

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Education is the most powerful tool for transforming the world. It is an essential part of our everyday life. Nobody can achieve success without education. Education entails becoming acquainted with our environment. However, basic information does not constitute knowledge. Education aids in the conversion of information to knowledge. Education cultivates a person's identity in all aspects, including physical, intellectual, social, emotional, cultural, and spiritual, raising them out of poverty and suffering. As a result, he/she develops into a resourceful and intellectual citizen capable of benefiting society and the nation. An effective education system assists students in realizing their full potential, broadening their competencies, and shifting their interests, attitudes, and behaviours. Education is critical for human development and advancement, with far-reaching implications for society. Without education, the world would have been intellectually black.

Quality Education is critical for national success, and teachers play an important role in providing it. NEP 2020 also emphasizes that teachers will "truly shape the future of our children - and, as a result, the future of our country," implying that teachers will play an important role in nation building by developing high-quality human resources in the classroom. The teacher is the cornerstone of true, all-encompassing education. The efforts of exceptional teachers yield successful instruction. To teach effectively, all teachers must have the essential competences, expertise, and passion. Any substantial educational reform should begin with improving teachers' professional growth and quality. A thorough examination of the teacher's proficiency is the most important precondition for improving teaching ability. When given the freedom to carry out the bulk of their obligations in the community and in the classroom in a standard, professional manner, a competent and dedicated teacher will automatically set off the chain reaction, resulting in high-quality education. As a result, the skill of teachers who are passionate about their work is the most important aspect in the success of any educational system. According to UNESCO (2008), a good teacher in

the twenty-first century should have a thorough understanding of his or her subject's curriculum and the ability to use technology into the curriculum.

The Teacher Education program is a crucial part that seeks to instill in student-teachers the knowledge, skills, critical thinking, morale, values, and everything else needed to become a great teacher, allowing them to develop qualitatively. The National Council for Teacher Education (NCTE, 1993) defines Teacher Education as "programmes of education, research, and training of persons for equipping them to teach at the pre-primary, secondary, and senior secondary stages in schools, and includes non-formal education, part-time education, adult education, and correspondence education through distance mode" (NCTE, 1993). The Teacher Education curriculum instils many desired skills and values in student-teachers / instructors, allowing them to effectively carry out their obligations and responsibilities to the teaching profession and society at large. Teachers were trained as mechanics or technicians, with a focus on mechanical proficiency. The level of teacher training was extremely limited. W.H. Kilpatrick claims that "training is given to animals and circus performers, whereas education is given to humans." The focus of teacher training was solely on skill development. Training institutes are critical for producing future educators that are innovative, adaptable, and capable of changing the lives of their pupils.

Pre-service teachers act as change agents, working to preserve and improve educational quality in order to better prepare future generations. It offers aspiring teachers with the required information, skills, and competences to flourish in their field. It provides an organized and thorough curriculum that includes a wide range of educational topics, such as pedagogy, subject knowledge, classroom management, assessment methodologies, and educational psychology. Prospective teachers benefit from Pre-service education, which provides them with a firm basis for meeting the demands and challenges of the teaching profession. Pre-service teachers confront a variety of challenges that test their ability, flexibility, and emotional fortitude. Although these challenges are crucial for their professional development, they can also be overwhelming without the proper support. Becoming a teacher is both physically and emotionally demanding. Throughout this process, one must learn how to cope with two sets of demands: those of the Teacher training education program

and those of the schools. This may cause stress and negatively impact their engagement in the process, influencing their decision to continue the program or even begin working as a teacher. Some of the challenges are substantial, resulting in failure or dropping out of school, and displaying early signs of student anxiety while dealing with minor issues. Effective teacher training helps trainee teachers develop resilience by equipping them with the skills, knowledge, and mindset needed to confront the challenges of the teaching profession. It comprises not just recovering from challenging or negative situations, but also thriving professionally and emotionally, which can lead to higher job satisfaction, better well-being, and greater commitment to the teaching profession (Mansfield et al. 2016). The training program includes techniques for maintaining discipline and creating a healthy learning environment. It enables them to personalize training to the specific needs of each student, decreasing frustration and improving confidence. It enables people to remain engaged and motivated in their careers. It can promote a growth mindset in teachers, who perceive issues as opportunities for learning and improvement, resulting in long-term job engagement. It ultimately improves outcomes for both teachers and students, resulting in a good and dynamic educational environment. Mansfield et al. (2016) recommended that Teacher Education cover issues such as relationship development, self-care, and motivation, learning to take initiative, and emotional management.

1.2 Teacher Education in India

In India, Teacher Education is crucial in the development of the quality of education. It equips individuals with the skills necessary to become professional educators who can make a meaningful impact on the growth and development of students. The emphasis has shifted from conventional teaching methods to more innovative and student-centred approaches over the years.

1.2.1 Brief history of Teacher Education in India (Pre-Independence)

Ancient and Medieval Era (2500 B.C. to 500 B.C.): During this period, education predominantly revolved around the doctrines of the Vedas. The Brahmins, the educated class in Hindu society, were chiefly accountable for instruction. The Gurukul system prevailed, wherein students resided with their instructors and studied courses including philosophy, religious literature, and ethics in an informal

environment. Teachers occupied a revered status in society, and only individuals deemed erudite, especially from the Brahmin class, were permitted to assume the burden of educating others. The implementation of the monitorial system, wherein senior students assisted in instructing their junior counterparts, was a notable characteristic of this era.

Buddhist Era (500 B.C. to 1200 A.D.): Buddhism presented a more inclusive paradigm for education. The teaching profession was no longer confined to the Brahmin caste, permitting persons from many backgrounds to assume the job of instructors following appropriate training. This era signified the establishment of a structured training system for educators, wherein prospective teachers received instruction from seasoned educators within Buddhist monasteries. In Buddhist monasteries, referred to as Viharas, teachers were tasked with disseminating Buddhist teachings that highlighted moral ideals, appropriate behaviour, and Dharma. Upon completing adequate training, these educators were certified as competent to instruct. This era broadened the parameters of Teacher Education beyond caste and class, instituting more formalized training systems.

Islamic Era (1200 A.D. to 1700 A.D.): During this period, education was predominantly religious, with institutions such as Madrasahs serving as the focal point for the instruction of the Quran and other Islamic sciences. A formal teacher training system was absent. Teachers, or Molvies, were generally recruited because to their expertise in religious writings and frequently received their education in various regions of the Islamic world. The role of instructors during this period was predominantly centred on religious instruction, with only Muslims permitted to serve as educators at Madrasahs and analogous institutions. Although official teacher training systems were absent, the Madrasah system offered organized religious education that shaped the educational framework.

British Era (1700 A.D. to 1947 A.D.): The British colonial era introduced significant modifications to India's educational system, transitioning it to a more organized and Westernized framework. The British prioritized English instruction to fulfil their administrative requirements. The Normal School system was established during this period to provide official training for teachers. The inaugural school was founded at Serampur, Bengal, in 1793, with the objective of training educators for primary

education. As the demand for educators increases, formal training has become essential. Organizations such as the Native Education Society in Bombay and others in Bengal concentrated on enhancing the quality of Teacher Education. This period marked the establishment of teacher training and the creation of a framework that formed the basis for contemporary Teacher Education in India.

In summary, Teacher Education in India has undergone substantial evolution throughout the centuries, transitioning from informal and caste-based instruction in ancient times to a more structured system of teacher training during the British colonial period. Every historical phase has had a role in establishing the contemporary Teacher Education framework in India.

1.2.2 Brief history of Teacher Education in India (Post-Independence)

Following India's independence in 1947, there was a notable transformation in the emphasis on education and teacher training, as the government acknowledged the critical importance of proficient educators in nation-building. This resulted in a coordinated initiative to augment teacher Training institutes and improve training programs. Numerous pivotal commissions were established following independence to enhance the quality of Teacher Education.

University Education Commission (1948): The University Education Commission, led by Dr. S. Radhakrishnan, advocated for a balance of theory and practice in teacher training programs. It recommended that teacher trainees acquire practical experience in schools prior to their employment as educators. The panel emphasized that training courses must be sufficiently adaptable to meet the social and educational requirements of the country. It advocated for a comprehensive reform of teacher training programs to enhance their responsiveness to modern issues.

Kothari Commission (1964-1966): The Kothari Commission acknowledged that a strong professional education program for teachers was essential for enhancing the overall quality of education in India. It proposed several techniques to elevate the standards of teacher educators and initiated reforms in Teacher Education. The commission proposed summer schools and correspondence courses to mitigate the deficiency of qualified teachers. The primary message was that the essence of Teacher

Education must be "quality," underscoring that teacher training should adhere to the highest standards.

