



**CHAPTER V**

**SUMMARY,  
EDUCATIONAL  
IMPLICATIONS,  
SUGGESTIONS FOR  
FURTHER STUDIES AND  
CONCLUSION**

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### SUMMARY, EDUCATIONAL IMPLICATIONS, SUGGESTIONS FOR FURTHER STUDIES AND CONCLUSION

#### 5.0 Introduction

The present chapter provides a comprehensive overview of the entire research study. This chapter provides a concise overview of each chapter, encompassing the introduction, review of related literature, research methodology employed in the study, the major findings of the research work, the educational implications of the study and suggestions for further research work.

#### 5.1 Background of the Study

Inclusive Education has acquired a global interest all around the world. It is not only a policy but it's a practice to be performed at every level to make education equal for all. In Indian context, the constitution itself provides an equal right to all individual following its preamble of the constitution which starts with 'WE' the people of India.

Inclusive Education holds its inception to the World Conference on Special Needs Education in Salamanca, (1994). The Salamanca conference held in Spain in the year 1994 stated that schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions. This should include disabled and gifted children, street and working children, children from remote or nomadic populations, children from linguistic and ethnic or cultural minorities and children from other disadvantaged or marginalized areas or groups. Inclusive Education is giving access to all and equally. It fosters the principle of access, participation, and achievement of all the learners whenever possible. There should not be any kinds of discrimination on any grounds.

According to the RPWD Act, 2016 a person with disability means a person with long term physical, mental, intellectual or sensory impairment which, in interaction with various barriers, may hinder his/her full and effective participation in society equally with others. The Act specifies the following disabilities: autism spectrum disorder; blindness; low vision; cerebral palsy; chronic neurological conditions, deaf-blindness; haemophilia (bleeding disorder where blood does not clot normally); hearing impairment; intellectual disability; leprosy cured; loco motor disability; mental

illness; muscular dystrophy (muscle diseases that weaken the musculoskeletal system and hamper locomotion); multiple sclerosis (affects nerve cells of brain and spinal cord); specific learning disability; speech and language disability, sickle cell disease, thalassemia (a blood disorder in which the body makes an abnormal form of hemoglobin); acid attack victims, Dwarfism and, multiple disability (Bharati, 2018). Inclusion also seeks to provide equalisation of educational opportunities to all the learners keeping in mind their varied needs and requirements. There is a need to be more accountable for both social and physical inclusion in educational institutions by acknowledging the students from various socio-economic backgrounds, cultural and ethnic backgrounds, and having diverse physical needs. Building the students' confidence and also preparing them to feel an imperative part of the larger society and not a segregated entity. All these students must feel belonged to the place where they come to learn, this is what inclusion in education could be defined as (NCERT, 1993-2000).

Inclusion can be broadly categorised from perspectives such as –

- Physical inclusion
- Social inclusion
- Cognitive inclusion

To make the concept of Inclusive Education a reality apart from any other factor the most important one is to have trained teachers having the willingness to deal with it (NCERT, 2005). Every teacher in an Inclusive school is a key person who is responsible for the success or failure of Inclusion. Research on Inclusive Education has identified four core values that undergird teacher's competence in developing inclusive practices; (a) valuing learner diversity as a resource and asset, (b) Supporting all learners, (c) Working with others, collaboration and teamwork and (d) continuing personal professional development (UNESCO, 2017).

To step towards Inclusive Education is gradual move and it requires systemic changes in the education system. At first, to welcome students from all the aspects and sections of society the basic barriers has to be removed; starting with improvement of Infrastructure, curricular materials, training of teachers and other professionals, building a strong leadership, developing a positive outlook and self-efficacy of the people involved in inclusion such as teachers, principals, parents, students and community members.

In India, the concept of Inclusive Education is still at the initial stage. Therefore it is important to enabling the elementary level teachers to successfully implement the core idea of Inclusive Education in their classroom for which proper Integration of Inclusive Education at the D. El. Ed. programme is necessary. It will prepare the teachers in such a way that they develop a positive attitude and efficacy towards Inclusive Education and so that they can be competent enough to address the varied needs of the classroom.

### **5.1.1 Rationale of the Study**

There have been efforts all around the world for almost last three decades to make the education system Inclusive. There were various policies and programmes that have been formulated to provide education to children with special needs in the mainstream setup. All these initiatives aim to promote inclusion in education. Inclusive Education values and celebrates the diversity among students and recognizes their individual ability considering the issues of rendering human rights and equity among them (Hornby, 2014). Inclusive Education is not a policy it should be a practice, to develop every school into an inclusive one (Ainscow and Booth, 2002). One of the important components that contribute to IE is a trained teacher who is able to successfully cater to the diversified need of the classroom.

The training of educators needs to adapt to the shifting requirements of the educational system. To achieve this goal, teacher education programmes must train their students to be: a) active members of a group of people who make a mindful attempt for curricular renewal so that it is relevant to the needs of today's students; and b) hopeful, compassionate, and humanitarian facilitators in teaching-learning situations that allow learners (students) to discover their talents, realise their physical and intellectual potential to the fullest, and develop personality and enviable social and human values to act as conscientious citizens (NCERT, 2005).

It is recommended that teacher education programmes incorporate practical experiences for teachers to engage with children in authentic settings, rather than solely relying on theoretical instruction about child development. This should elucidate the psycho-social attributes and needs of learners, including their unique abilities and characteristics, as well as their preferred mode of cognition, motivation, and learning that may stem from their home and community socialization (NCTE, 2009). Thus it is very much important that the teacher education programme at

elementary level must include the components of Inclusive Education in their training programme to empower the student teacher to develop his/her personality in such a way that it is able to cater the needs and demands of every student in the classroom (Lancaster & Bain, 2010; Sreeja, S.2017; NCTE, 2009 & Julka, A. n. d.).

