - d) Using better methods of teaching ☐
32. For making the teaching efficient and effective, you will:
- a) Introduce long stories ☐
 - b) Dictates notes ☐
 - c) Present practical examples ☐
 - d) Teach with books ☐

33. NCERT stands for:

- a) National Council of Educational Research and Training ☐
- b) National Centre for Entertainment Research and Training ☐
- c) National Council of educational research and Technical education ☐
- d) National Committee for Education and Research for Teachers ☐

34. The curriculum should be:

- a) According to the child ☐
- b) Be fixed and child made to fit ☐
- c) Be drawn uniformly ☐
- d) Be according to social needs ☐

35. Which is the important factor for classroom learning?:

- a) Motivation ☐
- b) Discipline ☐
- c) Lesson outlines ☐
- d) A.V. Aids (audio-visual aids) ☐

APPENDIX-III

OPIONIONNAIRE ON SOME ASPECTS OF TEACHER EDUCATION

Put a ☒ on your choice

1. Syllabus for B.Ed. and D.El.Ed. programme should be revised/updated
 - a) After every three years ☐
 - b) After every four years ☐
 - c) After every five years ☐
2. Duration of B.Ed. and D.El.Ed. programme should be
 - a) One year ☐
 - b) Two years ☐
 - c) Three years ☐
3. Internship should be conducted in the
 - a) Third semester ☐
 - b) Last semester ☐
4. The institution should take responsibility for arranging job placements for student-teachers who have completed their teacher training.
 - a) Yes ☐
 - b) No ☐
5. Teachers who have a natural aptitude for teaching need not undergo B.Ed/D.El.Ed training.
 - a) Agree ☐
 - b) Disagree ☐
 - c) Undecided ☐
6. Do you think training of teachers should be made mandatory for all teachers working in schools?
 - a) Yes ☐
 - b) No ☐
7. The number of lesson plan to be created should be
 - a) Reduced ☐
 - b) Increased ☐
 - c) As usual ☐

8. Student teachers should have the option to choose

- a) One pedagogy paper ☐
- b) Two pedagogy papers ☐
- c) Three pedagogy papers ☐

9. The syllabus should be broader in scope and should emphasize preparation for the NET exam

- a) Agree ☐
- b) Disagree ☐

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Akansha Publishing House.

ANNEXURE-I
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Ph.D. Thesis Certificate on Plagiarism Check

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Title of Ph.D. thesis	Teaching Aptitude and Attitude towards Teacher Education Programmes of Elementary and Secondary Student Teachers in Mizoram	
Name & Institutional Address of the Supervisor	Prof. H. Malsawmi, Department of Education, Mizoram University, Aizawl	
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TITLE OF THE THESIS	: TEACHING APTITUDE AND
	ATTITUDE TOWARDS TEACHER
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	ELEMENTARY AND SECONDARY
	STUDENT TEACHERS IN
	MIZORAM



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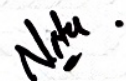
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Perception of B.Ed Teacher Trainees Towards Internship in Aizawl City.....

in the National Seminar on **Teacher Education Program : New Panorama and Challenges in
the Context of Draft National Education Policy 2019.**


(Prof. B.B. MISHRA)
Head of Department


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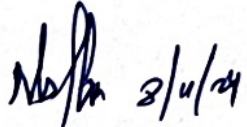
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Research Scholar, Institute of Advanced Studies in Education

presented a paper on the topic

Opinion of Student - Teachers in Mizoram towards Teacher
Education Programme

on 8th November, 2024, held at
Institute of Advanced Studies in Education, Aizawl, Mizoram.


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(Prof. LALBIAKDIKI HNAMTE)
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DEGREE	: Doctor of Philosophy
DEPARTMENT	: Education
TITLE OF THE THESIS	: Teaching Aptitude and Attitude Towards Teacher Education Programmes of Elementary and Secondary Student Teachers in Mizoram
DATE OF ADMISSION	: 23.07.2018
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EXTENSION (if any)	:No.16-2/MZU(Acad)/21/313-318; Dated.12 th July, 2023(Two years)

(Prof. LOKANATH MISHRA)

Head

Department of Education

ABSTRACT

TEACHING APTITUDE AND ATTITUDE TOWARDS TEACHER EDUCATION PROGRAMMES OF ELEMENTARY AND SECONDARY STUDENT TEACHERS IN MIZORAM

**AN ABSTRACT SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF
PHILOSOPHY**

EVA LALRAMPARI

MZU REGISTRATION NO: 4787 of 2011

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DEPARTMENT OF EDUCATION

SCHOOL OF EDUCATION

FEBRUARY, 2025

ABSTRACT

Teaching Aptitude and Attitude towards Teacher Education Programmes of Elementary and Secondary Student Teachers in Mizoram

By

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Department of Education

Supervisor

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Submitted

**In partial fulfillment of the requirement of the Degree of Doctor of Philosophy
in Education of Mizoram University, Aizawl.**

Introduction

Teaching is one of the most prominent and impressive professions as it shapes individuals thereby enriching them with knowledge, skills, critical thinking as well as creative thinking abilities. Through teaching an individual is inspired to learn leading to fostering one's curiosity which resulted in nurturing the potential of all students. According to H.C. Morrison (1934) teaching is an intimate contact between a more mature personality and a less mature one which is designed to further the education of the latter.

