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**An investigation into the professional development needs of  
Upper Primary and Secondary teachers in mainstream,  
private schools to meet the diverse learning needs in Indian  
classrooms**

**Submitted for the Degree of  
Doctor of Philosophy  
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## DEDICATION

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## ABSTRACT

The research reported in this thesis investigates the professional development needs of mainstream teachers, teaching upper primary and secondary classes to successfully cater to a class of diverse learners. The research was conducted in mainstream private, English medium schools, that followed one of the national education boards in four of the five largest metropolitan cities of India: Delhi NCR, Mumbai, Bangalore and Kolkata. The study used a mixed methods approach involving a web-based survey for teachers (n=280) in the first stage and focus group discussions with teachers (n=8 with 50 teachers involved in all) and semi structured interviews (n=16) with other stakeholders such as the heads of schools, counsellors, SENCOs and section heads or coordinators in the second stage. The study sought to answer questions on the challenges faced by mainstream teachers in catering to the needs of diverse learners, identifying their professional development needs for inclusion, understanding their perceptions on the efficacy of the methods currently used to meet their professional development needs and obtaining suggestions about the content and features of an ideal professional development programme. The study has its underpinnings in the social constructivist theory.

The findings of the study reveal that the challenges faced in inclusion were related to teachers' attitudes, competencies and training, student related issues, school systems and policies, curriculum and parent cooperation and support. The common training needs pertained to knowledge and skills related to diverse needs, curriculum related and personal attributes of teachers. While schools were found to employ a variety of methods for professional development of teachers such as in-house training sessions, external workshops and guidance from Coordinators, Counsellors and SENCOs, none of them were specifically designed to prepare teachers for a class of diverse learners. Suggestions for the content of a new training programme for inclusion comprised-knowledge of diverse needs and their identification, inclusive teaching practices and differentiated instruction, classroom management, lesson planning, subject and age specific training. Participants across all four locations suggested that exemplar programmes should be practical, regular, conducted at frequent intervals, have follow-ups, provide access to the resource person conducting the workshops, and involve interaction with experts and other schools. This study provides insights into the training needs of Indian mainstream educators for inclusion and the structure of a professional development programme. The evidence from these findings could be used as valuable inputs. The findings have implications for teacher educators who seek to formulate future professional development programmes for teachers. It also enables academic institutions and school managements to gain an insight into the challenges of teachers related to inclusive practice and extend all the necessary support to them. Suggestions for better and more effective implementation of inclusive practices can also guide school managements to make the necessary changes to school policies and systems such that they eliminate barriers and facilitate inclusion.

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## LIST OF ABBREVIATIONS

ATIES	Attitudes Towards Inclusive Education scale
ATDP	Attitude Toward Disability Scale
B.Ed.	Bachelor's Degree in Education
CBSE	Central Board of Secondary Education
CIES	Concerns about Inclusive Education Scale
CISCE	Council for the Indian School Certificate Examination
CWSN	Children with Special Needs
DI	Differentiated Instruction
DPEP	District Primary Education Programme
EFA	Education for All
ICIT	Inclusion Competencies of Indian Teachers
IDEA	Individuals with Disabilities Act
IDP	Interaction with Disabled Persons scale
IEDC	Integrated Education for Disabled Children
IEDSS	Inclusive Education for the Disabled in the Secondary and Senior Secondary stage
IEP	Individualised Education plans
IGCSE	International Certificate of Secondary Education
IB	International Baccalaureate
GOI	Government of India
M.Ed.	Masters of Education
MHRD	Ministry of Human Resource and Development
MSJE	Ministry of Social Justice and Empowerment
NCERT	National Council of Educational Research and Training

NCR	National Capital Region that includes the cities of Gurgaon, Noida and Delhi
NGO	Non- Government Organisation
NFE	Non-Formal Education
NIMH	National Institute for the Mentally Handicapped
NPE	National Policy on Education
NIOS	National Institute of Open Schooling
PDP	Professional Development Programme
PIED	Project Integrated Education of Disabled Children
POA	Programme of Action
PWD	Persons with Disability
RCI	Rehabilitation Council of India
RMSA	Rashtriya Madhyamik Shiksha Abhiyan
RPWD	Rights of People with Disabilities
RTE	Right to Free and Compulsory Education
Secondary	Grades IX-XII
SDG	Sustainable Development Goals
SEDG	Socially and Economically Disadvantaged Groups
SEN	Special Educational Needs
SENCo	Special Education Needs Coordinator
SSA	Sarva Shiksha Abhiyan
UDL	Universal Design for Learning
UNCRPD	United Nations Convention for the Rights of People with Disabilities
UNICEF	United Nations Children's Fund
UGC	University Grants Commission
Upper Primary	Grades V-VIII

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# CHAPTER 1: INTRODUCTION

## 1.1 Overview of the Study: Professional Development and Inclusion

Inclusive education has gained currency across the world in the recent decades (Chow and Sharma, 2022). Inclusion has its foundation in the premise that there are various naturally occurring differences between students in a classroom and disability is only one of them. An inclusive philosophy lays emphasis on providing for all learners and puts the onus on schools to change and improve their systems and practices, including classroom teaching in order to reach out to all learners. Sharma *et al.* (2012) summarise studies conducted into teachers' beliefs in addressing issues of diversity and contend that this is an important determinant in making classrooms more inclusive as perceptions impact their thoughts and actions. They also note the dearth of studies that focus on teacher efficacy in including students with diverse needs in regular classrooms. Inclusive teaching is not an easy task and requires skill and proficiency. Therefore, the attitudes, capabilities and training of mainstream teachers become key factors worthy of further investigation in understanding the process of making a classroom truly inclusive.

This research was undertaken to investigate the professional development needs of mainstream teachers in India in the context of inclusion. Specifically, it addressed the training needs of educators teaching in the upper primary and secondary sections to cater to the diverse learning needs of students and provided a framework for a professional development program. Though the research methodology involved both quantitative methods (in the form of an online questionnaire) and qualitative methods (focus group discussions and semi-structured interviews), it was predominantly a qualitative study. As discussed later in this thesis, decisions were made that influenced my adoption of this approach to collecting and analysing data. The research study reported here focussed on regular school teachers (mainstream teachers) who teach students from upper primary to secondary school within the 11-18 years age range across urban areas in India. The school sites considered for this study were English medium, mainstream private inclusive schools located in urban areas which followed an CISCE (Council for the Indian School Certificate Examination) or CBSE (Central Board of Secondary Education) curriculum. The study was undertaken in the four major metropolitan cities of India; these being Delhi NCR (National Capital Region that includes the cities of Gurgaon, Noida and Delhi), Mumbai, Bangalore and Kolkata. Literature on multi-location studies that focus on professional development for inclusion is limited in India and this study aims to fill that gap.

The purpose of the study was to understand the perspectives of teachers, their challenges in addressing the diverse needs of learners, their professional development requirements, the strategies and systems

various schools have adopted for professional development and the efficacy of such systems. Most importantly, by gaining an understanding of these factors, it aimed to arrive at a broad structure of what would constitute an ideal professional development programme for educators in India for inclusive mainstream practice. It was believed that teachers being those most directly in contact with children would be the best source of obtaining information about the implementation of inclusive education on the ground. Aruna *et al.* (2016) concur and further contend that it is important for teachers to have an appreciation of the need for inclusion and its advantages along with training in inclusive teaching practices. The actual goal was however, that such a professional development programme would be able to equip teachers so that the diverse needs of all children in a class are taken care of, within the confines of the classroom. This is because inclusive education is more than just the physical placement of students with different needs in the classroom, it is equally about their participation and achievement in the class (Kinsella and Senior, 2008; Pachigar *et al.*, 2011). Hence, teachers need to be adequately trained and prepared to make inclusion effective.

The intention of the research study was to examine teachers' perspectives and capabilities on inclusion, as the concept is understood across the world today. Although in India inclusion has historically been associated predominantly with disability, teachers in schools are being given guidance as to what the broader definition of inclusion entails such as gender, religion, caste, social class. In 2009, the Right of Children to Free and Compulsory Education Act (RTE) established the government's obligation to guarantee eight years of free, quality education to all children aged 6 to 14 years. The Act covers a broad range of needs, with the preamble to the main legislative documents identifying children from scheduled tribes or caste, socially and educationally backward (sic) class, or others disadvantaged by social, cultural, economic, geographical, linguistic, gender or others that may be specified by government mandate. The Act was deliberately phrased in such general terms to recognize that many factors have been seen to inhibit access to schooling in India. While the breadth of the Act was intended to ensure that few children were overlooked, some critics have suggested that the wording is vague and has limited the ability of schools and policy administrators to adopt a coherent approach to inclusion (Rai and Palit 2016; Saluja 2023). The interpretation of the RTE is complex and when discussing the concept of inclusion with teachers it is necessary to be aware that categorization can lead to confusion. Hence, throughout the study the term 'diverse learners' or learners/students with 'diverse needs' has been used. These diverse needs of students could arise from the student being a first-generation learner, from an economically disadvantaged background, from a socially marginalized community and so on. In general, any regular class in school is bound to have children with different interests, learning styles, intelligences and capabilities and educators must be able to cater to the needs of each child. Moreover, with the growing momentum towards inclusion across the world, including the passage of different legislations in the field of inclusive education that

mandate that students with special needs are educated along with their non-disabled peers in regular classrooms, classes are becoming increasingly diverse (Yadav *et al.*, 2015). This increasing diversity in classrooms requires a skilled, knowledgeable and confident teacher, trained in inclusive practices to be able to adequately support the needs of the diverse learners in a classroom. Other researchers corroborate this point by indicating that legislations enacted in the last few years necessitate the training and preparation of teachers for the adoption of more inclusive approaches to teaching (Saravanabhavan and Saravanabhavan, 2010; Bordoloi, 2011). Mapping the literature in the development of inclusive education practice, Alzahrani (2020) states that various studies across the world have been conducted on teacher professional development and while their results vary, there is a consensus on the significance of taking into account teachers' perceptions, opinions and concerns in relation to inclusion. Studies undertaken by several researchers internationally and in India suggest that one of the factors that impacts the implementation of professional development related to inclusion is the teachers' perception that they lack the specialized skills, training and competence to teach students with special needs (Das *et al.*, 2013a; Bhatnagar and Das, 2014a). The foundation of inclusive education rests on the abilities teachers have in reaching out to students with difficulties, modify instruction and adopt inclusive approaches. Unfortunately, regular classroom teachers in India have been found lacking the readiness, competence as well as confidence in implementing inclusive education (Das, 2001; Jangira *et al.*, 1995)

## 1.2 The Context of the Study - India

### 1.2.1 The Education System in India

In India education is managed under the Ministry of Education (MoE). Until recently this government department was known as the Ministry of Human Resources Development (MHRD). It was renamed in 2020 (GOI, 2020). The management of schools falls under the purview of both the central and state governments. The central government's responsibility is to monitor the quality of the education being delivered whereas the organisation and structure of education is the prerogative of the state governments (Sharma and Das, 2015). Over the years, a number of Non-Governmental Organisations (NGOs) with aid from international organisations such as the World Bank and UNESCO have also contributed to the development of education. Some of these programmes were the Project Integrated Education for the Disabled in 1987, Sarva Siksha Abhiyan (Education for All Movement) in 2001 and the Action Plan for Inclusive Education of Children and Youth with Disabilities in 2005. They have not just helped in bringing the issues of equity, access and quality of education to the forefront of the national discourse but also done some commendable work at the grassroot level to bring children who are at an educational disadvantage into the fold. These include children from underprivileged backgrounds, scheduled castes, scheduled tribes etc. (Jagannathan, 2001; Kingdon,

2007, Bhatnagar and Das, 2014b). An evaluation of PIED indicated that it had brought about increased enrolment of children with disabilities in the mainstream along with higher retention rates and a change in teaching pedagogy (Basu and Basu, 2015).

However, there is a lack of systematic research by independent bodies on the effects of projects undertaken by NGOs (Rose, 2009; Srivastava *et al.*, 2015). Molteno *et al.* (1999) cited in Rose (2009) also state that there has been more emphasis on the reporting of positive outcomes related to NGO provision and almost a complete absence of any critical analysis of the results or mention of the difficulties faced with the education provided by NGOs. Though India has been a front runner in non-formal education within government plans, it also acknowledges the limitations of non-formal methods. A critical analysis of the SSA programme reveals that it has not been able to accomplish some of the goals envisioned. Not only was there a lack of flexibility in provision, community involvement, inclusion of girls and low overall coverage of the programme, there were also no entry points for getting into formal schooling (Government of India, Ministry of Human Resource Development 2002). There were also various criticisms raised about PIED such as low coverage, faulty implementation and its inability to bring about a change in pedagogy due to improperly designed teacher training courses (Basu and Basu, 2015).

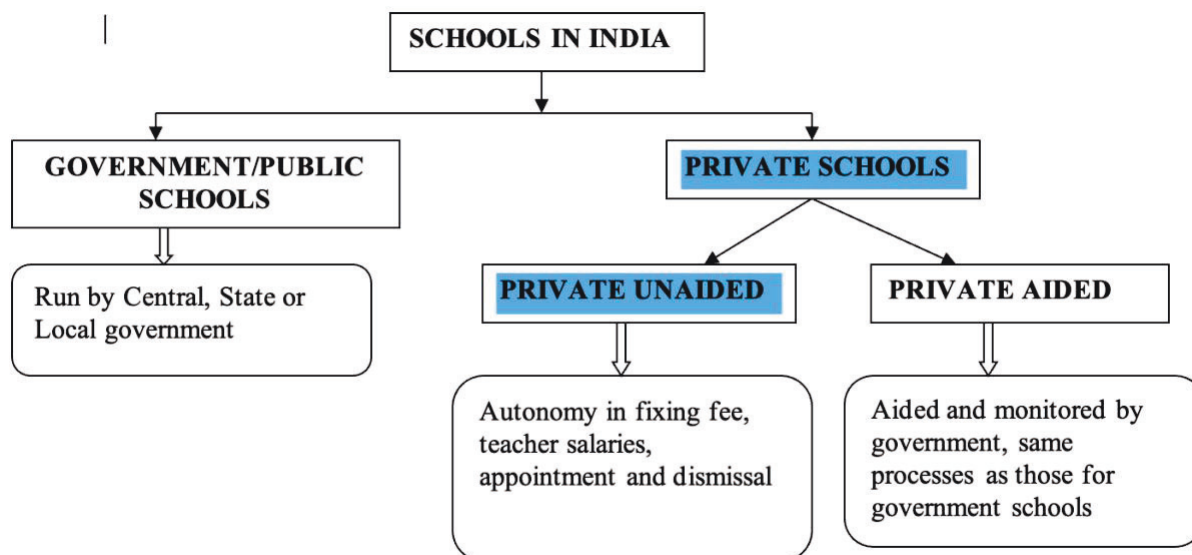
### 1.2.2 Education structure in India

In India, schools can be broadly divided into two categories on the basis of autonomy- government or public schools and private schools. Government schools are run by the central, state or local government. In the section that follows, schools have been categorised on the basis of governance, school structure and educational board. Figure 1.1 below provides an overview of the schools categorised by governance within India.

The sections highlighted indicate the kind of schools that were part of my research.