Establishment of District Institute of Education and Training (DIET) is one of the major steps to improve upon the quality of Elementary Teacher Education. DIET focuses on developing the competencies of the teachers in such a way that they become sensitive towards their profession and can understand the needs of the students of their classroom. DIETs have the responsibility to increase the capabilities of educators by way of the organisation of seminars and workshops on a variety of educational subjects for the purpose of professional development. It works as a nodal institute for pre-service and in-service Elementary Teacher Education Programme. At present, the biggest challenge in front of IE is that the teachers teaching in the schools do not have much knowledge or skills how to accommodate the children with diverse needs in the normal classroom, what teaching strategies would be best applicable for the children. However, in the teacher education programmes also Inclusive Education is not kept at the center in most of the teachers training programmes it is taught merely as a paper in their course (Julka, 2004).

Most of the researches conducted last two/three decades have majorly focused on the Access, (Peter, 2004; Acedo, 2008; Miles, and Singal, 2010) status, (Rahman, 2011; Mawangi, & Orodho, 2014), attitude (Avramidis & Norwich 2002; Ozokcu, 2018) and teacher training (florian, & Linklater, 2010; Cameron, 2017). Studies conducted by (Kalita, 2013; Bhattacharya, 2020; Babla, 2017; Devi, 2019) majorly focused on status of IE, efficacy of pre-service teachers and on specific disability. The researcher could not locate any studies that were being conducted in Assam on the teacher training programme at primary level with relation to the efficacy of student teachers in conducting an inclusive classroom. There was a lacuna of a comprehensive study understanding the teacher education programme from an inclusive outlook. Most of the studies related to teacher training emphasized on secondary education only. The present study intends to investigate the inclusion of Inclusive Education component in the D.El.Ed. programme in terms of curriculum, infrastructural and human resources, and how the teachers are being prepared to work in an inclusive classroom, their perception and self-efficacy in dealing with the

children in an inclusive setting and pedagogical processes adopted to teach in same classrooms.

### **5.1.2 Statement of the Problem**

The present study is entitled as “**Study of Inclusive Education in the Elementary Teacher Education Programme in Assam**”

### **5.1.3 Significance of the Study**

Inclusion is regarded as process of change and adaptations. This change must be endured considering the students’ requirements. To be able to create such changes and modifications it is important to empower the teachers’ community through various processes. One of the significant ways is to induce inclusive education contents in the teacher training programmes at various stages.

Teacher education programmes in India have been given adequate importance by various policies and programmes. Recently, NEP 2020 has also laid major recommendations for improving the teacher education system in India. In the context of recent advancements in school education and teacher education, Department of Education of Groups with Special Needs (DEGSN), NCERT has also emphasized the needs to identify gaps in teacher education programmes from the perspective of Inclusive Education.

Therefore, this study aspires to investigate various components of teacher education programme in order to understand and find out the amalgamation of Inclusive Education in the pre-service elementary teacher education programmes. This study has focused on understanding the construction of the curriculum from an inclusive education perspective, studying the infrastructural facilities in the TEIs, understanding the perception of the student teachers and teacher educators and their level of self-efficacy.

For the implementation of inclusive education at the elementary level and to achieve all the goals stated by the government for an inclusive system of education. It is imperative to train our prospective teachers and up-skill the teacher educators for inclusive teacher training. Research conducted over the years have proved that teachers training and teachers perception plays a significant role in IE. Thus, this study becomes highly pertinent to understand the process. The findings of the study would contribute to redesign and restructure the existing curriculum of elementary

teacher education programme in Assam. Moreover, the findings of the study would also bring the focus on developing infrastructural facilities in DIETs of Assam. The NCTE guideline 2022 had also stressed on the same point. Further, the findings would reveal about how the student teachers and the teacher educators perceive Inclusive Education as an integral part of the education system. It would also contribute to understand self-efficacy of both the groups.

Findings of this study would provide composite framework for the teacher education institutions at elementary level to improve the existing elementary teacher education programme and contribute to prepare teacher more confident in managing an Inclusive classroom.

#### **5.1.4 Operational Definitions**

**Inclusive Education:** In this present study Inclusive Education means, a system of education that includes Children from both physically and socially disadvantaged sections despite their differences, and provides opportunity of being part of the same classroom as other children of their age, and gives them the opportunity of being exposed to the curriculum to their optimal potential. In the present study Inclusive Education also refers to curricular adaptation, infrastructural resources, perception and self-efficacy for Inclusive classroom in D.El.Ed. Programme of DIET's of Assam.

**Elementary Teacher Education Programme:** In the present study Elementary Teacher Education Programme refers to the two-year Diploma in Elementary Education (D.El.Ed.) offered by DIET's in Assam.

**Perception:** In the present study Perception refers to the concept and understanding of Inclusive Education among teacher educator and student teacher.

**Self-Efficacy:** In this study, Self-Efficacy refers to the ability of the teacher educator and student teacher to work in an Inclusive classroom.

#### **5.1.5 Research Questions**

1. How the concept of Inclusion is reflected in the Curriculum in terms of the Theory, Practicum, and Internship of D.El.Ed Programme?
2. How far the Infrastructural and Human Resources of DIET's promote an Inclusive setup?
3. What is the Perception of Teacher Educator on Inclusive Education?

