Teacher Education Programme in Bangladesh: Inclusiveness for Children with Disabilities

actionaid

Teacher Education Programme in Bangladesh:

Inclusiveness for Children with Disabilities

Study Team

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Preface

Realisation of the declaration Sustainable Development Goal 4 (SDG4) and its implementation has become a crucial challenge particularly in relation to inclusive education. Like many other countries around the world, Bangladesh committed the international declaration and brought a number of policy reforms to promote inclusive education.

The attempts of the Government for inclusion of children with disabilities into regular school are yet to be fully implemented. As far as inclusion of children is concerned, there is a need for understanding ground reality. Thus a study was undertaken by ActionAid under the Removing Cultural Barriers (RCB) project which implemented by ActionAid Bangladesh (AAB). The study intended to explore the Status of Teacher Education Programme from the perspective of Inclusive Education. The findings of the study were presented at the International Conference on Inclusive Education held in January 2015, with the intent of validation.

It was revealed from the findings of the study that a major reform is required in the existing teacher education curriculum, teacher education institutions, teacher educators and practicum schools for promoting inclusive education.

The principal researcher of this study is Professor M. Tariq Ahsan, PhD, a faculty member of Institute of Education and Research (IER), University of Dhaka. AAB appreciates the contributions of Dr. Ahsan and the members of the study team for employing their quality efforts in conducting the study.

The purpose of publication and wider dissemination of the findings of the study is to inform a wide range of stakeholders such as policy makers, researchers and practitioners in the field of Inclusive Education by bringing to their attention into the ground reality. AAB believes that this document will be instrumental in deepening understanding of Inclusive Education for children with disabilities in Bangladesh on the one hand, as well as undertaking pro-active initiatives towards inclusive teacher education programme on the other.

We are hopeful that the findings and recommendations will be taken up and acted upon. Policy reforms and certain initiatives have not been successful in fully attaining inclusion of children with disability across public and private educational institutions.

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Abstract

Since Salamanca Declaration (UNESCO, 1994), globally there has been a major shift from segregated mode of education to inclusion. Like many other countries around the world, Bangladesh has responded to the international declarations and gone through a number of policy reforms to promote inclusive education. Despite several initiatives, still there are large number of children remain out of school or dropped out from the schools. Among many challenges that are acting as barriers to inclusion, ill-preparation of school teachers are one of the major factors identified by many researchers. This study is an attempt to explore the Status of Teacher Education Program in the Perspective of Inclusive Education for the Children with Disabilities in Bangladesh. A mixed method design was applied in the study. Findings of the study revealed that there are some good initiatives taken by the government for inclusive education. However, teacher education curriculum, teacher education institutions, teacher educators and practicum schools require a major reform for promoting inclusive education. A number of policy, practice and administrative level challenges have been identified in this study. Recommendations have been made to make teacher education in Bangladesh more inclusive.

List of Abbreviations

AAB	ActionAid Bangladesh
AIEC	Access and Inclusive Education Cell
ATO	Assistant Thana Officer
AUEO	Assistant Upazila Education Officer
B.Ed	Bachelor of Education
BUP	Bangladesh University of Professionals
CDD	Centre for Disability in Development
C-in-Ed	Certificate in Education
C-in-SpEd	Certificate in Special Education
CRP	Centre for the Rehabilitation of the Paralysed
CSID	Centre for Services and Information on Disability
DPEd	Diploma in Primary Education
DPE	Directorate of Primary Education
DPOs	Disabled Peoples Organizations
DSHE	Directorate of Secondary and Higher Education
EFA	Education For All
FGD	Focus Group Discussion
HT	Head Teacher
IE	Inclusive Education
IER	Institute of Education and Research
LEA	Local Education Authority
MoE	Ministry of Education
M.Ed	Masters of Education
MoPME	Ministry of Primary and Mass Education
MSW	Ministry of Social Welfare
NAEM	National Academy of Educational Management

NAPE	National Academy for Primary Education
NCTB	National Curriculum and Text Book Board
NEP 2010	National Education Policy 2010
NFOWD	National Forum of Organizations Working with the Disabled
NGO	Non Government Organization
NPA II	National Plan of Action Phase II
PEDP II	Second Primary Education Development Program
PEDP III	Third Primary Education Development Program
PISER	Proyash Institute of Special Education and Research
PTI	Primary Teachers' Training Institute
RCB	Removing Cultural Barriers
SMC	School Management Committee
TO	Thana Officer
TQI-SEP	Teaching Quality Improvement in Secondary Education Project
TTC	Teachers' Training College
UEO	Upazila Education Officer
UN	United Nations
UNESCO	United Nations Educational Scientific and Cultural Organization
URC	Upazila Resource Centre
USAID	US Agency for International Development

Glossary of Terms

Char   A tract of land surrounded by the waters of an ocean, sea, lake, or stream; it usually means, any accretion in a river course

Haor-Baor   Bowl-shaped large tectonic depression. It receives surface runoff water by rivers and consequently, a haor-baor becomes very extensive water body in the monsoon and dries up mostly in the post-monsoon period.

CHAPTER I

Introduction

Since Salamanca Declaration (UNESCO, 1994), globally there has been a major shift from segregated mode of education to inclusion. UNESCO (2009) defines inclusive education as:

> *"process aimed to offering quality education for all while respecting diversity and the different needs and abilities, characteristics and learning expectations of the students and communities, eliminating all forms of discrimination" (p. 18).*

Therefore, it could be assumed that the values of inclusive education would ensure such welcoming environment in schools that would be free from the effects of negative forms of discrimination based on gender, culture, ethnicity, disability, religion or socio-economic and or geographic backgrounds (UNESCO, 1994). However, it is still reported teachers feel less confident in including children with disabilities in their programs (Forlin, Loreman, Sharma, & Earle, 2009; Kim, 2011; Shade & Stewart, 2001). As a result, inclusive education aims to readdress these specific inequities to ensure high quality education through differentiated teaching-learning approaches.

Like many other countries around the world, Bangladesh has responded to the international declarations and gone through a number of policy reforms to promote inclusive education. Bangladesh made primary education compulsory for all children by enacting the Compulsory Primary Education Act 1990 (Ministry of Primary and Mass Education [MoPME], 1990). Besides, the recent National Education Policy 2010 (MoE, 2010) strongly recommended implementing inclusive education at primary education in Bangladesh. However, Bangladesh is facing various challenges to ensure the rights of every citizen into education. Since the DPE & CSID (2002) study, there is no study that published a valid nationwide education related data regarding children with disabilities. However, the DPE & CSID (2002) study claimed that despite a number of policy initiatives to ensure education for all, 89 percent of children with disabilities is left out of education in Bangladesh. Of those who attend schools, a large majority frequently dropout within first few months or years. In addition to that, only 22% children from the indigenous communities completed primary education during 2004 (Sarker & Davey, 2009). There are still more than 3.2 million out of school children and opportunities for schooling are limited for specific groups, including hard-to-reach children: children with disabilities, children in remote areas [Char, Haor-baor, flood prone area, disaster prone area etc.], children living in extreme poverty, children living in slum areas and working children which is a big challenge.

Among many challenges that are acting as barriers to inclusion, ill-preparation of school teachers are one of the major factors identified by many researchers (Ahsan, 2013; Ahsan, Sharma & Deppeler, 2012, 2013; Avramidis & Norwitch, 2002). In Bangladesh, teacher education for inclusive education still require a major reform to ensure adequate preparation of both pre-service (Ahsan et al. 2012, 2013) and in-service (Ahmmed et al. 2012) teachers for inclusive education. This study is an attempt to explore the status of teacher education programme in the perspective of inclusive education for the children with disabilities in Bangladesh.

Rationale of the Study from the AAB Perspective

Bangladesh is world's one of the most densely populated countries with 150 million people. There are millions of children and young people with disabilities struggling to live a life of dignity in Bangladesh. A combination of poverty and lack of government support prohibits them from accessing the basic services they are entitled to – such as education – and the employment opportunities they need to improve their lives. The current primary school curriculum and teacher training are not sufficient to include the needs of children with disabilities and to cover specialist methods, skills or tools, so teachers are not fully aware on how to cater for the needs of these pupils. Studies have shown that this lack of understanding amongst teachers is one of the major reasons why children with disabilities do not go to school. For the exclusion from education system, there are very few opportunities for those young people with disabilities in Bangladesh to earn a living to meet up their basic needs.

The Government of Bangladesh has taken solid steps to support its citizens with disabilities through national and international policies and conventions. It has passed a law aiming to guaranteeing the right to education, including children with disabilities in the country and has ratified the UN Convention on the Rights of Persons with Disabilities. However in reality, these commitments are not being acted upon and people with disabilities are being excluded and left behind. To achieve lasting change in Bangladesh, we need to raise awareness on these issues, to drive the rights of people with disabilities into the public consciousness and ultimately place pressure on the Government to live up to its promises and act.

Since its establishment on 1983 in Bangladesh, ActionAid Bangladesh (AAB) has worked with children, families and communities to overcome poverty. The most remarkable successes have been securing improved access to quality education for children and adults and long term partnership with poor communities. AAB has been successfully running the Removing Cultural Barriers (RCB) project from 2006 and has achieved amazing results including Bangla sign language becoming widely recognised, families becoming more aware of the specific needs of children with disabilities and improved access to healthcare and rehabilitation services for people with disabilities.

From January 2014, AAB has been implementing a Murant trust funded project titled "Removing Cultural Barriers in Bangladesh: Improving the lives of children and young people with disabilities". The project has been implementing in Golapgonj Upazila of Sylhet District and Keranigonj Upazila of Dhaka District which will be end on December 2016. In the RCB project, we will work on supporting the Government (DPE & NAPE) to develop an inclusive education curriculum to be taught in teacher trainings, training of primary education teacher trainers on the revised inclusive curriculum, setting up committees to ensure that education delivers for all children and to protect the rights and welfare of children and young people with disabilities, working with the Government to ensure that children with disabilities have equal access to education opportunities. There is a provision to conduct a study to define the gaps on policy instruments and implementation and publish a research report to protect education opportunities for children with disabilities in Bangladesh.

Analytical Lens of the Study

This study followed a frame, which is known as the 'social model of inclusion' to select research methods, develop data collection tools, interpret and analyse collected data and in suggesting recommendations for teacher education for inclusive education in Bangladesh. The concept of social

model of inclusion claims that inclusion is more than just physically placing children with disabilities into mainstream schools (Booth, Nes, & Stromstad, 2003; Forlin, Cedillo and Romero-Contreras, 2010). Rather, it is more focused on improving the whole school system and teaching learning approaches to ensure quality education for all learners (Forlin, 2008, 2010; Sharma, 2011). Many educationists (e.g. Ainscow, 2005; Sen 2005; Slee, 2010) argued that the broader goal of inclusive education is to achieve equity and social justice for all through education. On the other hand, the opposite paradigm, known as 'medical model of inclusion' views differing abilities of learners as deviance and suggests that those differences have to be treated in a segregated manner from the mainstream education (Loreman, Deppeler, & Harvey, 2005). Such deficit view highlights a child's inabilities first and overlooks their potentials and become rigid in improving teaching-learning approaches to address educational needs of all children (Ainscow, 1997).