#### **Figure 1.1- Governance structure**



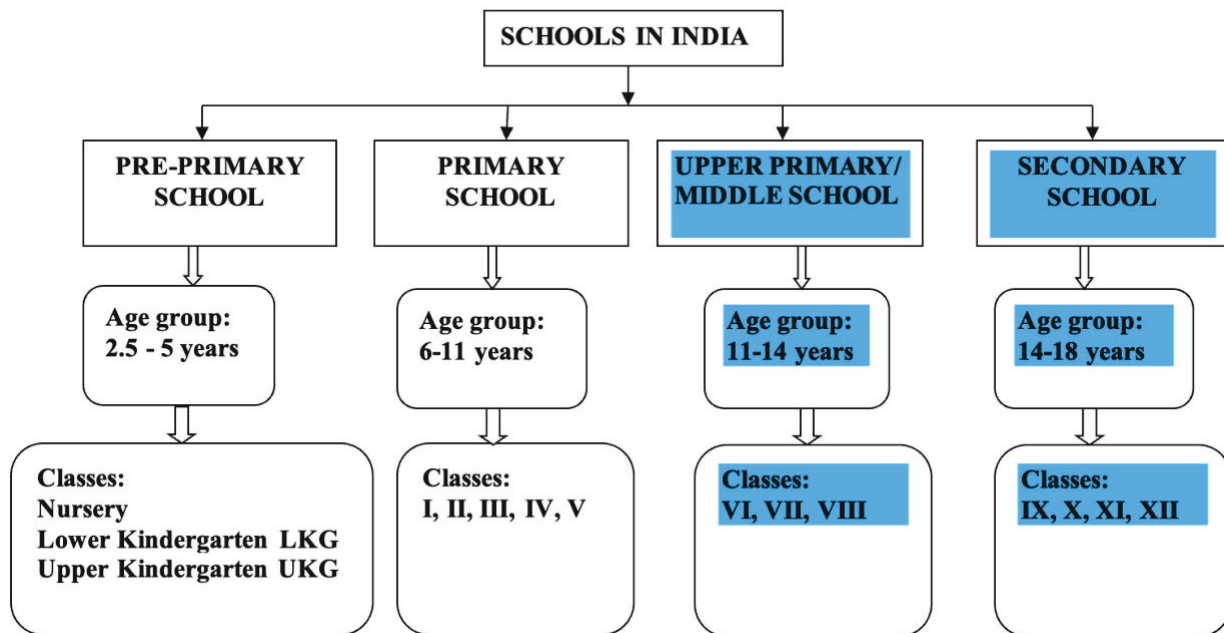


In government schools, all decisions pertaining to the fee, teacher appointment and salaries are taken by the respective government. Under private schools there are again two categories. One is the private aided schools. These are schools which receive government aid and are therefore monitored by the government. The processes related to school fee, teacher recruitment, dismissal and salaries are all similar to that of government schools. Private unaided schools on the other hand are autonomous and have the discretion to make all decisions related to the functioning of the school within the ambit of Indian laws. Kingdon (2020) states that although private schools are a well-established reality in urban and rural India and are becoming increasingly popular, it is difficult to get credible and accurate information on them. Firstly, in India, there is no one comprehensive data source on private schools. Also, there are a number of private schools that are not government recognised as it was not mandatory to do so before the Right to Education Act (2009) and therefore complete data on these schools is not officially available. Thus, the official District Information System on Education (DISE), which is intended to be an annual census of all schools in the country, does not normally collect data from the majority of so-called non-recognized private schools. Additionally, comprehensive data of the recognised private schools also is not available with DISE. Kingdon (2020) laments that to further complicate matters, DISE data published annually clubs the private unaided schools with private aided schools which are very different and function like government schools. An analysis of the National Sample Survey (NSS) raw data, 2014–15 by the author shows that private schools are almost twice as common in cities as they are in rural regions. It was also found that in urban areas, 40.7 per cent of students in the upper primary age group (11-14 years) and 36.1% of students in the secondary school age group (15-18 years) attended private unaided schools. Not only is there a disparity in the numbers in urban and rural areas, there is also a lot of variance in the

enrolment numbers between states. In the period from 2010-11 to 2016-17, on an average, government schools in India grew by 0.8% while private schools increased by 43.9%.

Figure 1.2 below provides an overview of the Indian school structure. The boxes highlighted represent the sections of school and classes that were part of my research study.

**Figure 1.2: School structure**



As seen in the figure above, education in India is divided into Pre-Primary (2.5- 5 years age group), Primary (6- 11 years age group) which covers Grades I to V, Upper Primary or Middle school (11- 14 years age group) comprising Grades VI-VIII and Secondary (15- 18 years age group) consisting of Grades IX-XII. This is the broad structure that is followed across India with some variations in a few states such as Maharashtra where Grade XI-XII fall under Junior college as per the State Board. Education of children from the age of 6-14 is guaranteed as a fundamental right of all children according to the 86th Amendment of the Constitution enacted in December 2002 (Department of Education, 2004). However, education at the pre-primary level does not fall under the ambit of compulsory education and also varies greatly with different provisions in rural and urban areas (Kaul, 2002). There are other alternative systems of education also available in India such as Non-Formal Education (NFE) and the National Institute of Open Schooling or NIOS (earlier known as the National Open School). These systems were started in the 1990s with the aim of providing education to children who couldn't attend school. However, the system fell short in its implementation (Department of Education, 2005) and was rechristened and relaunched as the Education Guarantee

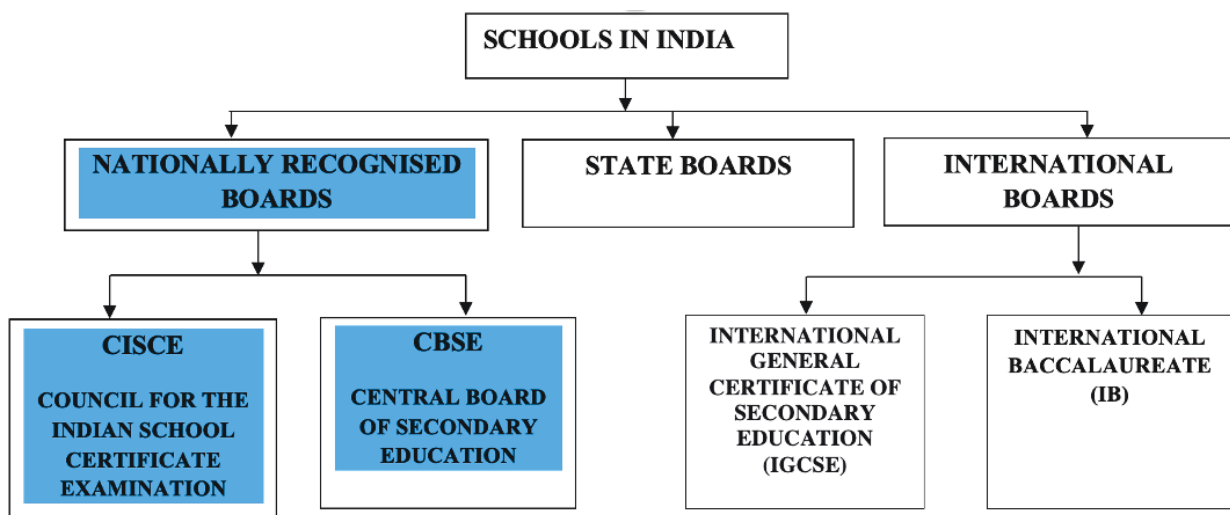
Scheme and Alternative and Innovative Education. The scheme sought to get out of school children in the age group of 6-14 years into the system and help them complete elementary education through these more flexible and cost-effective approaches (Singal, 2006). Children with disabilities can however, avail of the open schooling system of education up to the age of 18 years (Department of Education, 2005).

Along with academic courses at Secondary and Senior Secondary level, NIOS also has the Open Basic Education or OBE, which has three levels that correspond to the elementary education system. OBE Level A is equivalent to Grade I-III, OBE Level B is equivalent to Grade IV-V and OBE Level C is equivalent to Grade VI-VIII. Additionally, NIOS also runs several skill-based vocational, life enrichment and community-oriented courses (NIOS, 2017). Singal (2006) states that although these programmes have led to an increase in school enrolments as found by the Ministry of Human Resource Development (2000) and continue to be supported by the Government, they have been criticised by researchers such as Dreze and Sen (1995) and Nambissan (2000) for providing substandard education that limits the future opportunities available to these individuals.

Figure 1.3 below provides an overview of the schools in India as categorised by educational boards.

**Figure 1.3: Educational boards**

The boxes highlighted in blue represent the boards of the schools that were part of the study- the two pan-India boards of CISCE and CBSE.



The educational boards in India are responsible for all aspects of education, including laying down the curriculum and syllabus to be covered, conducting the Board exams at the high school and higher secondary school stage and maintaining the uniformity and standard of all schools under their

jurisdiction (Sharma, 1991). They can broadly be divided into three categories: nationally recognised boards, state boards and international boards. The two nationally recognised boards are the Council for the Indian School Certificate Examination (CISCE) and the Central Board for Secondary Education (CBSE). States also have their own boards. There are two international boards: The International General Certificate of Secondary Education (IGCSE) and International Baccalaureate (IB).

### 1.2.3 Inclusive Education in India: Legislation and Training for Inclusion

In the past fifty years India responded to international developments in the field of inclusion and passed several pieces of legislations to further the cause of education for children with disabilities. One of the earliest schemes enacted by the Government of India (GOI) in this effort was the Integrated Education for Disabled Children (IEDC) launched in 1974 (NCERT, 2011). This scheme highlighted the need for education of students with mild to moderate disabilities in the mainstream classrooms and provided financial assistance to schools to cover expenses for the same. Since then, several other schemes, policies and legislation have been implemented, highlighting the government's resolve towards inclusive progression. Stressing the need for equality in education, the National Policy on Education (NPE), was launched in 1986 with a view to eliminate the disparities in education for individuals with disabilities who had been denied this right so far. This was followed by the Project Integrated Education of the Disabled Children (PIED), launched in 1987 in collaboration with UNICEF. It was reported that this led to teachers as well as students becoming more accepting of students with disabilities (Azad, 1996). By the mid 1990s, the Government of India passed The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full participation) or PWD Act in 1995 which called for students with disabilities being taught in regular schools and having access to the same educational opportunities as their non-disabled peers. It also stipulated 3% reservation of seats for persons with disabilities in various government departments and the public sector. This legislation was monumental for the education and economic rehabilitation of persons with disabilities in India (Das *et al.*, 2013a, Bhatnagar and Das, 2014b; Yadav *et al.*, 2015). The PWD Act was updated in 2016 to include more provisions and widened the applicability to 21 disabilities instead of the 7 conditions mentioned in the previous act.

Several other significant legislation and initiatives have taken place in the last three decades, in response to various developments at the national and international level. These include India becoming a signatory to Salamanca Statement and Framework for Action on Special Needs Education (UNESCO, 1994) which called for mainstream schools to “accommodate all children, regardless of their physical, intellectual, social, emotional, linguistic or other conditions” (UNESCO, 1994, p. 6).

In 2001, the Sarva Shiksha Abhiyaan (SSA) or Education for All movement was launched. It had a 'zero-rejection' policy and stressed on universalization of elementary education for all with a focus on girls, marginalized castes and ethnic groups and children with disabilities. Thus, inclusive education was an essential part of SSA. In 2009, this scheme was then upgraded to Rasthriya Madhyamik Shiksha Abhiyan (RMSA) to include secondary education which sought to improve the access as well as quality of education imparted and eliminate barriers, achieving universalization of secondary education.

Other significant legislation in India includes the National Trust Act (1999), National Action Plan for the inclusion in education of children and youth with disabilities (IEDC, 2005) revised in 2009 and named 'Inclusive Education of the Disabled at the Secondary Stage' (IEDSS). Another historic policy passed in 2009 was The Right of Children to Free and Compulsory Education (RTE) Act. This Act (section 12) made it mandatory for all recognised schools, public or private, to reserve 25% of seats for pupils from disadvantaged groups which included those from economically weaker sections of society and those with disabilities and provide them with free and compulsory elementary education (Yadav *et al.*, 2015, Sharma and Das, 2015). These initiatives, policy and legislations highlighted the Government of India's commitment towards bringing about equality in education and the betterment of opportunities for children with disabilities. However, many of the acts and documents provided limited advice and guidance on teacher's professional development for inclusion. Sharma and Das (2015) contend that in spite of all these efforts by the government, the actual implementation of educational inclusion at the ground level remains limited in reach and impact for professional practice.

One of the major hurdles that has been identified in the implementation of inclusive education in South Asian countries (Sharma *et al.*, 2013), including India (Singal, 2005a, 2005b) is the lack of teacher preparation. Successful inclusion depends on the skills, knowledge and competencies of regular teachers to reach out to all learners in classes that are increasingly becoming more diverse by altering their teaching strategies and making adaptations such that all students are able to learn (Winter, 2006; Forlin, 2010). However, regular teachers in India have not only been found lacking in these competencies, but they are also known to depend heavily on a teacher-centred instructional method of delivery which is not considered effective for students with special needs and thus limits student learning (Shah, 2005; Unnikrishnan, 2010; Sharma and Das, 2015). Forlin (2010) contends that teaching an inclusive class involves a multitude of skills and abilities along with good content knowledge to make accommodations, curriculum adaptations and be adept at using a range of pedagogies to meet the needs of different learners. Therefore, she calls for reframing teacher education so that it is more progressive and involves greater collaboration with schools, takes into

account the intricacies and layers involved in teaching in inclusive classrooms and ensures that teachers are being trained for the reality of inclusive teaching with diverse learners. This need for reformation in teacher education has also been expressed by researchers in India (Singal, 2005a, 2005b; Mitchell and Desai, 2005; Sharma *et al.*, 2009; Bhatnagar and Das, 2013) as well as international agencies like UNESCO (2005). Teachers trained in special education were also found to have more positive attitudes towards inclusion, thus reaffirming the need for focussed and continuing professional development of all teachers irrespective of governance, school structure and educational board (Reusen *et al.*, 2000; Avramidis *et al.*, 2004; Bhatnagar and Das, 2014b).

However, Sharma and Das (2015) lament that there is no clarity on how this can be achieved in terms of policy or research to back it up. They further state that for any pan-Indian change to take effect, the primary institutions responsible for teacher training in India, such as the National Council for Teacher Education and University Grants Commission need to view inclusive education differently. Sharma and Das (2015) suggest that inclusive education needs to become an integral and inherent part of teacher education that prepares teachers to provide good quality education to all learners and not something additional that needs to be provided to just a few children with special needs.

### 1.3 The Rationale of the Research Study

Over the last decade, across the world, inclusive education has been acknowledged as important towards accomplishing 'Education for All'. The SDGs have reiterated the importance of taking a holistic view of the needs of all children including that of developing a more inclusive and equitable approach to education ( Meijer and Watkins, 2016). Research has shown that regular classroom teachers play a critical role in the success of inclusive programmes and their role in providing inclusive and quality education cannot be undermined (Bhatnagar and Das, 2013; Das *et al.*, 2013a; Shah, 2005). While EFA recognises this critical role as well as the variances in the qualifications, availability and employment of teachers it does not shed light on the issues of teacher preparation and development. Also, there is a lot of disparity in teacher training between and also within countries. However, teacher training for inclusion remains a common challenge both internationally and within India (Forlin and Florian, 2010; Das *et al.*, 2013b).

Over the years there has also been a massive change in the education of students with special needs. Students with special educational needs being a part of the mainstream classroom is now the accepted philosophy of education (Winter, 2006). With this shift from segregated to inclusive placement of students, the demands on schools as well as expectations from teachers to provide adequately for the diverse population of students now found in classes, have increased (Ainscow, 2003; Forlin, 2006).

However, teacher training has not kept pace with these changes. Forlin and Florian (2010) contend that with classes becoming more heterogenous, teachers need to acquire new competencies, techniques and pedagogies to ensure that all students can learn. They emphasise that teacher education, both for pre-service as well as in-service teachers must embrace the changes and adopt more creative and modern ways to incorporate the theoretical elements and research into practice. Training teachers is also one of the important teaching reforms suggested within the Sustainable Development Goals (SDGs). Several researchers in India have commented on this and have underscored the training of mainstream teachers as a significant factor in implementing inclusive education in India and called for more research in this area along with a transformation of teacher training programmes (Singal *et al.*, 2010; Mitchell and Desai, 2005; Sharma *et al.*, 2009; Sharma and Das, 2015).

Thus, there is an immediate need to bring about changes in teacher education so that teachers are equipped to deal with the challenges of inclusive education and the increasing diversity in classes. This is critical to ensure that every learner is able to access the curriculum and learn. Not many studies are found in India that focus on the in-service education of teachers for inclusive education or on this section of teachers in particular, that is, those teaching in the upper primary and secondary sections. Therefore this study was a step in this direction and sought to understand various aspects related to teachers and inclusion - the challenges faced by them in inclusive education, their professional development needs and to provide the framework of a professional development programme for inclusion.

### 1.3.1 Personal Rationale

In the past twelve years of my being in the field of special education, I have relocated several times and lived in four of the five largest metropolitan cities of India, each located in four different directions of India-Delhi NCR to the north, Bangalore to the South, Mumbai to the west and Kolkata, to the East. Though a little difficult, it has given me the opportunity of working in different schools and set-ups across these cities. India is a large and culturally diverse country. It is the seventh largest in the world with 28 states and 8 Union territories and has 17% of the world's population (Office of the Registrar General, 2011).