The prominent element in teaching entails cultivating a positive as well as supportive classroom environment. This implies that the teacher's attitude, aptitude, dedication, passion, empathy and responsiveness highly influence the learning experience of the students. Teaching objectives are achieved in terms of behavioural changes among the students and it is the responsibility of the teachers to generate learning situations wherein all desired behavioural changes may be brought about. This behavioural change of students is the means to achieve teaching objectives, henceforth, teaching has to be planned and delivered to attain the teaching objectives to the maximum level.

Concept and importance of teacher education

Teacher education refers to the formal and systematic process through which individuals are trained and equipped with the knowledge, skills, attitudes and practices necessary to become effective teachers. It encompasses various aspects of professional preparation, development and on-going learning throughout a teacher's career.

John Dewey (1904) defined "Teacher education is the process of equipping teachers with the skills, knowledge, and habits necessary to contribute to social and intellectual progress, focusing on both the content of teaching and the methodology of education".

Dr. S. Radhakrishnan (1950) described “Teacher education is the process through which individuals develop the professional abilities and attitudes necessary to become competent and effective educators. It focuses on developing a teacher's intellectual, social, and moral qualities”.

Teacher education is important to fulfil the needs of student-teachers and communities being served, some common goals include:

1. **Developing subject knowledge and pedagogical skills:** Teacher education programmes are important to provide aspiring teachers with a strong foundation of knowledge in their subject area and the skills needed to effectively teach that subject to the students.
2. **Fostering critical thinking and problem-solving skills:** Effective teachers need the ability to think critically and solve problems in order to help their students do the same. Teacher education programmes are the gateway to develop these skills in future teachers.
3. **Developing teaching strategies and techniques:** Effective teaching strategies and techniques that can be adapted to different learning styles and student needs are provided to student teachers through teacher education programmes.
4. **Developing communication and interpersonal skills:** Teacher education programmes facilitate student teachers to develop effective communication skills and able to build positive relationships with the students, colleagues, and families.
5. **Promoting cultural awareness and sensitivity:** Teachers need to be aware of and sensitive to the diversity of cultures, languages, and backgrounds represented in their classrooms. Teacher education programmes serves as the cornerstone to promote cultural awareness and sensitivity in future teachers.

Overall, teacher education is crucial to prepare individuals for the complex and demanding role of a teacher, at the same time it equip them with the skills, knowledge and attitudes needed to help all student teachers to become an efficient and effective teacher.

Concept of Aptitude and Teaching Aptitude

Aptitude refers to the inborn traits of an individual which can be regarded as the natural ability or capability to develop specific skills, talents and competencies in a particular area. It wraps around the cognitive, physical and emotional abilities that influences a person to achieve success in various tasks or domains. Being an inherent trait, aptitude can be nurtured and developed through several series of experience and learning. The intellectual abilities such as logical reasoning, problem-solving and learning capacity, as well as specific talents in areas like music, language or sports comprised the aptitude of an individual. Unlike achievement, which measures what a person has already learned, aptitude is seen as a predictor of future learning success or skill acquisition. Various theories of aptitude emphasize different aspects of human potential, including cognitive intelligence, multiple intelligences, personality traits and even emotional intelligence. Aptitude tests are frequently used in educational and career settings to assess a person's potential for success in particular fields or tasks.

Teaching aptitude refers to the qualities, traits and skills pertaining to teaching which a person possesses naturally or acquires through self-effort and which gets reflected in his inclination towards teaching and are helpful to him in performing his job dexterously (Srivastava 1981). So, teaching aptitude ordinarily refers to the specific ability, potentiality, interest, satisfaction and fitness of an individual in teaching profession. Teaching aptitude is fundamental for effective education as it determines the ability of a teacher to engage, motivate and support students in the teaching and learning process. A teacher possessing a potent aptitude has the ingenuity to understand diversified styles of learning, the willingness to adapt to as well as incorporate multifarious teaching methods and also to create an environment

which is inclusive to nurture intellectual and emotional growth. It also heightens the ability of teachers to express complex concepts, furnishing constructive feedback and also inspiring learners to perform critical thinking.

Concept of Attitude

An aptitude is generally thought as the ability of an individual to acquire a specific skill or knowledge. It is also regarded as a component of a competence to do a certain kind of work at a certain level. When looking into the original broad definition aptitude means aptness, inclination, tendency, prosperity, predisposition, fitness or suitability for performance in some situation usually involving formal and informal learning.

Francis Galton (1869) a pioneer in the study of human abilities, suggested that aptitude is a natural, inherited ability to perform tasks and solve problems, particularly in areas like reasoning and sensory abilities.

Attitude is a mental readiness which is often persuaded by an individual's experiences. It helps one to make judgement according to one's preferences. Attitude is evaluative in nature which convinced the individual to give response grounded on one's feelings, experience as well as beliefs. It is crucial for a teacher to possess a strong attitude towards teaching so as to satisfy the thirst of learners in different areas of learning.