4. What is the level of Self-efficacy of Teacher Educator for preparing teachers for Inclusive classrooms?
5. What is the Perception of Student Teacher on Inclusive Education?
6. What is the level of Self-efficacy of Student Teacher for teaching in an Inclusive classroom?
7. What will be the Suggestive Framework for Integration of Inclusive Education in the D.El.Ed Programme?

#### **5.1.6 Objectives of the Study**

1. To analyse the Curriculum from the perspective of Inclusive Education in terms of-
  - a. Theory
  - b. Practicum
  - c. Internship.
2. To study the Infrastructural and Human Resources for an Inclusive setup in the DIETs.
3. To study the Perception of Teacher Educator and Student Teacher towards Inclusive Education.
4. To study the level of Self-efficacy of Teacher Educator and Student Teacher for Inclusive Education.
5. To prepare a Suggestive Framework for Integration of Inclusive Education in the D.El.Ed programme.

#### **5.1.7 Hypotheses**

1. Hypothesis H<sub>0</sub> 1: *There is no significant difference in the mean scores of male and female teacher educators related to self-efficacy toward Inclusive Education.*
2. Hypothesis H<sub>0</sub> 2: *There is no significant difference in the mean scores of male and female teacher educators related to efficacy in managing behaviour.*
3. Hypothesis H<sub>0</sub> 3: *There is no significant difference in the mean scores of male and female teacher educators related to efficacy in collaboration.*
4. Hypothesis H<sub>0</sub> 4: *There is no significant difference in the mean scores of male and female teacher educators related to efficacy in inclusive instruction.*



5. Hypothesis H<sub>0</sub> 5: *There is no significant difference in the mean scores of male and female student teachers related to self-efficacy toward Inclusive Education.*
6. Hypothesis H<sub>0</sub> 6: *There is no significant difference in the mean scores of male and female student teacher related to efficacy in managing behaviour.*
7. Hypothesis H<sub>0</sub> 7: *There is no significant difference in the mean scores of male and female student teacher related to efficacy in collaboration.*
8. Hypothesis H<sub>0</sub> 8: *There is no significant difference in the mean scores of male and female student teachers related to efficacy in inclusive instruction.*

## **5.2 Review of Related Literature**

Chapter two of this research work deals with the Review of Related Literature. The reviews in this study had been categorized under five broader themes such as reviews related to Inclusive Education, reviews related to Curriculum Analysis, reviews related to Perception towards IE, reviews related to Self-efficacy towards IE and lastly reviews related to Teacher Training and IE. These reviews were later categorised as international and national levels. The researcher conducted a thorough analysis of the recent studies conducted in the aforementioned themes related to the area of study.

## **5.3 Research Methodology**

Chapter three of the present study deals with the research methodology of the study. In this study, the Pragmatic paradigm of research has been adopted to investigate the research problem. Pragmatism as a philosophical paradigm of research work arises out of actions, situations and consequences instead of precursory event (Creswell, 2014). As a research paradigm it promotes plurality; of philosophical approaches and methods (Creswell & Clark, 2011). Researchers uses methods that best works for investigating the particular research problem in the most appropriate way (Feilzer, 2010). Research questions or matter investigated are given utmost importance in pragmatic paradigm of research; it supports that notion that generating results through qualitative and quantitative research is practical and required to address certain type of research questions (Bryman, 2006, Maarouf, 2019).

### **5.3.1 Research Design**

As per the research questions and objectives of the study the researcher have used Descriptive Survey Research Design for the present study, wherein both quantitative and qualitative data had been collected.

### **5.3.2 Research Methods**

This study aims to understand the prevailing perception and self-efficacy of the elementary pre-service teacher of Assam. Therefore, Descriptive Survey Method has been used for the present study.

### **5.3.3 Population**

In the present study Teacher educator and student teacher of D.El.Ed programme of District Institute of Education and Training (DIETs) of Assam constitutes the population of this study. There are 23 DIETs functioning under SCERT in Assam spreading across 23 districts of the state.

### **5.3.4 Sample and Sampling Techniques of the Study**

Sample is the representative unit of the population systematically selected by following a scientific method. In this study the sample constitutes of six DIETs out of 23 DIETs from which 245 student teachers and 39 teacher educators which constitute a total of 284 samples have been selected for the study.

The sample of the study are selected through multi stage sampling technique, at the first stage by using simple random sampling technique in which six DIETs were selected which was spreading over four divisions of Assam namely, North Assam division, Lower Assam division, Central Assam division and Upper Assam division. In the second stage 245 student teachers (students-teachers enrolled in the second year from the selected DIETs) and 39 teacher educators (from the Pre-service teacher Education Department, PSTE) of these six DIETs were taken as final sample of the study using random sampling technique.

### **5.3.5 Tools used for Data Collection**

In any research well-structured and systematically developed tools are the most important part. The stated objectives are addressed and information related to it is

gathered through the tools developed by the researcher. In this study, the following tools were adopted for collecting data.

1. Document analysis was used to collect and analyse the data to study the first objective.
2. A checklist was developed by the researcher to study the second objective of the study.
3. A semi-structured questionnaire was developed by the researcher to study the third objective.
4. A standardized tool developed by Umesh Sharma, Tim Loreman and Chris Forlin “Teacher Efficacy for Inclusive Practice (TEIP) Scale” was used to study the fourth objective.
5. Semi- structured interview schedule was developed by the researcher for the teacher- educators.