A Brief Review of Literature

Bangladesh recently enacted a law known as the Protection of the Rights of the Persons with Disabilities Act, 2013 (The Ministry of Social Welfare, 2013). These policies and acts also uttered the necessity of inclusive education for ensuring education for all children. Furthermore, some recent policy initiatives have been taken by the Government of Bangladesh to help the existing education system to promote inclusive education and also to reform the existing pre-service teacher education programs. One milestone of such policy change is the National Plan of Action Phase II (NPA II) developed by the Ministry of Primary and Mass Education (MoPME) to be implemented in the period 2003-2015 (MoPME, 2003). NPA II Vision 5.2.iii of the Basic Primary Education by 2015 describes:

> All primary school-age children (6-10 years), boys and girls, including all ethnic groups, disadvantaged and disabled, are enrolled and successfully completing the primary cycle and achieving quality education (MoPME, 2003: 28).

Policy has acted to stimulate the goal of full implementation of inclusive education in the primary schools by the year 2015. Therefore, the education system is faced with meeting new challenges of inclusive education including teacher preparation areas. The Directorate of Primary Education (DPE) under the Ministry of Primary and Mass Education (MoPME) has already sent an office order/circular to all the primary schools in Bangladesh to include all children in their regular programs and provide required support to those children (Directorate of Primary Education, 2007). Therefore, Bangladesh formally started implementing inclusive education since 2003 through a project titled the Second Primary Education Development Program known as PEDP-II by formally including different vulnerable children (it covers gender, children with disabilities, tribal children and socially disadvantaged children) into education (Directorate of Primary Education, 2006). The Ministry of Education (MoE) has also initiated some experimental programs to include children with diverse learning needs in the secondary level of the education system (Ahsan, 2006). In total, Bangladesh education system has four layers. The table (Table 1) provides a brief idea of the education structures and pre-service teacher education systems in Bangladesh (Haq & Islam, 2005; Munir & Islam, 2005; Quddus, 2007; UNESCO-Dhaka & FREPD, 2007).

Table 1 : Education structures and pre-service teacher education systems in Bangladesh

Education Layers		Grade level	Type of pre-service teacher education	Offered by
PRIMARY		Grade I-V	One and a half year long Diploma in Primary Education	Primary Teachers' Training Institutes
			one and a half year long Certificate in Education	Bangladesh Open University
SECONDARY	Junior secondary	Grade VI-VIII	1-year long B.Ed 2-year long B.Ed 4-year long B.Ed (Honors)	Teachers' Training Colleges through the National University and other public and private universities
	Secondary	Grade IX-X		
HIGHER SECONDARY		**Grade XI-XII**	**Not Compulsory**	**Not Compulsory**
TERTIARY		**XII+**	**Not Compulsory**	**Not Compulsory**

Bangladeshi primary school teachers engage in a one and a half year long regular pre-service trainings titled Diploma in Primary Education (DipEd), but pre-service teachers are asked to attend the course within 3 years of their recruitment as a teacher because of the huge training-loads of the training centers to serve a large teacher population (Quddus, 2007; UNESCO-Dhaka & FREPD, 2007). The major coverage of secondary level teacher preparation is done by the government TTCs. Several research studies in Bangladesh show that inaccessible environment, lack of proper training of teachers, lack of resources and materials, teachers' and school staffs' lack of confidence and negative attitudes, gender discrimination, prejudice, rigid teaching-learning and assessment systems are some common barriers in Bangladesh for including children with diverse needs in regular education (Ahsan, 2000, 2005, 2006a; Ahsan & Burnip, 2007; Anam & Ahsan, 2002; DPE & CSID, 2002; USAID Bangladesh, 2005). Therefore, implementing inclusive education in Bangladesh still has a long way to go to achieve success. Initiatives are required to develop positive beliefs and attitudes towards the inclusive education of regular teachers for the success of the program.

Several recent studies have been noticed that tried to explore the status of teachers from the context of inclusive education from the context of Bangladesh and the world. Some key observations from the review include:

- Still a lot of children are out of school or dropped out from school in Bangladesh and around 53% of them are children with disabilities (Ahsan, 2013)
- It is still reported that teachers feel less confident in including children with disabilities in their programs (Forlin, Loreman, Sharma, & Earle, 2009; Kim, 2011; Shade & Stewart, 2001).
- Among many challenges that are acting as barriers to inclusion, ill-preparation of school teachers are one of the major factors identified by many researchers (Ahsan, 2013; Ahsan, Sharma & Deppeler, 2012, 2013; Avramidis & Norwitch, 2002).

- In Bangladesh, teacher education for inclusive education still require a major reform to ensure adequate preparation of both pre-service (Ahsan et al. 2012, 2013) and in-service (Ahmmed et al. 2012) teachers for inclusive education.

This study is an attempt to explore the status of teacher education programme in the perspective of inclusive education for the children with disabilities in Bangladesh.

Objective of the Study

The broad objective of the study was to explore the status of teacher education programme from the perspective of inclusive education for the children with disabilities to develop an advocacy framework for the inclusion of children with disabilities in the mainstream schools of Bangladesh.

Specific Objectives
- To identify the belief, attitude and perception of different stakeholders (pre-service and in-service teachers, institutional heads, policy makers, SMC and community members).
- To explore the inclusiveness of existing model of teacher education programmes and practicum schools (laboratory schools), specifically in curriculum, teaching-leaning approach and assessment related issues.
- To find out the inclusiveness of environment of teacher education programme.
- To identify the existing challenges for teacher education programme for the implementation of inclusive education.
- To explore the policy issues that foster or condemn the implementation of inclusive education through teacher education programmes.

Limitation of the Study

Few limitations of the study can be identified. For example, the study had the opportunity to collect data once from the field. So, the interpretation made based on the findings can be considered as a snapshot of the current situation of the teacher education for inclusive education in Bangladesh. If there was opportunity to get data in several intervals, the situation could be more clearly interpreted. Furthermore, the study could not collect data from the student teachers when they returned to schools after completion of the degree. It could give more in-depth understanding of the implementation challenges of the concepts of inclusive education that they were taught during the training period. However, further research may have the scope to address the issues that were not explored in the current study.

CHAPTER 2
Methodology

a. Selection Procedures of Geographical Locations for collecting data from PTIs/TTCs/URCs/Teacher Education Institutions

In Bangladesh, there are around 55 PTIs and 15 TTCs. However, they follow same curriculum and instructional strategies and also under same kind of monitoring and supervision approaches. Therefore, there are few variations found among those institutions. Having said that, yet there is some diversity in those institutions. Considering those variations, a purposive sampling technique were followed in this study to select three (03) geographical locations for this study with an aim of choosing teacher education institutions from those locations. The following criteria were maintained while selecting the geographical location:

   i.   Institutions from the Capital-district (Dhaka)-Dhaka TTC, Joydebpur PTI & any URC in Dhaka city and different key agencies involved in teacher education initiatives and policy formation issues; i.e. Inclusive Education Cell of DPE, NAEM, IER-Dhaka University, some Private Universities, some Private agencies involved in teacher preparation programs for the Government.
   ii. Institutions from a district town where government's teacher training academy NAPE is situated-Mymensingh PTI, Mymensingh TTC, Mymensingh Women PTI, an URC from Mymensingh district and NAPE.
   iii. Institutions from a semi-urban district town (i.e. Sylhet)- Sylhet TTC, Sylhet PTI & any URC in Sylhet town.

b. Methods used: A mixed method design was conducted for this research that allowed the researchers to apply both qualitative and quantitative tools as well as techniques

1. Literature review:
   i.   Government reports, citizen charter and documents relevant to teacher education for inclusive education
   ii. Non-government project/ program documents relevant to teacher education for inclusive education
   iii. Review of Pre-service and In-service teacher education curriculums and modules
   iv. Review of research reports relevant to teacher education for inclusive education
   v.   Review of journal articles relevant to teacher education for inclusive education

Data analysis procedure: A thematic analysis procedure was followed to analyse the secondary data. Thematic analysis provides researchers opportunities with analyse the documents by extracting themes from the data by coding (Denzin & Lincoln, 2000).

2. **Semi-structured face-to-face interviews:** A series of semi-structured face-to-face interview schedules were conducted with teacher educator/master trainers, policy makers, DPE/NAPE/NCTB/NAEM representatives, heads of teacher training institutions, head/senior teacher of practicum schools, NGO representatives that are running unique inclusive education programs etc. This procedure allowed the researchers to create rapport with the interviewees and to keep the interview on right track (Cohen, Manion & Morrison, 2007; Creswell, 2008). Heads of the teacher education institutions were asked to select participants for interviews. Objectives of the study and literature review guided researchers to develop interview schedules.

Data analysis procedures: All interviews were audio-recorded and transcribed. A thematic analysis procedure was followed to analyse the interview data. Thematic analysis provides researchers opportunities with analyse the interviews transcriptions by extracting themes from the data by coding (Denzin & Lincoln, 2000).Objective of the study and the literature review were the guiding principle for analysis of the interview data.

3. **Observation:** In order to understand the teaching-learning approaches followed in the teacher education programs; a classroom-observation was done. Besides, practicum schools were observed to explore how much inclusive learning-friendly environment is available in those schools. Separate checklists were used to conduct those observations. Photographic documentations were also made by seeking permission.

Data analysis procedures: Conceptual framework and the literature review of the study helped analysis of data from observations in both qualitative and quantitative manner.

Figure 1: Observation Checklist for the Training Sessions

General Information	Teaching-learning	Learning Assessment	Session Environment	General Comment
- Subject - Gender of trainer - Number of trainee - Type of trainee - Time span	- Approach - Trainee participation - Peer participation - Teaching material	- Approach - Participation of trainee - Cover of learning domain	- Sitting arrangement - Lighting - Accessibility - Communication method	General remarks of the observer

Figure 2: Observation Checklist for Practicum Schools

General Information	Environment of school	Teaching-learning	Learning assessment	General Comment
Class hour Student-teacher ratio: Gender of teacher & students Ethnicity/disability of students Teacher training & edn. qualification	- Physical accessibility (mobility, furniture, lighting etc.) - Instructional accessibility (sitting arrangement, educational material etc.)	- Approach - Participation of student - Peer partici pation - Use of teaching material	- Approach - Participation of students - Cover of learning domain	General remarks of the observer

4. **Focus Group Discussion:** A Focus Group Discussion (FGD) was conducted with trainee teachers in each geographical location. FGD sessions were designed with specific guidelines. General questions about personal information of the participants were asked to start the session, allowing each participant a chance to share their views. Heads of the teacher education institutions were asked to select participants for FGDs. Besides, another FGD were conducted with the parents of practicum schools.