Rationale of the study

India possesses one of the largest systems of teacher education. Besides the university departments of education and their affiliated colleges, government and aided institutions, private and self-financing colleges and open universities are also engaged in this venture. Teacher education today is facing many challenges because of the specific mandate of "education for all" and the constitutional programme of "Right to Education". It has to transfer itself into a process that is practical in its approach, research based in its transaction, value based in its outlook and with learning to learn as its motto. In essence teacher education is not a matter of simply

acquiring degree rather it is more a matter of orientation of the minds of young teachers towards services to their country. This, in fact, reflected the importance of training of teachers.

Teacher education or teacher training refers to the policies, procedure and provisions designed to equip the prospective teacher with the knowledge, attitudes, behaviour and skills they require to perform their tasks effectively in the classroom, school and wider community. It is well known that the quality and extent of learners' achievements are determined primarily by teacher competence, sensitivity and teacher motivation. It is a common knowledge too that the academic and professional standard of teacher constitute a critical components of the essential learning conditions for achieving the educational goal. The length of academic preparation, the level and quality of subject matter knowledge, different pedagogical skills the teacher possess to meet the needs of diverse learning situation, the degree of commitment to the profession, sensitivity to contemporary issues and problems of the learners and the level of motivation critically influence the quality of curriculum transaction in the classroom and thereby pupil learning. This greatly affects the larger process of social transformation.

Education is a lifelong process. In this process of education, the teacher plays an important role. Without the teacher the process of education is ineffective. The teacher is the backbone of the educational system, maker of mankind and the architect of the nation. He trains the minds, cultivates manners and shapes the morals of the members of the community at their most impressionable age. Attitudes are the key to improving the quality of education. Student teachers attitude towards teacher education programme have a great influence on their learning and commitment to become a competent teacher. It also determines their will and dedication to teach and bring out notable progress in the teaching-learning processes in particular and the education system as a whole. This is important as teachers are the nation builders and the development of a nation to a large extent actually depends on the teachers.

In the state of Mizoram there are eight (8) DIETs to provide teacher education at elementary level. After years of functioning, two secondary teacher training institutions have been opened at Aizawl and Lunglei DIETs. Prior to the opening of these two secondary teacher training institutes, there were only two secondary teacher training institutes in Mizoram i.e, Institute of Advanced Studies in Education (IASE) and Department of Education, Mizoram University. In all these institutions there are more than 500 student teachers at elementary level and more than 400 student teachers at secondary level. It has been found that not many studies pertaining to teacher education programme have been conducted in Mizoram.

Studying the teaching aptitude of student teachers is crucial to understand their readiness and potential to become efficient teachers. Teaching aptitude encompasses critical skills such as communication, classroom management, problem-solving, and subject knowledge. The assessment of these skills will help us to clearly identify the strengths and areas for improvement, ensuring that student teachers are well-equipped to meet the diverse needs of students. The study will also magnify the worth of teacher education as it will enhance teacher preparation programs, fostering professional growth and ensuring that future educators possess the necessary competencies to positively impact student learning outcomes and contribute to the development of the education system.

At the same time, the evaluation of student teachers perception, motivation and determination during teacher education programme is vitally important. In this regard the study will be helpful to know and understand the predisposition of student teachers towards teacher education programme. Further, it will also display the relevance as well as reliability of the programme. An understanding of their attitude helps identify factors that influence their learning, teaching methods and overall effectiveness. Positive attitudes towards the programme can lead to better learning outcomes, while negative attitudes may hinder professional growth. This study is also undertaken with the aspiration to provide invaluable insights into curriculum design, teaching methods and the overall effectiveness of teacher education programs, allowing educators and policymakers to make informed decisions to

improve teacher preparation and ensure that student teachers are fully motivated and prepared for their teaching careers.

Till date, there were no studies conducted to find out the teaching aptitude of these student teachers nor has there been any study pertaining to the attitude of teacher trainees towards teacher education programme. Besides, an in depth studies of the perception of teacher trainees on the different components of teacher education has not been researched upon. Therefore, it is felt that these issues need to be researched upon. If such study can be taken up, it would provide a better understanding of the teaching aptitude as well as the attitude and opinion of student teacher on teacher education programme which would greatly enhance the development of teacher education in Mizoram. In view of the above discussions, the following research questions arise:

1. Has attitude scale towards teacher education programme ever been constructed for student teachers in Mizoram?
2. What is the teaching aptitude and attitude of elementary and secondary student-teacher towards teacher education programmes?
3. Does any significant difference exist between the teaching aptitude of elementary and secondary student teachers with reference to various selected independent variables?
4. Does any significant difference exist in the attitude of student teachers towards teacher education programmes with reference to various selected independent variables?
5. Are there any relationship between the attitude of student teachers towards teacher education programmes and their teaching aptitude?
6. What is the opinion of student teachers on some aspects of teacher education?

Statement of the problem

In the light of the above discussions on the importance of teacher education and the fact that no studies have been conducted on teaching aptitude and attitude towards teacher training programme in Mizoram, the present research is entitled as, **“Teaching Aptitude and Attitude towards Teacher Education Programmes of Elementary and Secondary Student Teachers in Mizoram”**.