In my experience of working as a special educator and SEN Coordinator (SENCo) across cities and educational institutions, the one factor that has remained unchanged is the struggle mainstream teachers and faculty go through in catering to the diverse learners in their classes. Being passionate about the cause of inclusive education, it's implementation in practice is something that I am naturally

observant of, have been interested in and something that has always bothered me because of slow progress in this area. There is often an incomplete or wrong understanding of the needs and concerns of students with special and additional needs. Terms such as dyslexia, hyperactive, learning disabilities, slow learners, depression and IQ are all used quite casually in India without any real understanding. There is also a constant 'us' vs 'them' attitude and a lack of cohesion between the special needs departments and mainstream teachers. Therefore, I have come to realize that without training the mainstream teachers, no significant impact on the experiences of students with disabilities and other diverse needs can be made. Even the best special educators and counsellors, have a limited reach and their scope of work is limited. However, the teachers who actually go into the classrooms and deliver the lessons on a day-to-day basis are the ones who can have a huge and positive impact on the experiences of not just children with special needs but all students. I have observed several teachers, irrespective of their professional qualifications, number of years of experience or intentions finding it difficult to carry on with their classes as planned or achieve the outcome desired owing to the varied levels and different kinds of learners in their classrooms.

My dissertation for the Master of Arts in Special and Inclusive education from the University of Northampton explored the barriers and facilitators to inclusion within one Indian higher educational institute. The perspectives of both the teaching faculty as well as the students with special needs were examined and a core finding identified limited faculty training for inclusion and negative attitudes. It was suggested that teacher training for inclusion would enable the faculty in better understanding students and then catering to their diverse needs. This in turn would positively influence student experiences on campus. Owing to my professional experience, I was also aware that most schools have different approaches and kinds of training and workshops for teachers. The efficacy of this training and ways to empower and equip teachers to cater to the diverse learners in a class was something that I felt needed to be investigated. A survey of the literature in the field along with my prior experience of finding the same when doing my Masters dissertation made it apparent that there was a dearth of empirically backed research from India on the topic, as also mentioned by Singal (2005b) in her review of the Indian literature on inclusive education. Therefore, I felt committed to understand the teachers' perspectives, challenges and concerns in inclusion and initiate some action that would empower and support them appropriately and lead to a positive change. Consequently, these aspects on professional development for inclusion feature within this PhD research study.



## 1.4 Research Aims and Questions

### 1.4.1 Research Aims/ Focus

- To investigate the professional development needs of middle school and secondary teachers in four Indian urban environments in relation to inclusive education;
- To identify and develop ways of catering to their professional development needs;
- To formulate/ design a program/manual that may inform changes and improvements in practice as well as positively impact the learning of the diverse students in a classroom.

### 1.4.2 Research Questions

1. What are the difficulties/challenges faced by middle school and secondary teachers working in mainstream Indian schools in addressing the diverse needs of learners in a classroom?
2. What are the professional development needs of middle school and secondary teachers in mainstream Indian schools in urban locations in relation to inclusive education?
3. What methods such as teacher training, workshops etc. are being currently adopted to meet these professional development needs and how effective are they?
4. How should a module/manual/workshop be designed such that the professional development needs can be addressed for these teachers?

## 1.5 Methodology

The research reported here adopted a multi-step approach where data was collected in two stages. It was predominantly a qualitative study though an online survey was utilized in the first stage while focus group discussions and semi-structured interviews were used in the second stage. The research was conducted in the four metropolitan cities of India- Kolkata, Bangalore, Delhi-NCR (National Capital region-comprising Delhi, Gurgaon and Noida) and Mumbai. The schools considered for the research were mainstream, English medium schools, with a student roll between 2000-2500 and staff of about 100-150. These schools had a mixed population of students that included first generation learners, students from economically and socially disadvantaged backgrounds and students with special needs. There was no demarcation made on the basis of caste or religion either and students from all communities could get admitted if they fulfilled other eligibility criteria. Additionally, most schools took children as per the provisions of the RTE Act. However, they did not have all such categories as mentioned in the RTE Act. The schools were affiliated to one of the two Central Indian Boards, recognised across the country for secondary education-CISCE (Council for the Indian School Examination) or CBSE (Central Board of Secondary Education). Keeping the constraints of resources

such as time, cost and practicality, two schools from each location were considered as the sampling frame for the data collection. Consent was obtained from ten schools -two each in Delhi and Kolkata and three each in Mumbai and Bangalore for the first stage and one school from each location for the second stage.

An online questionnaire was used in the first stage to ease the process of collecting data from different locations and enable greater control and organization. A total number of 280 responses to the survey were received. This was followed by a series of focus groups and semi-structured interviews to gain deeper insight. Two focus group discussions with teachers were conducted in each school; each group comprising 6-7 participating teachers who taught different subjects and classes in the upper primary and high school section. Thereafter semi-structured interviews were conducted with the other stakeholders such as the heads of schools, special educators, section heads and counsellors. These interviews helped to understand the teachers' challenges and needs from their perspective. In all, eight focus groups and 16 semi- structured interviews were conducted.

### 1.6 The Significance of the Study/ Expectations

There is a dearth of literature on inclusive education in India (Singal, 2005). Out of the literature available, most of it pertains to one aspect like attitudes, one location or the segment of pre-service teachers/ primary teachers (Das, 2001; Bhatnagar, 2006; Sharma *et al.*, 2009; Singal, 2008; Yadav *et al.*, 2015). There were hardly any empirical studies found that looked at the professional development needs of in-service teachers (teaching at the upper primary and secondary level) in India in relation to inclusive education. This multi-location study aimed to fill the huge void in this area.

In addition to the professional development needs, it also aimed to understand teacher challenges in inclusion at those age and grade levels and arrive at a broad structure of a professional development programme that is likely to fulfil their professional development needs. Coming from the practitioners themselves and also taking into account the views of different stakeholders, it hoped to provide valuable and credible inputs that could be used to design a standardized professional development module for teachers teaching upper primary and secondary students so that they are confident and well equipped to cater to a class of diverse learners. The insights gained from the research, it is hoped, will ultimately help define the framework of professional development programmes designed for teachers and thereby influence policy and practice. Teachers who are trained thus, will be more effective in catering to the different aspects of a child's education and also to the different types of learners, making them learners for life; the key tenets of quality education.

## 1.7 Organization of the Thesis

The thesis has been organized into 15 chapters. This introduction chapter is followed by two literature review chapters. The first chapter provides a broad overview of inclusion internationally and inclusion in India: the background, legislation, obstacles in inclusive education. The second literature review chapter looks at the literature available for the different aspects of my research study such as teacher challenges, professional development needs and teacher training for inclusion. There are two Methodology chapters that elucidate the process that was followed in carrying out the research study. The chapter on Data management describes the entire process from the point of data collection to organization for analysis. There are five Findings chapters and each one shares the findings for a particular theme for all the locations. Discussion has been structured into three chapters. The first discussion chapter focusses on the first theme, while the second and third chapter combine two themes each which are related. The last chapter is on conclusion which contains the limitations of the study and recommendations for future research. Appendices contain documents such as the Consent forms, Information sheet, Focus group questions, interview schedule, table with list of codes and sample segmented transcript.

## CHAPTER 2: LITERATURE REVIEW-I

### 2.1 Chapter Overview

Inclusive education has gained momentum over the years, both internationally as well as in India, leading to the development of different themes and issues related to students with special educational needs, teachers' attitudes and professional development and policies, among others (Torrano *et al.*, 2020). The research reported in this thesis has investigated one of these issues in depth and explores the professional development needs of teachers in relation to inclusive education. The research questions as well as the choice of research methods, have been formulated with reference to the literature review. This literature review is therefore divided into two parts. The first part discusses the broad framework of the study, places the study in context and reviews the development of inclusive education globally and in India. It also clarifies the purpose of the literature review in relation to the research questions, provides an outline of the search and critical appraisal approach taken in presenting the literature, definition of terms used in the study, presentation of main findings of the review and summary of main findings and discussion. The second literature review chapter explores the literature in relation to the different aspects of my research.

### 2.2 Literature Search Methodology

A preliminary review of the literature was carried out to gain an understanding of the research that has already been reported related to teacher professional development and inclusion and whether the research questions have already been considered in other country contexts. Although a preliminary review was essential in a research of this nature, it was an iterative process which went on throughout the research. The criteria that guided the literature search were founded on the main focus of the papers, methodologies adopted along with the outcomes and location of literature, national context. Although the primary focus was on studies having an Indian context, it was appropriate that this should be expanded to other countries, many of which have been considering inclusion within teacher professional development for some considerable time. Therefore, studies from other countries were taken into consideration, where these were relevant to a significant aspect of my study, as a limited body of Indian literature was found. Although only one other study (Bhatnagar and Das, 2014) could be found which used an approach similar to mine, I believe that the approach I have adopted strengthens the understanding of this area. However, care was taken not to consider investigations which used a methodology which was completely dissimilar.

The literature search began using the traditional search engines such as the University of Northampton's NELSON repository and NECTAR which provided access to the major academic

search engines. Additional search engines like EBSCO and Google Scholar were also deployed. My search strategy included a number of methods; searching sources by hand, searching indexes of sources, author searching and checking citation information. The development of key words and terms related to my research questions enabled a focus upon the major thrust of my research to be maintained. The terms and keywords used to narrow the focus of my initial search were: inclusive education, inclusion, professional development of secondary teachers, teacher training for inclusion in India, teacher attitudes and diverse learners.

### 2.2.1 Definition of terms

For the purposes of this study, the following terms have been defined as follows;

#### Mainstream Schools, Diverse learning needs, and Inclusion

Mainstream schools considered for the purposes of this research were privately managed, English medium mainstream schools in urban areas, having an inclusive population of students with diverse learning needs. Inclusion has long been understood in India from the narrow lens of disability. However, any regular mainstream classroom is likely to have diverse learners, beyond students with disabilities. The term diverse learning needs is often used to express the inherent differences in the abilities, learning styles and preferences of students which makes them learn at a different pace and in different ways. These differences could also be due to the backgrounds of children such as first-generation learners and children from economically disadvantaged sections who do not have a conducive home environment for learning, have little or no exposure and connect to the curriculum they are learning and no support at home to enable the learning process. The learning needs of children with disabilities and other special needs such as emotional and behavioural difficulties, including gifted children are also very different. Hence, teachers in mainstream schools need to understand these diverse needs and be trained to plan effective learning experiences for all students. This would indicate that diverse learning should be a focus of planning and preparation of all teachers in all settings.

Inclusion has been defined by UNESCO (2017) as “a process that helps overcome barriers limiting the presence, participation and achievement of learners” (UNESCO, 2017, p.13). I believe that to be truly inclusive, a school needs to take cognisance of these diverse learning needs and ensure that the needs of all students are taken care of and their learning, development and achievement are actively facilitated. Other authors such as Winter (2006) and Pachigar *et al.* (2011) also subscribe to the view that inclusive education is more than just the physical placement of students with different needs in the classroom, it is equally about their participation and achievement in the class.

### Critical Appraisal strategy

After the literature was searched based on the criteria identified above, it was read through and evaluated on various parameters to determine its suitability for consideration in my study. The points that were kept in mind while going through the literature were: the kind of study reported, the methodology used, the claims being made, the evidence presented to support these claims and most importantly, how were the findings and outcomes reported relevant to my work.

### 2.3 Purpose of the Review

In the context of my research, the initial purpose of the review was to position the study in the context of the work already done in the field of special and inclusive education in India. Additionally, the review was used to ascertain the gaps in the knowledge and understanding of the professional development needs of teachers for inclusion. This enabled me to widen the knowledge base on this topic and help answer questions on how best to address the professional development needs through an appropriate programme. Though some literature regarding the attitudes of teachers, institution heads, teaching efficacy and confidence related to students with disabilities in schools is available in India, most of it is limited to pre-service teachers, primary teachers and one particular location (Das, 2001; Bhatnagar, 2006; Sharma *et al.*, 2009; Singal 2008; Yadav *et al.*, 2015). There was no documented research found that looked at in-service teachers specifically teaching the upper primary and secondary students or one that included the teachers' perspectives and suggestions on their own professional development needs and design of a professional development programme.

The research undertaken was thus an attempt to fill this void in existing literature. It focussed on in-service teachers teaching the upper primary and secondary age group in mainstream English medium schools. It was a multi-location research conducted across four major metropolitan cities of India- Delhi NCR, Mumbai, Bangalore and Kolkata. It investigated teachers' challenges and professional development needs for inclusion not just from their own perspective but also included the perspectives of other stakeholders such as heads of schools, counsellors, Special Education Needs Coordinators (SENCo) and section heads or coordinators. Suggestions on the designing of a professional development programme were also sought.

## 2.4 Inclusive Education

Inclusion means accepting students with diverse educational needs without looking at their personal, psychological and social characteristics and providing for them in appropriate ways that ensure equity. It involves a transformational change with respect to culture, organization and practices such that the diversity of students can be met. The aim of inclusion is to improve the access, learning opportunities and involvement of students with special needs by removing all barriers, whether personal, physical or institutional (Ricardo *et al.*, 2012). Inclusion is considered to mean giving access to formal education to several groups that were previously excluded (Peters, 2004). Although it is difficult to provide a clear definition of inclusive education as it differs between countries, inclusive education is now generally accepted as the most reasonable, just and successful approach to educating all kinds of learners, with and without disabilities (Florian, 2014; Forlin, 2018a). According to UNESCO (2006, p.14) inclusive education is:

*“....a process of addressing and responding to the diversity of needs of all learners through inclusive practices in learning, cultures and communities and reducing exclusion within and from education. It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children.”*

## 2.5 The Development of Inclusive Education Internationally

The Universal Declaration of Human Rights (1948) was a landmark international agreement that publicly stated the rights and freedoms of all individuals, without any distinction. In 1989, the United Nations Convention on the Rights of the Child (UNCRC) was passed and it was the first legally binding international agreement that reiterated the civil, political, economic, social, health and cultural rights of every child. In the UK, the Warnock report (DES, 1978) marked a major step in inclusive education and stressed the need for students with special needs to be educated in mainstream schools (Alzahrani, 2020). However, it was the Salamanca Statement adopted by the World conference on Special Needs Education that was considered a historical milestone internationally in the field of special education. It proclaimed that regular schools were “the most effective means of combating discriminatory attitudes, building an inclusive society and achieving education for all” (UNESCO, 1994, p. iv).

Though the Salamanca statement led to the adoption of inclusive education policies in several countries, there was no clarity on its conceptualization or the steps that were needed to be taken in terms of policy and practices. The understanding around inclusive education, the definition of

inclusive education and related terminology, provision, implementation, has developed differently in various countries around the world. This lack of clarity internationally could also be attributed to the fact that the concept of inclusion lends itself to different meanings, definitions and interpretations (Vislie, 2003; Ainscow, Farrell and Tweddle, 2000; Ainscow and César, 2006). Peters (2003) makes a similar observation while reviewing literature on the policies and practices around inclusive education stating that it is a complicated matter and that there is no evidence of a consistent approach that could be found in the literature. There is a variability in its objectives, classification of categories of special education needs, implementation and provisions which is likely to result in variability in training for inclusion within and across countries.

Loreman *et al.* (2014) contend that inclusive education has been conceptualised primarily in the following two ways: one defines inclusion based on the main features and characteristics while the other considers it as the elimination of barriers to inclusion. However, the presence of a wide range of diversity and cultures in countries brings with it different understandings of disability that eventually impact the attitudes towards inclusion. Loreman *et al.* (2014) argue that these two conceptualisations of inclusive education do not help to provide a universal definition as both the key features and barriers are context and culture specific, varying from country to country and also within countries. In a review of the research literature on inclusive education since the Salamanca statement, Torrano *et al.* (2020) observe that interest and research in the field of inclusive education continued to develop with several international agreements and treaties also being signed. Notable among these, which brought the focus on equality and inclusivity in education were the United Nations Convention on the Rights of Persons with Disabilities (2006), UNESCO International Conference on Education (2008) and the United Nations Sustainable Development Goal for Education (SDG 4). They also unravelled few common themes that are recurrent in the literature in the last 25 years. Two were related to teachers-their attitudes towards inclusive education, the professional development of pre-service and in-service teachers and the others dealt with special education, students with special needs, practices, principles and policies related to inclusion and inclusive education in higher education. Torrano *et al.* (2020) also take the support of researchers like Ainscow and César (2006) and Magnússon (2019) to note that though the Salamanca statement gave a major impetus to inclusive education policies and practices across the world, it also led to multiple interpretations of the concept causing variability in its implementation due to the lack of clarity in the document. They also found that the majority of the research on inclusive education comes from a limited number of countries and researchers belonging to a few developed countries such as US, UK, Australia and Canada. As they rightly point out, this could be a hurdle for the global development of inclusive education as there is the danger that the countries which do not have their own body of research on inclusive



education might base their policies and practices on research from countries which might be far removed from their local context and needs.