### **5.3.6 Techniques used for Data Analysis**

In this study to analyse the collected data both quantitative and qualitative data analysis techniques have been adopted. To analyse the first objective of the study the researcher had opted for document analysis and frequency, to study the second objective content analysis, frequency and percentage, to study the third objective content analysis, frequency and percentage had been used and for the analysis of the fourth objective t-test had been adopted.

### **5.4 Major Findings of the Study**

As per the analysis of the present the study the following major findings had been found

#### **Section-I**

1. The findings of the curriculum analysis have stated that 13.25% objectives were found to be overtly related to IE.
2. In the sub-units of the elementary teacher education curriculum 6.50% were overtly related.
3. The findings suggested that 6.45% practicums and 16.67% internship activities were found to be overtly related.

4. The findings related to the thematic analysis of the curriculum revealed that 11 objectives, 58 sub-units and 5 practicums in the whole curriculum found to be under the theme of identification of CWSN and SEDGs.
5. Findings also showed that 17 objectives, 42 sub-units, 14 given practicum and 9 school internship activities of the programme were related to the theme adopting and modifying the teaching practices.
6. It was also revealed from the analysis that 5 related objectives, 26 sub-units, 1 practicum, 4 school internship activities of the entire curriculum were found to be under the theme of Assessment of students in Inclusive Classroom
7. With reference to the theme “Working in collaboration”, it was found that 7 related objectives, 39 sub-units, 3 related practicums and 9 school internship activities were under the stated theme.

## **Section-II**

8. The findings related to infrastructural facilities had revealed that out of all the sampled DIETs 16.67% have ramp facilities with handrails on both sides to every building, suitable and separate toilet facilities for students with disability, and assistive devices for teaching-learning of students with special needs. Majority (66.67%) of institutes could not provide a spacious toilet especially modified for entry of wheelchair not any grab-rails were made inside the toilet. In 33.33% of institutes, the drinking water facility was not accessible to children with disabilities. In 33.33% of institutes students with disability can easily move around and access every building in the institute.
9. Administrative services such as availability for counseling services were available only in 33.33% of institutes. Cell for disability was not present in any of the sampled DIETs.
10. In 83.33 % of DIETs sitting arrangements in the library were suitable and accessible to all the students. The bookshelves were at accessible heights for students with disabilities in only 66.67% of institutes.
11. Findings had revealed that only in 16.67% of institutes, the sitting arrangement was made comfortable for children with disabilities.
12. It was found that in 66.67% of institutes the laboratories were not user-friendly for students with disability.
13. It was stated that in 83.33% of institutes there was no special educator available, and no counselor and therapists had visited. It was also found that

only 33.33% of institutes had staff appointed to cater to the needs of children with disability and resource teachers were available for assisting the general teachers.

### **Section-III**

14. The major findings of the perception of student teachers and teacher educators stated that majority of the student teachers and teacher educators were having clear understanding of the concept of IE. But, were found to be reluctant towards including students with moderate or severe disability in their classroom.
15. The findings showed that 10.26 % teacher educators and 21.22% student teachers believed that students with disability cannot learn better in an Inclusive environment. It is also evident from the results that 53.85 % teacher educator and 68.98% student teachers perceive that students from SEDGs could not adjust in Inclusive classroom.
16. It is also exhibited from the results that 15.38% teacher educators and 18.78 % student teachers denied the benefit of inclusive set up for students with special needs.
17. Findings revealed that 71.79% teacher educators and 84.08% student teachers believed that IE provides better learning opportunity for students. For majority of the students the most beneficial aspect of inclusion is that it promotes right attitude among students towards IE. It was also found that majority of the respondents believed that inclusion helps those who are in need, it develops team-spirit, peer-learning, develops sensitive attitude and contributes to become a good citizen.
18. Findings related perception towards facilitating inclusion of students with special needs stated that 74.36% teacher educator and 74.29% student teachers perceived that providing extra care and attention to the students with special needs can facilitate their learning. The teacher educators (89.75%) and 73.88% student teachers perceived that providing assistance to students can help them in inclusive classroom. While, 79.18% student teachers stated that asking students to work in groups can facilitate their learning.
19. Findings also revealed that 71.79% teacher educators and 73.47% student teachers agreed on providing leadership task to students with special needs for facilitating their learning.

20. The perception of the respondents towards chances of learning of specific disability students were not found to be very positive. It is seen that 74.36% teacher educators and 82.45% student teachers denied that learners with ADHD could have better chances of learning in inclusive classroom.
21. However, 51.28% teacher educators and 37.55% student teachers supported better chances of learning of children with learning disability in IE.
22. Regarding the perception towards developing an Inclusive infrastructural facility. Almost all the (100%) teacher educators and majority of the student teachers positively perceived the requirement and importance of an Inclusive infrastructural facility in the DIETs.
23. The findings related to classroom management in IC showed that almost all (100%) teacher educators and 93.88% student teachers agreed that the classroom arrangements should be modified according to the need of an IC.
24. However, 51.28% teacher educator and 77.96% student teachers stated that managing students with disability is difficult in classrooms. But only, 28.21% teacher educator and 39.18% student teachers perceived that children with special needs are unadjusted in inclusive classroom.
25. It was found that 58.97% teacher educators and 53.06% student teachers reported that completing the syllabus in inclusive classroom is difficult. Whereas, only 23.08% teacher educators agreed that the quality of education is compromised in inclusive classroom
26. Perception of the respondents towards psychological and behavioural aspect of students in IE had shown that 100% teacher educators 95.51% student teachers agreed on contribution of inclusive education in the adjustment of students with special needs in the society. Majority of the teacher educators (97.44%) and student teachers (95.51) perceived that IE develops self-confidence among students with special needs and it makes other students more sensitive towards CWSN.
27. Findings had also revealed that majority of the student teachers (60.00%) perceived attention seeking as a major behavioural problem with students in Inclusive classroom. Bullying was also found to be one of the major behavioural problems among students with special needs in IE as perceived by the teacher educators.
28. Regarding developing diversified curriculum for students in IC majority (97.44%) teacher educators and (88.16%) student teachers had shown positive

perception. Findings had also stated that 92.31% and 80.82% teacher educators and student teachers respectively exhibited that inclusive curriculum can be beneficial for all learners. However, 84.62% teacher educators and 71.02% student teachers believed that curriculum should be based on individualized needs.