Objectives of the Study

The following objectives have been proposed for the present study:

1. To construct an attitude scale towards teacher education programmes.
2. To find out the attitude towards teacher education programmes of student teachers (elementary and secondary) in Mizoram.
3. To compare the attitude towards teacher education programmes of student teachers (elementary and secondary) with reference to their specific programme i.e. B.Ed. and D.El.Ed., marital status, gender, locale, teaching experience, fathers working status, fathers' level of education, student teachers educational qualification and previous academic stream.
4. To compare the different dimensions of attitude towards teacher education programmes of student teachers (elementary and secondary) with reference to their specific programme i.e. B.Ed. and D.El.Ed., marital status, gender, locale, teaching experience, fathers working status, fathers' level of education, student teachers educational qualification and previous academic stream.
5. To find the teaching aptitude of student teachers (elementary and secondary) in Mizoram.
6. To compare the teaching aptitude of student teachers (elementary and secondary) with reference to their specific programme i.e. B.Ed. and D.El.Ed., marital status, gender, locale, teaching experience, fathers working status, fathers' level of education, student teachers' educational qualification and previous academic stream.

7. To find out the relationship between attitude towards teacher education programmes and teaching aptitude of student teachers (elementary and secondary) in Mizoram.
8. To find out the opinion of student teachers (elementary and secondary) on some aspects of teacher education.
9. To suggest measures for improving the existing elementary and secondary teacher education programmes.

Hypotheses of the study

1. There is no significant difference in the student teachers' attitude towards teacher education programmes with reference to their specific programme i.e. B.Ed. and D.El.Ed., marital status, gender, locale, previous teaching experiences, fathers' employment status, fathers' level of education, student teachers' educational qualification and previous academic streams.
2. There is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of content and relevance with reference to their specific programme i.e. B.Ed. and D.El.Ed., marital status, gender, locale, teaching experiences, fathers' employment status, fathers' level of education, student teachers educational qualification and previous academic stream.
3. There is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of teaching method, faculty support and collaboration with reference to their specific programme i.e. B.Ed. and D.El.Ed., marital status, gender, locale, teaching experiences, fathers' employment status, fathers' level of education, student teachers educational qualification and previous academic stream.
4. There is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of resources, facilities and programme management with reference to their specific programme i.e. B.Ed. and D.El.Ed., marital status, gender, locale, teaching experiences, fathers' employment status,

fathers' level of education, student teachers educational qualification and previous academic stream.

5. There is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of pre-internship with reference to their specific programme i.e. B.Ed. and D.El.Ed., marital status, gender, locale, teaching experiences, fathers' employment status, fathers' level of education, student teachers educational qualification and previous academic stream.
6. There is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of school internship with reference to their specific programme i.e. B.Ed. and D.El.Ed., marital status, gender, locale, teaching experiences, fathers' employment status, fathers' level of education, student teachers educational qualification and previous academic stream.
7. There is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of post-internship with reference to their specific programme i.e. B.Ed. and D.El.Ed., marital status, gender, locale, teaching experiences, fathers' employment status, fathers' level of education, student teachers educational qualification and previous academic stream.
8. There is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of assessment and feedback with reference to their specific programme i.e. B.Ed. and D.El.Ed., marital status, gender, locale, teaching experiences, fathers' employment status, fathers' level of education, student teachers educational qualification and previous academic stream.
9. There is no significant difference in the student teachers' attitude towards teacher education programmes on the dimension of career prospect with reference to their specific programme i.e. B.Ed. and D.El.Ed., marital status, gender, locale, teaching experiences, fathers' employment status, fathers' level of education, student teachers educational qualification and previous academic stream.

10. There is no significant difference in the student teachers' aptitude towards teaching with reference to their specific programme i.e. B.Ed. and D.El.Ed., marital status, gender, locale, previous teaching experiences, fathers' employment status, fathers' level of education, student teachers' educational qualification and previous academic streams.
11. There is no significant relationship between attitude towards teacher education programmes and teaching aptitude of student teachers.

Review of related literature

A total of 78 reviews were incorporated out of which 72 reviews were confined to studies in India and 6 studies were conducted abroad. The reviews were collected within a period between 2011 and 2024.

Methodology

The present study was descriptive in nature for which a descriptive survey method was employed.

Population

The population of the present study comprised of all student-teachers from every teacher training institute in Mizoram covering both elementary and secondary levels. There are eight District Institute of Education and Training (DIETs) that provide D.El.Ed programmes, with two of these DIETs also providing B.Ed programme. In addition, Institute of Advanced Studies in Education (IASE) and Mizoram University (MZU) also offered B.Ed Programmes. The total number of student-teachers in all the teacher training institutes is 1589. The following table – 1 shows the teacher training institutes in Mizoram along with programmes offered and the number of student-teachers in each institution.