   Data analysis procedures: A thematic analysis procedure was followed to analyse the interview data. Thematic analysis provides researchers opportunities with analyse the interviews transcriptions by extracting themes from the data by coding (Denzin & Lincoln, 2000).Objectives of the study and the literature review were the guiding principle for analysis of the interview data.

5. **Surveys:** A three-part survey questionnaire was applied on the trainees of PTIs, TTCs to measure their attitudes and confidence towards inclusive education. Heads of the teacher education institutions were asked to select participants for surveys.

   Part-one:
   Demographic information: A set of questions were asked to trainee teachers' demographic information such as age, gender, educational qualification, experience in

dealing persons with disabilities, previous training on inclusive/special education, level of teaching (primary/secondary), experience in teaching children with disabilities, knowledge about inclusive education policies and length of teaching experience.

Part-two:

Teacher Efficacy for Inclusive Practice (TEIP) scale: The study applied the Teacher Efficacy for Inclusive Practice (TEIP) scale (Sharma, Loreman & Forlin, 2011) to measure trainee teachers' perceived teaching-efficacy for inclusive education. This scale uses a six-point Likert scale of Strongly Disagree (1) to Strongly Agree (6). The TEIP scale yields a total-score, the value of, which can range from 18 to 108. Higher scores indicate high magnitude of perceived teaching-efficacy of teachers for IE. The reliability for the total scale was 0.89 (Sharma et al., 2011). The TEIP scale was designed by collecting pilot sample of pre-service teachers from Australia, Canada, and India (N= 558), and then validated on in-service teachers (n= 134) and also on pre-service teachers (n= 109) in Indonesia. This scale was previously applied in Bangladesh as well.

Part-three:

Sentiments, Attitudes, Concerns regarding IE (SACIE) scale: The Sentiments, Attitudes, Concerns regarding IE (SACIE) scale (Loreman, Earle, Sharma & Forlin, 2007) was used with trainee teachers. SACIE scale is designed to measure three factors that all together indicate the attitudes of teachers towards IE. These three factors are sentiments, concerns and attitudes towards IE. Cronbach's alpha for those three sub-scales are 0.68, 0.94 and 0.88 respectively (Loreman et al., 2007). SACIE scale has 15 items (e.g. Students who frequently fail exams should be in regular classes) and uses a 4-point Likert type anchor of Strongly Agree, Agree, Disagree and Strongly Disagree. The SACIE scale yields a total-score, the value of, which can range from 15 to 60. This study only used the Attitude subscale. The scale was validated on 996 pre-service teachers from four countries (Western Australia = 208; Victoria, Australia = 57; Edmonton, Canada = 191; Singapore = 102; Hong Kong = 438). This scale was applied in Bangladesh perspective as well.

Translation and Reliability of the attitude and efficacy scales in Bangladesh context: The three-part survey questionnaire was translated in Bangla language and then applied on large number of teachers (n=1623) from both primary and secondary levels in Bangladesh by Ahsan, Sharma and Deppeler (2012). The TEIP scale reliability, after using it in Bangladesh, was recalculated as 0.85, which was quite high and alpha coefficients for Factor 1, 2 and 3 were calculated 0.61, 0.77 and 0.78 respectively (Ahsan et al., 2012). The Cronbach's alpha of concern and attitude subscales of the SACIE scale for the Bangladesh sample were 0.60 and 0.63 respectively in Ahsan et al. (2012) study. However, alpha for the sentiment sub-scale was quite low. So, that part would not be used in this study.

Data analysis procedure: Teacher attitudes and efficacy data were analysed by using SPSS software. Means and Standard Deviations were calculated for the total score as well as factor scores. Multiple Regressions were used to identify variables that predict significant differences in teachers' teaching-efficacy, attitudes and concerns scores.

c. Ethical Consideration

This study followed all the ethical issues important for conducting a study by applying qualitative and quantitative methods. Ethical issues include acknowledgements of the secondary data sources by referencing; cautious paraphrasing would be maintained to avoid plagiarism. Consent was taken in this study where requires representation of any part of other published materials. In case of maintaining any issue of anonymity, identities were strictly kept hidden. In addition, the Child Protection Policy of ActionAid Bangladesh was maintained in this study.

d. Timeline

September to December 2014

CHAPTER 3
Findings and Discussions

Teacher Survey Findings

Teacher survey was conducted with the trainee teachers (n=216) of PTIs and TTCs enrolled in three districts by using the SACIE and TEIP Scale. Among the participants 51.9% were from primary level teacher education programmes and 48.1% were from secondary level teacher education programmes. Among them 38% were males and 62% were females. The following Tables (Table 2, 3 & 4) provide some demographic information of the participants of teacher survey on their attitudes and efficacy towards inclusive education:

Table 2 Trainee teachers at different education programmes

Level of training	Frequency	Percent
Primary level teacher training	112	51.9
Secondary level teacher training	104	48.1
Total	216	100.0

Table: 3 Institution-wise distributions of the teacher survey participants

Institution	Frequency	Percent
Dhaka PTI	70	32.4
Dhaka TTC	39	18.1
Mymensingh PTI	16	7.4
Mymensingh TTC 1	17	7.9
Mymensingh TTC 2	13	6.0
Sylhet PTI	26	12.0
Sylhet TTC	35	16.2
Total	216	100.0

Table 4. Gender of the teacher survey participants

Gender	Frequency	Percent
Male	82	38.0
Female	134	62.0
Total	216	100.0

Reliability of the Scales Used in the Teacher Survey

The Cronbach's Alpha (reliability) calculated for the SACIE scale while using in this study was .566; which is little lower. However, the R score very close to 0.6 is acceptable by the global academia. The Cronbach's Alpha (reliability) calculated for the TEIP scale while using in this study was .887; which is quite high. The following Table (Table 5) provides information related to the attitude and efficacy scales used in the teacher survey of the current study.

Table 5: Reliability Statistics of Attitude & Efficacy Scale

Scale type	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
SACIE Attitude Scale	.594	.599	15
TEIP Efficacy Scale	.881	.887	18

Regression Analysis and Findings of Attitude Scale

The regression analysis of the SACIE scale to reveal the impact of demographic variables on trainee teachers' attitudes towards inclusive education indicated that two variables are found to be significantly contributing to predict trainee teachers' attitudes towards inclusive education: level of training involved and confidence in teaching students with disabilities (See Table 6, 6A & 6B). Analyses of findings indicated that trainee teachers at primary level hold more positive attitudes towards inclusive education than their counterparts at secondary level. This result may be interpreted by that the government is promoting inclusive education at primary level more intensively than secondary grades, which may have contributed in developing more positive attitudes among primary level trainee teachers. The other variable, confidence level in teaching indicated that trainee teachers who have high and very high confidence, surprisingly possess, more negative attitudes towards inclusive education than others. This is an indication that trainee teachers may have some hidden concerns regarding inclusive education, which has not been reflected in the scale. Further in-depth research is required to get clearer picture regarding this finding.

Table 6: Attitude Scale Regression

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.666	.271		9.840	.000
Level of training involved	-.149	.053	-.215	-2.844	.005
confidence in teaching a student with disability	-.087	.024	-.245	-3.590	.000

a. Dependent Variable: Total Attitudes (0.05% level of significance)

Table 6 A: Attitudes and Level of training involved

Level of training involved	Mean	N	Std. Deviation
Primary level teacher training	2.5738	112	.32676
Secondary level teacher training	2.4558	104	.36088
Total	2.5170	216	.34787

Table 6B: Attitudes & confidence in teaching a student with disability

confidence in teaching a SWD	Mean	N	Std. Deviation
Very Low	2.5333	20	.43956
Low	2.5733	20	.30543
Average	2.5877	114	.35957
High	2.4085	47	.24500
Very high	2.2222	15	.22490
Total	2.5170	216	.3478

Regression Analysis of Teaching-Efficacy Scale

The regression analysis of the TEIP scale to reveal the impact of demographic variables on trainee teachers' attitudes towards inclusive education indicated that four variables are found to be significantly contributing to predict trainee teachers' attitudes towards inclusive education: level of training involved, sex, significant dealing with a person with disability and knowledge of local legislations regarding inclusive education (See Table 7, 7A, 7B, 7C & 7D). Analyses of findings indicate that primary level trainee teachers hold higher teaching efficacy towards inclusive education than their secondary counterparts. This result indicates a correlation with the attitude scale and a conclusion can be made that teachers possessing positive attitudes hold higher level of confidence to teach in inclusive classrooms. Male teachers are found to have higher confidence than female counterparts, which is quite opposite to the attitude scores. This finding is similar to another recent study conducted by Ahsan et al. (2012) in Bangladeshi context. Teachers who had significant experience in dealing persons with disabilities found to be more confident than those who did not have any experience. This finding indicates that scope of having real experience with children with disabilities is important during teacher preparation stage. In addition to that it has been found that teachers who have adequate knowledge regarding local legislations regarding inclusive education have higher level of confidence than those who do not have. Therefore, it is important to include information regarding local legislation in the teacher education programmes.

Table 7: Regression Analysis of Teaching Efficacy Scale

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	4.672	.459		10.182	.000
Level of training involved	-.323	.089	-.256	-3.631	.000
Sex	-.196	.087	-.151	-2.261	.025
Significant dealings with a person with disability	.189	.083	.150	2.288	.023
knowledge of the local legislation	.204	.055	.266	3.742	.000

a. Dependent Variable: Total Attitudes (0.05% level of significance)

Table 7 A: Total Efficacy & Level of training involved

Level of training involved	Mean	N	Std. Deviation
Primary level teacher training	4.8428	112	.54253
Secondary level teacher training	4.6597	104	.70612
Total	4.7546	216	.63185

Table 7 B: Total Efficacy & Sex

Sex	Mean	N	Std. Deviation
Male	4.8428	82	.60493
Female	4.7007	134	.64404
Total	4.7546	216	.63185

Table 7 C: Total Efficacy & Significant dealing with a person with disability

Significant dealings with a person with disability	Mean	N	Std. Deviation
Yes	4.7416	106	.64191
No	4.7672	110	.62468
Total	4.7546	216	.63185

Table 7 D: Total Efficacy & knowledge of the local legislation

knowledge of the local legislation	Mean	N	Std. Deviation
None	4.5692	102	.64696
Poor	4.8059	73	.58121
Average	5.1141	37	.51503
Good	5.1667	3	.38490
Very good	5.3889	1	.
Total	4.7546	216	.63185

Therefore, findings regarding attitude and efficacy scales have several implications in revising teacher education curriculums and policy reform initiatives.