Secondary Education Commission (1952):The Secondary Education Commission meticulously assessed the obstacles in teacher training and proposed significant recommendations for three categories of training institutions: primary teacher colleges, secondary teacher colleges, and general teacher training institutes. The panel advocated two distinct categories for teacher training institutions: one for those who have completed their school education, and another for graduates. This differentiation aims to adapt to the diverse demands of teacher trainees and improve the overall quality of Teacher Education.

National Council for Teacher Education (NCTE):The National Council for Teacher Education (NCTE) was created in 1973 to regulate and supervise Teacher Education in India. The NCTE has been crucial in establishing standards, formulating rules, and guaranteeing that teacher training programs adhere to defined quality norms. It has also participated in advancing accreditation processes to uphold the elevated standards of Teacher Education schools.

National Curriculum Framework for Teacher Education (NCFTE):The NCFTE (2010) underscored that the efficacy of teacher training is contingent upon the proficiency of teacher educators. It advocated for the establishment of Teacher Education programs that not only convey topic information but also equip prospective educators with essential teaching methodologies and pedagogical competencies. The framework underscored the necessity for teacher educators to possess advanced skills to proficiently train future teachers.

National Education Policy (NEP) 2020:The NEP (2020) laid out ambitious reforms, recognizing that teachers need to be trained in both high-quality subject content and instructional approaches to be effective. By 2030, Teacher Education is expected to be integrated into multidisciplinary colleges and universities, moving away from traditional standalone teacher training institutes. The strategy stipulated that by 2030, the minimum qualification for teachers will be a four-year integrated Bachelor of Education program, guaranteeing complete, high-quality training for educators.

Post-independence, there has been a significant emphasis on enhancing Teacher Education in India, propelled by several commissions and policies instituting reforms. These initiatives sought to improve the quality of teacher training, rendering it more professional, thorough, and attuned to the nation's requirements.

1.3 Teacher Education in Assam

Teacher Education is critical to determining educational quality. The Assam government and educational agencies recognize the need of skilled instructors who can deliver high-quality learning outcomes. Assam offers many Teacher Education programs to fulfil the needs of both new and experienced instructors. Several colleges around the state provide Pre-service Teacher Education programs, including the Bachelor of Education (B.Ed.) and Diploma in Elementary Education (D.El.Ed.). These programs provide aspiring teachers with a good foundation in educational theories, pedagogy, topic knowledge, and practical teaching experience. In-service Teacher Education programs support professional development for practicing teachers. Workshops, seminars, conferences, and training programs are organized to update instructors' knowledge, improve their teaching skills, and offer new ideas.

1.3.1 Brief History of Teacher Education in Assam (Pre-Independence)

In the 19th century, the British colonial administration implemented modern education in Assam, emphasizing Western pedagogical approaches. In 1905, the Assam government founded two normal schools, one in Jorhat and the other in Silchar, for the purpose of training teachers. These institutions furthermore provided specialist courses designed to teach local schoolmasters. By 1920, there existed one normal school, seven government-funded schools, and two supplementary women's normal schools. Nonetheless, owing to budgetary constraints resulting from the worldwide economic downturn, several schools, including those in Jorhat, Jowai, Tura, and Silchar, ceased operations by 1931, resulting in a decline in teacher training institutes.

During the late 19th and early 20th centuries, Assam witnessed the formation of numerous teacher training schools emphasizing pedagogical techniques and subject expertise. Missionaries were instrumental in establishing these schools, especially in

advancing women's education. In 1930, 46 women underwent training, with 9 obtaining senior teacher certifications and 20 acquiring junior certificates. In 1932, the government ceased stipend payments due to an economic crisis, resulting in a significant decline in the number of trainees. By 1933-34, hardly 19 trainees were registered. Following the reinstatement of stipends in 1935, the count of female trainees rose to 43 by 1936.

Despite advancements in primary and secondary education, the proliferation of educational institutions failed to match the increasing demand for qualified educators. By 1942, despite a rise in the overall number of teachers across various levels, the quantity of qualified educators had diminished, primarily due to the employment of untrained teachers in private institutions and insufficient resources for the training of lower-level educators. Furthermore, some qualified educators departed the industry for more lucrative prospects.

1.3.2 Brief History of Teacher Education in Assam (Post-Independence)

Following India's independence in 1947, a significant legislative initiative was undertaken to guarantee that basic education become universal, free, and mandatory. The Assam Primary Education Act of 1947 delegated the responsibility for administering primary education from local authorities to newly established school boards. While the Act did not completely fulfil the objective of compulsory primary education, it laid the groundwork for the expansion of basic education in Assam.

The Assam Basic Education Act was enacted in 1954, requiring the government to furnish fundamental training for all primary school educators. This resulted in the formation of Basic Training Schools. By the conclusion of the 1954-55 academic year, all Teacher Training Institution had their professors educated in fundamental pedagogy. Nevertheless, certain institution were shuttered, and others were transformed into Junior Basic Institutes. New centres were established at Morigaon, Mangaldoi, Kohima, and Margherita.

Notwithstanding these advancements, Teacher Education in Assam encountered considerable obstacles. In the ensuing decades, Teacher Education advanced, yet had intervals of stagnation. From 1971 to 1999, there was negligible increase in secondary

Teacher Education in Assam. Nonetheless, the enactment of NCTE Regulations led to a substantial increase in the number of secondary Teacher Education institutions in Assam and throughout India. In 1948, India had merely 10 secondary teacher training colleges, but by 2010, this figure had increased to 1084. Likewise, Assam's training colleges rose from 20 in 1951 to 108 by the 1970s; nevertheless, a deficiency of trained educators resulted in the closure of several institutions throughout that decade.

Assam experienced substantial progress in Teacher Education following independence, particularly with the establishment of Gauhati University and the Government of Assam's B.T. Colleges for secondary educators. In 1957, the first postgraduate training facility was established at Jorhat, which was affiliated with Dibrugarh University. The National Education Policy (NEP) 2020 implemented numerous reforms with the objective of enhancing education throughout the nation. Assam, particularly in the context of Teacher Education, was significantly affected by this policy. The integration of B.Ed. (Bachelor of Education) with other undergraduate programs is one of the main aspects of the NEP 2020 in relation to Teacher Education. The Integrated B.Ed. Program in Assam is consistent with the NEP 2020's objective of developing more comprehensive and holistic teacher training programs.

1.4 Concept of Resilience

Resilience refers to a child's ability to manage stress, face daily challenges, recover from setbacks, cope with adversity or trauma, set realistic goals, solve problems, build healthy relationships, and show respect towards themselves and others. It is a psychological concept that reflects an individual's ability to function effectively despite significant life difficulties (Werner & Smith, 1982; Rutter, 1987). In simpler terms, it is the ability to perform well even under stress and adversity, and to recover from challenging situations. Resilience can also be seen as any positive emotional, behavioural, or cognitive response to academic or social challenges, including learning new skills, putting in extra effort, or resolving conflicts peacefully. It helps explain why some young people are able to overcome hardship and mature despite their difficulties, while others may be overwhelmed by their early experiences and circumstances.

According to Tugade and Fredrickson (2004), students with high levels of Resilience use defensive abilities to improve their short-term well-being and gain long-term advantages in dealing with stress in the future. Individuals with high resilience experience both positive and negative feelings following hardship, such as wrath, panic, and mourning. Furthermore, these individuals demonstrate considerable post-crisis improvements in hopefulness, calmness, and subjective well-being (Tugade, Fredrickson, & Barrett, 2004). Research on resiliency has found an overwhelming number of benefits and positive outcomes for children and adolescents. The importance of society and institutions in developing and enhancing resilience cannot be overstated. Schools are good settings for building emotional growth and resiliency with the assistance of teachers, psychologists, and caregivers.

1.4.1 Genesis of the Concept of Resilience

The term "Resilience" was initially introduced in the 1800s. Until the 1950s, the psychological literature regarded resilience as a series of conscious coping skills, implicit defense mechanisms, and protective and risk factors. Resilience has been examined across multiple disciplines throughout the decades, beginning with its association with homeostasis and quantum physics in the 1920s, progressing to emotional stress and disease in the 1950s, brain plasticity in the 1970s, and psychoneuroimmunology in physiological research since the 1980s. The integration of physiological and psychological dimensions of resilience transpired in the 1990s (Liu et al., 2013). The term "Resilience" is defined as "stability, plasticity, and elasticity" and has been utilized since the early 1970s, originating from physics, where it denotes a solid body's capacity to revert to its original form after experiencing mechanical stress. Research on resilience has been disseminated throughout various psychological domains to investigate whether it constitutes a personality trait or a dynamic condition. The definition of Resilience has fluctuated based on the employed approach.