Table – 1
Training Institutes, Programmes offered and number of student-teachers

S.N	Institutes	Programmes	Student-teachers
1	Institute of Advanced Studies in Education, Aizawl	B.Ed	266
2	Mizoram University, Tanhril	B.Ed	189
3	District Institute of Education and Training, Aizawl	B.Ed D.El.Ed	99 234
4	District Institute of Education and Training, Lunglei	B.Ed D.El.Ed	100 165
5	District Institute of Education and Training, Serchhip	D.El.Ed	95
6	District Institute of Education and Training, Kolasib	D.El.Ed	84
7	District Institute of Education and Training, Champhai	D.El.Ed	94
8	District Institute of Education and Training, Lawngtlai	D.El.Ed	89
9	District Institute of Education and Training, Mamit	D.El.Ed	83
10	District Institute of Education and Training, Saiha	D.El.Ed	91
Total			1589

Sample

A sample is a smaller section chosen from a larger population. It represents a manageable portion of the bigger group and contains the same characteristics as the larger population. Samples are utilized in statistical tests when the population is too large to include all members or observations. The sample should accurately reflect

the entire population and should not show any bias towards any particular attribute. The present study employs stratified random sampling method. The population is divided into subgroups or strata, i.e. the districts from the North, South, East, West and Central represent the different strata and institutes are selected from each stratum to ensure that each geographical area is represented in the sample. The total sample consisted of 523 student-teachers. The name of the selected institutes, programmes and number of selected samples are presented in the following table – 2.

Table – 2
Selected Institutes, Programmes offered and number of selected samples

S.N.	Institutes	Programmes	Male	Female	Urban	Rural	Total
1	IASE	B.Ed	43	76	75	44	119
2	MZU	B.Ed	26	45	28	43	71
3	DIET, Aizawl	B.Ed	20	15	27	8	35
		D.El.Ed	20	64	46	38	84
4	DIET, Lunglei	B.Ed	19	25	24	20	44
		D.El.Ed	26	28	13	41	54
5	DIET, Serchhip	D.Ed.Ed	18	26	42	2	44
6	DIET. Kolasib	D.El.Ed	4	16	9	11	20
7	DIET, Champhai	D.El.Ed	8	30	12	26	38
8	DIET, Mamit	D.El.Ed	3	11	0	14	14
Total			187	336	276	247	523

Tools used for data collection

The following tools were used for the present study

1. Attitude Scale towards Teacher Education Programme (2024) developed and standardized by the investigator.
2. Teaching Aptitude Scale developed by S.C. Gakhar and Rajnish (2004).
3. Opinionnaire on some aspects of Teacher Education developed by the investigator.

Collection and tabulation of data

All three tools were directly administered to the student-teachers during visits to the selected training institutes. The purpose of the study and response instructions was clearly explained to them. Student-teachers were assured that their responses would be kept confidential and used only for research purposes. When collecting the completed responses, it was ensured that all questions were answered and the required personal information was provided. The collected data were scrutinized, classified, and scored according to the procedures outlined by the tool creator. The data were tabulated, and each respondent was assigned a serial number. Their scores were entered into an Excel sheet and subsequently transferred to SPSS for statistical analysis by employing the following statistical techniques.

Analysis of data

Quantitative analysis of data was done by making use of descriptive and inferential statistics like measures of central tendency, measures of variability, z-scores and percentiles together with Pearson product moment correlation, t-test and ANOVA.

Major findings

The following are the major findings of the present study:

1. Construction of Attitude scale towards Teacher Education Programme

Attitude Scale towards Teacher Education Programme was constructed and standardized. Item analysis was done by finding out the discrimination index. Coefficient of reliability was found to be .996 using Test re-test. Validity was established by ten experts in the field of Education and psychology. Norms was also established using z-Score.

2. Student teachers attitude towards teacher education programmes

30.21% student teachers have favourable attitude towards teacher education programmes, 41.49% have neutral attitude and 28.30% have unfavourable attitude towards teacher education programmes.

3. Comparison of student teachers attitude towards teacher education programmes with reference to different independent variables

(A) Overall Comparison

1) B.Ed. student teachers have a more favourable attitude towards teacher education programmes as compared to D.El.Ed. student teachers.

2) Urban student teachers exhibit a more positive attitude towards the teacher education programmes compared to their rural counterparts.

3) Student teachers whose fathers are employed show a more favourable attitude towards the teacher education programmes compared to those whose fathers are unemployed.

4) Student teachers whose fathers are matriculate and above shows a more favourable attitude towards the teacher education programmes as compared to those whose fathers are under matriculate.

5) Post-graduate student teachers have a more favourable attitude towards teacher education programmes than Plus-2 student teachers.

6) There is no significant difference in student teachers' attitude towards teacher education programmes with reference to their marital status, gender, previous teaching experiences and previous academic streams.

(B) Comparison on the dimension of 'Content and Relevance'

1) B.Ed. student teachers have a more favourable attitude towards content and relevance as compared to D.El.Ed. student teachers.

2) Married student teachers have a more positive attitude towards content and relevance than the unmarried student teachers.

3) Student teachers not having teaching experience had a higher attitude towards content and relevance as compared to student teachers having teaching experience.

4) Post-graduate student teachers have a more favourable attitude towards content and relevance than graduate student teachers.

5) There is no significant difference in student teachers' attitude towards content and relevance with reference to their gender, locale, fathers' employment status, fathers' level of education and previous academic stream.

(C) Comparison on the dimension of 'Teaching Method, Faculty Support and Collaboration'

1) B.Ed. student teachers have a more favourable attitude towards teaching method, faculty support and collaboration as compared to the D.El.Ed. student teachers.