Curriculum Review Findings

Pre-service teacher preparation is considered as the most important stage to prepare teachers for inclusive education, and thus, its curriculum components require serious scrutiny. Teaching and learning strategies are influenced by the theories of Constructivism (Fosnot, 1996; Steffe & Gale, 1995; Usher & Edwards, 1994). Constructivism is a theory that describes the way people learn and generate knowledge; it describes both what learning is and how learning happens (Fosnot, 1996; Richardson, 1997). Especially, Vygotskyan Social Constructivism focuses on the importance of the impact of socio-cultural context on the acquisition of knowledge and information. The latter understanding is widely accepted nowadays (Fosnot, 1996; Richardson, 1997). These ideas have brought a new paradigm shift that contributed to reform the teacher preparation and teacher education procedures. This paradigm shift has resulted in a pedagogical shift accordingly. Pedagogy is defined as the "art and science of teaching" and focuses attention on the "relationship between learning and teaching (Loughran, Berry, Clemens, Lancaster, & Long, 2008). This focus on pedagogy transfers an emphasis from teaching as actions to a broader understanding of the complex relationship of professional knowledge and competencies that are required to bring about high quality teaching and student learning. Therefore, teaching about teaching through pre-service education needs to support students to be problem-solvers and risk-takers and to see "that there is not necessarily one 'right-way' of doing teaching, and that dealing with uncertainty and making professional choices are part of what it means to understand teaching as problematic" (Loughran et al. 2008, p.04).

A social constructivist view of teacher education also helps to address the needs of diverse learners in an inclusive classroom. This demands teacher education curriculum reform as well. Different research studies have found multiple views on reforms of pre-service teacher education curriculum models. Some experts suggest that a pre-service teacher education curriculum should be a Unified system of model for all (Campbell & Fyfe, 1995; Hsien, 2007). Others believe in an embedded model of curriculum where the existing pre-service curriculum adds special education issues in the contents (Bradley, King-Sears, & Tessier-Switlick, 1997; Campbell & Fyfe, 1995; Forlin, 2008). In contrast, Dual certification is another model that provides an extra program in the special education area together with the regular pre-service teacher education courses (Campbell & Fyfe, 1995). Moreover, institutions providing pre-service teacher education offer different courses that differ in terms of content components, length and design of the courses and assessment processes to meet the demands of different target groups. Many western countries like Australia,

the USA and the UK have developed their own national standards of teacher education. A review of the curriculum components set by different agencies that design teacher standards in Australia, the USA, and in the UK might be useful for Bangladesh to compare its standard. All these standards in three western countries focus on three major aspects of teacher preparation for ensuring standards: Professional Knowledge (i.e. content knowledge and pedagogy, knowledge about student learning & development); Professional Practice (i.e. skill of instructional strategies, classroom management, challenging environment and communication techniques, curriculum and planning); and Professional Engagement (i.e. active learning and reflective practice, professional relationships and membership).

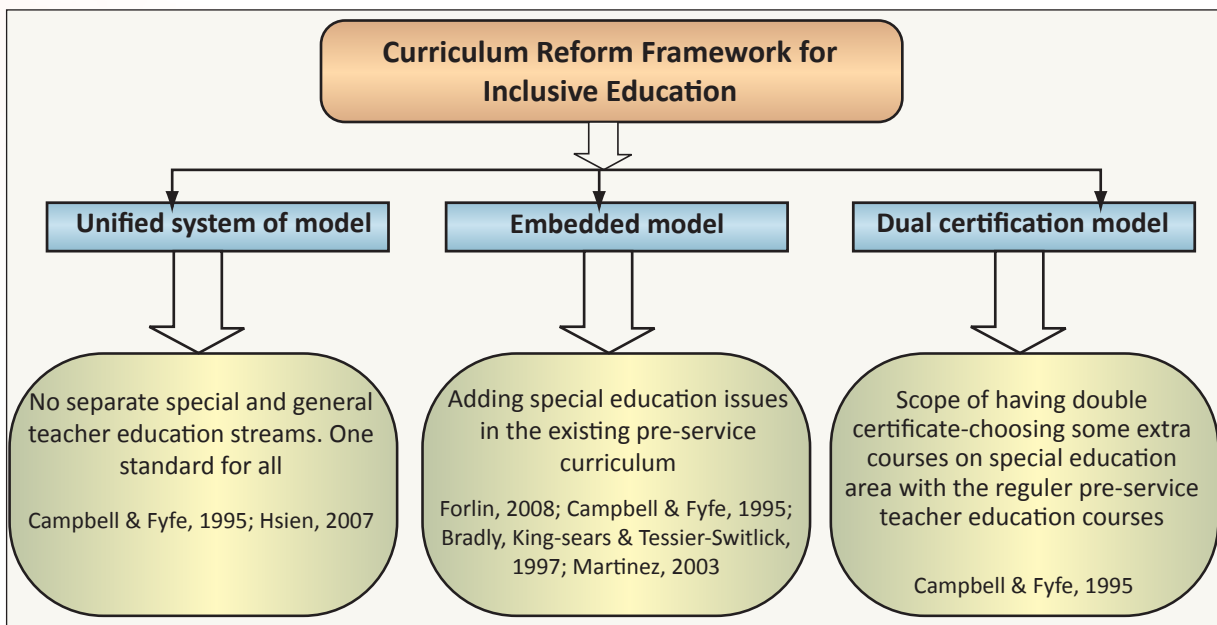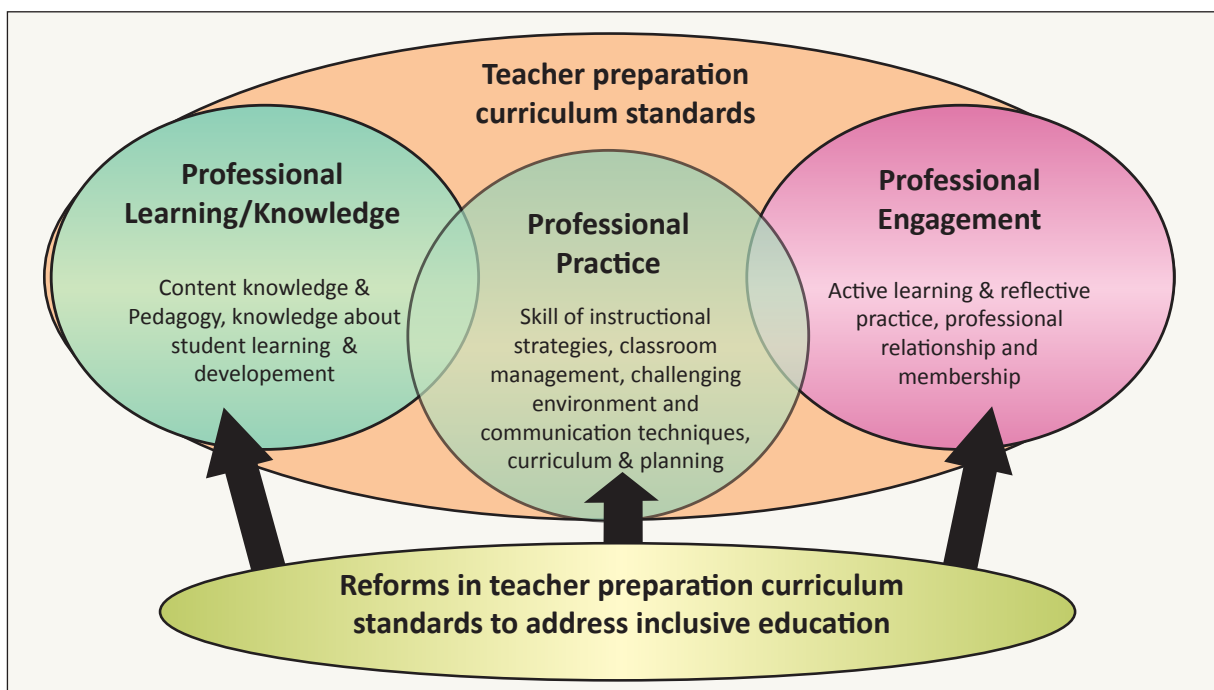**Figure 3: Teacher Education Curriculum Models**

Curriculum Reform Framework for Inclusive Education

Unified system of model

Embedded model

Dual certification model

No separate special and general teacher education streams. One standard for all

Campbell & Fyfe, 1995; Hsien, 2007

Adding special education issues in the existing pre-service curriculum

Forlin, 2008; Campbell & Fyfe, 1995; Bradly, King-sears & Tessier-Switlick, 1997; Martinez, 2003

Scope of having double certificate-choosing some extra courses on special education area with the reguler pre-service teacher education courses

Campbell & Fyfe, 1995

Figure 4: Inclusive Teacher Education Curriculum Components

Teacher preparation curriculum standards

Professional Learning/Knowledge

Content knowledge & Pedagogy, knowledge about student learning & developement

Professional Practice

Skill of instructional strategies, classroom management, challenging environment and communication techniques, curriculum & planning

Professional Engagement

Active learning & reflective practice, professional relationship and membership

Reforms in teacher preparation curriculum standards to address inclusive education

Teacher education in Bangladesh is mainly provided by government initiative and in a very small scale by non-government initiative. Inclusive education (IE) is addressed in a varied number of ways in the curriculum of these teacher education programmes. The review framework of curriculum for this study focused on how IE is addressed in the curriculum component, the weight of IE in the full curriculum, how diversity and pedagogy addressed within the professional knowledge, whether subject based components and practicum components are included and the presence of professional engagement. Curriculum of Institute of Education and Research (IER) of Dhaka University, Institute of Education and Research (IER) of Rajshahi University, National University, Open university, National Academy for Primary Education (NAPE), Uttara University, Institute of Educational Development (IED) of BRAC University, Proyash Institute of Special Education and Research (PISER)-Bangladesh University of Professionals (BUP), Centre for the Rehabilitation of Paralyzed (CRP), Centre for Disability in Development (CDD) and BRAC has been reviewed for this study. Some of these institutes have general education focused curriculum and few have special education focused curriculum. Both type of curriculum have been reviewed for this study.

Review of General Education Focused Curriculum

Both undergraduate and postgraduate programmes are offered by 5 government institutes which include both pre-service and in-service teacher education programmes. Among these, two institutes- IER, Dhaka University and National University offer four year Honours programme (BEd Honours) while the rest of the programmes offered by all four of these institutes are one or two year Certificate (C in Ed), Diploma (Dip in Ed), Bachelor (BEd) or Masters (MEd) programme. In the curriculum of four year Honours programmes of both the institutes, inclusive education is addressed as a unit for the overall programme, though IER- Dhaka University runs a separate special education department. Postgraduate Diploma in Education (PGDEd) and MEd programme of IER- Rajshahi University and 1 year BEd of National University and Open University address inclusive education as an embedded curriculum component whereas Certificate and Diploma programmes of NAPE address inclusive education as a separate course and session respectively. However, inclusive education is not addressed in the MEd curriculum of National University and Open University. According to weight, inclusive education is carrying a very minimal amount in the curriculum component. Only 10% of the special education curriculum of IER- Dhaka University and 0.625% of the 4 year Honours curriculum have inclusive education components, others are negligible. In regard to professional knowledge, diversity and pedagogy is addressed in a mixed model medical dominant approach in the curriculum of BEd and MEd of IER- Dhaka University, BEd (Honours) of National University and C in Ed and Dip in Ed of NAPE, whereas social model is dominated only in the one year BEd curriculum of National University. In addition, subject based components are also present in the curriculum of all these programmes. However, diversity, pedagogy and subject based component are unaddressed in the curriculum of IER- Rajshahi University, MEd of National University and Open University. Issues of inclusive education is also absent in practical components and professional engagement in all the curriculum except for 1 year BEd of National University and Dip in Ed of NAPE.