Stepaniuk (2019) undertook a literature review to understand the present state of inclusive education in Eastern European countries and the former Soviet states. She found that there wasn't enough information related to inclusive education practices in these countries and the bulk of the literature was on attitudes of teachers, parents and students. Stepaniuk (2019) also argued that although many of Eastern European and post-Soviet countries ratified the Salamanca Statement, the very concept of inclusive education contradicts the deep-rooted beliefs and discriminatory stance on people with disabilities who are regarded as incapable members of society. She contends that for inclusion to be effective in these countries, a paradigm shift in attitudes within society, supported by appropriate changes in legislation and policies will be required. Evaluating the results of the review with previous research, also including other countries, she quotes the work of Avramidis and Norwich (2002) and de Boer, Pijl, and Minnaert (2011) to assert that teachers' perceptions and interpretations about inclusive education are critical factors for putting inclusive education into practice.

An analysis of research on inclusive education in mainstream primary and secondary education across the world was conducted by Miegheem *et al.* (2020) to understand the themes that have been investigated in the literature, learnings from these for future practice and the existing gaps in literature. They carried out a thematic analysis of 26 reviews and discovered five main themes: attitudes towards inclusive education, professional development of teachers in relation to inclusive education, inclusive education practices, student participation and critical reflections on inclusive education research. They maintain that teachers need to be trained in evidence-based inclusive education practices for the successful implementation of inclusive education. The implementation of inclusive education has been the subject of serious deliberations world-wide sparking interest among researchers, practitioners and policy makers. Researchers such as Pijl and Meijer (1997) and Singal (2008) report that certain new laws implemented by western countries have led to a change in school policies, better teacher training and a greater participation of the parent community. Srivastava *et al.* (2015) argue that while there has been a gradual move towards looking at disability from the perspective of community, social respect and equality, these changes have not percolated to the school level (Thomas 2013). The path to implementing inclusive education is neither uniform nor one without hurdles. The challenges and propositions are different in the developed and developing countries (Armstrong, Armstrong, and Spandagou, 2011). Peters (2003) further explains that there are differences not just in the aims and objectives of inclusive education but the classification of disabilities and provisions in these countries may also be different.

When some of the developing countries of the world still grapple with basic issues such as health, social welfare and marginalisation of certain groups such as girls, education for all children itself seems to be a lofty target (Booth 1999; and Alur and Rioux 2003). In this scenario, the objective becomes to first get the students with disabilities access to education while the issue of the quality of education received by them gets relegated to the background ( Srivastava *et al.*, 2015). On the other hand, although inclusive education in Western countries began with the inclusion of students with disabilities in mainstream schools, inclusion is no longer confined to the notion of disability (Miles and Singal, 2010). Therefore, due to the various factors at play in the developed and developing countries, both the pace of implementation and the stage they are at in achieving inclusion in education for all students are likely to be different. International organisations such as UNICEF, UNESCO and World Bank have played an active role in developing countries to put inclusive education policy into practice through several projects (Srivastava *et al.*, 2015)

## 2.6 Inclusive education in India

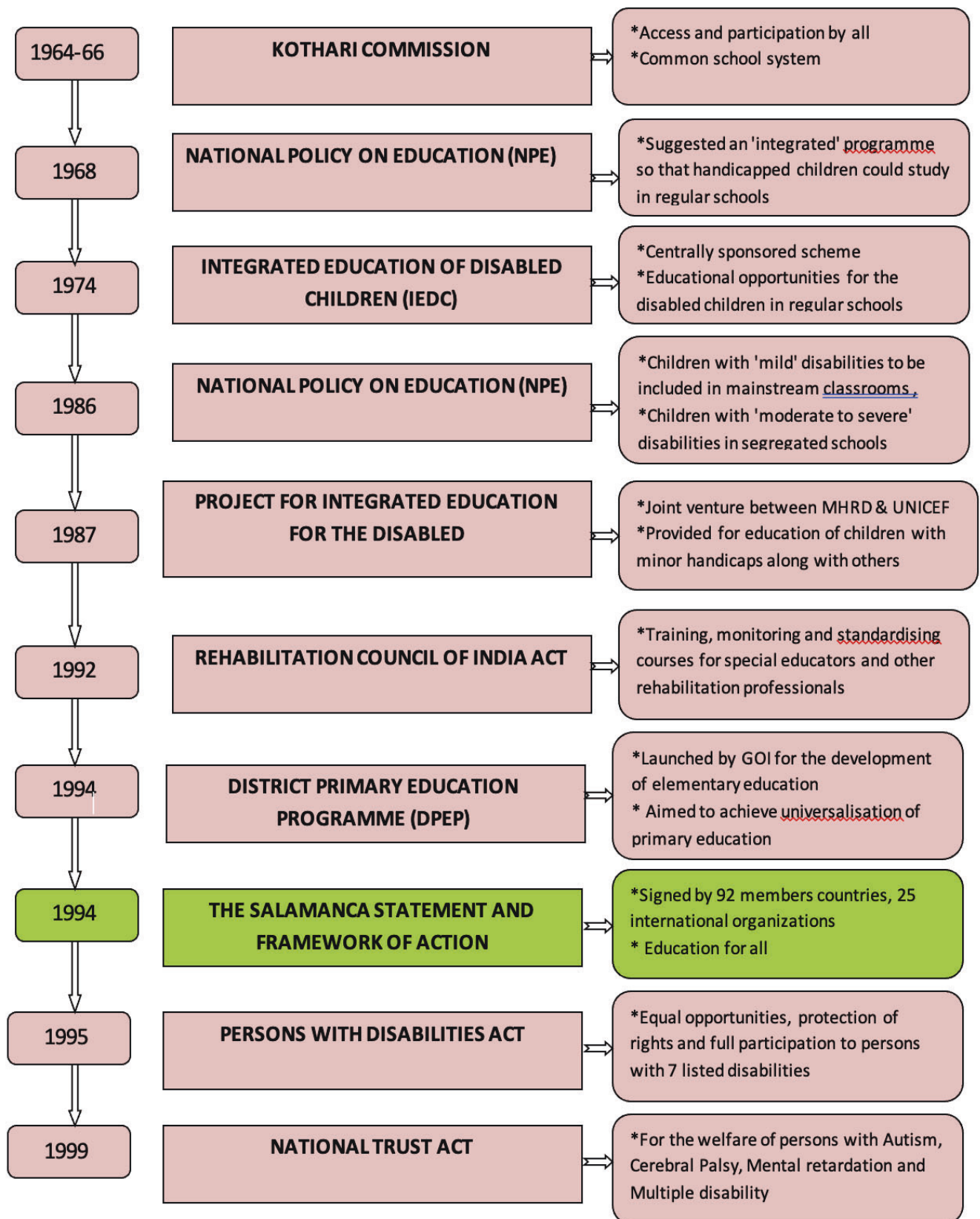
International developments in the field of inclusive education and the adoption of various significant resolutions such as UN Convention on the Rights of the Child (1989), the Jomtien Conference (1990) and the Salamanca Statement (1994) of which India was also a signatory had a bearing on contemporary developments in India (Mukhopadhyay and Mani 2000; Jha 2002). However, even though inclusive education entered the discourse and found mention in various documents, there remained a lack of clarity in the understanding and application of the concept. In a survey of the Indian literature on inclusive education, Singal (2005) states that there is an ambiguity in the literature regarding the definition of 'inclusive education' itself and who exactly fall under its purview. She also notes that there is no clear demarcation in literature regarding the concepts of 'integration' and 'inclusion'-both often being used interchangeably. Singal (2005) observes that the discussion on inclusion in India continues to focus on children with impairments or disabilities while excluding other marginalised groups such as ethnic and cultural minorities, orphans, labourers etc. Jha (2001) questions this premise even further and suggests that inclusive education should be broadened to include other children such as those who are out of school, from socially and economically disadvantaged backgrounds and victims of conflicts or calamities in its ambit. In India, the concept of disability has historically been looked at through the medical model rather than a social model. Therefore, the focus has been on establishing the disability or pathologic conditions of people-defining the so called 'deficit', with no standardization of terms used to address persons with disabilities or any widely accepted method of assessing them. Hence words such as handicapped, mentally challenged, crippled, disabled were in vogue. However, over the years this perspective has changed and disability is now largely viewed from a rights-based lens (Mondal and Mete, 2011).

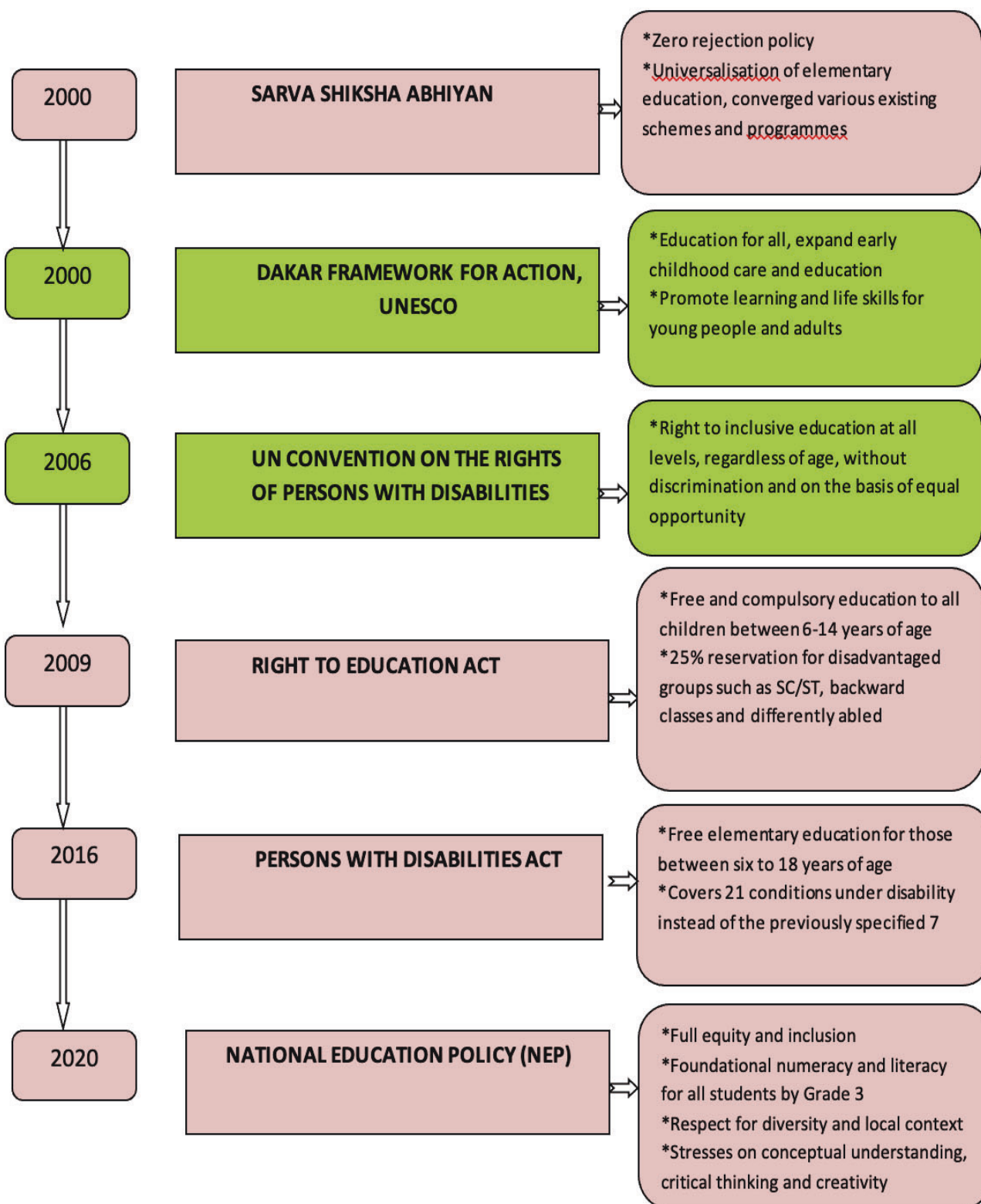
Sharma and Das (2015) agree to the individual or medical model being followed in India and state that this perspective is apparent even at the highest level of Government. The manner in which the policy documents related to disability and special education are framed is evidence of this approach. Educational researchers such as Jhulka (2002) and Ahuja (2002) discuss that school systems need to be responsive to the needs of all children in the classroom and question the previously held notion that the onus of 'fitting in' rests with the child. However, there are very few empirically backed studies that focus on inclusion at the school level. Most of these seem to be commentaries of authors and are not backed by systematic research or evidence (Singal, 2005). Sharma and Das (2015) cite Peters (2004) and UNESCO (2005) to make the point that there is a need to bring about a change in mindset at all levels of governance as well as society to bring about any real change. They suggest that 'disability' needs to be looked at more as a function of the system not being able to cater to the needs of the individual, thereby accepting the responsibility of the schools and education systems to cater to the needs of all learners. This change in mindset needs to come from the highest level and changes need to be made in the legislative documents to reflect the same. Also required, is a realisation that focus on improving the quality of education for children with disabilities, inevitably leads to quality education for all learners through quality training of educators and individuals in positions of educational power.

### 2.6.1 Legislation

As the inclusive education movement began to gain popularity around the world, India responded to the challenge through a number of policy initiatives. The flowchart below presents a snapshot of the important laws and legislations passed (International legislation is in green and Indian legislation is in a different colour) that shaped the development of inclusive education in India. This knowledge is important to understand the landscape of inclusive education in India, the responsibilities and expectations these laws placed on the role of the regular teachers and what this meant for teacher professional development. While the flowchart sheds light on all the important legislation, some of them have been discussed in greater detail.

**Figure 2.1: Flowchart of important laws related to inclusive education in India**





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One of the earliest initiatives that was put into practice by the central Government of India (GOI) in a few selected blocks of the country was the scheme of Integrated Education of Disabled Children (IEDC) in 1974. It provided financial aid to schools for the education of children with disabilities in the mainstream classrooms, aimed towards retaining these children in the regular school system and providing them pre-school training (Sharma and Das, 2015). However, a lack of awareness in parents which led to only a few children receiving benefits (in terms of equipment or services), improper resource allocation and lack of appropriate training of teachers for teaching an inclusive class proved stumbling blocks in its implementation (Seetharam, 1982, cited in Kalyanpur, 1996). This was followed by the implementation of the National Policy on Education in 1986, which aimed to eliminate the disparities in education and integrate into the mainstream, individuals who had previously been kept out of the system (Yadav *et al.*, 2015). In order to provide the requisite support to the IEDC, the Project Integrated Education of Disabled Children (PIED) was formulated in 1987. It was a joint venture between the Ministry of Human Resource Development (MHRD) and UNICEF. These initiatives by the government in the 1990s helped to highlight the issue of inclusive education in the national context. They emphasised the need for appropriate resources and teacher training to enable inclusion and bring about gradual changes at the school and classroom level (Sharma and Das, 2015). However, there was no clarity on how this could be achieved. The PIED was critiqued on its implementation on several grounds. Mani (1994) in Singal (2005b) report some of these such as; the roles and responsibilities of the mainstream teachers and resource teachers not being clearly defined, a lack of proficiency in skills of teachers and no monitoring of teacher training courses. Ainscow *et al.* (1995) in their evaluation of the PIED among other observations such as high project cost also stated that the teacher training programme used in the project was ineffective.