29. Regarding the nature of the curriculum 79.49% teacher educators and 73.06 % student teachers perceived that the inclusive curriculum should be able to address diversity properly. Responded had stated that multiple examples should be provided, curriculum should be contextualized, clear educational aims should be previously determined and it should be activity based in the curriculum.
30. It was also evident from the findings that 74.36% teacher educator and 77.55% student teachers agreed that inclusive curriculum should consider language, culture and identity of the learners.
31. Lack of TLMs and increased workload had been found as the major problems while developing lesson plans for IC.
32. Majority (94.87% TE, 97.96% ST) of the respondents had stated that in teaching an IC different teaching methods and strategies should be used.
33. However, it had been found that only 51.28% teacher educators and 61.22% student teachers stated that developing individualized lesson plan is required in an inclusive classroom.
34. Majority (87.18%) of the teacher educators expressed that activity based teaching strategies is most applicable teaching strategies in Inclusive classroom.
35. The respondents had stated that the best suitable method of teaching for students in IE for students with intellectual disability should be activity method (38.46%), remedial teaching (15.38%), teaching in small steps (10.26%), play-way method and discussion method (7.69%), brain storming and peer learning (5.12%), experiential learning and use of visual stimulus (2.56%) as best teaching methods.
36. The findings had stated that for teaching students with physical disability teaching methods such as, ICT enabled teaching (46.15%), Experiential learning (30.77%), Discussion method (7.69%), Activity based strategies and IEP (5.12%), Learning by doing, Story-telling (4.80%) and Co-operative learning (2.56%).

37. It was found that to teach students with multiple disability teaching methods such as Peer-teaching (38.46%), IEP (17.95%), Discussion method and ICT enabled teaching (12.82%), Experiential learning (7.69%), Remedial Teaching (5.12%), Activity method and Tactile learning strategies (2.56%).
38. Findings had suggested that students with chronic neurological and blood disorder could be taught using learning by doing as a teaching method along with Peer-learning, Yoga and Co-operative learning. For Students with Mental illness (Mental behaviour) Small steps learning (25.64%), Co-operative learning and Activity method (23.07%), ICT enabled teaching (15.38%), Yoga and Outdoor teaching (0.40%) and Play-way method (12.82%) perceived to be most appropriate. The findings further stated that SEDGs (socio-economically disadvantaged groups) should be taught using Peer learning (32.65%), Co operative learning (26.54%), Activity method (16.33%), UDL (8.16%) and Group learning, Team teaching, IEP and Lecture method (4.08%).
39. Half of the respondents perceived that CWSN cannot participate in all the co-curricular activities. The findings further showed that 61.54% teacher educators and 62.45% student teachers also agreed that CWSN are reluctant towards co-curricular activities. However, almost all the respondents had perceived that co-curricular activities develop adjustment skills among students with special needs.
40. The findings related to perception of the respondents towards teacher training programmes showed that 89.74% teacher educators and 77.14% student teachers believed that teacher education should give more stress on preparing teachers for inclusive classrooms. The findings had revealed the urge to prepare the teachers with adequate skills to teach in IC. The respondents had perceived that IE provides scope for skill development of teachers, 87.18% teacher educators and 71.43% student teachers reported that inclusive practices should be promoted through in-service training. They had also stressed on providing hands-on training for IC.
41. The majority (94.87%) teacher educators and (90.6%) student teachers agreed that IE should be an integral part of the internship process and teachers should be able to develop IEPs (89.74% teacher educators and 88.57% student teachers) for students.
42. The findings regarding the role of administration had stated that all the respondents reinstated on the importance of the role of administration on fund



allocation, removal of infrastructural barrier, organising training and workshop programmes. The findings had also revealed that active administration is required in TEIs for providing scope for professional trainings and collaboration between administration and vocational institutes and training centers.

#### **Section-IV**

43. The findings related to self-efficacy of the teacher educators had stated that 97.44% of teacher educators had an extremely high level of self-efficacy towards IE.
44. The findings had stated that the mean and SD of female teacher educator is  $M= 92.30$ ,  $SD= 7.685$  and for males, it is  $M= 92.33$ ,  $SD= 8.835$ . At  $df= 37$  the calculated t-value is  $-.013$  and the p-value is  $.989$  which is greater than the significance level of  $0.05$ . Therefore, the stated null hypothesis is accepted which depicts that there is no significant difference in the total self-efficacy score of teacher educators on the basis of gender.
45. The findings also showed that at  $df= 37$  the calculated t value is  $-.917$  for efficacy in managing behavior,  $.618$  for efficacy in collaboration, and  $.182$  for efficacy in inclusive instruction with p-value  $p= .365$ ,  $p= .540$  and  $p= .857$  respectively which is greater than the significance level  $0.05$ . Therefore, from this result, it is clear that the stated null hypotheses  $H_0 2$ ,  $H_0 3$ , and  $H_0 4$  were accepted which depicts no significant difference in the total self-efficacy score of teacher educators on the basis of gender in any dimensions of the TEIP scale.
46. Findings related to the self-efficacy of the student teachers revealed that majority of the student teacher respondents i.e.  $81.23\%$  were showing a high level of self-efficacy.
47. The findings had also stated that the mean and SD of female student teacher is  $M= 88.34$ ,  $SD= 7.782$  and for males, it is  $M= 90.09$ ,  $SD= 7.541$ . The calculated p-value is  $.114$ , which is greater than the significance level of  $0.05$ . Therefore, the stated null hypothesis is accepted which depicts that there is no significant difference in the total self-efficacy score of student teachers on the basis of gender.
48. The findings depicted that the calculated p-value is  $.000$  for efficacy in managing behavior,  $.027$  for efficacy in inclusive instruction which is lower