Beside the Government institutes, the curriculum of two non-government institutes- Uttara University and IED, BRAC University reviewed for this study, which does not address inclusive education in their BEd and MEd programmes.

Review of Special Education Focused Curriculum

Specialized special education programmes are offered by both government and non-government institutes. 3 months CDMEd and 1 year BSEd programmes are offered for both pre-service and in-service teachers by PISER-BUP and 1 year BSEd and 2 years MSEd programmes are offered for both of these groups by National University. Inclusive education is addressed in the curriculum of PISER-BUP but not in the curriculum of National University. According to weight, inclusive education is covered by 1.42% in the curriculum of CDMEd and 4.55% in the curriculum of BSEd of PISER-BUP. Diversity and pedagogy is addressed in the curriculum in a mixed approach where medical model is dominant. Subject based components are present in the curriculum of both of these programmes, however, the issues of inclusive education is absent in practical components and professional engagement of the curriculum.

Beside the government institutes, some non-government institutes also focus on special education programme. CRP-NAPE offers 1 year Certificate in Special Education course for primary level teachers, curriculum of which does not address inclusive education issues. BRAC provides 6 days in-service teacher training for BRAC primary school teachers, the curriculum of which covers inclusive education in a chapter. According to weight, it covers 100% of the curriculum. Diversity and pedagogy is also addressed in the curriculum in a mixed model medical dominant approach. In addition, subject based component and practical components are also present in the curriculum. However, professional engagement is absent there. CDD also provides training on inclusive education training to in-service teachers. Training manuals address diversity and pedagogy in mixed model medical dominant approach where subject based components and practicum components are present but professional engagement is absent.

Interview, Observation and FGD Findings

This study investigated the inclusive education status of teacher education programmes in Bangladesh. Data were collected from government policy making organizations, non-government organizations, government teacher education institutions and practicum schools through in-depth interview, focus group discussion and classroom observation. Data were coded and analysed. After the triangulation of data gathered through these, six themes emerged from the thematic analysis:
   a) Concept and attitude towards inclusive education
   b) Present status of teacher education
   c) Accessibility of teacher education institutes
   d) Current situation of practicum schools
   e) Existing challenges and
   f) Future expectations; A number of sub-themes also emerged in few themes.

Concept and Attitude Towards Inclusive Education

The participants of the study were asked about the feasibility of implementing inclusive education in the context of Bangladesh. Their answer to this question brought out their concept and attitude towards inclusive education. From the response of the participants it can be understood that the level of understanding of different types of stakeholders is not the same. Government and NGO representatives, heads of educational institutes, inclusive education experts, and master trainers are familiar with the concept of inclusive education which is to include children from different background in the same classroom. However, quite a few of these

participants understand inclusive education as the participation of children with disabilities only in regular classroom. One of the representatives of NCTB stated,

> *"Inclusive education is addressed in the policy but there is still confusion in its definition. In many cases when the issue of inclusive education comes, it refers only children with disabilities"* *(Representative from NCTB)*

A few participants from secondary teacher education institutes and practicum schools still do not have the clear concept of inclusive education. Some of the parents are also not familiar with the concept of inclusive education.

Most of the participants of the study hold a positive attitude towards inclusive education. They believe that inclusive education is not difficult to implement if the challenges can be identified and right initiatives can be taken to mitigate those challenges. All of the participants appreciate the current initiatives of the government for implementing inclusive education but they feel there is still a long way to go. One of the participants mentioned,

> *"Inclusive education is an on-going process and nothing can happen overnight. People are getting the knowledge, concept and awareness about inclusive education but it will take a long time to be practiced in the schools in reality"(IE expert of a teacher education institute)".*

One of the NGO representatives believes that beside schools, students with disabilities should be mainstreamed in the society as well with the appropriate guidance to live the life independently in a solvent way. However, one of the teacher education institute heads feel that it is a challenge for people with disabilities to make them capable like others because of their economical and physical barriers. A few participants of teacher education institutions, especially from the secondary level, mentioned about different barriers- such as, lack of resource (both human and physical), limited class hour, inaccessible infrastructure, for including children with different types of disabilities which make them reluctant to work for implementing inclusive education. As the number of students from disadvantaged background is less in comparison to the number of regular students in our country, students with disabilities get less priority for some. A representative from NAPE mentioned,

> *"Each year 3 million students are appearing for primary school completion examination. A very tiny number of students among them have disability. Therefore regular students are our main focus"* *(Representative from NAPE)*

On another scenario, from the focused group discussion with parents, it is revealed that the parents hold a sympathetic attitude towards children with disabilities. They feel the need of these students to be included in regular classroom and admit the benefit of all students to study together in the same classroom as this will create the opportunity for all the students to learn from each other's need. However, at the same time they feel that it would be distractive for general students as their children will get less time and attention. One of the mothers stated,

> *"If children with disabilities come to regular school, the teachers would give them more attention and care. That specific child might get help out of it but all the other children would be deprived from teacher's attention."*

Parents also mentioned about the limited class hour and inaccessible school infrastructure which to them is a big challenge for inclusion. Besides, some mothers believe that children with special educational needs should be in special schools as special schools can provide better care and education according to the needs of children.

Present Status of Teacher Education Programme/Training

Quite a few number of teacher education programmes are offered in Bangladesh through government and non-government initiative. BEd (Honours), BEd, MEd, PGDEd, C Ed, C-in-Ed, Dip-in-Ed, CDMEd, BSEd, MSEd, C-in-SpEd and different types of special and inclusive teacher trainings are offered from different institutes and organizations.

Inclusive education is addressed in the curriculum of most of the teacher education programmes either in an embedded approach or as a separate unit. According to most of the institutional head, master trainer and trainee teachers, the span inclusive education in the curriculum is limited to basic knowledge only which is helping them to understand the concept, changing attitude and raising awareness. However, the common complain found from all of these participants is that the curriculum does not address the specific teaching-learning system for an inclusive classroom. One of the participants mentioned,

> *"We know what inclusive education is, but we do not know how to address the learning need of a student who cannot see or listen. We do not have the specific idea about assessing these children differently in the same classroom with regular students." (Trainee teacher)*

On the similar issue, a different view is found from a group of trainee teachers of a TTC. They stated,

> *"Inclusive education is embedded in all six courses of our programme. We learned different teaching techniques like- group teaching, peer-teaching, mind mapping etc. Now we try to include all students of the classroom using these techniques. Inclusive education is nothing separate; this is just to incorporating these techniques involving all." (Trainee teachers of TTC)*

According to most of the participants, the training on inclusive education provided to master trainers and in-service teachers is for a very short time and therefore it is a matter of concern, how much effective the content of the training is. One of the representatives of a government organization stated,

> *"It is instructed by the government to address inclusive education in all types of teachers' training. But the problem is it is not in built in the full training; only exist as a session or chapter." (Representative of Govt. organization)*

According to a PTI Super, trainings provided by the persons with disabilities themselves, sometimes very much inspiring for the trainees as they can learn from the hands on experience. He quoted,

> *"Recently I have received Braille training from CDD and Sight Savers. The trainers himself was a person with visual impairment. I was surprised to see how wonderfully he was teaching us the whole process. If a person with total blindness can do this, we of course can learn and teach it to the students." (PTI Superintendent)*

Most of the participants emphasized on continuous monitoring and supervision of trainee teachers. According to them, it should be continuously monitored whether the teachers are implementing their acquired knowledge in the classroom. Very few participants also mentioned about refresher training, workshop and international exposure visit for enhancing teachers' knowledge and experience. On this regard, one of the master trainers of a TTC quoted,

> *"We got the basic knowledge of using sign language and Braille in our training in Australia. But we need to learn those according to our country context. We are not comfortable to teach students with hearing and visual impairment in our class, as we don't know how to communicate with them. It is really important to add sign language and Braille in our training". (Master Trainer of TTC)*

Almost all the participants of the study mentioned about assessment system in inclusive classroom. According to many of them, there is no specific guideline given in teacher education curriculum on assessing children with disabilities in an inclusive classroom. However, some of the trainee teachers and master trainers explained how they try to make the assessment inclusive and flexible for the students in the classroom. One of the trainee teachers stated,

> *"I have started doing student assessment fortnightly. Previously I used to make the same question for everyone. Now I make three sets of questions according to the capability of students. It is benefitting the students who were lagging behind." (Trainee Teacher, PTI)*

Another master trainer of a TTC mentioned,

> *"I myself have made the assessment system flexible for teachers with visual impairment. As they cannot come regularly, sometime I take the lesson plan of 2-3 days at a time. If I see they are misusing the opportunity, I try to control that as well. Sometimes, instead of writing the lesson plan, I tell them to discuss the plan orally with everyone. These are not there in our system. But I have adapted these changes according to their need."(Master Trainer, TTC)*

Majority of the participants of this study feel the need of an intensive inclusive education training involving every one of the institute as the training currently involves only one or two teachers from the schools and teacher education institutes which is not enough to make the whole institute inclusive friendly. A few participants from PTI also identified the qualitative difference between the programmes offered. According to PTI instructors, Dip-in-Ed has the better chance than C-in-Ed to reflect what the teachers are learning as this programme requires the teachers to continuously keep in touch with the school and to plan their teaching according to the need of students.

Non-government organizations are also working in the field of inclusive education. BRAC is providing 6 days in-service training to the teacher which is developed in an inclusive way. Plan International Bangladesh is working with 50 government primary schools in three upazillas to make those school model inclusive schools. Plan International Bangladesh also provides teacher training to selected government schools which covers different areas of inclusive education. Sightsavers also works with the government school teachers on teacher training, material development and student screening. According to the NGO representatives, the strongest point of NGO's teacher training is the continuous monitoring and follow-up of teachers which issue was also praised by few trainee teachers of the study. One of the participants stated,

> *"The training programmes of some NGOs were very effective. I have learned a lot from the trainings on sign language, Braille and mathematical calculation method. I have also learned how to incorporate that in teaching-learning strategies. Now I am teaching this to our trainee teachers" (PTI Super)*

Accessibility of Teacher Education Institutes

Physical accessibility

Condition of both physical and academic accessibility of a teacher education institute is identified for the purpose of this study. According to most of the participants of PTI and TTC, the environment of these institutes is not inclusive friendly. They have identified many problems which work as a barrier for physical accessibility of persons with disabilities. One of the inclusive education experts of a TTC stated,

*"There is no universal design applied in our institute. The building is
very old. There is no ramp, no lift, and the toilets are not accessible.
It becomes very difficult for the trainees with physical disabilities to
move comfortably and independently" (Master trainer of a TTC)*

The same scenario was observed in most of the PTI and TTCs of the study area. One of the PTI Superintendent quoted, "The environment of PTI should be inclusive friendly so that the teachers can take the practical experience of working in an inclusive environment from the institute to the schools" (PTI Superintendent).