Resilience was a prevalent topic of discourse in scientific communities during the 1960s and 1970s, and it was also examined within the context of positive psychology (Southwick SM et al 2014). In 1973, N. Garmezi presented foundational research on resilience, utilising epidemiological data to uncover protective characteristics that are currently widely employed to forecast resilience. E. Werner was one of the pioneers in

applying the term "Resilience" to describe children from economically disadvantaged circumstances or those reared by parents grappling with alcohol dependency or mental health challenges. In the 1980s, A. Masten concentrated on children of mothers with schizophrenia, highlighting the rise of resilience as a significant theoretical and empirical topic. In the 1980s and 1990s, research on Resilience focused on children who successfully adapted as adults despite experiencing considerable stress and trauma (Miller & Rasmussen, 2010). During the 2000s, research broadened to include many populations, including the elderly and persons from different ethnic communities facing adverse conditions. Since the early 1990s, research on Resilience has transitioned from identifying protective characteristics to comprehending the mechanisms that enable individuals to surmount adversity.

1.4.2 Concept of Academic Resilience

Among the various emerging educational trends, Academic Resilience introduces a new area of investigation. Academic Resilience is the terms that have been used interchangeably in many studies. It is essentially a branch of resilience concerned with improving educational outcomes for vulnerable children. Academic Resilience is described as the educational or academic competency acquired after overcoming obstacles, vulnerabilities, and disadvantages. It enables pupils to deal with difficult situations, regulate stress, and cope with classroom pressure (Monika and Shikha, 2018). It is a collection of characteristics that influence students' resilience. The variables include educators, peers, school counsellors, and family members. Furthermore, the degree of suffering experienced by a child influences his or her level of resilience. Even with protective variables in place (caring parents, power, a decent socioeconomic background, good teachers, and friends), considerable adversity can cause a person to become less resilient. Thus, inequalities in resilience are intimately linked to unequal access to power, money, and resources. So, Academic Resilience can be characterized as a dynamic and changing concept. Furthermore, a student's Academic Resilience can be defined as the combination of his or her inner abilities and many external factors (school, family, friends, teachers, socioeconomic status, resources, and so on). Academically Resilient children learnt how to set realistic goals and expectations for themselves. They have learnt to solve problems and make decisions, so they perceive mistakes, obstacles, and roadblocks as challenges to

overcome rather than stressors to avoid. To summarize, it is a multifaceted concept influenced by one's biological composition, upbringing, and environment.

The concept of Academic Resilience was introduced in the 1990s by Alva (1991) to characterize students who, despite being in high-risk circumstances for low academic performance and likely dropout, attain elevated levels of motivation, success, and achievement. Academic Resilience emphasizes a student's capacity to sustain excellent academic performance in the face of adversity. It denotes the capacity to achieve academic success in difficult or adverse educational circumstances (Mihir K. Mallik and Kaur, 2016). Academic Resilience refers to a student's ability to overcome challenges, stress, and difficulties in the educational environment, hence enhancing their likelihood of success in multiple life domains, even when confronted with adversities related to early experiences, characteristics, and situations.

Such students do better even after being exposed to stressful situations and events that would ordinarily cause them to perform poorly in school or drop out (Alva, 1991). A resilient child is an emotionally healthy child who can overcome challenges and recover from failures.

1.4.3 Risk factors and Protective factors of Academic Resilience

Two fundamental concepts have frequently been the focus of academics in their efforts to comprehend Academic Resilience: Risk factors and Protective factors (Rutter, 1990). The analysis of both Risk and Protective factors has the potential to enhance our understanding of the Academic Achievement of students in the presence of adversity.

Risk factor is a condition or factor that increases the likelihood of adverse outcomes in the presence of adversity. As per Kaplan (1999), the probability of adverse outcomes during a challenging period is elevated by specific acute stressors that an individual encounters, such as unanticipated traumas or ongoing chronic obstacles in the physical, mental, intellectual, and social domains. Risk factors or inadequate living conditions can have a detrimental impact on the resilience and overall development of children. These Risk factors may encompass genetic, sociocultural, behavioural, biological, and demographic conditions, attributes, or

characteristics. They may be environmental, social, familial, or personal. Significant environmental Risk factors for students' academic outcomes and resilience included poverty, family dysfunction, family conflict, a lack of social support, harsh discipline, a lack of positive parental skills, marital conflicts, and domestic violence. Nevertheless, Academic Resilience in at-risk students is influenced by a variety of factors, including family guidance, family support, low family stress, enhanced parenting skills, high expectations, opportunities for meaningful family involvement, and respectful communication and relationships. According to Rutter (1990), Protective factors are typically defined as individual or environmental safeguards that improve an individual's capacity to adapt and excel in the face of stressful life events, risks, or hazards. These are the characteristics that are particularly essential for the successful adaptation to high levels of risk or adversity (Rutter, 1990). A Protective factor is only considered a predictor of resilience if it appears to provide a "shielding effect" in the presence of peril or adversity. Protective factors are internal and external resources that mitigate or mitigate the consequences of risk or adversity, leading to increased adaptability or proficiency. Self-efficacy, self-control, planning, minimal anxiety, and persistence are the five factors that predict Academic Resilience (Martin & Marsh, 2006). Students' Academic Resilience is significantly influenced by internal protective factors, including positive self-perceptions, empathic understanding, Optimism for the future, an internal locus of control, and high educational aspirations, as well as external protective factors, such as peer caring relationships, school caring relationships, and high expectations at home (Gizir & Aydin, 2009). Greenberg (2006) identified three categories of Protective factors: an individual's cognitive aptitude and temperament, level of involvement, contextual influences, and regulatory activities. The Protective factor is activated exclusively when a risk factor is present. Despite the fact that protective characteristics decrease an individual's susceptibility to peril, they may not always improve an individual's ability in other areas (Rutter, 1990). Protective factors may not be conventionally defined as pleasurable experiences, or even experiences at all; rather, they may be individual traits (Rutter, 1990).

1.4.4 Protective Constructive Model of Academic Resilience

An alternative definition of Resilience was proposed by Kumpfer (1999). This Resilience paradigm comprises both process and outcome components. Six significant

structures are addressed. Two transactional nodes connect two domains, and there are four spheres of impact. The four domains that have an impact are the environmental context, individual characteristics, acute stressor or challenge, and outcome. The convergence of the environment and the individual, as well as the individual's selection of outcomes, are the distinguishing characteristics of transactional processes. Therefore, the six most critical determinants of resilience are as follows:

Stressors and challenges: Stressful experiences activate the resilience mechanism, resulting in disequilibrium or imbalance in homeostasis in the individual being studied. Individual stress levels are governed by the stressor's perception, cognitive assessment, and interpretation as a hazardous occurrence that is disagreeable.

External Environmental Context: It encompasses a combination of critical risk and protective variables as well as procedures in the individual child's external environment. encompassing significant domains of impact such as family, community, culture, school, and peer groups. Depending on the historical period, geographical region, and culture, the significance of these domains varies with age.

Person-Environment Interaction Processes: It encompasses interactions between the child and his or her environment. These procedures can be passive or active, and they aim to recognize, infer, and overcome hazards, impediments, or difficult circumstances in order to build more protected environments.

Internal Self Characteristics: This term encompasses the emotional/affective, cognitive, social/behavioural, physical, and spiritual capacities or character traits that are essential for success in a diverse array of personal situations, cultures, and developmental activities.

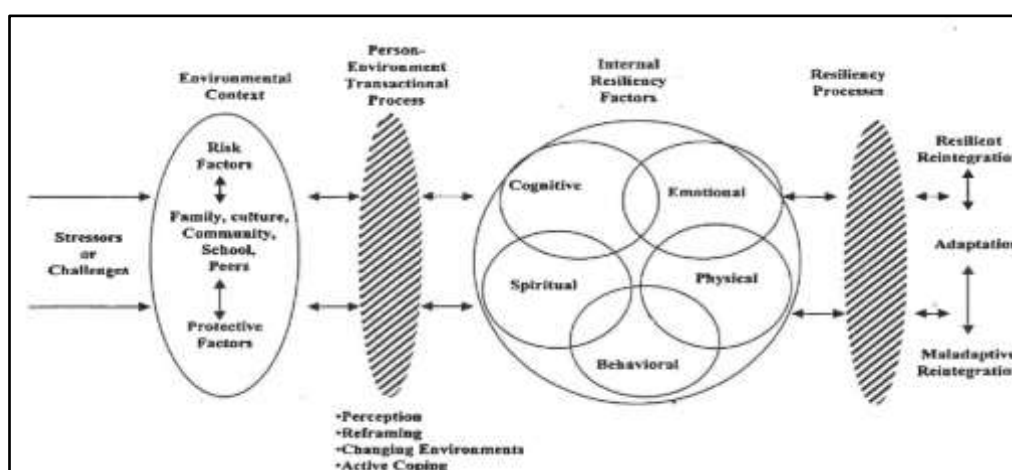
Resilience Processes: Resiliency process are unique short-term or long-term coping mechanisms that individuals develop as a result of continuous exposure to increasing challenges and stressors. These mechanisms aid in the recovery process through robust reintegration (Richardson, Neiger, Jensen, and Kumpfer, 1990).