2) Student teachers having previous teaching experience had a higher attitude towards teaching method, faculty support and collaboration as compared to student teachers not having teaching experience.

3) Student teachers whose fathers are employed displayed a more favourable attitude towards teaching method, faculty support and collaboration as compared to student teachers whose fathers are unemployed.

4) Post-graduate student teachers had a more positive attitude towards teaching method, faculty support and collaboration compared to Plus-2 student teachers.

5) There is no significant difference in student teachers' attitude towards teaching method, faculty support and collaboration with reference to their marital status, gender, locale, fathers' level of education and previous academic stream.

(D) Comparison on the dimension of ‘Resources, Facilities and Programme Management’

1) Student teachers whose fathers are employed depicted a more favourable attitude towards resources, facilities and programme management as compared to student teachers whose fathers are unemployed.

2) There is no significant difference in the student teachers’ attitude towards resources, facilities and programme management with reference to their specific programme, marital status, gender, locale, previous teaching experiences, fathers’ level of education, student teachers’ educational qualification and previous academic stream.

(E) Comparison on the dimension of ‘Pre-Internship’

1) B.Ed. student teachers have a more favourable attitude towards pre-internship as against D.El.Ed. student teachers.

2) Student teachers whose fathers are employed displayed a more favourable attitude towards pre-internship as compared to student teachers whose fathers are unemployed.

3) Student teachers whose fathers’ level of education is matriculate and above holds a better attitude towards pre-internship in comparison with student teachers whose fathers’ educational level is under matriculate.

4) Post-graduate student teachers have a more favourable attitude towards pre-internship than those students-teachers whose educational qualification is ‘Plus-2’

5) There is no significant difference in student teachers’ attitude towards pre-internship with reference to their marital status, gender, locale, previous teaching experiences and previous academic streams.

(F) Comparison on the dimension of ‘School Internship’

1) Urban student teachers have a more supportive attitude towards school internship in comparison with student teachers from rural areas.

2) There is no significant difference in the student teachers’ attitude school internship with reference to their specific programme, marital status, gender, previous teaching experiences, fathers’ employment status, fathers’ level of education, student teachers’ educational qualification and previous academic stream.

(G) Comparison on the dimension of ‘Post-Internship’

1) B.Ed. student teachers have a better attitude towards post-internship as against D.El.Ed. student teachers.

2) Student teachers whose fathers are employed displayed a higher attitude towards post-internship compared to that of student teachers whose fathers are unemployed.

3) Post-graduate student teachers displayed a higher attitude towards post-internship as compared to both graduate and Plus-2 student teachers.

4) Student teachers whose previous academic stream is Science have higher attitude towards post-internship as compared to student teachers whose previous academic stream is Arts.

5) There is no significant difference in student teachers’ attitude towards post-internship with reference to their marital status, gender, locale, previous teaching experiences and fathers’ level of education.

(H) Comparison on the dimension of ‘Assessment and Feedback’

1) Student teachers whose fathers are employed displayed a higher attitude towards assessment and feedback in comparison with student teachers whose fathers are unemployed.

2) There is no significant difference in the student teachers' attitude towards assessment and feedback with reference to their specific programme, marital status, gender, locale, previous teaching experiences, fathers' level of education, student teachers' educational qualification and previous academic stream.

(I) Comparison on the dimension of 'Career Prospect'

1) B.Ed. student teachers have a more preferable attitude towards career prospect as against D.El.Ed. student teachers.

2) Student teachers from urban area have a higher attitude towards career prospect as against student teachers from rural area.

3) Student teachers having teaching experience have a more favourable attitude towards career prospect contrary to student teachers not having any teaching experience.

4) Student teachers whose fathers are employed displayed a more favourable attitude towards career prospect as compared to student teachers whose fathers are unemployed.

5) Student teachers whose educational qualification is Post-graduate and Graduate have a more favourable attitude towards career prospect compared to Plus-2 student teachers

6) Student teachers whose previous academic stream is Commerce have a more positive attitude towards career prospect compared to student teachers whose previous academic stream is Arts.

7) There is no significant difference in student teachers' attitude towards career prospect with reference to their marital status, gender and fathers' level of education.

4. Student teachers teaching aptitude

36.52% student teachers have high teaching aptitude, 40.15% have moderate teaching aptitude and 23.33% student teachers have low teaching aptitude.

5. Comparison of student teachers' teaching aptitude with reference to different independent variables

(A) Overall Comparison

- 1) B.Ed. student teachers have a higher teaching aptitude as compared to the D.El.Ed. student teachers.
- 2) Urban student teachers exhibit a more positive teaching aptitude when compared with their rural counterparts.
- 3) Student teachers whose fathers are employed display a higher teaching aptitude as compared to those whose fathers are unemployed.
- 4) Student teachers whose fathers are matriculate and above shows a more favourable teaching aptitude than those student teachers whose fathers are under matriculate.
- 5) Post-graduate and Graduate student teachers have a higher teaching aptitude compared to student teachers whose educational qualification is Plus-2.
- 6) There is no significant difference in student teachers' teaching aptitude with reference to their marital status, gender, previous teaching experiences and previous academic stream.