A different opinion was found from another teacher education institute head. According to him, "Modification of infrastructure is going on. Ramp is made, toilet is renovated (IER) and laboratory is set up for children with disabilities." However, from the observation, it was seen that there is no lift for students to go upstairs.

Though the overall environment of the teacher education institutes is not inclusive friendly, but in comparison to practicum schools, it was observed that the classrooms are spacious and there is good ventilation inside the classroom. A group of trainee teachers of a TTC also mentioned that the environment of the institute is much better and inclusive than the practicum schools.

Academic accessibility
Most of the participants of teacher education institute mentioned that they have the provision of accepting trainees with disabilities. One of the teacher education institute heads happily mentioned about the admission provision for students with disabilities in his institute from where each year 4-5 such students get their degrees. However, some participants mentioned that very few trainees with disabilities come for receiving the training or the course.

Some participants also talked about the academic accessibility of students at the classroom and examination hall. One of the inclusive education experts of a TTC stated, "Multimedia classroom is needed for making the classroom multi-sensory which benefits not only the students with disabilities but all other students. Extra time also needs to provide for students with disabilities". Two more experts were also mentioning about the need of writer for trainees with visual impairment on the right time at the examination hall.

*"The classrooms are not suitable for inclusion. There is not enough
space, lack of trained teachers, and infrastructure problem. Benches
are so heavy that it is not possible to move those for making groups.
So there is no scope to practice interactive teaching-learning
methods." (Trainee Teachers of a PTI)*

Existing situation of the schools has an influence on teachers' attitude. One of the head teachers of another practicum school states, "We don't accept the students who use wheelchair as we do not have facilities to accommodate them." In addition, all the participants of the study also identified the problem of teacher student ratio of a classroom. More than 80 students sit in the classroom. It was observed from classroom observation that the teaching-learning approach of

the teachers is still very traditional. Teachers mostly use the lecture based method and give attention to front benchers only and can very hardly reach to all students of the classroom. The trainee teachers mentioned,

> *"While we were attached in the schools, we did not get the chance to apply the acquired knowledge in the classroom because of limited class hour. But our teachers used to observe if we were making eye contacts with all, engaging all students, taking care of weak students." (Trainee teachers of a TTC)*

According to most of the head teachers, trainee teachers, NGO representatives and inclusive education experts, existing textbooks and syllabus are not accessible for all. One of the Head Teachers quoted, "If we want to include children with disabilities, we need to revise the syllabus and make it suitable for everyone in the class."(Head Teacher of practicum school).

Participants also talked about community participation and coordination between school and teacher education institutes. According to most of the participants, community people are still not ready to accept all students in the same classroom. Parents have discriminative attitude towards children with disabilities. According to one participant, "If the teachers give special attention to a student with disability, parents of other students complain against that. They think teachers are depriving their children" (Head Teacher of Practicum School). Awareness has still not reached to mass people to accept students with disabilities which is also limiting the scope of inclusion in regular schools.

Regarding the coordination between practicum schools and teacher education institutes, mixed reaction found from the participants. Some of the head teachers mentioned they have very good relation with the TTC or PTI and they get support from them. Few others mentioned, they do not have any collaboration with the teacher education institutes. In the same way, teacher education institutes in many ways are not very happy with the existing relation they share with schools. One of the participants mentioned,

> *"There is no coordination between the schools and TTC. The schools don't bother about inclusive education. Their target is to get A+. Our students don't get any help from the schools in implementing new ideas."(Master Trainer of a TTC)*

On the other hand, one of the head teachers stated,

> *"Schools do not get that much support from TTC as the administration is totally different. But the school authority thinks it would be helpful if TTC send their students at the beginning of a term so that both the schools and trainees make the best use of their time." (Head Teacher of Practicum School)*

It was also identified from the conversation of some of the institution heads of teacher education institutes that the practicum schools exist only as a school to send the trainee teachers for practice teaching. But the main purpose of using the schools as laboratory for experimenting new teaching-learning method is completely demolished.

Existing Challenges

A huge number of challenges identified from different group of participants of the study. These are divided into sub-themes as follows:

Lack of awareness in the community

According to most of the participants, inclusive education is still a vague concept to the mass people. Most of community people do not know what inclusive education is and therefore their attitude towards inclusion is not possible. Even the attitude of the parents of children with disabilities is sometimes very negative. One of the participants of the study mentioned,

> *"Sometimes the parents of children with disabilities feel their children as a burden and want us take the responsibility of their children for lifetime." (NGO representative)*

According to most of these participants, inclusive education needs more coverage in the community level for changing attitude and bringing awareness.

Insufficient presence of inclusive education information in teacher education programme

The majority of the participants mentioned that the teachers' education provided by the government only covers the concept and basic knowledge of inclusive education. Teaching-learning process in an inclusive classroom or the inclusive pedagogy is not present. This is a challenge in implementing inclusive education as the teachers do not get to know the hands on teaching practice. One of the representatives of policy making body mentioned,

> *"Inclusive education is there now in different teacher training module, but that only trains teacher about the access and classroom management of a student in inclusive classroom. But there is no technique on the content delivery for a student with visual impairment in the regular classroom". (Representative from NCTB)*

Another participant mentioned,

> *"Inclusive education is addressed in many different types of teacher training. But there is a lack of coordination among the trainings provided. It becomes difficult for the teacher to utilize the whole knowledge in the classroom and thus it becomes an isolated knowledge with no implementation. (PTI Superintendent)*

Time is also mentioned as a challenge. Teacher trainings given to the teachers from PTI or TTC is for a very short period and therefore it becomes difficult to give a detailed training to the teachers. One of the master trainers of a TTC quoted, "I could not give everything that I learned from the training because of time constraint. I tried to touch everything from the surface level, couldn't go in-depth."

Some of the participants also mentioned about the huge need of working on changing the mindset of the personnel who make the teacher training modules. Some of the participants also identified the challenge of preparing qualified trained teachers. According the plan of DPE, two teachers from each government school will receive the training on inclusive education. But to implement successful inclusion, all teachers need to be trained which is not possible because of time and resource constrain.

Resource constraint
Most of the participants of this study identified the lack of appropriate resources needed for inclusion. Lack of teaching materials, assistive devices, and technological devices is some common resources mentioned by all. One of the participants stated,

> "Besides, providing teachers training, our organization attempts to think in a holistic way for implementing full inclusion and as a mean of that they provide assistive device to students and do the monitoring of the usage. But there is laziness in government initiatives to supply assistive device for students and train teachers to handling that". (NGO representative)

Insufficient monitoring and supervision
Lack of monitoring of teacher education institutions and government training providing organizations is mentioned by almost all the participants of the study, especially by all trainee teachers. A group of student teachers mentioned,

> "When we go back to school, we are overloaded with lots of responsibilities. And within the limited class time it becomes really difficult for us to practice the skills we learn in the course and by the course of time we forget those. But if there were any monitoring system, we could be aware of practicing the skills regularly and it could bring better result". (Student-teacher)

Most of the NGO representatives mentioned this as the major drawback of the government. One of the representatives stated,

> "Without proper monitoring system, nothing works properly. We work in the most remote places of the country and with the teachers with limited educational qualification. But we assure the sustainability and quality of the training through strong monitoring system. Government system must focus on this as well." (NGO representative)

Lack of collaboration
Lack of collaboration in different types of organizations is mentioned by almost all the participants. There is a huge gap in inter-ministerial collaboration. Many of the participants complained about the Ministry of Social Welfare to perform the educational responsibilities of children with disabilities. One of the participants mentioned,

> *"Ministry of Social Welfare is publishing Braille books but only for government special schools. Other schools are not getting those books as this responsibility of publishing books lies on Ministry of Primary and Mass Education. Collaboration can be made between these two ministries and the facility can be given to all"*

Lack of coordination also mentioned among the TO, ATO, URC instructor, UEO, AUEO, practicum schools and teacher education institutes. It was mentioned that, this can be a challenge for implementing inclusive education if all these bodies do not work collaboratively with the same goal.

There are many types of schools other than government primary schools in Bangladesh. It was also mentioned by few participants that those schools also needs to be inclusive. One of the participants stated,

> *"Enrolment of students from different background is not assured in private schools and those schools are not at all inclusive. For developing an inclusive society, we also need to work with those schools." (NGO representative)*

Administrative barriers
Administrative challenges were mentioned by some of the participants. According to one of the participants, local government officers are not very eager to come to visit the institutes. PTI does not have a good coordination with the practicum schools and the schools do not cooperate without the permission of local government working there. They identified the need of planned coordination between PTI, local government and practicum schools.

Transfer of trained teachers from the teacher education institutes is also a challenge mentioned by a few participants of the study.

Lack of research initiative
Some of the participants, especially the head of teacher education institutes and NGO representatives, mentioned about the lack of research initiatives in implementing inclusive education. According to them, there is lack of research on how the teachers are implementing the knowledge of inclusive education after going back to school in practical scenario. Another participant mentioned about the lack of research in making the policies on inclusive education. One of the participants stated,

"There is no research on inclusive pedagogy in the context of Bangladesh. Without the background research on pedagogy needed for our country, it will be very difficult to implement initiatives in the schools." (NGO representative)

The participants also mentioned that there is less initiative of disseminating research finding among different stakeholder related to inclusive education. One of the head teachers stated,

"People come to us for research purpose. They take the information. But we never get to know the result came up from that research. We are also eager to know what you are finding from the research." (Head Teacher of Practicum School)

Lack of statistical information

The challenge of having no definite statistics on the prevalence of different types of disability is also mentioned by a few participants. One stated,

"We don't have the statistics of disability. It is very important to know how many and what types of children with disabilities are there in the schools and catchment areas. And steps need to be taken considering that." (URC instructor)

Future expectations

From the discussion with different types of stakeholders, lots of future expectations came out which might be helpful to implement inclusive education in Bangladesh. Most of the participants of the study identified the need of redesigning curriculum of teacher education programmes for the proper implementation of inclusive education. According to most of the participants, teacher education curriculum should focus on inclusive teaching-learning strategy based on individual needs. Change in assessment system also needs to be designed in the curriculum. One of the participants stated,

"Curriculum and assessment are related to each other. If changes can be brought into the curriculums that would contribute to changing the assessment system accordingly" (PTI Superintendent).

Many of the participants identified the need of introducing Braille and sign language in teachers' training with continuous practice and follow up mechanism. The need of preparing master trainers to address diversified need of children with disabilities is also expected. In addition to that, few participants also mentioned to involve special educators as resource persons for teachers training. Three of the total number participants also mentioned the need of the support of special education unit for implementing inclusive education in regular schools. Few participants mentioned to develop need based local training. One of the participants stated,

"URC can find out the need of the schools and develop training modules to assist the teachers locally to implement inclusive education." (Representative from NAPE)

Many participants felt the need of involving administrative persons, such as the Heads of TTC and PTI in inclusive education training as they are the key persons for the implementation of policies at the practical ground. Few participants also mentioned the need of keeping conceptual knowledge on disability or inclusive education as the requirement of TTC/PTI head recruitment and providing them the orientation on inclusive education. Some of the NGO representatives urged the need of making the government teacher training manuals with the collaboration of NGOs to avoid the repetition of the contents of the training.