The central government thereafter passed other vital legislations such as the Rehabilitation Council of India Act in 1992, the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act in 1995 and the National Trust Act in 1999 which show its dedication towards the cause of inclusive education and children with disabilities (Das *et al.*, 2013a). The Persons with Disabilities Act (1996) was considered a landmark legislation in the education of individuals with disability as for the first time, it enabled them to seek legal recourse in case they faced any discrimination through a grievance redressal system established at the central and state levels. Another important initiative launched in 2002-2003 was the Sarva Siksha Abhiyan (SSA) that sought to take elementary education to all sections, especially girls, marginalized caste groups and ethnic minorities. Inclusive education was also one of its primary aims. It had a policy of 'zero rejection' and warranted that admission to school could not be denied to a child based on disability (Sharma and Das, 2015). Das (2007) states that although governments at the state and centre have taken steps to lower the drop-out rates and increase the retention rates through the SSA, there is still a long road

ahead in terms of achieving universalisation of elementary education. He suggests that factors such as provision of appropriate infrastructure and trained teachers are critical to enhance the quality of education provided through SSA and would eventually result in higher retention of students. With a view to increase the access to secondary education and to improve the quality of education being imparted, the SSA was later upgraded to the Rashtriya Madhyamik Shiksha Abhiyan (RMSA). It aimed to provide universal access to secondary education by 2017 by eliminating all barriers such as gender, disability and socio-economic and sought to have universal retention by 2020 (Das and Shah, 2014). In a commentary on the effectiveness of the RMSA, Mishra (2015) says that the scheme hasn't been successful and access to secondary education continues to remain a concern. Amongst other factors responsible for the ineffectual implementation such as a high student- teacher ratio, lack of clear guidelines for infrastructure development and different education boards, he highlights issues in teacher professional development. He laments not just on the lack of sufficient teacher training institutes due to which in-service teacher training has suffered but also on the quality of training being offered to teachers, which has no relation to their professional needs.

The Right to Free and Compulsory Education Act in India (Ministry of Human Resource Development 2009), has been identified as the most significant legislation passed within the country aimed at ensuring universal education (Mehrotra 2012; Rose 2017). The legislation responded to international agreements (UNESCO 1994; 2000) which focused upon the need to provide a more equitable access to education for all children. It provided a focus upon ensuring that children from educationally disadvantaged communities, those from scheduled tribes and scheduled castes and others with disabilities and special educational needs gain their right to schooling. However, this meant bringing about sweeping changes in the current school system and raised questions about the availability and provision of resources for the same. It also brought the focus on challenges the mainstream teachers would have to face to cater to a more diverse student set in their classrooms and their preparation for the same (Hodkinson and Devarakonda, 2009; Rose, 2017). In a study on the implementation of the RTE, Soni and Rahman (2013) found that although states and Union Territories had started putting into action the provisions of the RTE Act, there were several impediments in its implementation. The shortage of teachers, skewed teacher-student ratio, lack of training of teachers for inclusion were major challenges. Other hindrances found were the non-availability of appropriate infrastructure, including aids and appliances and lack of awareness in the parents and community at large.

The Persons with Disability (Equal Opportunities, Protection of Rights and Full Participation Act, 1995), has since been replaced by The Right of Persons with Disabilities Bill, 2004. It covers 21 conditions under disability instead of the previously specified 7 in the previous Act. It provides free

elementary education for those between six to 18 years of age out of which six to 14 years are under the Right to Education Act, 2009 (The Rights of Persons with Disabilities Bill, 2014). Establishment of teacher training institutes and teacher professional development for inclusion were part of the recommendations proposed by this Act. Apart from the PWD Act, other laws that govern various aspects of disabilities include the Mental Health Act, 1987, the National Trust for the Welfare of Persons with Autism, Cerebral Palsy and Mental Retardation and Multiple Disabilities Act, 1999.

India's latest education policy, National Educational Policy (2020) proposes sweeping changes in school and higher education, bringing the much-needed reforms in education. It aims to eliminate all forms of exclusion and create an inclusive culture and society. It seeks to provide equitable and inclusive education for all learners, especially the Socio-Economically Disadvantaged Groups (SEDGs) by enabling access, participation, retention of learners and completion of learning outcomes. These SEDGs have been further classified based on gender identities, geographical identities, disabilities, socio-cultural identities and socio-economic conditions (MHRD, 2020). The NEP (2020) also stresses on high quality teacher education, recommends a four-year integrated B.Ed. (Bachelor of Education) degree, removal of stand-alone teacher training institutes imparting sub-standard education and moving the teacher education system into multidisciplinary faculties and universities. However, creation of this teacher training capacity is a tall order and with all its grand intentions, it does not lay out the roadmap to achieve this or any of its stated objectives. Thus, it remains to be seen how these ideals are translated into action (Dixit, 2020; Menon, 2020).

### 2.6.2 Challenges in the Development of Inclusive Education in India

Commentators in the field of have put forth several arguments on the causes for the lack of development of inclusive education in India in an appropriate manner and pace, despite various policy initiatives taken by the government. They all however agree on the need for more inclusive systems (Singal, 2005). There are many barriers or challenges discussed in literature. First is the conceptualisation of inclusive education. Tracing the history of inclusive education in India, Singal (2005) and Sharma and Das (2015) contend that the way inclusive education is conceptualised and understood in India differs both within the country and also from the international understanding of the concept. In India, the terms 'integration' and 'inclusive education', though related concepts, have not been differentiated and often used interchangeably. While internationally inclusive education encompasses 'all' children, including but not limited to students with disabilities, in India the focus seems to be primarily on children with disabilities. By adopting such an approach, Singal (2005) says that Indian literature fails to take note and highlight the challenges faced by other groups likely to be excluded such as orphans, labourers, victims of abuse, natural disasters etc. It has been witnessed that



the common understanding in India is that inclusive education is related to students with disabilities. After the introduction of the Right to Education Act (2009), this has at the most been expanded to include students from economically weaker sections. The concept of 'diverse learners' hasn't entered into common parlance as of now. This shift in mindset needs to be brought about at the highest level and steps taken to ensure that it percolates down to the actual practitioners. This calls for teacher professional development programmes to not just make teachers aware of this diversity in the classrooms but also prepare them with the skills and strategies for effective engagement and learning of all students.

The second challenge for inclusive education in India is the lack of professionally trained teachers. The preparation of mainstream teachers is a critical factor that determines the effectiveness of implementing inclusive education in schools. This has also been acknowledged in literature where the role of the mainstream teachers in implementing inclusion and teaching practices adopted has come under scrutiny, along with teacher training. Singal (2005) laments that the focus of this discourse has been limited to the teacher's awareness and identification of special needs, ignoring other more significant aspects such as their understanding the need for adoption of different teaching practices for diverse learners. The current pre-service training programs that teachers go through mandatorily have just one or two theory-based subjects on teaching children with disabilities which are also optional. This reveals the underlying mindset that children with disabilities are not considered the responsibility of the mainstream teacher (Sharma and Das, 2015). It could be argued that this contributes to teachers coming into the profession with a lack of knowledge and skills in inclusive education along with the same flawed notion that teaching students with special needs is not their job and that the responsibility for this lies with the special educators or other trained professionals. Even when teachers have undertaken the optional courses in special education, they gain just a theoretical understanding of some aspects and when faced with the reality of teaching students with special needs in the classroom, their partial and theoretical knowledge has little value and they find themselves ill equipped (Singal, 2015). Also, most of the training programmes for professionals focus on a single disability (Myreddi and Narayan, 2000). While Dev and Belfiore (1996) point out the ineffectiveness of training programmes, the need for a more structured school-based training programme for in-service teachers has been emphasised by Jangira (1995). Although these two studies are more than twenty years old there is still a dire need to transform teacher education programmes in India. This has been emphasised more recently by other academic researchers (Mitchell and Desai, 2005; Sharma *et al.*, 2009; Singal, 2015, Sharma and Das, 2015) and international agencies alike UNESCO (2005). In a diverse country like India, where there are a multitude of colleges and universities delivering teacher education, there needs to be more standardisation and teacher training curriculum and delivery needs to undergo a change across the board. Sharma and Das (2015) further contend that the two main

organisations responsible for teacher training, namely the National Council for Teacher Education and the University Grants Commission (UGC) need to undergo a shift in mindset and recognise the importance of preparing teachers to effectively teach a class of diverse learners. It should not be construed as an 'optional' or 'additional' work undertaken by teachers. They recommend involving teacher educators in this discussion to reform teacher education towards teaching for all.

The third barrier to inclusive education in India is centred on social attitudes towards those with disability. India is a multi-cultural, multi-religious, multi-lingual and diverse society, where all of these factors are inextricably woven together in the society and have a bearing on the beliefs, attitudes, ethics and thinking of the people. Though there are various religions and sects that co-exist in India, the main religions are Hinduism (80.5%), Islam (13.4%), Christianity (2.3%), and Sikhism (1.8%) (Disability India Information Resources, 2007). Religious beliefs, customs and traditions also impact a person's perspective on disability. The concept of 'karma' and 'dharma' are widely believed in Hinduism and Buddhism. While 'karma' essentially means that good or bad luck is the result of one's actions, 'dharma' refers to one's own duties and obligations towards the family, society and the world at large. Thus, many people in India believe that disability is the result of misdeeds committed by that person or someone in his/her family in the past. Dharma makes people undertake charitable acts towards the diseased, disabled, poor and other less fortunate as their religious duties. Sikhism as well as Hinduism also believe in 'sewa' or 'service', that involves community service especially towards the less fortunate. Muslims and Christians on the other hand, believe in God's will. People with disabilities are considered regular members of the society and nothing to be ashamed of Hasnain *et al.* (2008) also add that Muslims accept and consider all individuals as worthy, spiritual beings, created by God, irrespective of their disabilities (Anees, 2014). Internationally, inclusive education is looked at from a rights perspective. However, Singal (2006) avers that this is replaced by sympathy, care and rehabilitation in India. In most of Indian society therefore, disability is regarded as a deficit inherent in the individual and hence the attitude is to find a remedy. Kauts & Bhardwaj (2012) agree and say that such negative attitudes towards disability are strengthened by religious institutions and are an impediment in efforts towards inclusion. Guha (2002) reiterates this point and states that as it is believed by many that disability is a consequence of actions in previous births, it generates feelings of pity. Thus, any provisions made for people with disabilities are viewed from an altruistic perspective as acts done out of kindness and humanity.

Researchers like Miles (2002) and Kalyanpur (2006) concur and add that although the Acts are based on a global perspective of rights, this is not reflected in the larger society. They add that while catering to the needs of people with disabilities is viewed as extending a favour by the general population as per previous studies, it is considered as a compromise by professionals. As Singal (2006) argues,

these attitudes lead to a complete abdication of responsibility on the part of society to identify and acknowledge the barriers that they have themselves created. This thinking therefore completely changes the discourse and comes in the way of attempts towards the implementation of inclusive education. It is clear that to challenge such barriers training and development needs to occur both in educational institutions and wider society.

The lack of resources and allocated finances is a final yet significant challenge within inclusive education in India. Literature suggests that in a huge number of schools in India, there is a dearth of the infrastructural and physical resources required (such as ramps) and other aids and appliances (such as wheelchairs) to execute inclusive education. This problem is further magnified in rural and distant, hilly areas (Bhan and Rodricks, 2012; Bhatnagar and Das, 2013; Shah *et al.*, 2014; Sharma *et al.*, 2009; Sharma and Das, 2015). There is also a lack of other resources such as financial, technical and human resources. However, it is important to see these deficits in their totality as they rarely occur in isolation and are inter-connected. For example, a lack of funds would lead to the inability to provide for the requisite infrastructural facilities, appropriate teaching learning materials and acquire the technical know-how. Lack of trained teachers and other service professionals such as special educators, speech and occupational therapists adds to the challenge of implementing inclusive education (Chadha, 2000; Tuli, 2002; Shah, 2005). Another aspect brought out by Unnikrishnan (2010) is that even the existing professionals, such as special educators are not trained to work in inclusive settings such as schools as they have traditionally been taught to work in the clinical model. As a result, not just teachers but trained special educators find it difficult to support students appropriately in a class or larger group setting and prefer to retreat to the familiarity and comfort of a one-to-one setting. This hampers not just the special educators' own ability to support a large number of students but also their ability to guide the regular classroom teachers who may approach them for support in implementing inclusive practices in a classroom setting.

## 2.7 Teacher Training for Inclusion

The implementation of the various laws demands significant changes in education provision and practice, not least that associated with the professional development of teachers and those in initial teacher training (Rose and Rajanahally, 2019). Jha (2002) highlights the challenges of inclusion as comprising of different levels. He avers that it is not just related to the inclusion of children with special needs, those from socially and economically disadvantaged backgrounds, different cultural and language backgrounds but also the children who in spite of being in the mainstream classrooms do not feel included because of the ineffective, teacher centric pedagogy followed and a curriculum that they cannot relate to.

To achieve the goal of providing “equitable and inclusive quality education and lifelong learning for all by 2030”, as part of the Sustainable Development Goals for Beyond 2015, one of the primary areas identified is teacher education and training. As per the 11th EFA Global Monitoring Report (2013/1; p.30) is:

*All children must have teachers who are trained, motivated and enjoy teaching, who can identify and support weak learners, and who are backed by well-managed education systems.*

Various studies have been conducted in India regarding teachers’ attitudes, concerns, barriers faced, challenges and competencies in implementing inclusive education. In a survey on teachers conducted across seven Indian states by Jangira *et al.* (1995), it was found that teachers did not possess the requisite competence in catering to the needs of students with disabilities. Similar results were reported in a study by Das (2001) on regular primary and secondary school teachers in Delhi, India to investigate their present skills to address the needs of students with disabilities in inclusive settings. The findings of the study revealed that a significant majority of the teachers were neither trained in special education nor did they have the requisite skills to teach students with disabilities. Other more recent studies on Indian teacher concerns regarding their abilities to include learners with special educational needs and disabilities in their classrooms also suggest that there are significant deficiencies in their understanding, knowledge and skills in this area (Sharma *et al.*, 2009; Bhatnagar and Das, 2013). Teacher professional development for inclusion has been identified as an area in need of greater research to understand how progress can be made (Unnikrishnan, 2010).

In a paper commenting upon the Education for All Global Monitoring Report, Singal *et al.* (2010), also contend that training of mainstream teachers is one of four critical factors that are vital to make inclusive education in India a reality. They cite the evidence obtained from the report to further state that there is a lack of clarity and confidence in teachers to support students with special needs. Therefore, the need for teacher training in inclusive practices is emphasized. This need is further expanded on in the work of researchers who have explored the challenges of developing a more inclusive approach to education in several parts of India (Sharma *et al.*, 2009; Das *et al.*, 2013a) and have considered the education of children with special educational needs in urban communities. The challenges are further exacerbated in more rural environments, and where there are large numbers of first generation learners (Singh, 2006; Velu, 2015).

Forlin (2018b) cites the work of Porakari *et al.* (2015) to emphasise the point that for inclusion to be effective, teachers need to not just be aware of its meaning but also be able to plan their classes in

such a way that they are able to meet the needs of the diverse learners in their classrooms. This in turn calls for commitment on the part of the heads of schools to inclusion in order that they support and equip their teachers by providing appropriate training and development programs for them. However, she avers that in most of the Asia- Pacific region, there is no clarity on the policy related to training of teachers as well as a lack of concurrence on parameters such as the duration and type of such training. This view is supported by Jha (2010), who in a research conducted as a case study of three schools in Delhi, found that the inclusion policies of two of those schools were guided by the fact that the mainstream teachers had not been trained to 'deal' with children with special needs. The head teacher of one of the schools also said that it was not feasible to make the entire school undergo training for 'dealing' with children with special needs. Similarly, in a review of research from thirteen Asian countries undertaken by Sharma *et al.* (2013), they found that there not only was there an absence of well formulated policies, but also an insufficient understanding of inclusive education and proficiency to guide teachers in inclusive practices. They contend that in addition to policy reform and a different approach to provide education to all students, the efficacy of inclusive education is governed by teacher preparedness to implement it. Forlin (2018b) further argues that in the absence of a structured and practical policy it would not be possible to train teachers for inclusion. Training teachers such that they are able to cater to all learners also features prominently among the teaching reforms listed by the EFA Global monitoring report (2013-14). These have since been superseded by the Sustainable Development Goals (SDGs) which along with access, emphasise on the quality of education imparted by focussing on preparing qualified teachers through teacher training.

Inclusion in the institution and how it is carried forward is always driven by the management and head of the school. Most schools are known to have a sketchy, unclear policy related to inclusion which rarely mentions teacher training for inclusion as a goal. This is despite the fact that there are different training programs for teachers planned through the year, yet there is no consistency in these programs or linkage to inclusive practices. India is only just waking up to the realization that having special educators or a department in the school is not sufficient and that it is the mainstream teachers who need to be trained for inclusion to be successful.