than the significance level 0.05, and the found p value is .206 for efficacy in collaboration, which is greater than the significance level 0.05. Therefore, the stated that null hypothesis H<sub>0</sub> 6 was rejected for efficacy in managing behavior where males are found to be more efficacious in managing behavior in inclusive education than their counterparts. The null hypothesis H<sub>0</sub> 8 for the dimension efficacy in inclusive instruction was also rejected and it shows that the males (M=30.57) show slightly higher efficacy in providing inclusive instruction to the students than females (M=29.63).

However, for the dimension efficacy in collaboration, there is no significant difference among male and female student teachers hence the null hypothesis H<sub>0</sub> 7 was accepted.

### Section-V

In accordance with the findings of the present study and related literature a framework for integrating Inclusive education in the D.El.Ed Programme is prepared. This framework had been designed keeping in mind the views, suggestions and opinions received from the practitioners and stakeholders (student teachers and teacher educators) in the form of the findings of the research work.

**Table No. 5.1: Suggestive Framework for Integration of Inclusive Education in Elementary Teacher Education Programme**

Dimensions	Suggestive Framework
<b>Redefining Elementary Teacher Education Curriculum</b>	<ul style="list-style-type: none"> <li>• In the theory section of the curriculum content addressing to Inclusive classroom should be added. For example: PEDAGOGY OF MIL –I paper Content related to <i>teaching students with language difficulty should be incorporated.</i></li> <li>In the paper S3.6 CHILDREN’S PHYSICAL AND EMOTIONAL HEALTH EDUCATION <i>unit 2: Understanding children’s health needs</i> should include content related to <i>“Health needs of CWSN”.</i></li> <li>• In the practicum section of the curriculum practical related to teaching students with special needs or understanding</li> </ul>

	<p>students with special needs should be included.</p> <p>For example: “Designing activities/materials to assess writing skills” practicum should add along as “<i>designing activities/materials to assess writing skills of students with learning difficulty</i>”.</p> <ul style="list-style-type: none"> <li>• In the internship activities “<i>Development of useful Teaching-Learning Materials (TLMs)</i>” should be extended to “<i>Development of useful and interactive Teaching-Learning Materials (TLMs) for students with special needs</i>”</li> </ul>
<p><b>Making Adaptations in the Infrastructure</b></p>	<p><b>Inter-Building connectivity</b></p> <ul style="list-style-type: none"> <li>• Inside the campus the inter-building connectivity should be improved as per the requirements of students with special needs</li> </ul> <p>For example: Ramps between the two buildings should be made for smooth mobility inside the campus.</p> <p><b>Toilet Facilities</b></p> <ul style="list-style-type: none"> <li>• At least one toilet for students with disability should be made in every DIET irrespective of enrollment of students.</li> </ul> <p><b>Classroom Arrangement</b></p> <p>6. In cases where lift facility or ramp facility could not be made in first floor or second floor, all the labs and classrooms should be preferably set-up in the ground floor where it should be accessible to everyone.</p> <p><b>ICT Facilities</b></p> <ul style="list-style-type: none"> <li>• Desk benches in the classroom should be able to accommodate students with special needs.</li> <li>• Use of ICT facilities, availability of projectors in classrooms should be made available.</li> <li>• For blind students Braille scripts and teachers trained in teaching Braille should be made available.</li> </ul>

	Recreational facilities, library facilities should also be restructured to suit to the needs of students with special needs.
<b>Understanding Concept of Inclusive Education</b>	<ul style="list-style-type: none"> <li>• The student teachers and teacher educators should be given training on developing understanding about the aspects of Inclusion.</li> <li>• Empower the student teachers in preparing and using TLMs for diverse group of students in Inclusive Education.</li> <li>• Encourage students via interaction sessions and field visits to special school to develop their confidence in teaching students with severe disability as well.</li> </ul>
<b>Understanding Classroom Management</b>	<ul style="list-style-type: none"> <li>• Mock sessions on classroom sitting arrangements, blackboard placement should be given to the student teachers.</li> <li>• Provision for teaching in an inclusive classroom should be made available during the internship to train student teachers in classroom management skills.</li> <li>• Orientation should be given for understanding the students' behaviour in inclusive classroom.</li> <li>• Practical lesson plan development activity for an inclusive classroom should be given to the student teachers.</li> <li>• Teacher educators during the course of teaching should develop inclusive lesson plans as well.</li> </ul>
<b>Practicing Managing Behaviour</b>	<ul style="list-style-type: none"> <li>• Role plays should be organized to orient the student teachers to manage the behavioural issues in an inclusive classroom. <i>For example, "teaching in a classroom where student with hard of hearing, and language difficulty is present how would you teach poetry to them?"</i></li> <li>• During the internship programme, student teachers should be asked to record a diary for classroom management issues which should be advised and solved by the teacher educator.</li> </ul>