6. Opinion of student teachers on some aspect of teacher education programme

- 1) Most student teachers wanted to revise and update their syllabus after every three years.
- 2) Majority of student teachers wished the duration of teacher training programme be two years.
- 3) Majority of student teachers preferred to conduct the internship programme during the fourth semester.

- 4) Majority of student teachers were of the view that their institution should take responsibility for arranging job placements for student teachers who have completed their teacher training course.
- 5) Majority of student teachers disagreed that teachers possessing a natural aptitude for teaching need not undergo teacher training programme.
- 6) Majority of student teachers strongly viewed that teachers working in schools should mandatorily undergo teacher training course.
- 7) Most number of student teachers preferred the number of lessons to be planned should be reduced.
- 8) The largest number of student teachers would like to have two pedagogy papers.
- 9) Majority of the student teachers preferred that the scope of the teacher training syllabus should be much broader and should emphasize on preparation for the NET examination.

Educational implications of the study

The present research carries a paramount importance towards improving as well as strengthening teacher education programmes (elementary and secondary) in Mizoram. The research enlightens the necessity of enlightening student teachers to understand the different aspects of teacher education programmes. It helps to identify the problems and challenges of teacher education programmes in Mizoram which in turn implore relevant topics and activities to be incorporated to enrich the same. As the quality of teachers depend upon the quality of training received by them in different training institutions, this research highlighted that training for teachers must remain mandatory for all serving in the teaching profession so that they will be equipped with a variety of knowledge, skills, techniques, methods and all other prerequisites to become professionals in teaching.

The construction and standardization of Attitude Scale for Teacher Education Programme will provide future researchers with a tool to conduct research in order to fill in the gaps based on the present findings and also incorporating different independent variables for a more comprehensive study. The research also shows that

there existed a positive and significant relationship between teaching aptitude and attitude of student teachers towards teacher education programme. This proves that any person interested in the teaching profession should have possessed a certain level of aptitude to teaching in order that they will be able to evolve more favourable attitude towards teaching as well as teacher education programme. As a profession, teaching requires people who have aptitude for teaching and a favourable attitude towards teacher education programme. The present findings, therefore, will serve as a navigator for policy makers, curriculum framers and teacher educators to work on teacher education programme which will best satisfy prospective teachers and all other stakeholders.

Recommendations

The following recommendations were made for enhancing *Teaching Aptitude* and *Attitudes* of student teachers in Mizoram:

I. Enhancing Teaching Aptitude for B.Ed and D.El.Ed Student Teachers

To improve the teaching aptitude of student teachers in Bachelor of Education (B.Ed) and Diploma in Elementary Education (D.El.Ed) programmes, several targeted strategies can be implemented. These recommendations focus on comprehensive training, practical experience and continuous professional development to ensure that future educators are well-equipped to meet the demands of modern classrooms.

1. Curriculum Enhancement: Revising and updating the curriculum regularly to include the latest educational theories, pedagogical practices and technological advancements are essential to ensure that the curriculum covers a broad range of teaching methods, classroom management techniques and inclusive education practices to cater to diverse learning needs. Integrating subjects like educational psychology, assessment and evaluation, and special education can provide a more holistic approach to teacher training.

2. Practical Teaching Experience: Increasing the emphasis on practical teaching experience by incorporating more fieldwork and internship opportunities will provide

student teachers ample opportunities to observe experienced teachers mode of transacting the curriculum, engage in co-teaching and lead classrooms under supervision. These hands-on experiences are crucial for developing confidence and teaching skills. Encouraging student teachers to reflect on their practical experiences and provide feedback can further enhance their learning.

3. *Mentorship and Support:* Establishing a mentorship programme where experienced educators guide and support student teachers will furnish valuable insights, best practices and offer constructive feedback. This support system can help student teachers navigate challenges, build professional networks and develop a strong foundation in teaching. Creating a collaborative learning environment where student teachers can share experiences and learn from each other is also beneficial.

4. *Professional Development Workshops:* Organising regular professional development workshops and seminars to keep student teachers updated on the latest trends and innovations in education is also another important aspect of teacher education. Topics could include differentiated instruction, classroom technology integration and strategies for teaching diverse learners. Workshops led by experts in the field can provide practical tips and techniques that student teachers can apply in their classrooms.

5. *Assessment and Feedback Mechanisms:* Implementing robust assessment and feedback mechanisms to monitor the progress of student teachers will help to conduct regular evaluations through peer assessments, self-assessments and mentor feedback can help identify areas of improvement and strengths. Constructive feedback should focus on specific teaching skills, lesson planning and classroom management techniques. Continuous assessment can guide student teachers in their professional growth and development.

6. *Focus on Soft Skills:* Developing soft skills such as communication, empathy and adaptability are essential for effective teaching and building positive relationships with students. Incorporating activities and exercises to promote emotional intelligence, conflict resolution and teamwork into the training programme will enrich the content of the programme. Encouraging student teachers to engage in community service and extracurricular activities can also help develop these skills.

7. Technology Integration: Integrating technology into the teacher training programmes to enhance teaching and learning experiences be formulated to train student teachers in the use of educational technologies such as interactive whiteboards, online learning platforms, and digital assessment tools. Familiarity with technology can help student teachers create engaging and dynamic learning environments, meeting the needs of tech-savvy students.