## 2.8 Inclusion in Upper Primary and Secondary Schools

With inclusive education becoming an all-pervasive philosophy, upper primary and high school teachers are also expected to ensure that all students, including those with special needs are able to achieve the learning outcomes. However, inclusion in secondary education is considered challenging due to various factors associated with the delivery of a more complex curriculum and in some cases

the widening gap between students with difficulties and their peers (Reusen *et al.*, 2000). Secondary level education serves as the transition from school to higher education and the job market. Therefore, secondary schools place greater emphasis on the performance of students as it is deemed to reflect on the worth and success of the institution in the public eye (Cole and McLeskey, 1997; Davies and Howes 2005; Graham and Harwood 2011). Therefore, there is greater pressure on school administrators as well as teachers to prepare students to achieve high academic standards and develop the skills required for a successful transition (Reusen *et al.*, 2000). Additionally, secondary teachers are considered subject and domain experts who are assigned to teach several classes. This deprives them of the opportunity to understand individual students and cater to their specific needs (Vroey *et al.*, 2016). Furthermore, being content specialists, teachers are reported to be reluctant to make modifications and adaptations for individual students (Bacon and Schultz, 1991; Houck and Rogers, 1994; Schumm and Vaughn, 1991).

The focus of secondary teachers on curriculum content along with the expectations of high standards and unfavourable attitudes naturally become an obstacle to inclusion for students who find it difficult to cope with a general curriculum (Bouck 2004; Ellins and Porter 2005; Avramidis *et al.*, 2002). In a study on attitudes towards inclusion, secondary teachers were found to have the least favourable attitudes to inclusion as they were primarily concerned with the content (Avramidis and Norwich 2002). Reusen *et al.* (2000) state that the extent to which high schools are successful in implementing inclusive practices effectively depends majorly on the teachers' attitudes, feelings of self-efficacy and sense of responsibility in addressing the needs of all the diverse learners in their class. This belief concurs with that expressed by several Indian researchers. For example, a study was undertaken by Bhatnagar and Das (2014) to determine the attitudes of secondary regular school teachers towards the inclusion of students with disabilities in New Delhi (India). They used the Attitudes towards Inclusive Education Scale and reported that the teachers in Delhi had positive attitudes towards the inclusion of students with special needs. Additionally, they found that teachers having more knowledge of and trained in special education tended to have more positive attitudes towards inclusion. In contrast, another Indian study examining the level of preparedness of teachers to use inclusive practices in secondary schools in West Bengal, Kundu and Rice (2019) found that teachers were inadequately trained and lacked the requisite knowledge and skills for implementing inclusive practices.

## 2.9 Chapter Summary

This chapter has attempted to provide a brief summary of the literature relating to the development of inclusive education internationally and in India. It discussed the various initiatives taken by the Indian government over the years to further the cause of inclusive education. Some of the significant laws related to inclusive education in India, in line with national concerns as well as international

initiatives such as the Integrated Education of Disabled Children (IEDC, 1974); the Project Integrated Education of Disabled Children (PIED, 1987), the Persons with Disabilities Act, (1996), the Right to Free and Compulsory Education Act in India (RTE, 2009); Sarva Shikha Abhiyaan (SSA, 2002) and the latest National Educational Policy, 2020 were deliberated on. The chapter also considered some of the major hurdles in the effective implementation of inclusive education such as the understanding of inclusive education, lack of teachers who are trained for inclusion, attitudes towards disability prevalent in Indian society and lack of resources. The factors particular to inclusion in the upper primary and secondary were also considered and it follows that implementing educational inclusion in this section of students has a whole new dimension and this is an area in need of greater exploration and study in India. The next chapter reviews literature on various aspects of the research topic such as teacher challenges in inclusion, teacher attitudes and readiness and training of teachers for inclusion.

## CHAPTER 3: LITERATURE REVIEW-II

### 3.1 Chapter Overview

The previous literature review chapter provided an overview of the research study topics. It considered the concept of inclusive education and how it has developed across the world and within India over the years. It is apparent that inclusive education in India and legislation has encountered some obstacles that hinder its successful implementation.

This chapter examines the literature to understand the findings of other researchers pertaining to the chosen topic and other related issues that are significant from the point of view of this study. These include: teacher perspectives and challenges in implementing inclusive education in the upper primary and secondary school section, teacher attitudes, teacher training for diversity, professional development needs of teachers in relation to inclusive education/diverse learners and any professional development programmes currently in place that cater to these needs. While the aim of this review was to discuss studies in India and in similar schools with comparable sample populations, the limitation of literature in this specific aspect was such that my search was expanded to Asian countries and then to literature from other parts of the world. The various keywords and phrases used for the search were: professional development needs of secondary teachers for inclusion, teacher training for inclusion in India, teacher challenges in implementing inclusive education in India, teacher preparedness for inclusion in India, teacher perspectives/teacher attitudes towards inclusive education in India, professional development programme for inclusive education.

### 3.2 Teacher Attitudes, Concerns and Challenges in Addressing the Diverse Needs of Learners

Internationally, the amount of literature for this aspect is extensive and hence this section is more detailed than others. The past four decades have witnessed a growing commitment towards the inclusion of children with special needs in regular education environments, all over the world. Legislation enacted by the government of India such as the Persons with Disabilities Act (PDA, 1995), Sarva Shiksha Abhiyan (SSA, 2000); which has now been changed to Samagra Shiksha Abhiyan (2018) (covering the entire gamut of school education from pre-school to class XII), the Right to Free and Compulsory Education Act (RTE, 2009) have necessitated the education of students who have been traditionally marginalised (due to economic status, disability or other factors), alongside their peers in regular schools. It therefore mandates that teachers possess the requisite knowledge, skills and competencies to teach such diverse classes (Bhatnagar and Das, 2013). The



new National Education Policy, 2020 recognises the inequity in the country's education system. The groups that have been traditionally under-represented in the existing educational systems have been clubbed into a new social category called SEDGs. It includes gender identities, socio-cultural identities, geographical identities, disabilities, and socio-economic conditions. The NEP 2020 aims to address the educational needs of all these groups and ensure equality and equity.

It is well established that the success of inclusive education is contingent upon the confidence and competence of regular school teachers-their attitudes, skills, self-efficacy beliefs and willingness to include students with diverse needs (Bhatnagar and Das, 2013; Das *et al.*, 2013b; Shah, 2005). In order to effectively implement inclusion, teachers need to be skilled and willing to make changes to their teaching practices in order that individual differences may be catered to (Forlin, Douglas and Hattie, 1996; Forlin *et al.*, 2009; Sharma *et al.*, 2009). Sharma *et al.* (2009) cite the work of Avramidis and Norwich (2002); Harvey and Green (1984) and Scruggs and Mastropieri (1996) to state that research from countries including the United States, the United Kingdom, Canada, Australia and New Zealand indicates that regular teachers are not always keen on bringing about changes required for inclusive education.

Attitudes are an important factor determining the success of inclusion as they are deemed to impact the daily practices of teachers (Smith, 2000; Sharma *et al.*, 2006). Stressing the significance of positive attitudes in teachers Sharma *et al.* (2006) cite the work of Hobbs and Westling (1998) and Wilczenski (1992, 1995) to state that having positive attitudes considerably increases the possibility of all students being included as it may spur teachers to adopt more inclusive practices. Scruggs and Mastropieri (1996) conducted a meta-analysis of American attitude studies comprising 28 survey reports conducted between 1958 to 1995. They found that while 65% of the teachers were agreeable to the concept of integration in general, only 40% considered it to be a realistic goal for most children. Vaughn *et al.* (1996) had similar findings in their study of mainstream and special teachers' perceptions of inclusion. They found that most of the teachers who had no experience of inclusion, harboured strong and negative attitudes towards inclusive education. On the other hand, as observed by Villa *et al.* (1996) in their study, teachers who were actively involved in implementing inclusive education seemed to favour the inclusion of students with special needs in regular classrooms.

In a study on the impact of inclusion on teachers over a three-year time period in Michigan, LeRoy and Simpson (1996) found that the experience of working with children with special needs led to an increase in the confidence levels of teachers in teaching these children. Avramidis and Norwich (2002) quote these and other studies to state that teachers' initial attitudes (which may be neutral or negative) tend to change over time as they become more experienced and therefore adept at adopting

inclusive practices. This is corroborated through another study of UK teachers' attitudes where it was found that those teachers who had the experience of implementing inclusion had more positive attitudes compared to those who did not have this experience (Avramidis *et al.*, 2000).

A survey of the literature was undertaken to find studies that investigated teacher perspectives, attitudes, challenges in relation to inclusive education. While the focus was on finding studies that involved similar samples of teachers as used in my study, that is, in-service teachers in private schools in India, who taught the upper primary and secondary sections, the search had to be expanded due to the scarcity of such published studies. Clipa *et al.* (2020) notes that various studies have been conducted on teacher attitudes and they are known to be impacted by different factors such as prior experience, the nature of disabilities to be addressed, training received in the field, self-efficacy beliefs and resources available. If the prior experience of teachers related to inclusive education has been positive, they are likely to have a more positive attitude and be more effective in their practices (Avramidis *et al.*, 2000; Leatherman and Niemeyer, 2005). Attitudes of teachers are also associated with the nature of disabilities to be addressed in class and some studies suggest that teachers tend to have more positive attitudes towards the inclusion of students with physical and sensory impairments (Avramidis and Norwich, 2002; Leatherman and Niemeyer, 2005) as compared to students with social or behavioural difficulties (MacFarlane and Marks Woolfson, 2013).

Forlin (1995) found that educators were more accepting of children with physical disabilities as compared to cognitive disabilities. Also, the more severe the disability, irrespective of whether it was physical or cognitive, the lesser was the level of acceptance in educators. In a study by Ward *et al.* (1994) to assess teacher attitudes towards inclusion of children with SEN, teachers were found to be more agreeable to the inclusion of children with mild difficulties (mild physical, visual disabilities and hearing loss) since they were not likely to require any additional instructional or management skills from the teacher. Educators were unsure about the inclusion of children with conditions such as mild intellectual disability, moderate hearing loss and visual disability and hyperactivity which were likely to cause additional challenges and demanded special skills and competencies from teachers.

While this thesis seeks to understand the challenges teachers encountered in implementing inclusive education, most of the research studies from India identified only teacher concerns. It could be argued that 'challenges' can be faced by educators only when they are in the field and have had an experience working towards inclusion. However, 'concerns' and 'perceptions' as most of the studies explore, are slightly different concepts and may not be based on actual experience. Nevertheless, unravelling all of these related concepts is necessary as it helps in understanding the perspectives of educators at

different stages of teaching and ultimately have a bearing on their teaching practices, whether current or future. In their review of international literature on teacher concerns, Yadav *et al.* (2015) found that several studies on teacher concerns have been conducted using the Concerns about Inclusive Education Scale (CIES) or some version of it that has been modified by the researchers.

CIES is a 21 item Likert scale that was designed to measure the concerns of school principals and teachers regarding the inclusion of students with disabilities. It has four responses: Extremely concerned (4), Very concerned (3), A little concerned (2) and Not at all concerned (1). The concern score for an individual is calculated by adding all the responses on each item and the total scale score is calculated by adding the value of responses on each item. Thus, the score can range from 21 to 84. A high score would indicate that the respondent is highly concerned about including students with disabilities and vice versa. The concerns are clubbed into four factors: Concerns about availability of resources (Factor I), Concerns about acceptance of students with disabilities (Factor II), Concerns about declining academic standards (Factor III) and Concerns about workload (Factor IV). On the CIES, a mean score of 2.0 or above indicates teachers' concern for an item, mean score below 2.0 shows that there is no concern about that item, a mean score of 3 or above suggests a higher level of concern, whereas a mean score between 2 and 3 implies moderate level of concerns (Sharma and Desai, 2002).

The advantage of using such a scale is that it is easy to administer and process. It also shows evidence of good acceptability with a response rate of 80% (Sharma and Desai, 2002). However, its focus only on 'disabilities' implies that it does not take into account the complete range of diversity in the inclusive classroom and thus may not be suitable for measuring teachers' attitudes towards emotional, behavioural and learning difficulties (Ewing *et al.*, 2018). Also, as the CIES was originally composed to examine Indian teachers' concerns about inclusion, it may not be applicable as it is, across samples differing in cultural or educational background and context or who might be at different stages of implementing inclusive education. Miesera *et al.* (2019) and Park *et al.* (2018) in Lozano *et al.* (2022) found that the original factor structure of the CIES does not hold in all contexts and different studies with different samples produced different factor solutions of the scale. Additionally, the scale is negatively skewed with only one neutral option of 'not at all concerned', while the other three options are all in the negative direction.

Sharma *et al.* (2006) conducted a multi-national comparative study to investigate the perceptions of pre-service teachers' - their attitudes and concerns toward inclusion and comfort in interacting with persons with disabilities. The countries involved were Canada, Australia, Singapore and Hong Kong. A total of 1060 pre-service teachers who were preparing to teach in regular classrooms at preschool,

primary or secondary level participated in the study. A four-part survey instrument was used to collect data. Part One gathered general demographic information about each participant. Part Two involved the Attitudes Towards Inclusive Education scale (ATIES) (Wilczenski, 1992). Part Three was a modified version of the Interaction with Disabled Persons scale (IDP) (Gething, 1991, 1994). Part Four employed the Concerns About Inclusive Education Scale (CIES) (Sharma & Desai, 2002). Although self-reporting attitudinal scales such as the IDP are both practical and economical ways to measure attitudes, it might be difficult to predict actual behaviour of teachers based on these scales as attitudes are a complex construct. In a study to evaluate the IDP's internal consistency and factor structure, Iacono *et al.* (2009) found that other than the factor 'Discomfort', the scale draws on a number of aspects containing items that are variable across participant groups. Therefore, the impact of other factors becomes difficult to identify, affecting the interpretation of results.

ATIES is a long standing 16-item scale, designed by Wilczenski in 1992. It measures participants' attitudes toward the four aspects of inclusion: social, physical, academic and behavioural. Each item on the scale is rated on a 6 point-Likert scale ranging from 1 (strongly disagree), 2 (disagree), 3 (disagree somewhat), 4 (agree somewhat), 5 (agree) to 6 (strongly agree). The ATIES (Wilczenski, 1995) records teachers' perceptions about inclusive education but makes no attempt to understand the thinking or feeling behind these cognitions. It does not consider the affective component of teachers' attitudes towards inclusive education. Although acceptable discriminant validity was found for the ATIES, response rates were not reported for the ATIES (Wilczenski, 1995).

The total value of the score can scale range from 16 to 96, with higher scores indicating more favourable attitudes. They found that teachers had moderate level of concerns with mean scores of 2.21-Canada, 2.25- Australia. 2.62-Singapore and 2.68-Hong Kong. An examination of their total mean scores on CIES indicated that Canadian educators were least concerned while those from Hong Kong were most concerned about including students with disabilities in their classrooms. In terms of attitudes, Canadian pre-service teachers were found to have the most positive attitudes followed by Australian teachers. Hong Kong and Singaporean pre- service teachers were the least positive about implementing inclusive education. Educators from Canada were also found to be most comfortable when interacting with people with disabilities. Pre-service teachers from Singapore on the other hand displayed the highest discomfort while those from Hong Kong and Australia were in between these two. The pre-service educators from the West seemed to be more positive in all aspects. Underscoring the importance of targeting negative attitudes, Sharma *et al.* (2006) contend that this might be especially pertinent in Eastern countries which seem to be have a cultural bias against people with disabilities as apparent in this study.

Yadav *et al.* (2015) also considered studies by Bradshaw and Mundia (2006) in Brunei and Ahsan *et al.* (2012) in Bangladesh who found concern mean scores of 2.70 and 2.67 respectively. Forlin and Chambers (2011) cited in Yadav *et al.* (2015) report that pre-service teachers in Hong Kong were most concerned about a lack of adequate resources and staff to aid in the process of inclusion and least concerned about the acceptance of students with disabilities by their mainstream peers. In one of the earliest studies of concerns about inclusion in India conducted by Sharma (2001), in government schools in Delhi, the participants consisted of 310 primary school principals and 484 teachers. It was found that both groups of participants were concerned about the paucity of resources, funding and training in inclusive education. In a similar study by Shah (2005), that involved 560 teachers in government schools in Ahmedabad, it was found that teachers were most concerned about lack of infrastructural resources and least concerned about the social acceptance of students with disabilities in inclusive classrooms. The concerns were also found to be dependent on various other factors such as gender, experience in the profession, education in the field and the number of students with disabilities in a class.