Positive Outcomes: Thees are effective life adaptations in age-appropriate developmental activities that promote future positive adaptation to new

developmental obstacles, improving the likelihood of becoming a resilient child or adult. A positive outcome suggesting resilience is also linked to subsequent robust rebuilding after trauma or stress.

In order to establish predictors of resilient outcomes in high-risk adolescents, all six of these critical cluster components must be utilized, as research studies have investigated these numerous constructs as predictors of resilience in an individual.

Fig 1.1 Protective Constructive model of Academic Resilience



1.4.5 Academic Resilience of Pre-service teacher

In the past 15 years, there has been a substantial increase in the amount of research conducted on teacher resilience, which has been associated with a variety of positive outcomes for educators, such as job satisfaction, commitment, effectiveness, engagement, motivation, well-being, and a strong sense of identity. Klassen et al. (2018) have recently identified resilience as a critical non-cognitive attribute for novice educators, as identified by the Australian Institute of Teaching and School Leadership. This acknowledgment has prompted a surge in interest in nations such as Australia, where resilience is considered a significant non-cognitive capability for the selection of Teacher Education applicants.

The topic of resilience has been the subject of a diverse array of studies, which have concentrated on a variety of aspects. These studies have examined the relational

dynamics of teaching and their impact on resilience ,the perspectives of teachers at different stages of their careers and the ecological factors—both micro and macro—that affect teacher resilience in diverse countries and contexts (Mansfield et al., 2018). Although the current body of literature provides valuable insights into teacher resilience, such as how it can be measured and strengthened through personal and contextual factors, there has been a lack of attention to the ways in which professional learning can enhance teacher resilience. Recent research suggests that resilience-related strategies and skills can be acquired during pre-service Teacher Education (Beltman et al., 2018). In addition, there is evidence that professional development opportunities for in-service teachers contribute to the development of resilience throughout their careers (Gibbs & Miller, 2013). In order to fortify their resilience, educators are advised to prioritize professional learning experiences by Wosnitza et al. (2018).

Resilience is viewed from a social ecological perspective (Ungar, 2012) as a dynamic process that combines personal and professional traits, as well as an individual's capacity to leverage both personal and contextual resources to surmount challenges. This viewpoint examines the roles and interactions of human and environmental factors, considering resilience across multiple system levels. This perspective is bolstered by Masten's (2014) depiction of resilience as a multifaceted process, which emphasizes the involvement of "numerous systems within the individual and numerous systems external to the individual". Furthermore, the individual's adaptability is associated with a variety of systems that are in a state of perpetual interaction at varying levels of functioning.

1.5 Concept of Engagement

Passion and excitement are the phrases used to indicate Engagement (Barkley, 2009). These expressions indicate a motivation-based approach to participation. The etymological roots of the word engagement lend credence to this viewpoint. "Engage" is derived from Middle English and has numerous connotations, including dedicating one's life and honor, as well as enticing or enchanting someone into becoming an ally. Engaged students are actively interested in the academic activity at hand and employ higher-order thinking skills such as information analysis and problem solving" (Barkley, 2009).

It is fantastic to have a classroom full of enthusiastic, engaged students; however, there is no educational value if this enthusiasm does not translate into learning. Students who are engaged in their studies but exhibit reluctance and resentment are classified as disengaged. Motivation and active learning are the sources of student engagement in the classroom. It does not occur if either element is absent, which is why it is a product and not a sum. It is not the result of either factor alone; rather, it is a product of the intersection of active learning and motivation (Barkley, 2009).

1.5.1 Genesis of the Concept of Engagement

A scholar named Alexander Astin is credited with the establishment of the modern concept of student involvement as a comprehensive indicator of experience. In 1984, Astin introduced the concept of the student's investment of physical and psychological energy in the academic experience. Without a doubt, that is wholly biased. George Kuh, the director of the National Survey of Student Engagement, subsequently modified the definition to emphasize that engagement is a reciprocal responsibility. This definition encompasses the time and energy that students spend on academically deliberate activities, in addition to the endeavour that institutions make to implement effective educational practices (Axelson & Flick, 2010). Teachers who are committed to their profession will find it simpler to encourage student engagement in school, according to Gallup, which conducts monthly surveys on student engagement.

Classification of Engagement as a characteristic, state, or activity is a contentious issue. According to Macey and Schneider (2008), engagement can be interpreted as a synthesis of three components, which progress from trait (a propensity to perceive work as engaging) to state (a sense of absorption in work) to behavioural (extra-role conduct) engagement. Conversely, Schaufeli et al. (2002) contended that Engagement is an affective-cognitive state that is prevalent and constant, and it is not particular to any particular item, event, individual, or behaviour. A condition that is not specific to any one endeavour can be referred to as engagement.

1.5.2 Concept of Classroom Engagement

Students are deemed to be actively involved in the learning process when they participate in classroom activities. Chapman (2003) defines Classroom Engagement

as the extent to which students actively engage in all facets of school life, such as attending class, completing allotted homework, and paying attention in class. The performance and learning outcomes of students were negatively impacted by their lack of active participation in class, as discovered by Wang et al. (2014). The concept of student engagement, which is currently gathering momentum in this region, is the result of schools' development initiatives and high-quality classroom instruction (Fletcher, 2007). Student-teacher interactions, academic activities, learning experiences, and active and collaborative learning are the most effective methods of achieving classroom engagement.

An integral part of teaching is keeping students engaged in the classroom. Research shows that when students are actively involved in their own learning, their understanding of the material improves, they are more engaged in class discussions, the instructor is more present, and a feeling of community is fostered. A strong sense of belonging and constructive relationships with peers are essential for the mental well-being of kids, particularly in rural regions where children frequently experience prolonged alone. This is especially vital for vulnerable kids and marginalized populations. To mitigate behavioural difficulties, it is imperative to maintain student engagement in both conventional and digital learning settings. Educators must meticulously contemplate how to engage their pupils during class planning and assessment design. Engagement in classroom activities needs intentional planning and consideration. The Community of Inquiry framework (Garrison et al., 1999) provides a theoretical model for comprehending the essential interactions that foster a successful classroom setting. This paradigm, first designed for remote learning, has been extensively utilized to improve learning across online, blended, and in-person environments. This concept posits that effective learning relies on the interactions between students and teachers across three interrelated "presences" (Garrison et al., 1999). Belcher et al. (2015) contend that classrooms integrating these three presences enhance student engagement, critical analysis, and collaboration. This active engagement is advantageous for both students and educators. Recent research has investigated the beneficial effects of engagement on academic achievement, motivation, and self-efficacy (Heng, 2014; Wang & Eccles, 2013; Guthrie, Klauda, & Ho, 2013). Engaged students actively participate in obtaining necessary skills and knowledge, while less invested students often withdraw and surrender when

confronted with challenges. Research indicates that academic achievement is significantly correlated with active student engagement. Guthrie et al. (2013) identified a positive correlation between engagement and text comprehension, illustrating that involvement enhances understanding. According to Reeve and Tseng (2011), engagement models might have two, three, or even four components. Students' actions, ideas, and emotions are reflected in what is known as "engagement," according to one of the most widely used models in the field. A social component necessitating classroom collaboration was later added by Fredricks and colleagues (2016). There are certain shared characteristics among engagement components despite their conceptual uniqueness. Academic, cognitive, social, and emotional elements were the building blocks of a generally recognized model of participation by Finn and Zimmer (2012).

The classroom is the site of most instructional and learning activities. According to Gulec and Alkis (2004), the classroom setting affects the results of learning. The concept of classroom life is crucial in the context of a classroom. All the social and cognitive interactions that take place in a classroom, as well as the dynamics between the instructors and their pupils, make up classroom life. What happens in the classroom and the amount of assistance and attention students receive from professors are both factors in how instructors and students perceive classroom life (Ellison et al., 2000; Reynolds & Miller, 2003). Everything that has to do with education takes place in a classroom. Moreover, the classroom is the most crucial social environment for academic achievement because of the profound influence it has on students' emotional and cognitive development (Baek & Choi, 2002).

1.5.3 Models of Classroom Engagement

In their comprehensive review of the research, Fredricks et al. (2004) articulated involvement as a dynamic and multidimensional concept with three primary dimensions: Cognitive, Emotional, and Behavioral. The authors contend that the dimensions are interrelated rather than distinct.