Most of the participants had a strong opinion about teaching materials. According to them, this is a must for an inclusive room and there should be a strategy to develop teaching materials. One of the participants mentioned about a very effective plan of involving all students to prepare the teaching materials from the very beginning of the year. According to him, this will not only help the students to enhance their arts and craft qualities but also help them to understand the need of their peers who have some disabilities. Concept of multi-sensory teaching-learning materials is also mentioned as a need to be introduced (see the Figure 5).

Figure 5: Multisensory Teaching-aids

Inter-ministerial and inter-institutional comprehensive plan is expected by many of the participants. A strong strategy for the coordination between teacher education institutes and practicum schools is suggested. One of the participants stated,

> *"Government should have more involvement in practicum schools
> so that our students get the chance to utilize their knowledge in the
> schools and we can make them accountable for that" (PTI Super)*

Coordination among local government officials is also suggested by few participants. To make them accountable to the need of the schools, inclusive education expert of NAPE stated, "UEO, AEUO, URC instructor and ATOs should get in-depth training on inclusive education."

In addition to all of these, almost all of the participants advocated for recruiting assistant teachers and increasing the number of classes in all the government primary and secondary schools to maintain the quality of education.

Photographic Presentation of the Institutional Observations:

Figure 6: Status of PTIs

Figure 7: Status of Experimental/Intern Schools

Figure 8: Status of TTCs

CHAPTER 4

Recommendations

Modification in /teacher training programme is the most important gadget to bring about rapid changes in the sector of education. If we can expertise our teachers through effective training, it will not only reflect in classroom teaching but also in our social life in every aspect. Here are some recommendations which we think will be beneficial for the children with disabilities of our society.

• Trainee teachers require to have exposure to children with disabilities, national legislations during their stage of teacher preparations.

• To reach the concept of inclusive education to mass people and to raise awareness, a comprehensive dissemination plan should be taken by the government with the collaboration of non-government organizations. Parents and children should be considered as the main focus of this dissemination as the success of inclusion largely depends on them after the teachers.

• Curriculum of teacher training programmes should be redesigned incorporating inclusive pedagogy in an embedded approach, not as a separate chapter. Subject based training modules should also include inclusive teaching-learning and assessment strategies. Special educators should be involved as resource persons while bringing these changes to get the technical knowledge support.

• In-depth training on inclusive education for administrative persons and institutional heads should be designed to take the implementation of inclusive education forward.

• Strong co-ordination mechanism should be developed among the teacher education institutes, local government and practicum schools to take the knowledge into practical implementation with the involvement of Ministry of Primary and Mass Education and Ministry of Education.

• Strong monitoring and follow up system needs to be developed to give continuous feedback to the teachers on their teaching-learning strategies in an inclusive classroom.

• Need based local training capacity need to be developed using the local government bodies to assist teachers meeting their needs.

• Longitudinal research should be planned involving the education led research institutes of Bangladesh to understand the achievements of inclusive education of different projects.

This chapter describes an advocacy framework of teacher education for inclusive education-based on the findings of this study. The analysis of findings indicated that there are following challenges related to teacher education for inclusive education in Bangladesh:

Figure 9: Challenges identified in this study regarding teacher education for inclusive education
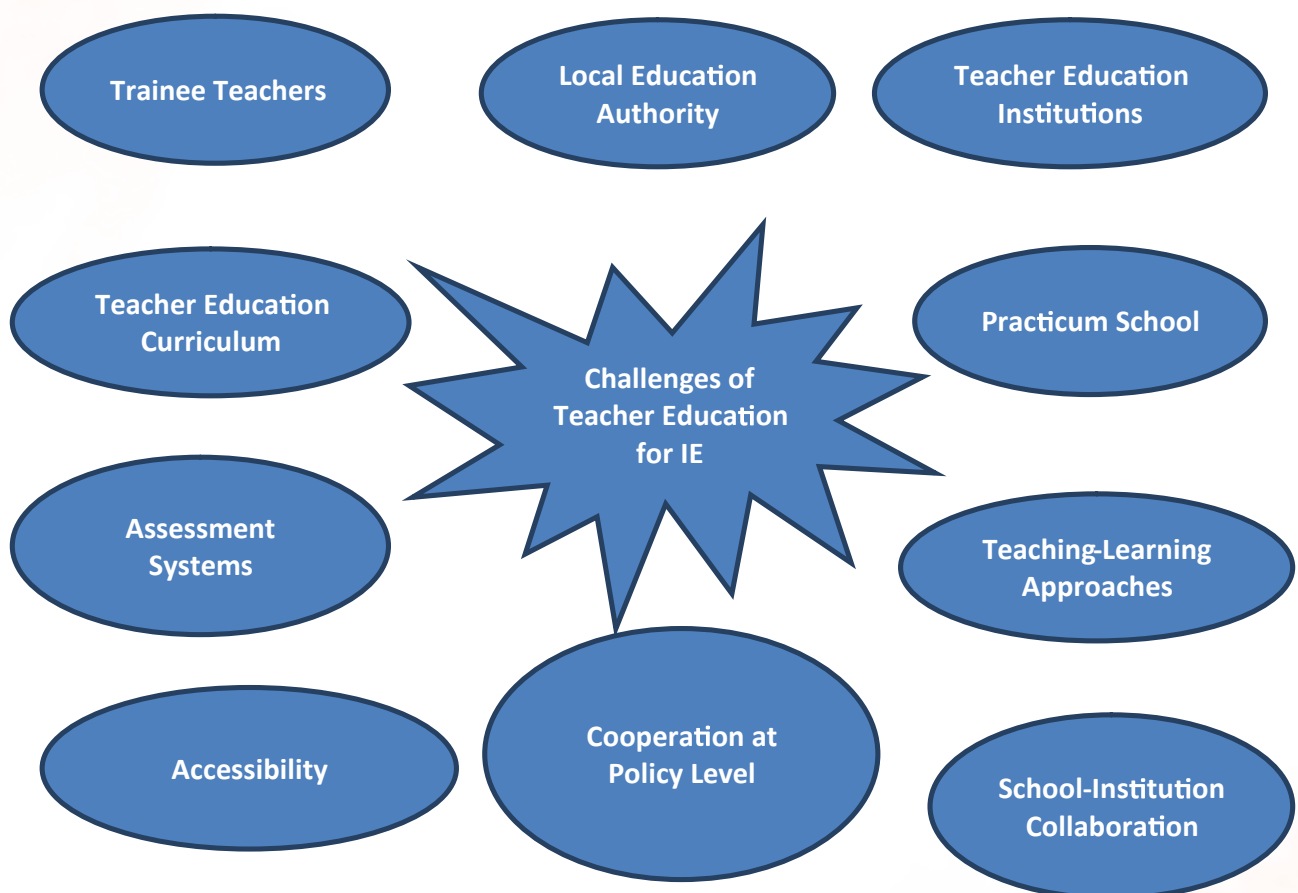
To address these challenges an advocacy framework has to be designed that may include the following activities:

1. Sensitization workshops/seminars/dialogue at different levels
2. ToT for the master trainers
3. Training for the LEAs
4. Infrastructural accessibility activities
5. Practicum/Intern school reforms
6. Inserting learning from others in the package

7. Policy advocacy
8. Involvement in the curriculum reform processes
9. Operational research

It is important to mention that the activities mentioned above for the advocacy framework belong to three levels of the education system:

a. Teacher education institution level
b. Local education authority/educational administration level and
c. Policy level

Without designing a holistic approach for all three levels (See Figure 10), the reform ideas may not sustain. These initiatives also require inclusion of different relevant stakeholders in the action plans.

Figure 10: A Holistic Package Approach for the Sustainability of the Advocacy Initiatives for Teacher Education for Inclusive Education

Figure 11: Flowchart of the steps to be followed to develop the Teacher Education Advocacy Package for IE

The Action Plan may also include a plan for short term and long term goals for teacher education and inclusive education. The following Table (Table: 8) provides the priority plan for the proposed advocacy framework:

Table 8: Action Plan

Sl. No.	Challenges	Short-term Actions (0-1 year)	Long-term Actions (1-2 years)
1	Trainee Teachers	---	Getting training through a reformed curriculum
2	Local Education Authority (UEO, URC, AUEO, HT)	Orientation Training/ToT	Training run by the LEA members
3	Teacher Education Institution	Need Assessment and Resource Mobilization	Development and Implementation of Inclusive Learning Friendly Environment Framework for TE Institution
4	Practicum School	Need Assessment and Resource Mobilization and Training of teachers	Development and Implementation of Inclusive Learning Friendly Environment Framework
5	Accessibility	Need Assessment and Resource Mobilization	Development and Implementation of Accessible Environment Framework
6	Teaching-Learning	Training on T-L for TE Institutions and Practicum Schools	Implementation and Feedback, Further Actions
7	Assessment System	Training on Alternative Assessment for TE Institutions and Practicum Schools	Implementation and Feedback, Further Actions