	<p>For example “<i>if a student is very much loud during the class and creating disturbances for other student but he/she is very good at studies and completing tasks. How do we manage such students?</i>”</p>
<p><b>Adopting Pedagogy for Inclusive Classroom</b></p>	<p><b>Physical Disability</b></p> <ul style="list-style-type: none"> <li>• Student teachers should be trained in using IEP, UDL, ICT enabled teaching, brainstorming and story-telling as method of teaching for students with physical disabilities.</li> <li>• Training should consider subject-wise appropriate adoption of the teaching methods.</li> </ul> <p><b>Intellectual Disabilities</b></p> <ul style="list-style-type: none"> <li>• Orientation on adopting activity based teaching, project method, peer teaching and collaborative teaching as per the intellectual capacity of students.</li> <li>• Hands-on experience on devising skill for use of small-step teaching method.</li> <li>• Slow learners as well as gifted learners should also be taught using experiential learning, Collaborative teaching, Project method and IEP.</li> </ul> <p><b>Mental Behaviour or Mental Illness</b></p> <ul style="list-style-type: none"> <li>• Orientation should be given to use game based teaching method of to teach for example students with ADHD or students with learning disability.</li> <li>• Engaging students in outdoor activities for teaching significant concepts.</li> <li>• For teaching students with behavioural issues yoga, mindfulness and teaching in small steps could be adopted as a method of teaching.</li> </ul> <p><b>Chronic Neurological and Blood Disorder</b></p> <ul style="list-style-type: none"> <li>• Training should be given to the student teachers and teacher educators on adopting Yoga and Experiential teaching and Inclusive pedagogy to teach students with thalassemia or sickle cell disease.</li> <li>• Exercise on using cooperative learning and Peer learning</li> </ul>

	<p>as a teaching method for students with neurological disorders in an IC.</p> <p><b>Multiple Disabilities</b></p> <ul style="list-style-type: none"> <li>• During the internship students should be advised to use IEP, UDL, Peer teaching, play way method and learning by doing as a teaching method as suitable in the subjects.</li> </ul> <p><b>Socio-Economically Disadvantaged Groups</b></p> <ul style="list-style-type: none"> <li>• For promoting social inclusion cooperative learning, group learning, peer teaching and team teaching should be adopted as a method of teaching.</li> </ul>
<p><b>Realizing the Role of Administration in TEIs</b></p>	<p>For promoting more inclusive elementary teacher education programme the administration should be able to make the given provisions.</p> <ul style="list-style-type: none"> <li>• Administration should provide professional freedom to teachers to work in an Inclusive classroom.</li> <li>• Organise collaborative work with special schools and professionals like, speech therapist, Braille experts, sign language experts and counselors etc.</li> <li>• The administration should provide incentives of different kinds to the student teachers and teacher educators for managing an Inclusive classroom.</li> <li>• Facility for appreciation should be there from the administration side to acknowledge the efforts of teachers to boost their confidence.</li> </ul>

### 5.5 Educational Implications

From the analysis of the results, the major findings of this study exhibits some very important educational implications incorporating components of IE in the Elementary Teacher Education Programme in India. This study has highlighted that in the different parts of the Elementary Teacher Education Programme, IE should be intriguingly incorporated to provide an overview to the student teachers for a large scale practice of Inclusion in teacher education. The importance of having a skilled and knowledgeable teacher as the primary requirement for establishing an inclusive classroom has been emphasized in prior research, governmental reports, and NEP

2020 recommendations. The promotion of quality and accessible elementary Inclusive Education to students is a primary objective of the National Education Policy (NEP) 2020 in India, where Inclusive Education (IE) is still in its nascent stage. In order to attain the specified goal, it is imperative to enhance the programme for Elementary Teacher Education. Consequently, the findings of this study have yielded significant educational implications. They are stated as follows-

**A. For Policy Makers**

1. The papers related to IE which are in the last semester of the D. El. Ed programme could be placed in the starting semesters, so that the student teachers from the very start could develop an inclusive outlook through the elementary teacher education programme. .
2. NEP 2020 has primarily given importance on developing the education system into an Inclusive one. Therefore, the policy makers and curriculum developers should make a conscious effort to include IE content in the curriculum with keeping the essence of teacher education curriculum.
3. In the teacher education curriculum practicum related to IE should be explicitly stated. This would empower the teacher educators and the student teachers as they would have some experiential exposure to it.
4. It is required to ensure the proper transaction of the elementary teacher education curriculum for preparing teachers who would be able to facilitate inclusion in the classroom.
5. The suggestive framework would provide a guiding document for the policy makers to reorient and redesign the elementary education programme from an inclusive perspective.

**B. For Administrator**

1. Administrative initiatives are required for inclusive set-up at any educational institution. Therefore, the administrators in the TEIs should ensure to develop infrastructural facility for an inclusive set-up inside the TEIs.
2. It is advisable that other basic amenities such as drinking water facility, toilet facilities and classroom arrangements should be made according to the need of an inclusive set-up.
3. The TEI administration should organize collaboration with the local and national organizations working in IE. In addition, specialists should be invited to give practical experience to the student teachers and teacher educators.

4. The findings of this study have also give emphasis on the needs of organizing hands-on workshops in the TEIs.
5. It is advisable to appoint specialized teachers such as speech therapist, itinerant teachers.
6. The suggestive guideline would help the administrators in eradicating the issues of inclusive set-up and facilitate inclusive environment.