Fredricks et al. (2004) defined three prevalent approaches for characterizing behavioural participation, which have also been examined by Finn (1993), Finn, Pannozzo, and Voelkl (1995), Finn and Rock (1997), and Skinner and Belmont

(1993). Rumberger (2004) identified these techniques as critical determinants affecting the dropout phenomena. This is referred to as Behavioral Engagement. The initial strategy entails conforming to suitable conduct, including observing classroom standards, sticking to rules, and refraining from disruptive behaviours such as absenteeism or disturbances (Finn & Rock, 1997; Fredricks et al., 2004). The second strategy emphasizes active participation in learning activities, characterized by persistence, concentration, sustained focus, inquiry, involvement in discussions, and effort (Fredricks et al., 2004; Finn et al., 1995; Skinner & Belmont, 1993). Finn (1993) and Finn et al. (1995) characterize the third strategy as participation in extracurricular school activities, including athletics and student governance (Fredricks et al., 2004). Consequently, behavioural engagement is a measurable facet of involvement, characterized by distinct indicators including absenteeism, school preparedness, attendance, participation in curricular and extracurricular activities, and disciplinary referrals (Reschly & Christenson, 2006; Fredricks et al., 2004; Appleton et al., 2008).

Cognitive Engagement denotes a student's commitment to learning, encompassing their readiness to employ effective learning strategies (such as prioritizing elaboration over rote memorization), their inclination towards challenging tasks, and their capacity for self-regulation in the learning process (Fredricks et al., 2004). Cognitive engagement indicators encompass the utilization of learning techniques, including the integration of new material with existing knowledge and the application of self-regulation to improve learning (Finn & Zimmer, 2012; Fredricks et al., 2004). Further indicators encompass perseverance in challenging undertakings, adaptability in problem-solving, and the development of elucidating inquiries.

The Emotional Engagement component, as delineated by scholars, encompasses motivational engagement (Linnenbrink & Pintrich, 2003), psychological engagement (Finn, 1993), and emotional engagement (Archambault et al., 2009). This dimension represents students' emotional responses to academic work, peers, teachers, and the overall school environment, whether favourable or unfavourable (Fredricks et al., 2004). Principal indications of emotional involvement encompass interest, happiness, and the lack of negative feelings such as anxiety, despair, and boredom. Furthermore, children exhibiting robust emotional engagement cultivate a sense of belonging and

loyalty to their school, appreciate academic accomplishments, and perceive support from their teachers and peers (Fredricks et al., 2004).

Fig 1.2 Fredricks et al.'s model of Engagement

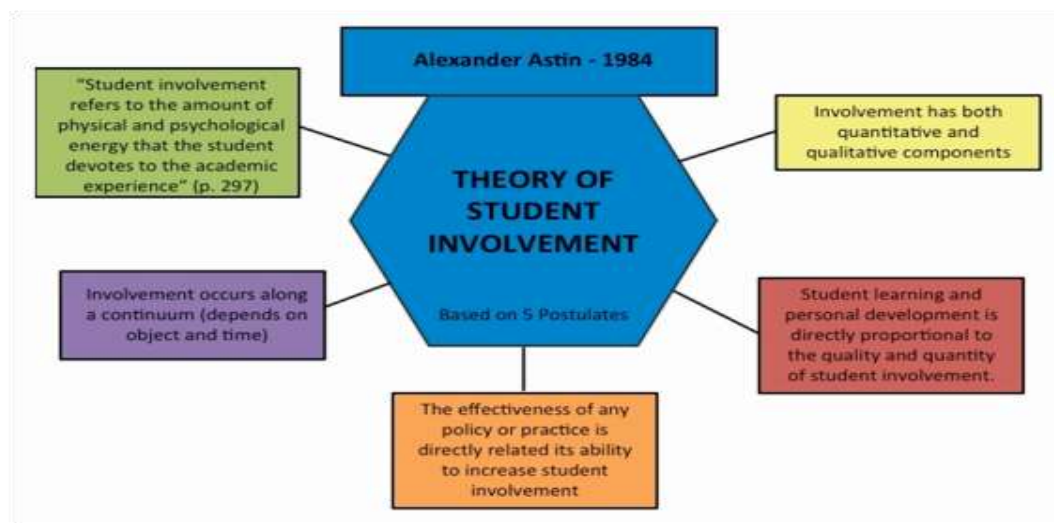


1.5.4 Theoretical framework of Classroom Engagement

In 1984, Astin presented the Student Involvement Theory, derived from his investigations into student behaviour and perseverance in higher education (Astin, 1975, 1977). Astin (1984) defines student involvement as the physical and psychological energy students dedicate to their academic experiences. His studies primarily concentrated on the commitment students invest in college life, the quality and quantity of their learning, and their general personal growth. This theory also integrated institutional issues, emphasizing the significance of educational policies and practices that, as per Astin, are only beneficial if they enhance and promote student engagement and achievement in higher education. When he published his theory, Astin was part of the U.S. National Institute of Education (NIE) Study Group on the Conditions of Excellence in Higher Education, and his concepts were initially supported by the group's findings in 1984. Subsequent to the publication of his thesis, Astin persisted in investigating the collegiate experience to gain a deeper comprehension of the elements influencing students in higher education. In a 1999 publication of the *Journal of College Student Development*, Astin articulated two pivotal findings: (a) Academic Engagement, faculty interaction, and peer relationships

profoundly impact students' cognitive and emotional growth, and (b) A robust correlation exists between increased involvement and retention, contingent upon the amount of time students allocate to diverse educational activities. Astin's idea of Student Engagement comprises two primary components: the time and effort students dedicate to their academic pursuits and other activities, which enhance experiences and outcomes that foster student success. This approach was influenced by Pace's (1980) quality of effort metric, Astin's Student Involvement Theory (1985), and Chickering and Gamson's (1987) principles of effective undergraduate education. Astin defines student involvement as the quantity and quality of both physical and psychological energy that students dedicate to their college experience, which can be expressed through academic pursuits, extracurricular engagement, and relationships with teachers and institutional leaders.

Fig 1.3 Student Involvement theory



1.5.5 Classroom Engagement of Pre-service teacher

Classroom Engagement is crucial for Pre-service teachers for several reasons:

Learning Effectiveness: Pre-service teachers who actively participate in their learning typically process and retain material more effectively. Engaging in diverse learning activities, discussions, and practical experiences enhances their comprehension of educational ideas and practices. Engagement facilitates the development of actual pedagogical abilities. By engaging directly with mentors and peers, they refine their classroom management strategies, teaching approaches, and

communication skills. As involvement rises, so too does their motivation and commitment to the teaching profession. Pre-service teachers who perceive a connection to their learning and acknowledge its significance for their future jobs are more inclined to maintain motivation and dedication to their studies and prospective students.

Reflective Practice: Engaging actively in learning encourages pre-service teachers to contemplate their experiences. Reflection is essential for enhancing teaching techniques, as it allows educators to recognize their strengths and areas for improvement, so increasing their overall efficacy in the classroom.

Professional Identity: Engagement significantly influences the professional identity of pre-service teachers. Engaging in dialogues regarding educational philosophy, ethics, and the societal role of educators facilitates the development of their individual teaching ideals and viewpoints.

Classroom Preparation: Through active learning, pre-service teachers gain practical knowledge and abilities applicable in the classroom. This form of preparation is essential for developing their confidence and competence as they embark on their teaching careers.

In summary, Engagement is essential for Pre-service teachers, as it enhances learning efficacy, facilitates skill acquisition, boosts motivation and dedication, promotes reflective practice, fosters professional identity development, and ensures adequate preparation for their roles as educators.

1.6 Concept of Academic Achievement

The term "Achievement" initially appeared in middle French in the 15th century. Achievement has the literal meaning of "a finishing" and may also be regarded as a progress. It refers to a person's accomplishment in reaching his or her own aims and ambitions. These aims and objectives can be defined ahead of time using instructional techniques, or they can be determined by evaluating one's capacity. Achievement can be defined as an individual's level of success based on their aptitude, time constraint, resources, and required experiences. A person feels more secure and proud when they

reach a higher degree of achievement. It also displays the level of expertise that someone has about a given topic. However, not everyone has the same level of achievement. Everyone has varied levels of achievement in many areas. It is something that makes someone feel confident in his or her own talents. Furthermore, we might state that achievement is determined by a variety of circumstances. Some of these elements are information, knowledge, abilities, time management, planning, confidence, and self-efficacy. These are the factors that motivate a person to devise a plan and accomplish something larger. Academic Achievement has a very broad definition and cannot be expressed in one or two lines. In short, it motivates people to succeed in their chosen sector. Academic Achievement can be shaped by the attributes that an individual possesses. Some of these qualities are their behaviour style, confidence level, communication skills, timeliness, and understanding of their culture and beliefs. These are some of the factors that can influence an individual's academic performance and achievement. Academic Achievement may be defined as excellence in all academic disciplines, in class as well as co- curricular activities". Academic Achievement is one of the most significant educational goals in today's competitive society. Academic Achievement is influenced by a variety of factors such as age, gender, intelligence, personality, motivation, socioeconomic status, attitude, study habits, mental health, and so on, which are referred to as achievement correlates and, as a result, students are classified as high achievers, average achievers, and low achievers. Academic Achievement of a student refers to the skills obtained in school topics that are evaluated by school officials via achievement tests that can be standardized or teacher-created. The term "Academic Achievement" is made up of the words "Academic" and "Achievement". The term Academic is derived from the word "Academy," which refers to a school where specialized teaching is provided. The term "Achievement" refers to any desired learning, accomplishment, or performance in a certain skill or body of information. Academic Achievement and performance are important factors in defining an individual's social position. It is expressed in the form of degrees and diplomas earned by individuals, which provide them with a scholarly identity. Achievement is the key to success as you go from school to college, university, and then into the workforce. In society, a person's academic performance is highly valued. It improves his self-esteem and influences his entire demeanor. It also makes more room for better work prospects. Today, competition is increasing by the day, and being able to enter the race and make advancement is heavily dependent on