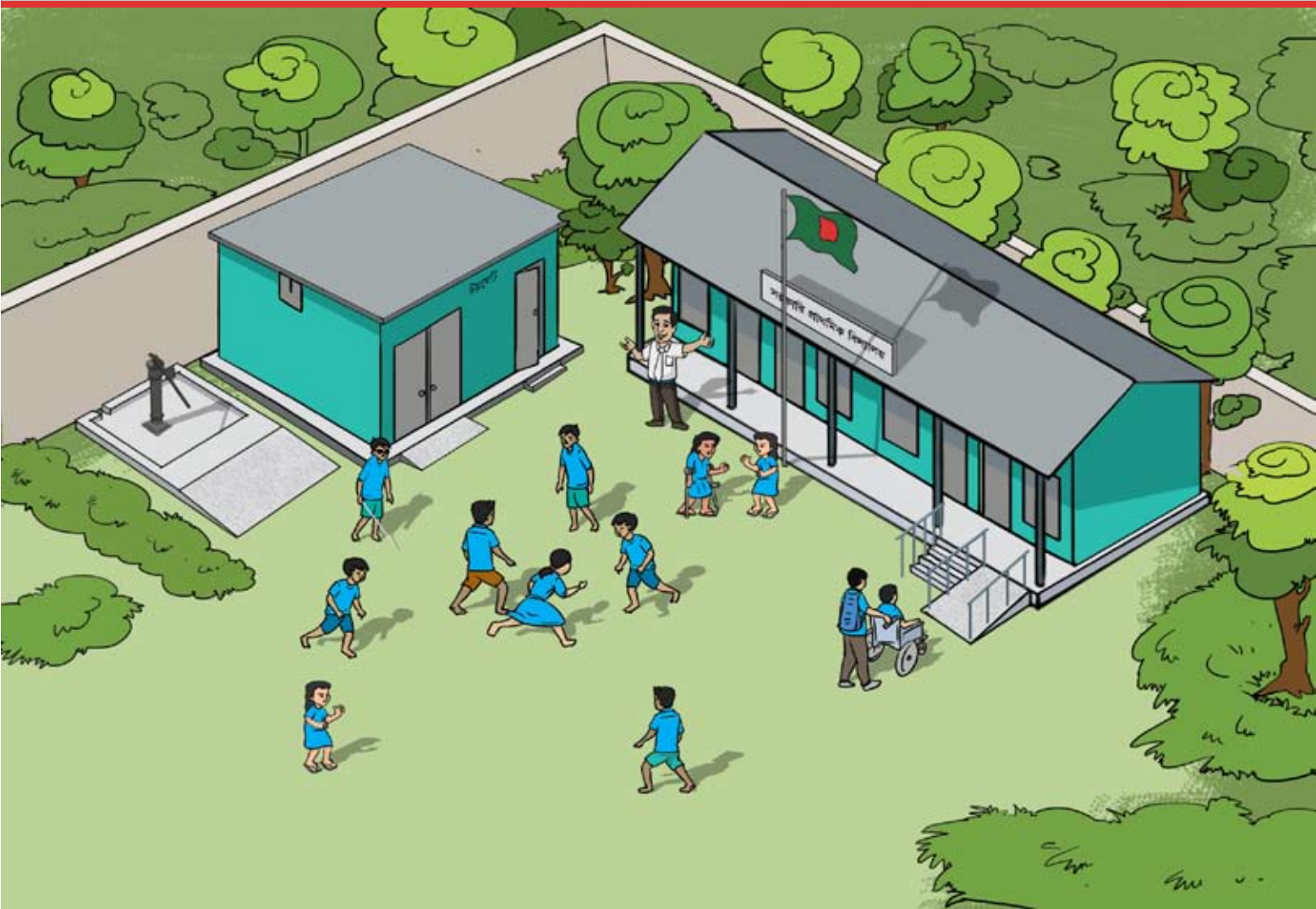| Sl. No.	Challenges	Short-term Actions (0-1 year)	Long-term Actions (1-2 years)
8	Teacher Education Curriculum	Need Assessment and Resource Mobilization, Consultation Workshops	Development and Implementation of the Revision Framework of Teacher Education Curriculum
9	School-Institution Collaboration	Need Assessment and Resource Mobilization, Consultation Workshops	Development and Implementation of Collaboration Framework for Schools and TE Institution
10	Policy Level Orientation & Cooperation	Consultation Workshops, Orientation Programmes, Exploration of Collaboration Opportunities	Development and Implementation of Policy Reform Framework

Monitoring, supervision and evaluation would be a regular part of the advocacy initiatives. These can also be done through an operational research plan.

Bibliography

Ahmmed, Sharma & Deppeler (2012). Variables affecting teachers' attitudes towards inclusive education in Bangladesh. Journal of Research in Special Educational Needs, 12 (3), 132–140.

Ahsan, M. T. (2013). National Baseline Study for "Developing a model of inclusive primary education in Bangladesh project" based on secondary data. Dhaka: Plan Bangladesh. ISBN 978-984-33-7159-1

Ahsan, M. T. (2006). Inclusive education acts and policies in some selected countries including Bangladesh: A review. Bangladesh Education Journal, 5(1), 53-68.

Ahsan, M. T., & Burnip, L. (2007). Inclusive education in Bangladesh. Australasian Journal of Special Education, 31(1), 61-71.

Ahsan, M. T., Deppeler, J., & Sharma, U. (2013). Predicting pre-service teachers' preparedness for inclusive education: Bangladeshi pre-service teachers' attitudes and perceived teaching-efficacy for inclusive education. Cambridge Journal of Education, 43 (4), 517-535. DOI:10.1080/0305764X.2013.834036

Ahsan, M. T., Sharma, U., Deppeler, J. (2012). Exploring pre-service teachers' perceived teaching-efficacy, attitudes and concerns about inclusive education in Bangladesh. International Journal of Whole Schooling, 8 (2), 1-20.

Ainscow, M. (1997).Towards inclusive schooling. British Journal of Special Education, 24 (1), 3-6.

Ainscow, M. (2005). Developing inclusive education systems: What are the levers for change? Journal of Educational Change 6: 109-124.

Anam, N. & Ahsan, M. T. (2002).The feminine dimension of disability. Teachers' World,24-25: 111-125.

Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. Journal of Special Needs Education, 17(2), 129-147.

Booth, T., Nes, K., & StrØmstad, M. (2003). Developing inclusive teacher education: Introduction. In T. Booth, K. Nes & M. StrØmstad (Eds.), Developing inclusive teacher education. NY: RoutledgeFalmer.

Bradley, D. F., King-Sears, M. E., & Tessier-Switlick, D. M. (1997). Teaching students in inclusive settings: From theory to practice. MA, USA: Allyn & Bacon.

Campbell, D. M., & Fyfe, B. (1995). Reforming teacher education: The challenge of inclusive education. Paper presented at the Extended Annual Meeting of the Association of Independent Liberal Arts Colleges for Teacher Education, Washington DC.

Cohen, L., Manion, L., & Morrison, K. (2007). Research methods in education (6th Ed.). London: Routledge.

Creswell, J. W. (2008). Educational research: Planning conducting and evaluating quantitative and qualitative research. NJ: Pearson Prentice Hall.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2000). Handbook of qualitative research (2nd ed.). Thousand Oaks, CA: Sage Publishers.

DPE & CSID. (2002). Educating children in difficult circumstances: Children with disabilities. Dhaka: CSID.

DPE (2006). Innovation grants manual. Dhaka: Second Primary Education Development Program (PEDP-II), Directorate of Primary Education.

DPE (2007). PEDP-II progress. Retrieved 14 September, 2008, from http://www.dpe.gov.bd/pdf/ProgressReportDecember2007.pdf

Forlin, C. (2008). Education reform for inclusion in the Asia-Pacific region: What about teacher education. In C. Forlin & M.-G. J. Lian (Eds.), Reform, inclusion and teacher education. Oxon: Routledge Tailor and Francis.

Forlin, C. (2010). Reforming teacher education for inclusion. In C. Forlin (Eds.), Teacher education for inclusion: Changing paradigms and innovative approaches. Oxon: Routledge Tailor and Francis.

Forlin, C. Cedillo, I. G. and Romero-Contreras, S. (2010). Inclusion in Mexico: Ensuring supportive attitudes by newly graduate teachers. International Journal of Inclusive Education, 14(7), 723-739.

Forlin, C., Loreman, T., Sharma, U., & Earle, C. (2009). Demographic differences in changing pre-service teachers' attitudes, sentiments and concerns about inclusive education. International Journal of Inclusive Education, 13(2), 195-209.

Fosnot, C. T. (1996). Constructivism: Theory, perspectives and practice. NY: Teahers College Press.

Haq, M. N., & Islam, M. S. (2005). Teacher motivation and incentives in Bangladesh (Publication. Retrieved June 19, 2008, from Eldis Document Store: http://www.eldis.org/go/topics/resource-guides/education/primary-education/quantity-versus-quality&id=33274&type=Document

Hsien, M. L. W. (2007). Teacher attitudes towards preparation for inclusion-in support of a unified teacher preparation program. Postgraduate Journal of Education Research, 8(1), 49-60.

Kim, J (2011). Influence of teacher preparation programs on preservice teachers' attitudes toward inclusion. International Journal of Inclusive Education, 15 (3), 355-377.

Loreman, T., Deppeler, J., & Harvey, D. (2005).Inclusive education: A practical guide to supporting diversity in the classroom. NSW, Australia: Allen & Unwin.

Loreman, T., Earle, C., Sharma, U., & Forlin, C. (2007). The development of an instrument for measuring pre-service teachers' sentiments, attitudes, and concerns about inclusive education. International Journal of Special Education, 22(2), 150-159.

Loughran, J., Berry, A., Clemens, A., Lancaster, G., & Long, M. (2008). Establishing a national centre for pedagogy. Australia: Teaching Australia.

Ministry of Education [MoE] (2010). National Education Policy 2010. Dhaka: MoE.

MOPME (1990).The compulsory primary education act 1990. Dhaka: MOPME.

MOPME. (2003). Learning for change: Education for all national plan of action (2003-2015). Dhaka: MOPME, Government of the Peoples' Republic of Bangladesh.

Ministry of Social Welfare. (2013). Protection of the Rights of the Persons with Disabilities Act, 2013. Dhaka: BG Press.

Munir, S. Z., & Islam, M. R. (2005). Analysis and modification of the certificate in education curriculum of the primary training institute incorporating components of inclusive education. Dhaka: UNESCO, Bangladesh.

Quddus, S. M. (2007). The unfeasibility of professionalization of primary-school teachers in Bangladesh. Unpublished Ph.D Thesis, University of Bergen.

Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In J. Sikula (Ed.), Handbook of research on teacher education (pp.102-119). New York: Macmillan.

Sarker, P., & Davey, G. (2007). Exclusion of indigenous children from primary education in the Rajshahi Division of northwestern Bangladesh. International Journal of Inclusive Education, 13(1), 1-11.

Sen, A. (2005). Human rights and capabilities. Journal of Human Development and Capabilities, 6(2), 151-166.

Shade, R.A. & Stewart, R. (2001). General education and special education preservice teachers' attitudes toward inclusion. Preventing School Failure: Alternative Education for Children and Youth, 46 (1), 37-41.

Sharma, U. (2011). Teaching in inclusive classrooms: Changing heart, head, and hand. Bangladesh Education Journal, 10 (2), 7-18.

Sharma,U., Loreman, T. & Forlin, C. (2011). Measuring teacher efficacy to implement inclusive practices. Journal of Research in Special Educational Needs.doi: 10.1111/j.1471-3802.2011.01200.x

Slee, R. (2010). Political economy, inclusive education and teacher education. In Teacher Education for Inclusion. Changing Paradigms and Innovative Approaches, ed. C. Forlin, 13-22. London: Routledge.

Steffe, L. P., & Gale, J. (Eds.). (1995). Constructivism in education. NJ: Lawrence Erlbaum Associates, Inc.

UNESCO. (1994). Salamanca statement and framework for action on special education needs. Paris: United Nations.

UNESCO (2009). Inclusive education: The way of the future. Final Report of the International Conference of Edicaton (48th Session). Paris: UNESCO.

UNESCO-Dhaka & FREPD. (2007). Assessment of pre-primary, primary and secondary (including higher secondary educational institutions) teacher status in Bangladesh. Dhaka: UNESCO.

USAID Bangladesh. (2005). Assessment of educational needs of disabled children in Bangladesh. Dhaka: USAID.

Usher, R., & Edwards, R. (1994). Postmodernism and education. London: Routledge.