However, as evident from the Table 3.1 in the next page, the focus of most studies in India related to inclusion has been teacher concerns, attitudes and perceived barriers to inclusive education. A few other studies have examined teacher preparedness and preference of delivery modes for teacher professional development. The studies presented in Table 3.1 below were selected as they showcase recent research into teachers' perspectives on implementing inclusive practices in India, have used robust methodological approaches and have been published through reputable sources. They are thus indicative of the prevailing situation and help in understanding the need for professional development of teachers for inclusion in India. These studies have been examined in greater detail.

**Table 3.1- Examples of studies of teacher perspectives on inclusive education in India**

Authors	Year of publication	Research Topic	Data Collection Methods	Sample size/location	Main Findings
<b>Research Focus: Attitudes and Concerns</b>					
<a href="#">Parasuram</a>	2006	Variables that affect teachers' attitudes towards disability and inclusive education	Two Attitude Scales	300, Mumbai India	Some of the variables of interest did affect teachers' attitudes towards disabilities, the only variable that affected teachers' attitudes towards inclusion was prior acquaintance with a person with a disability.
<a href="#">Sharma, Moore &amp; Sonawane</a>	2009	Attitudes and concerns of pre-service teachers regarding inclusion of students with disabilities into regular schools	Survey	480 Pune, India	Participants had somewhat negative attitudes and a moderate degree of concern regarding the inclusion of students with disabilities in their classes.
<a href="#">Bhatnagar &amp; Das</a>	2013	Concerns of regular secondary school teachers towards inclusive education	Questionnaire	470, Delhi, India	Overall, teachers had moderate levels of concerns to implement inclusive education
<a href="#">Bhatnagar &amp; Das</a>	2014	Regular Secondary School Teachers' Concerns and Perceived Barriers to Implement Inclusive Education	Focus groups, Semi-structured interviews	Focus groups (20 teachers) Interviews (20 teachers) Delhi	Main concerns expressed were poor infrastructure, financial limitations and large class sizes. Barriers included a lack of trained teachers, lack of inclusion policy and a lack of differentiation in instruction among others.
<a href="#">Yadav, Das, Sharma &amp; Tiwari</a>	2015	Understanding regular elementary school teachers' concerns about inclusive education	Questionnaire	175 Gurgaon, India	Overall, teachers were a little concerned about implementing inclusive education
<a href="#">Shah, Das, Desai &amp; Tiwari</a>	2016	Teachers' concerns about inclusive education in Ahmedabad, India	Survey	560 Ahmedabad, India	Teachers were moderately concerned about including students with disabilities in their classrooms. They were most concerned about lack of infrastructural resources and least concerned about lack of social acceptance of students.
<b>Research Focus: Perceptions of teacher preparedness and practice</b>					
<a href="#">Das, Kuvini &amp; Desai</a>	2013	Inclusive education in India: Are the teachers prepared?	<u>Two part</u> questionnaire	223 primary school teachers, 130 secondary school teachers Delhi, India	Almost 70% of regular school teachers had neither received training in special education nor had any experience teaching students with disabilities.
<a href="#">Kundu &amp; Rice</a>	2019	Indian educators' perceptions of their inclusion implementation <u>practices</u> in secondary schools.	Survey, Interviews, Observations	160 teachers, 15 Headteachers, West Bengal	Head teachers and teachers perceived that their schools were not implementing inclusive practices.
<b>Research Focus: Preferences for delivery modes</b>					
<a href="#">Das, Gichuru &amp; Singh</a>	2013	Regular school teachers' preferences for professional development delivery modes.	Survey	223 primary & 130 Secondary teachers Delhi, India	Conferences/conventions related to inclusion, workshops conducted by experts from outside India and in-service programs conducted by Ministry of Education were rated as the most preferred in-service delivery modes by both primary and secondary school teachers.

Parasuram (2006) conducted a study to investigate the attitudes of general educators in the city of Mumbai, India, toward disabilities and the inclusion of students with disabilities into regular schools. It also aimed to study the impact, if any, of background variables such as age, gender, income, education, teaching experience, exposure to a person with disability on the attitudes of teachers. A final sample of 300 teachers across Mumbai was chosen from state and private-aided schools. The teachers chosen for this study did not have children with disabilities in their classrooms. Two attitude scales were utilised for the study. One was the Attitude Toward Disability Scale (ATDP), which was developed by Berry and Dalal (1996) and measures teachers' attitudes towards people with disabilities. The second scale was the Attitudes Towards Inclusive Education Scale (ATIES), developed by Wilczenski (1992).

On the Attitude Toward Disability Scale (ATDP), the total score analysis of all the 300 respondents indicated an overall mean of 3.0, thus the overall attitude fell in the middle of the response scale where 1 indicated more negative attitudes towards people with disabilities and 5 indicated more positive attitudes towards people with disabilities. The analysis of the findings for the different variables indicates that teachers in the age group of 20–30 years and 50.1–60 years had more positive attitudes as compared to teachers in the age group of 40.1–50 years. Similar results were found for the variable of experience where teachers with less than 5 years of experience and those with more than 25 years of experience displayed most positive attitudes. Thus, most positive attitudes were displayed by the new and youngest and the most experienced and oldest teacher groups in the study. Therefore, the study found that although some of the variables studied affected teachers' attitudes towards disabilities, only one of the variable characteristics of general educators- 'acquaintance with a person with a disability' had a substantial impact on attitudes towards inclusion. However, the ATDP uses dated terminology and measures attitudes towards 'disability' thus leaving out other diverse needs such as learning difficulties and social, emotional and behavioural difficulties which are not always visible. Also, as ATDP is a direct measure of attitudes there is the possibility of respondents giving responses which are considered to be socially appropriate as against revealing their true thoughts. Also, it has been critiqued due to its unidimensional nature to measure a multi-dimensional construct of attitudes (Iacono *et al.*, 2009). The overall mean of all the respondents on all the statements of the ATIES was 3.3. The ATIES comprises 16 items that are distributed into four categories of mainstreaming accommodations: physical; social; academic; and behavioural. High scores indicate more favourable attitudes towards inclusion. The score obtained indicated an attitude towards inclusion as leaning more towards response number 3, that is, 'disagree somewhat'. This study highlighted the need for in-service workshops for teachers to achieve greater awareness and attitude changes towards inclusion. Contact with persons with disabilities also emerged as an important factor that had a bearing on the attitudes of teachers. However, the respondents in this study

were teachers who had no experience with inclusion and their responses here might not be true predictors of their actual behaviour when they come across students with special needs in their classes as it hinges on several other factors. Nevertheless, the study indicated that for inclusion to be effective, teachers must be provided with several opportunities to interact with students with disabilities as part of teacher preparation for inclusive education.

Sharma *et al.* (2009) conducted a study on a sample of 478 pre-service teachers enrolled in a one year Bachelor of Education (B.Ed) program at Pune University, in the state of Maharashtra to investigate their attitudes and concerns regarding the implementation of inclusive education. They used a three-part survey instrument for the study. Part one gathered general demographic information about each participant, Part two used the Attitudes Towards Inclusive Education scale (ATIES) (Wilczenski, 1992) while Part three comprised the Concerns about Inclusive Education Scale (CIES) developed by (Sharma and Desai, 2002). The overall mean of participants on the ATIES was 3.07, which indicated that teachers possessed somewhat negative attitudes toward implementing inclusive practices with regard to children with disabilities. These results were in line with the findings from a previous study by Parasuram (2006), who studied attitudes of in-service teachers using the same scale in Mumbai. They also reported that teachers had moderate level of concerns about implementing inclusive practices in their classrooms. An analysis of participants' scores on the four factors of the CIES revealed that that participants were most concerned about lack of resources and least concerned about the declining academic standards owing to the inclusion of children with disabilities in their classes. Participants with a higher level of education (i.e. post- graduate degrees) were found to have significantly more positive attitudes compared to their counterparts. This was in tune with the findings from the study by Parasuram (2006) who found that level of education was positively correlated to attitudes. Perceived level of confidence in teaching students with disabilities was also associated with lower degree of concerns amongst participants (Sharma *et al.*, 2009). The results of the studies have implications for initial teacher education as well as policy makers. Pre-service teachers should be informed and reassured about the resources available to them to support students with special needs. They should have an opportunity to understand the entire range of resources available during their initial training and also be able to practice using them during their interaction with students with special needs as part of their training. These measures are likely to positively impact teachers' attitudes towards inclusion of students with special needs and help to alleviate their concerns in this regard (Sharma *et al.*, 2009).

Bhatnagar and Das (2013) carried out a study in Delhi to investigate the concerns of secondary school teachers in implementing inclusive education and the impact if any, of background variables on these concerns. However, unlike earlier studies discussed in this chapter, their study was conducted in



private schools. A total of 470 responses were received from teachers across 12 schools in different zones in Delhi. A two-part survey was used where Part one gathered information pertaining to their personal and professional characteristics such as age, education, experience, training in special education and perceived level of confidence in teaching students with disabilities. Part two was the CIES. A mean score of 2.37 was obtained in the study which meant that teachers in this study had moderate level of concerns about implementing inclusive education. A comparative analysis of the concerns on the four factors of the CIES revealed that teachers were most concerned about lack of resources followed by decline in academic standards in the classrooms and lack of acceptance of students with special needs. The factor increased workload in inclusive settings did not qualify as a concern. There was no significant difference in the teachers' concerns on the basis of their age, gender or qualifications. However, teachers who had not received training in special education were more concerned than those who had, and the difference was statistically significant. Also, a greater degree of concern was expressed by those teachers who were not confident in teaching children with special needs. This study underscores the need for mainstream teachers to be trained in inclusive education practices to ameliorate their concerns and in order to make them confident practitioners possessing the necessary skills and knowledge to cater to a class of diverse learners. Bhatnagar and Das (2013) quote studies by Shah (2006) and Sharma *et al.* (2009) to contend that the results of these studies, also using CIES are similar, although the teachers in this study appear to be slightly more concerned than those in the other two studies. This slight increase in concerns could be due to the increasing awareness in the last few years about special needs and disability, the growing emphasis on the implementation of legislation related to inclusive education and the responsibilities it places on the teachers.

Bhatnagar and Das (2014) also conducted a study to gain a deeper understanding of the concerns and perceived barriers of regular school teachers in Delhi, towards the implementation of inclusive education. Participants comprised secondary school teachers involved in teaching children with special needs. Qualitative research methods in the form of focus group interviews and individual semi-structured interviews were utilised for the purpose of data collection. Two focus groups and 20 individual interviews were conducted. After analysing the qualitative data from focus groups and interviews through the qualitative analysis program QRS NVivo, three concern themes and eleven barrier themes were established. The primary concerns identified were poor infrastructure, financial limitations and large class sizes. Some of the barriers included a lack of trained teachers, lack of inclusion policy and a lack of differentiation in instruction.

A study was undertaken by Yadav *et al.* (2015) to identify the concerns of elementary school teachers in including students with disabilities. The participants included 175 teachers from government and

private schools in Gurgaon. A two-part questionnaire was used for data collection- the first collected background data of participants while the second part was a modified version of the Concerns about Inclusive Education Scale (CIES) developed by Sharma and Desai (2002). The original CIES measures teachers' concerns on four factors: resources, acceptance of students with special needs, academic standard of the classrooms and workload in inclusive settings. Yadav *et al.* (2015) modified the scale and recalibrated it into the following five factors: Classroom related concerns, School-related concerns, Self-related concerns, Academic achievement related concerns and Management-related concerns. Descriptive and inferential statistics were used to analyse the data. They found that teachers in the study reported the highest level of concerns for the factor 'achievement related concerns' and least concerns for the factor 'management related concerns'. These findings are contrary to the findings of Sharma *et al.* (2009) where teachers were least concerned about the declining academic standards. This could be due to several reasons such as more awareness and heightened expectations about performance in the last few years of schooling. Also, teachers in the previous study were pre-service teachers who didn't have actual experience in teaching and therefore might not be able to anticipate how an inclusive class that has students with special needs could impact the learning of the entire group and notions change with actual experience. Overall, Yadav *et al.* (2015) reported that teachers in the study were a little concerned about including students with disabilities in their classrooms.

A similar study was conducted by Shah *et al.* (2016) in Ahmedabad, Gujarat to identify the concerns of primary school teachers regarding the inclusion of students with disabilities into regular classrooms and to establish relationships, if any between their concerns about inclusive education and background variables such as gender, age, academic qualifications, qualifications in special education, teaching experience, class size and number of students with disabilities in class. A two-part questionnaire was used in this study. Part 1 gathered information related to personal and professional characteristics of the teachers. Part 2 was a 21-item Likert scale titled Concerns about Inclusive Education – Gujarati which was adapted from the CIES developed by Sharma and Desai (2002). A total of 560 teachers, working in government-run inclusive schools, returned the completed survey. On the CIES, a mean score between 2 and 3 implies moderate level of concerns. The concerns mean score of the teachers in this study was 2.31. Hence, Shah *et al.* (2016) found that teachers in Ahmedabad had moderate levels of concerns about implementing inclusive education. The results were in tune with the studies conducted by Sharma *et al.* (2009) and Yadav *et al.* (2015). Further analysis of the results revealed that the teachers had the highest level of concern about infrastructural resources and the lowest level of concern about social acceptance. An inspection of the data to find the relationship between concerns and background variables showed that there were significant differences in terms of gender, those with and without qualifications in special education, teaching

experience and number of students with disabilities in class. Teachers without a special education qualification had significantly higher levels of concerns about including students with disabilities into their classes than teachers with a qualification in special education. This is in tune with the findings of the study by Bhatnagar and Das (2013) where similar results were found.

Shah *et al.* (2016) compared their findings with another study on teachers in government-run schools in Delhi by Sharma (2001). In the study by Sharma (2001), a mean score of 2.20 was reported when he employed the CIES which is lower than the mean score of 2.20 found in this study, indicating that the teachers in Ahmedabad were significantly more concerned than teachers in Delhi. This could be attributed to the fact that there's likely to be more awareness about disability, inclusion and related laws in Delhi, also the capital of India. There are often significant discrepancies between levels of awareness and access to resources when comparing metropolitan cities in India with rural districts (Narayan and Patnaik, 2020; Rose *et al.*, 2021). Shah *et al.* (2016) quote research by Riley (1997) and Sharma (2001) to reason that lower level of concerns found in teachers in Delhi could be the result of greater levels of awareness about inclusive practices and legislation.

Summarising the research related to attitudes, it could be said that teachers have been found to have somewhat negative attitudes towards inclusive education though certain sections of teachers have been found to be more positive than others (Parasuram, 2006; Sharma *et al.*, 2009). In terms of concerns, most studies have reported moderate levels of concerns in teachers (Bhatnagar and Das, 2013; Yadav *et al.*, 2015; Shah *et al.*, 2016). Lack of resources seemed to be the factor educators at all stages-whether pre-service or in-service were most concerned about. A lack of trained teachers in special and inclusive education emerged as another factor that also negatively impacted their confidence and increased their concerns in adopting inclusive education practices (Shah *et al.*, 2016). Thus, various studies have been undertaken in different parts of India on attitudes and perceptions of educators, but most have been limited to a particular region or city (Parasuram, 2006; Sharma *et al.*, 2009, Yadav *et al.*, 2015; Shah *et al.*, 2016). The results of these studies are not therefore generalisable as these may greatly differ in a country as diverse as India with varying levels of development and awareness and implementation of inclusive education in different states and cities emerging at a different pace. Most studies have used existing attitude scales and concerns scales or modified versions of them to examine attitudes and concerns. While attitude and concern scales help in the quantitative measurement of attitudes and opinions, they do not enquire in depth into the reasons or thinking behind the opinions. This in-depth understanding of the causes behind the thinking is required in order to achieve a more complete picture and take appropriate steps to address those actions that may promote development. However, these studies provide useful insights on which further research and action is warranted.