Academic Achievement. Academic Achievement is a multidimensional concept that quantifies the extent to which a student has met or exceeded specific educational objectives in a variety of subject areas and learning domains. In educational settings, grades are the most prevalent indicator of success (Steinmayret al. 2014). Academic Achievement is a frequently researched topic because of its ability to anticipate future outcomes, such as employability (Byrne 2022). One of the most immediate determinants of success is engagement, which is incorporated in the majority of theoretical frameworks (e.g., Fredricks, Blumenfeld, and Paris 2004). In a study of pre-university students, the quality of cognitive, metacognitive, and self-regulatory learning techniques, attendance, and effort were the predictors of university achievement (van Rooij, Jansen, and van de Grift 2017). A recent meta-analysis (Wong et al., 2024) discovered a robust correlation between academic accomplishment and student engagement. The most significant predictor of accomplishment was behavioural engagement, followed by cognitive and affective engagement, according to their findings.

1.6.1 Theoretical Framework of Academic Achievement

Few theories on Academic Accomplishment have undergone empirical testing, with Walberg's (1981) theory of educational productivity being one of the most prominent. Reynolds and Walberg (1992) contend that educational outcomes, encompassing cognitive, behavioural, and attitudinal results, are shaped by the psychological traits of individual students and their surrounding psychological contexts. This viewpoint is fundamental to Walberg's idea of academic success. Walberg, Fraser, and Welch (1986) identified nine pivotal factors influencing educational outcomes: student ability and prior achievement, motivation, developmental stage, quantity and quality of instruction, classroom climate, home environment, peer group influence, and exposure to mass media beyond the school setting.

Studies on learning environments (Astin, 1993; Fraser, Walberg, Welch, & Hattie, 1987; Fullarton, 2002) have consistently demonstrated that the psychosocial characteristics of classroom settings are substantial predictors of student achievement. Crucial psychosocial factors—namely self-concept, attitudes, actions, intrinsic motivation, and general involvement in learning—are vital for assessing curricula and offer educators valuable insights for enhancing classroom dynamics.

1.6.2 Factors affecting Academic Achievement

Academic Achievement is a result of education; it measures how well a student, teacher, or institution has met its educational objectives. The interaction between the learner and his surroundings results in learning. Only in a nice environment can the learner focus his or her full concentration on the task at hand. In terms of student learning, three major groups of qualities are directly associated to academic achievement: family, institutional, and individual. Family variables such as parents' educational and professional backgrounds, family size, income, and social standing in society and at home all have an impact on socioeconomic status. Institutional elements include the learning environment, curriculum, physical space available, instructor competency, and how they interact with pupils. Students' personality attributes may include IQ, attitude, desire, hobbies, aptitude, and study methods (Nisar, Mahmood, & Dogar, 2017). Thus, it is critical to closely analyse the factors that influence students' academic achievement, as our primary educational goal is to help students improve their academic performance. There are several classifications of predictors of academic performance (Alyahyan and Dustegor Citation2020; Van Rooij, Jansen, and van de Grift Citation2018), but they can be split into two categories: Cognitive and Non-Cognitive Factors.

Cognitive Factor: Students' Academic Achievement is profoundly influenced by Cognitive Factors including attention, perception, memory, reasoning, and intellectual capacity. Besides language proficiency and reading abilities, a learner's cognitive style and approach significantly influence their academic performance. Intelligence comprises four fundamental dimensions: goal-directed behaviour, attentiveness, rationality, and values. A correlation between intellect and student achievement is seen across all educational settings (Naderi, H. 2009). Motivation is recognized as a crucial element in Academic Achievement; nevertheless, Linnenbrink and Pintrich (2002) contend that additional factors must be considered. This encompasses cognitive elements such as metacognitive methods, acquired information, and the capacity to organize the learning process, alongside social influences including expectations, values, and previous accomplishments.

Non-Cognitive factor: Non-Cognitive Factors are defined as "patterns of thought, feelings, and behaviour" (Borghans et al., 2008) that can develop across an

individual's lifetime (Bloom, 1964), impacting their educational experiences. These criteria generally encompass characteristics not directly associated with cognitive capacity or formal conceptual knowledge. In 1916, Binet and Simon noted that Academic Achievement encompasses more than just intelligence; attention, will, and character are also essential factors. Olson (2012) subsequently elaborated on this perspective, elucidating how non-cognitive elements, such as children's social skills—particularly their capacity to interact with classmates and refrain from disruptive behaviours—are indicative of their Academic Achievement (Olson, 2012, p. 20). Recent research categorizes these non-cognitive factors into four primary groups: (1) student engagement, encompassing motivation, self-concept, self-efficacy, enjoyment, and time management; (2) learning strategies, which pertain to students' planning, control, manipulation, and comprehension of the learning process and its outcomes; (3) school climate variables, including the importance assigned to academic and extracurricular activities, teacher support, and school leadership; and (4) various aspects associated with parental involvement (Khine & Areepatta Mannil, 2016).

1.7 Conceptual framework

Resilience can be defined as the extent to which a person can constructively adapt to adversity, adjust to new circumstances, and ultimately prevail in the face of potentially disastrous occurrences (Wu et al., 2020). Academic Resilience, which is vital to a student's educational experience, is the ability to persevere in the face of adversity, whether short-term or long-term. Academic Resiliency as the ability to overcome academic hurdles and flourish despite a high-risk background (Serrano Sarmiento et al., 2021). According to García Crespo et al. (2021), academic resilience is the ability to overcome classroom challenges and succeed. Students who overcame major educational obstacles are resilient (Gartland et al., 2019). Resilient pupils participate in different aspects of classroom setting and do not give up easily under academic pressure. This characteristic predicts high accomplishment motivation, Academic Achievement, lowered dropout intentions, and students who are very happy with their lives (Bittmann, 2021).

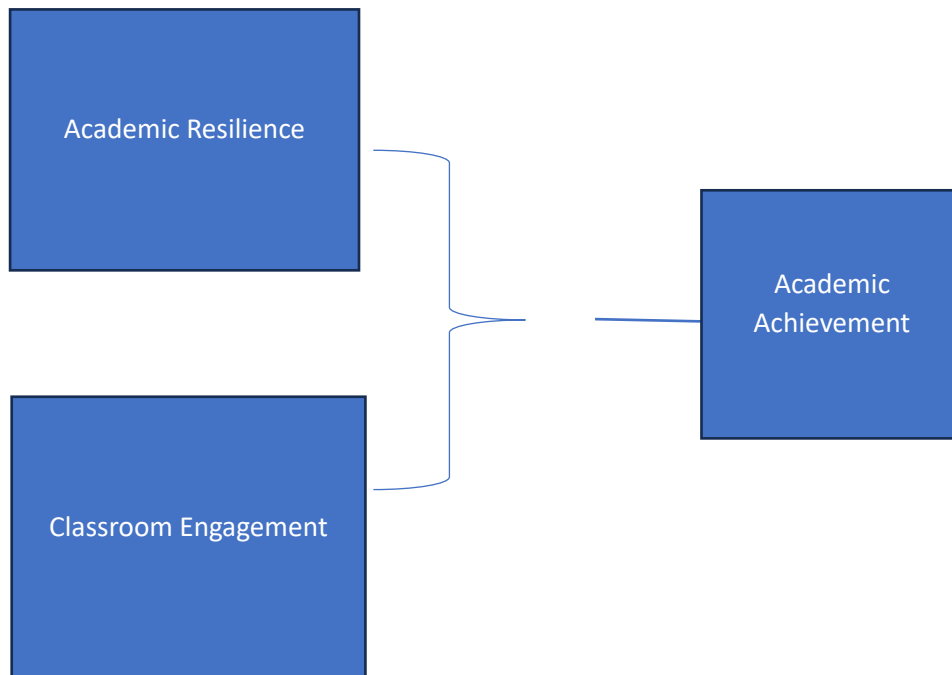


Fig 1.4: Conceptual framework of the study

Thus, within the context of this study, the conceptual framework investigates the dynamic relationship between Academic Resilience, Classroom Engagement and Academic Achievement of the Pre service teachers.