8. Promote Research and Innovation: Encouraging student teachers to engage in research projects and innovative teaching practices so that they will be exposed to maximum opportunities for action research, where student teachers can investigate and address real classroom challenges, can foster a culture of continuous improvement and creativity. Highlighting successful case studies and best practices in teaching can inspire student teachers to explore new methods and approaches.

9. Inclusive Education Practices: Promoting inclusive education practices by training student teachers to address the needs of all students, including those with special needs is also a matter of importance in today's education system. Providing knowledge and strategies on how to create inclusive classrooms can ensure that student teachers are prepared to teach diverse student populations effectively.

10. Strengthening Partnerships: Building strong partnerships with schools, educational institutions, and community organizations to provide student teachers with a supportive network to obtain collaborative efforts can enhance training programmes, provide additional resources and create opportunities for professional growth.

By implementing these comprehensive measures, B.Ed and D.El.Ed programmes in Mizoram can significantly enhance the teaching aptitude of their student teachers, ensuring they are well-prepared for the dynamic and diverse demands of modern education.

II. Enhancing the Attitude towards Teacher Education Programmes for B.Ed and D.El.Ed Student Teachers

To foster a positive attitude towards teacher education programmes among B.Ed and D.El.Ed student teachers, it is essential to create an engaging, supportive

and inspiring learning environment. Here are several detailed recommendations to achieve this goal:

1. *Improve Curriculum Relevance and Appeal:* It is important to ensure that the curriculum is up-to-date, relevant and aligned with the latest educational trends and best practices. Incorporating engaging and interactive teaching methods, including project-based learning, case studies and technology integration will further improve the curriculum. This approach can make learning more dynamic and enjoyable, positively impacting student teachers' attitudes.

2. *Provide Practical Experience Early:* Integrating practical teaching experiences as early as possible in the programme will increase the engagement of student teachers in classroom observation, co-teaching and internships from the beginning are more likely to see the relevance and impact of their training. Early exposure to real classroom settings can increase their confidence and enthusiasm for teaching.

3. *Offer Continuous Professional Development:* Organising regular workshops, seminars and training sessions led by experienced educators and experts in the field serves as an important guide to strengthen the efficiency of student teachers. Topics should cover innovative teaching strategies, classroom management, and the use of educational technology. Continuous professional development opportunities can keep student teachers motivated and enhance their professional skills.

4. *Create a Collaborative Learning Environment:* Promoting a collaborative and inclusive learning environment where student teachers can share experiences, ideas, and resources is another ideal environment. Group projects, peer assessments and discussion forums can foster a sense of community and collective growth. Collaboration encourages mutual support and a positive learning culture.

5. *Recognition and Rewards:* Acknowledging and celebrating the achievements and progress of student teachers through awards, certificates and public acknowledgment can boost morale and reinforce positive attitudes. Celebrating small milestones can motivate student teachers to stay committed and enthusiastic about their training.

7. *Focus on Career Opportunities:* Organising career fairs, job placement services and networking events to connect student teachers with potential employers will

uplift the aspirations of student teachers. Providing clear pathways to employment can enhance their optimism and attitude towards the programme.

8. Incorporate Feedback Mechanisms: Establishing regular feedback mechanisms to gather input from student teachers about their experiences and suggestions for improvement is another prerequisite. Actively involving them in the decision-making process can make them feel valued and heard. Addressing their concerns and implementing their suggestions can lead to a more positive outlook on the programme.

9. Support Work-Life Balance: Recognising the importance of maintaining a healthy work-life balance is essential for student teachers. It would be most desirable to provide flexibility in scheduling, offering mental health support and creating a supportive environment that prioritizes well-being. Ensuring that student teachers can manage their personal and professional responsibilities effectively can enhance their overall attitude towards the programme.

10. Promote a Positive Institutional Culture: Cultivating a positive and inclusive institutional culture that values diversity, equity and respect will further enhance open communication, collaboration and a sense of belongingness. A positive cultural environment can significantly impact student teachers' attitudes and their overall satisfaction with the programme.

11. Engage with the Community: Fostering strong connections between teacher education programme and the local community will encourage student teachers to participate in community service projects and local educational initiatives. Engaging with the community can provide a sense of purpose and relevance, enhancing their commitment and positive attitude towards the programme.

By implementing these comprehensive measures, B.Ed and D.El.Ed programmes in Mizoram can enhance the attitudes of their student teachers, ensuring a more engaging, supportive, and inspiring educational experience. Success of teaching depends on teachers' attitude towards teaching profession, his dedication towards learners' interest in teaching and the urge to effectively fulfil the duty of a teacher.

Suggestions for further research

1. Explore how socio-economic background influences the attitude of student teachers towards teacher education programmes.
2. Study the impact of parental education levels on the teaching aptitude of student teachers.
3. Assess the impact of technology integration in teacher education programmes on the teaching aptitude and attitudes of student teachers.
4. Investigate how cultural factors and values influence the attitude of student teachers in Mizoram.
5. Explore the role of mentorship and support systems in shaping the attitude of student teachers.
6. Evaluate how the perceived relevance of the teacher education curriculum influences the teaching aptitude of student teachers.

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