#### **C. For Teacher Educators**

1. From the findings it is realized that it is required to provide skill-based experience to the teacher educators regarding preparing student teachers to teach and manage an Inclusive classroom.
2. The high confidence and efficacy of the teacher educators should be adequately utilized and channelized through providing appropriate guideline to them in order to teach the student teachers.
3. Teacher educators should be conscious of using inclusive pedagogy in the classroom. So that the student teachers would have a practical understanding of it. They should make the elementary teacher education programme inclusive in nature.
4. Inclusive practices should be adopted by the teacher educators in their classrooms.
5. Monitoring the lesson plans developed by the student teachers and their internship activities from an inclusive perspective should be crucial.
6. The suggestive guideline would help the teacher educators in preparing student teachers for managing an inclusive classroom and modifying the curriculum as per the need of the classroom.

#### **D. For Student Teachers**

1. The whole Elementary Teacher Education Programme functions to prepare student teachers to be diligent teachers at elementary level. Since, by laws and policies all the schools should be inclusive in nature. Therefore, the Elementary Teacher Education Programme should prepare student teachers to able to teach students with special needs in an inclusive classroom and implement inclusion in the school classrooms at the elementary level.
2. They should be encouraged to learn inclusive pedagogy and classroom management skills for IE.
3. In the Elementary Teacher Education Programme developing an inclusive lesson plan should be a requisite for students during their internship.



4. Student teachers should be given proper orientation and practical exposure to the benefits and difficulties of an IC. So, that during the course itself they could develop an outlook to the ways through which they could adopt inclusion in their classrooms.
5. Provisions should be made to develop their self-efficacy and strengthen their perception for IE
6. Student teachers should be encouraged to conduct field work and carry out action research on IC so as to develop their understanding of teaching in an IC in IE system.
7. The suggestive guideline would facilitate student teachers in selecting appropriate teaching strategies for students with special needs. It would help them in creating an inclusive set-up as well.

The researcher had developed a suggestive framework, and it was based on all of the findings that came from this study. The incorporation of an Inclusive Education component into the Elementary Teacher Education Programme might be aided by following the guidelines provided by this framework.

## **5.6 Limitations**

The study is conducted to understand the teacher preparation program at elementary level from an Inclusive perspective. Therefore, it could not be generalized to other levels of teacher education program such as secondary level. However, this study would be extremely useful for the practitioners and researchers with related milieu.

## **5.7 Recommendation for Further Studies**

As the researcher conducted the present study and from the findings of this study the following potential areas were identified, where similar studies could be conducted.

1. This study was conducted on Elementary Teacher Education level in Assam. Similar studies could be undertaken in other states of north east India and other parts of the country as well. Since north-east region in itself is very much diversified in terms of language culture and geographical set-up therefore it would be important to understand the nature and requirement of

Inclusive Education in the teacher education programme of other states in North East India.

2. A comparative study of curriculum analysis could be conducted between India and another country which have successfully implemented Inclusive Education in its education system. It would help the researcher to understand the nature of the teacher education curriculum in both the countries.
3. Various Teacher Education Programme and school curriculum could also be analysed from Inclusive point of view for enhancing the quality of curriculum at different level.
4. As the NEP 2020 gives due importance of foundational stage learning. Preparation of the foundation stage teachers from an Inclusive perspective could also be conducted.
5. This study only dealt with the student teachers and teacher educators similar study could be conducted taking into account the policy makers for teacher education and administrators of teacher education institution as well.
6. Internship activities of the student teachers could be analysed from an Inclusive perspective.
7. Study could be conducted on problems faced by a student with special needs in carrying out teacher education programme.
8. Experimental studies on inclusive teaching practices and inclusive pedagogy could be conducted.

### **5.8 Conclusion**

Research conducted in the back days since its inception had studied very profoundly the problems and issues related to IE and its implementation. Pivik et al. (2002), Smith (2008) and Mag, Sinfield, and Burns (2017), and Anderson (2020) had rightly found and stated in their studies that in order to implement inclusive education, the major stakeholder in this process i.e. the teachers need to be prepared adequately. Considering that teachers hold executive positions in inclusive systems, their empowerment and skill enhancement are critical factors in the development of an inclusive education system within our schools. Research pertaining to the perception and self-efficacy of educators towards inclusive education indicates that despite maintaining a favourable outlook towards inclusion, they encountered certain challenges.

The primary concern stems from their insufficient training procedures. If we had to promote inclusion in the schools, the very initial stage i.e. at the elementary level had to be developed in Inclusive environment in terms of curriculum, infrastructure and trained skillful teachers. To achieve this goal the teacher education programme at the elementary level had to be designed according to empower the student teachers to become an excellent teacher in Inclusive schools. NEP 2020 and NCTE had also envisaged on developing an Inclusive teacher education programme. The student teachers of these DIETs would be the practitioners in the schools where inclusion is aimed to be achieved in its totality.

Studies conducted in the field of teacher education and inclusive education would bring out the possibilities and hardships which can be attained and overcome through rigorous efforts of government and the TEIs. This research went ahead with the same underpinning quest of scrutinizing the Elementary Teacher Education Programme from an Inclusive Education. The major question was that whether the Elementary Teacher Education Programme (D.El.Ed) in Assam is preparing student teachers to be able to teach in an Inclusive school set-up? Answer to this quest resulted in an affirmative direction which would contribute a lot in developing Inclusive Education in the educational institutions.