1.8 Theoretical framework of the study

I. Self- efficacy theory

Self-Efficacy Theory, developed by Albert Bandura, is a psychological framework that explains how an individual's belief in their ability to succeed influences their motivation, behaviour, and overall performance. In the context of education, it suggests that students who have high self-efficacy—meaning they believe they can effectively handle academic challenges—are more likely to be engaged, persistent, and achieve better results. It affects whether people will even attempt to cope with a situation, as they tend to avoid perceived threats that exceed their coping skills and engage confidently in situations, they feel capable of handling. Those with low self-efficacy may dwell on deficiencies and magnify potential difficulties, leading to stress and impaired performance.

Conversely, individuals with high self-efficacy focus their attention and effort on the task demands, seeing obstacles as challenges that spur greater effort. High self-efficacy has numerous benefits to daily life, such as resilience to adversity and stress, healthy lifestyle habits, improved employee performance, and educational achievement.

Self-efficacy is associated with resilience as it has been found to be important with regard to psychological adjustment, self-regulation, and physical health (Maddux, 2002). It is believed that when we have a sense of control over our behaviour and emotions, and the world seems predictable, then we have a greater sense of well-being and happiness. This enables us to feel more confident to meet life's challenges, to feel confident in our interpersonal relationships, and achieve personal satisfaction (Bandura, 1990; Maddux, 2002). Individuals who are confident in their abilities have been found to perform and respond to difficult situations more calmly than those who lack confidence and approach situations with apprehension and fear.

ii) 5-C Model of Academic Resilience

In a comprehensive path analysis, Martin and Marsh (2006, pp. 5-6) identified five factors were found to predict scores on a self-reported academic resilience scale. This analysis informed the development of the 5-C model of academic resilience, which comprises control, confidence, commitment, coordination, and composure. Fullerton et al., (2021, p. 3) states that this model is designed to predict three key educational and psychological outcomes: school enjoyment, class participation, and overall self-esteem.

5-C Model of Academic Resilience

- i) Control: Students demonstrate effective academic performance when they exhibit patience in controlled circumstances.
- ii) Confidence: In the quest for academic accomplishments and success, the concept of academic resilience holds significant importance in the lives of students.

- iii) Commitment: In order to attain academic success, academic resilience plays a pivotal role in a student's life. Students demonstrate a commitment to completing their work with precision and timeliness.
- iv) Coordination: Successful task completion is heavily reliant on coordination. Effective coordination ensures timely and efficient work execution.
- v) Composure: This element contributes to improved mental well-being. In the event of an individual encountering a problem and experiencing a setback, this element enables them to regain their strength and resume their tasks.

1.9 Rationale of the Study

Teachers are crucial in shaping India's future, since the NEP 2020 emphasizes the significance of empowering teachers for national progress. The effectiveness of the educational process primarily relies on the teacher's competencies. Teachers function within a complex landscape marked by limited resources, issues of academic integrity, structural inequities, mental health challenges, and shifting expectations from various stakeholders, including students, parents, alumni, employers, administrators, and governmental bodies. John Adams asserted that a teacher is the “Maker of Man,” emphasizing the profound impact educators have on students' development. Teachers enable students to achieve their goals and engage in the teaching profession beyond simple adherence to formal requirements, incorporating emotional investment as well. The balance between formal qualifications and emotional investment, along with the evolving needs of students, has transformed both the teaching profession and the teacher's role (NPST, 2001).

Teacher training institutes are essential in shaping the viewpoints of future educators, who will subsequently influence societal advancement. Unlike other fields, the environment and practices in Teacher Education have undergone significant changes, accompanied by more stringent learning standards. The transition from student to teacher trainee requires significant mental and emotional adjustments, since trainees must integrate academic knowledge with practical experiences. These modifications often lead to difficulties in adaption, resulting in a decrease in motivation for learning (Glennie, 2022). Moreover, these challenges

may result in emotional instability and reduced self-confidence, negatively impacting Academic Achievement (Frazier et al., 2019). In higher education, students must adeptly oversee their academic obligations. When confronted with academic challenges, students often experience negative emotions and stress, highlighting the necessity of recognizing their skills and taking personal responsibility to surmount these difficulties (Sangma Jasmine B. A., 2017).

Given the complexities of teaching, it is essential to elevate Teacher Education to the higher education level, ensuring that programs are expanded and more rigorous. Pre-service training necessitates augmentation and enhanced regulation inside public and private institutions, whilst in-service training systems must be broadened and modified for greater flexibility. Teacher Education must integrate theoretical instruction with practical experience to allow trainees to see knowledge as an actively constructed thing through learning (NCFTE, 2009). Engagement in academic and practical experiences allows Pre-service teachers to establish a deep connection to the profession, motivating them to overcome challenges.

Resilience refers to students' ability to navigate challenges and disappointments, ultimately emerging stronger from these experiences. The NEP 2020 advocates for the creation of a flexible and adaptable education system, emphasizing the need for educators to develop skills that foster resilience in students. Teacher training institutions must effectively provide educators with the skills to recognize and support students with emotional and academic difficulties. Educators must undergo comprehensive pre-service and in-service training to recognize signs of stress and mental health concerns in children. They must be educated in skills such as mindfulness, emotional intelligence, and stress management, which are essential for aiding students in cultivating resilience. Teachers need to adopt a student-centred approach that emphasizes personalized assistance, thereby aiding each student in cultivating resilience to academic and personal challenges. In alignment with the NEP 2020's vision for holistic development, teacher preparation should encompass mental health awareness and promote a culture of emotional well-being. Educators with resilience and strong coping strategies are more likely to instill these qualities in their students, promoting a positive and lasting educational environment. Teacher Education programs can be challenging,

featuring intensive curriculum, actual teaching experiences, and elevated expectations. Pre-service educators frequently encounter difficulties in reconciling academic obligations with personal life, addressing feedback, and navigating the demands associated with preparation for a teaching profession. Academic Resilience enables individuals to overcome obstacles, maintain motivation, and persist in the face of challenges.

Engagement is a vital factor influencing student learning and academic success. The NEP 2020 underscores the importance of engaging students in their education using experiential and activity-based methodologies. Teachers are encouraged to move beyond rote memorization and adopt teaching practices that actively involve students, such as project-based learning, collaborative activities, and inquiry-based approaches. To effectively use these practices, there must be adept not only in academic content but also in techniques to engage and inspire students. Teacher training programs must provide Pre-service teachers with the tools to foster curiosity, responsibility, and ownership of their learning. By creating dynamic and interactive classroom environments, teachers may foster deeper connections to the subject matter, leading to heightened student engagement. Teacher training programs must equip Pre-service teachers to successfully employ digital resources, facilitating the creation of interactive and engaging learning experiences that attract students' attention and foster sustained interest in their subjects.

Pre-service teachers must be prepared to recognize and support diverse learners, understanding that each student has unique strengths and challenges that necessitate attention for optimal academic achievement. Teacher training programs focus on educating them with competencies in formative assessment and providing constructive feedback. This concept identifies students needing additional support and allows educators to adjust their teaching methods to cater to all learners, promoting academic success across diverse learning styles.

Teacher training institutes are crucial in developing Pre-service teachers who will be the principal actors in promoting Resilience, Engagement, and Academic Achievement. A robust emphasis on emotional intelligence, student-centred pedagogy, and professional development is crucial for educators to cultivate

resilience in students, actively include them in their learning, and facilitate their academic advancement. Integrating these ideas into teacher training can enhance educators' ability to navigate student hurdles, stimulate curiosity and engagement in their studies, and cultivate a passion for learning that leads to academic success. Moreover, the NEP 2020 encourages educators to perceive education as a whole process, wherein Academic Achievement constitutes but one facet of a student's overall development, alongside emotional, social, and ethical advancement. Pre-service teachers globally encounter numerous problems in acclimating to the learning process, social integration, and managing emotional, physical, and academic transitions. These quotidian challenges impact people socially, psychologically, cognitively, physically, and academically. Some Pre-service teachers manage these constraints efficiently, while others find it challenging to engage, prompting inquiries into the reasons behind the varying performance levels across students. Research is required to investigate the correlation between Academic Resilience, Classroom Engagement, and Academic Achievement among Pre-service teachers in Assam, as such studies are presently deficient. This research may offer significant insights to assist policymakers and educators in fostering resilience among future teachers.

Pre-service trainees frequently have difficulties in reconciling academic knowledge with actual teaching, particularly when addressing varied classroom dynamics and student requirements. Time management, lesson plan development, and discipline maintenance can induce stress for novice educators. The demands of assessments, insufficient practical experience, and the need to balance academic and practical obligations can also lead to stress. Notwithstanding these hurdles, they are essential for cultivating resilience, adaptability, and the competencies required for success in the teaching profession, rendering Pre-service training both a transforming and rigorous experience. Investigating the obstacles encountered by Pre-service teachers can elucidate critical elements that affect effective teacher preparation, assisting policymakers in addressing these issues and fostering best practices. Hence, the present study is very significant in understanding academic resilience and classroom engagement to improve teaching learning outcomes among Pre-service teachers of Assam.

1.10 Statement of The Problem

After going through the conceptual framework and related literature the investigator thought it worthwhile to conduct a research study entitled as:

“Academic Resilience and Classroom Engagement among Pre-service teachers of Assam in relation to Academic Achievement”

1.11 Operational Definitions of the Term Used

Academic Resilience: Resilience is the ability to cope and manage negative affective reactions to challenges. Academic Resilience means the capability own by individual to conquers the academic issues.

In the present study, Academic Resilience of Pre-service teachers mean the ability to deal with unfavourable conditions effectively and handle and manage the stress and pressure in an academic setting. It is measured through mean score obtained on the Academic Resilience scale which is developed by M. D’Souza and S. Pandya (2018) based on the dimensions related to Self-Efficacy, Social Support and Social Competence.

Classroom Engagement: Engagement means willingness and quality of effort, focus and enthusiasm towards particular task. Classroom Engagement is the degree of curiosity, attention, passion shown by the student in the process of learning and being taught.

By Classroom Engagement of Pre-service teachers, the present study refers to reflective and critical engagement which involves different dimensions i.e., Behavioral engagement, Emotional engagement, Cognitive engagement, and Teaching skills Engagement. Further it is measured through the mean score obtained on the self-developed Classroom Engagement Scale for Pre-service teachers.

Academic Achievement: In the present study Academic Achievement is defined as scores obtained by Pre-service teachers’ students in the previous year end examinations.

Pre-service Teacher: Pre-service teacher refers to an individual in a Teacher Training Programme receiving training and supervision. They are supposed to acquire different kinds of knowledge and skills related to teaching. They are the people who pursue relevant degree in order to become a teacher in the future.

In the present study, Pre-service teachers are student pursuing “two years Bachelor of Education (B. Ed.)” from different Teachers Training Institute of Assam.

Classroom Transaction: In the present study, Classroom Transaction means the effective and desirable implementation of 2-year B. Ed curriculum content on the basis of aims and objectives listed in the curriculum.

1.12 Objectives of the study

1. To study the level of Academic Resilience of the Pre-service teachers of Assam.
2. To find out over all significant difference in Academic Resilience of the Pre-service teachers of Assam teachers based on
 - i. Gender (Male and Female)
 - ii. Locality (Urban and rural)
 - iii. Stream (Arts, Science)
 - iv. Types of institution (Private and Govt. TEIs)
3. To find out dimension wise significant difference in Academic Resilience of the Pre -service teachers of Assam based on
 - i. Gender (Male and Female)
 - ii. Locality (Urban and rural)
 - iii. Stream (Arts, Science)
 - iv. Types of institution (Private and Govt. TEIs)
4. To study the level of Classroom Engagement of the Pre-service teachers of Assam.
5. To find out over all significant difference in Classroom Engagement of the Pre-service teachers of Assam based on

- i. Gender (Male and Female)
 - ii. Locality (Urban and rural)
 - iii. Stream (Arts, Science)
 - iv. Types of institution (Private and Govt. TEIs)
- 6. To find out dimension wise significant difference in Classroom Engagement of the Pre-service teachers of Assam based on
 - i. Gender (Male and Female)
 - ii. Locality (Urban and rural)
 - iii. Stream (Arts, Science)
 - iv. Types of institution (Private and Govt. TEIs)
- 7. To study the level of Academic Achievement of the Pre-service teachers of Assam.
- 8. To find out over all significant difference in Academic Achievement of the Pre-service teachers of Assam based on:
 - i. Gender (Male and Female).
 - ii. Locality (Urban and rural)
 - iii. Stream (Arts, Science)
 - iv. Types of institution (Private and Govt. TEIs)
- 9. To find out the relationship between Academic Resilience and Academic Achievement of the Pre-service teachers of Assam.
- 10. To find out relationship between Classroom Engagement and Academic Achievement of the Pre-service teachers of Assam.
- 11. To analyse the effect of Academic Resilience and Classroom Engagement on Academic Achievement of the Pre-service teachers of Assam.
- 12. To find out different barriers and underlying factors faced by Pre-service teachers of Assam during Classroom transaction.
- 13. To study different suggestive measures suggested by Pre-service teachers of Assam regarding barriers during Classroom transaction.

1.13 Hypotheses of the study

For Objective 2, the following hypotheses are formulated:

H₀₁. There is no significant mean difference in Academic Resilience of Pre-service teachers of Assam in regards to Gender (Male and Female).

H₀₂. There is no significant mean difference in Academic Resilience of Pre-service teachers of Assam in regards to Locality (Urban and Rural).

H₀₃ There is no significant mean difference in Academic Resilience of Pre-service teachers of Assam in regards to Stream (Arts and Science).

H₀₄ There is no significant mean difference in Academic Resilience of Pre-service teachers of Assam in regards to Types of institution (Private and Govt).

For Objective 3, the following hypotheses are formulated:

H₀₅ There is no significant mean difference in i) Self-efficacy ii) Social support and social competence of Pre-service teachers of Assam in regards to Gender.

H₀₆ There is no significant mean difference in i) Self-efficacy ii) Social support and social competence of Pre-service teachers of Assam in regards to Locality.

H₀₇ There is no significant mean difference in i) Self-efficacy ii) Social support and social competence of Pre-service teachers of Assam in regards to Stream.

H₀₈ There is no significant mean difference in i) Self-efficacy ii) Social support and Social competence of Pre-service teachers of Assam in regards to Types of institution.

For Objective 5, the following hypotheses are formulated:

H₀₉ There is no significant mean difference in Classroom Engagement of Pre-service teachers of Assam in regards to Gender.

H₀₁₀ There is no significant mean difference in Classroom Engagement of Pre-service teachers of Assam in regards to Locality.

H₀₁₁ There is no significant mean difference in Classroom Engagement of Pre-service teachers of Assam in regards to Stream.

H₀₁₂ There is no significant mean difference in Classroom Engagement of Pre-service teachers of Assam in regards to Types of institution.

For Objective 6, the following hypotheses are formulated:

H₀₁₃ There is no significant mean difference in i) Cognitive Engagement ii) Emotional Engagement iii) Behavioural Engagement iv) Teaching skills Engagement of Pre-service teachers of Assam in regards to Gender.

H₀₁₄ There is no significant mean difference in i) Cognitive Engagement ii) Emotional Engagement iii) Behavioural Engagement iv) Teaching skills Engagement of Pre-service teachers of Assam in regards to Locality.

H₀₁₅ There is no significant mean difference in i) Cognitive Engagement ii) Emotional Engagement iii) Behavioural Engagement iv) Teaching skills Engagement of Pre-service teachers of Assam in regards to Stream.

H₀₁₆ There is no significant mean difference in i) Cognitive Engagement ii) Emotional Engagement iii) Behavioural Engagement iv) Teaching skills Engagement of Pre-service teachers of Assam in regards to Types of institution.

For Objective 8, the following hypotheses are formulated:

H₀₁₇ There is no significant mean difference in Academic Achievement of Pre-service teachers of Assam in regards to Gender.

H₀₁₈ There is no significant mean difference in Academic Achievement of Pre-service teachers of Assam in regards to Locality.

H₀₁₉ There is no significant mean difference in Academic Achievement of Pre-service teachers of Assam in regards to Stream.

H₀₂₀ There is no significant mean difference in Academic Achievement of Pre-service teachers of Assam in regards to Types of institution.

For Objective 9, the following hypotheses are formulated:

H₀₂₁ There is no significant relationship between Academic Resilience and Academic Achievement of Pre-service teachers of Assam.

For Objective 10, the following hypotheses are formulated:

H₀₂₂ There is no significant relationship between Classroom Engagement and Academic Achievement of Pre-service teachers of Assam.

For Objective 11, the following hypotheses are formulated:

H₀₂₃ There is no significant effect of Academic Resilience and Classroom Engagement on Academic Achievement of Pre-service teachers of Assam.

1.14 Delimitations of the study

1. The study is delimited to only Pre-service teachers of Assam.
2. The study is confined only to a two-year B.Ed. Programme.
3. This study confined to only Arts and Science stream.

1.15 Limitations of the study

1. Academic Resilience is a psychological trait that varies across individuals and is challenging to quantify objectively.
2. The research is conducted at a single point in time, it might not capture how resilience develops over time.
3. The results might be specific to the region and may not reflect the experiences of pre-service teachers in other states or countries.