### 3.3 Professional Development Needs- Teacher Preparedness, Competencies, Skills and Training for Inclusive Education

Along with attitudes, perceptions and concerns, the preparedness of teachers to implement inclusive education is a significant component for its success. Although teachers may have an acceptance of all students, they may not find themselves prepared and ready to cater to a class of diverse learners (Bradshaw, 2003). Bradshaw and Mundia (2006) contend that these feelings of being ill-equipped and vexation in teachers are likely to act as obstacles in the path of inclusive education. Cate *et al.* (2018) state that while the global movement towards inclusive education and international legislation has suggested that governments design educational systems where all students with diverse needs are now part of regular classes, the responsibility for successfully implementing inclusive practices lies on the teachers. They quote Blanton *et al.* (2011) to contend that catering to a class of diverse learners is very demanding and teachers may not feel adequately prepared and hence be anxious and hesitant about the inclusion of students with special needs into the regular classrooms. As recognised by Bandura (1997) the self-efficacy of teachers has an impact on the learning environment created by them and their decisions about the tasks undertaken by them. Sharma *et al.* (2012) apply this theory to an inclusive setting and state that teachers with high efficacy would believe that students with special needs can be taught in an inclusive classroom and take appropriate decisions and actions to support such learning.

Das *et al.* (2013b) conducted a study in Delhi, India to investigate the skill levels of regular school teachers for inclusive education. Respondents were 223 primary and 130 secondary school teachers. The methodology involved a two-part questionnaire. Part-one of the questionnaire was used to collect demographic data of the participants such as special education training, experience in teaching students with disabilities and access to support services. Part-two was a Likert scale where the teachers were to rate their perceived current skill levels on a list of competencies needed to implement inclusion. The questionnaire called Inclusion Competencies of Indian Teachers (ICIT) was a modified version of Essential Teacher Competencies Questionnaire which was developed by Gear and Gable in the USA in 1979. The instrument was modified keeping in mind the educational, social, political, economic and legal context of India. The modified instrument comprised 52 items categorised into ten competency areas. The participants could rate their competencies on a Likert scale with a rating from 1 to 4 where 1 indicated 'Not at all competent' to 4 that meant 'Highly competent'. The categories were: (1) professional knowledge concerning exceptional children (2) classroom climate of acceptance (3) communication with parents, community and colleagues (4) assessment of students' needs (5) classroom management (6) goal setting (7) resources for classroom learning (8)

instructional techniques (9) personalized curricula (10) evaluation of student progress. Data was analysed using descriptive statistics and t-tests. Analysis of Part I of the questionnaire revealed that nearly 70% of the regular school teachers hadn't received training in special education nor did they have any experience of teaching students with disabilities. It was also found that 87% of the teachers did not have access to support services in their classrooms. Data analysis from Part II of the survey showed that both primary and secondary teachers rated themselves as not having competence in each of the competency categories. Also, both groups of teachers rated themselves highest in 'Classroom Climate' and lowest in 'Professional Knowledge'. Finally, no statistically significant difference was found between their perceived skill levels.

This study has implications for teacher educators and highlights the critical need for teacher training in areas where they are found to be lacking in order to enable them to support a diverse group of learners. The study also brought to light the sad state of affairs in terms of resources for inclusive education as a huge majority of teachers mentioned the lack of support services available in their schools. As literature shows, lack of adequate support services may be a hindrance in the teachers' abilities to successfully implement inclusive education practices (Bindal and Sharma, 2010; Sharma and Desai, 2002; Singal, 2006).

Kundu and Rice (2019) conducted a study to understand the perceptions of educators about the inclusive practices in their schools. Participants were 160 teachers and 15 headteachers from randomly selected secondary schools in the Indian state of West Bengal. Research instruments used were surveys, interviews and observations. A survey with teachers and interviews with head teachers were used to ascertain their respective views about the availability of learning resources, the policies of the school management and teacher competencies in teaching students with special needs. Classroom observations were also conducted at each school in multiple settings. This helped to corroborate the headteachers' claims about the small population of students with special needs in the schools. Observations also helped to inspect the equipment and resources available in various schools and their usage during teaching. The data were analysed descriptively. The study revealed that headteachers and teachers perceived that their schools were not implementing inclusive practices. Not only were the physical, infrastructural and instructional resources insufficient for supporting learners with special needs, the teachers were also not trained to teach students with special needs. Furthermore, it was found that school management policies were not broad and extensive enough to support the learning of all students with special needs. Thus, professional development programmes for teachers should include knowledge about students with special needs, assessment of students' needs, planning and outcomes, teaching techniques and strategies, classroom management along with

skills to communicate and liaise with parents and other stakeholders. School managements also need to ensure that appropriate resources are provided to teachers.

### 3.4 Professional Development Programmes for Inclusive Education

Avramidis and Norwich (2002) contend that the awareness and information about children with special educational needs obtained as a result of pre-service or in-service training is an enabling factor in improving teacher attitudes towards inclusion. They go on to say that any attempts at implementing inclusive education without such a training are not likely to yield results. In a study conducted by Dickens-Smith (1995) in Chicago to examine the attitudes of regular and special educators towards inclusion, an attitude survey was given before and after staff development. It was found that both regular and special education teachers displayed more favourable attitudes towards inclusion post their in-service training. Furthermore, regular education teachers showed the strongest positive attitude change. Thus, Dickens-Smith argues that in order for inclusion to be effective, training of personnel is crucial. Carroll *et al.* (2003) highlight the need for improved teacher training as the prevalent methods seem to be ineffective. They state that the training programmes for pre-service teachers including countries such as USA, UK, Australia that follow a dual training model are not found to be effective. When general and special education teachers are taught separately, they are not afforded with the opportunities to integrate materials or collaborate or experience the changing realities of the classroom. Thus, there is an over emphasis on knowledge and lesser possibilities of mastering the practical skills required to cater to a class of diverse learners.

In an Australian study on assessing the impact of special education training on the attitudes of pre-service teachers, Carroll *et al.* (2003) reported that completion of a course on special education led to general educators becoming more knowledgeable, comfortable and confident in their interactions with people with disabilities. Similar findings were reported in another study about the attitudes and concerns of in-school and pre-service teachers in Brunei from an investigation conducted by Bradshaw and Mundia (2006). The study was conducted to investigate the attitudes and concerns of three different groups of teachers in training regarding the inclusion of students with disabilities into general classrooms. It also sought to understand the differences in results between the groups if any. Participants comprised 166 randomly selected student teachers at the University of Brunei, Darussalam from three different courses taught by the researchers. One group was in-service experienced special educators, the second was primary pre-service teachers who had taken one course on inclusive education and the third group was secondary pre-service teachers who had not taken any courses in special or inclusive education. It was found that pre-service and in-service teachers who had completed at least one course related to special and inclusive education possessed a better attitude

toward people with disabilities. However, in terms of concerns in the classroom, there was no noticeable difference between the groups leading one to believe perhaps a second course is needed that focuses more on strategies to alleviate teacher feelings of inadequacy.

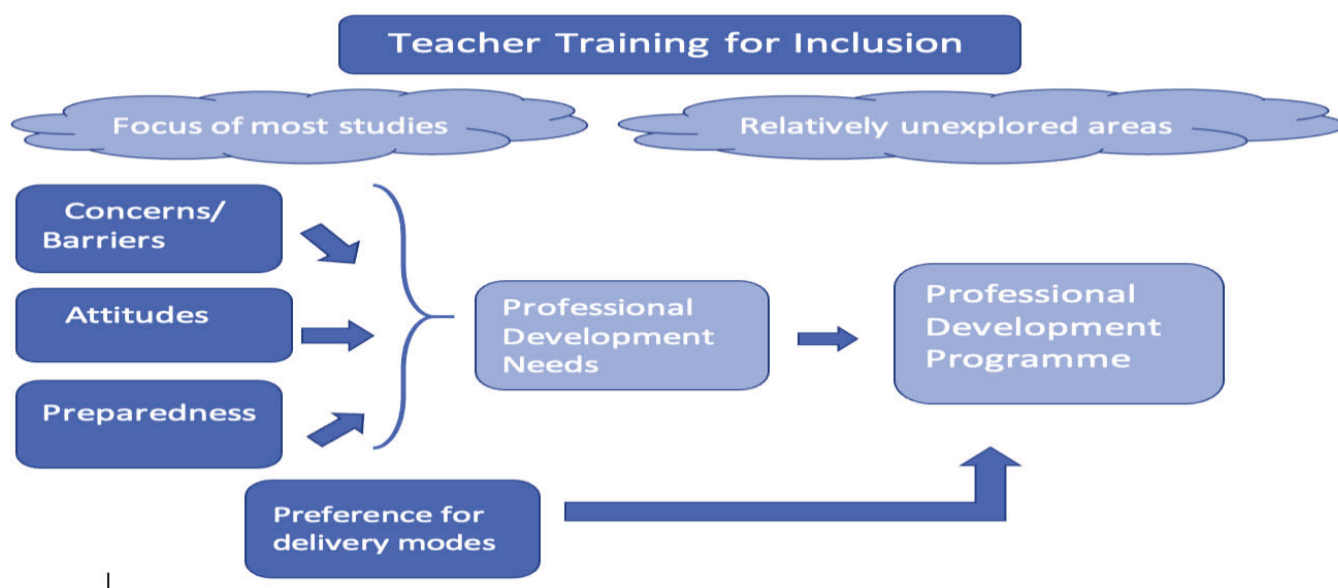
Kosko and Wilkins (2009) underscore the need for in-service training programmes for regular teachers that have been thoughtfully planned and designed so that teachers are equipped to keep up with the demands of the changing classroom scenario. They contend that these professional development opportunities should enable the teachers to gain the knowledge and develop the practical skills required to adopt more inclusive practices and thereby cater to the diverse learners in their classes. Das *et al.* (2013a) examined the preferences of regular primary and secondary school teachers in Delhi, regarding the delivery modes for professional development programmes focussed on inclusive education. They used a survey design and a total of 223 primary school teachers and 130 secondary school teachers participated in the study. Participants had to respond to a seven-item Likert questionnaire (ranging from 1= very low to 4 = very high) to demonstrate their preference for the in-service delivery modes. The teachers were also asked to mention additional delivery modes that they would like to be used while receiving in-service training. The findings from the data analysis indicated that both the primary as well as secondary teachers rated conference/ conventions related to inclusion, workshops conducted by experts from outside India and in-service programs conducted by personnel from the Ministry of Education as the top three preferences. While primary teachers rated the formal self-study program as the least preferred mode, full-time university courses in inclusion was the least preferred in-service delivery mode for professional development for secondary teachers. Other suggestions for delivery modes included school visits and observation of model inclusive classrooms, training at the school premises and training by in-house personnel such as school principals and school teachers. Therefore, summarising the literature on successful professional development programmes, the important elements suggested are that it should include knowledge and understanding about children with special educational needs, be well-planned and designed and in keeping with the changing times. Additionally, there should be common programmes for special education and general teachers which help them learn and practice collaboration, opportunity to develop the practical skills and strategies required to cater to the diverse learners in their classes and provide a choice of delivery modes.

### 3.5 Chapter Summary

Having reviewed a substantial body of the literature, it is evident that the focus of most studies so far has been on teacher concerns, attitudes, perceptions and preparedness for inclusion. As depicted in Figure 3.1 below, the dark blue boxes represent the different themes that have received maximum

focus in literature while the light blues ones indicate the elements that are as yet relatively unexplored through empirical research in India but are vital components to implement inclusion effectively.

**Figure 3.1-Coverage of aspects related to teacher training for inclusion in literature**



Thus, more research and action are warranted in the crucial next steps of establishing the professional development needs of teachers for inclusion and designing a PDP that efficiently trains teachers to cater to a class of diverse learners.

Researchers from countries which have experience in implementing inclusive education such as Scruggs and Mastropieri, 1996; Mitchell 2000; Kugelmass and Ainscow 2004, Sharma *et al.*, 2009 have listed several factors that are essential for its successful execution. These include appropriate policy and leadership structure, well trained teachers, sufficient resources and opportunities for professional development. Das *et al.* (2013) note that India does not seem to have the sufficient resources as well as the training and professional development of teachers in place. Therefore, they suggest that the Ministry of Education personnel and teacher educators need to take note and respond appropriately to the needs of regular school teachers in view of the latest legislation and changes in the education system towards inclusive education. The next chapter explores the methodological aspects of the study pertaining to mixed methods, sampling and piloting of the research instruments and the theoretical underpinnings.



## CHAPTER 4: METHODOLOGY I

### 4.1 Chapter Overview

This is the first of the two Methodology chapters. This chapter explains the overview of the research design including the methodological approach adopted for the study, the research design and its suitability for the research study. The theoretical construct adopted is also elaborated on along with the ethical considerations in the study. The next chapter discusses the research instruments used for the collection of data, the decisions for their choice and reasoning behind their suitability, the development of these instruments, decisions regarding sampling and procedure adopted for piloting the instruments, challenges in data collection and data analysis.

### 4.2 Methodological Approach

Researchers working in the social sciences have often referred to the differing paradigms that influence the ways in which they work. More specifically they focus upon those described as the normative paradigm and interpretive paradigm. While the normative paradigm is often seen to be most appropriately applied to medium and large-scale research, an interpretive approach is generally favoured for small-scale research (Rosenthal, 2018). They go on to explain that normative paradigms are generally used for examining macro concepts such as society, systems, institutions and positions and seek to find reasons/ causes for behaviour and actions. The normative model is often regarded as more objective as compared to the subjective interpretive model because of its use of statistical procedures and formal testing of hypotheses. The interpretive approach uses a more intimate approach to data collection, such as observation and interviews and interpretation of actions and meanings. It operates from the premise that behaviour and actions are subject to change according to the situation and environment. The normative model is regarded by many researchers working in the social sciences as impersonal with research being conducted from a distance whereas the interpretive model calls for the personal involvement of the researcher who focusses on the individuals at the centre of enquiry and seeks to understand their experiences and interpretations. There is no aim to find a general theory which fits all, rather theory may emerge after or during their research. These theories must make sense and may be as varied as the individuals they involve (Cohen *et al.*, 2007).

The research reported in this thesis adopted an interpretive approach and tried to understand the professional development needs of teachers, from middle to senior secondary school in addressing the diverse learning needs in a classroom. It also took into consideration the perspectives of other stake holders- the heads of schools, counsellors and SEN heads, who interact with teachers closely and would have their own views on these professional development needs. It did not pre-suppose or

form any hypotheses based on previous findings or otherwise. It was anticipated that the findings would emerge purely from the data collected. This approach was adopted as I was working within a social constructivist philosophy and wanted to ensure that multiple perspectives and interpretations of situations were gained. Creswell and Creswell (2017) contend that an interpretive methodology is an effective way of understanding an individual's perspectives within a certain environment, and support its usefulness for studying the interactions between the individuals and the context in which they are working.

### 4.3 Research Design

Mixed methods research is an approach that strategically combines features of both the quantitative and qualitative methods to best understand and analyse a research problem and its different nuances (Clark, 2017). Cohen *et al.* (2018) state that the primary reason for adopting a mixed methods design is that it enables the collection of both quantitative and qualitative data, both of which together aid in a better and more comprehensive understanding of the research topic as compared to any one method used alone. The present study though uses mixed methods, cannot be called a mixed methods research as the data collected and analysed was largely qualitative. Also, most quantitative studies use reliable and valid tools to collect information about key constructs examined in the study and use statistical methods for analysing the data which was not the intention in this study.

Green *et al.* (1989) suggest other purposes for which mixed methods can be used. These include triangulation of findings from both kinds of data, complementarity (making use of the findings from one method to expand on, explain and understand the findings from the other method); development (using the information and findings from one method to develop the other method and expansion (expanding the span and scope of a study). Some of the decisions that need to be taken in mixed methods research are the sequence of collecting data (whether data is collected simultaneously or one after the other and in which sequence), the importance given to each form of data and how both kinds of data are going to be combined or integrated (Cohen *et al.*, 2018). These decisions are also dependent on the purpose of using the mixed methods approach (Onwuegbuzie *et al.*, 2007).

The present study involved a multi-step approach where data was collected in two steps and through three instruments. This was considered to be the best approach to answer my research questions as through the internet-based survey I was able to get an overview of teachers' perspectives from different locations while the qualitative data collected through focus group discussions and interviews helped to get an in-depth understanding of different aspects of the topic. This was essential to explore and understand the various aspects of the topic being investigated (Creswell, 2018). The reason for

using both quantitative and qualitative methods in my study was for the study to have a wider range by using surveys as well as for triangulation of the findings from the survey with those from the focus groups and interviews. Additionally, the survey helped to inform the formulation of research instruments in the second stage and though there were some open-ended questions in the survey, the data from the focus groups and interviews helped to expand on and explain the reasons behind the findings from the survey. Thus, a sequential mixed methods design was used where as part of the first stage, the web-based survey was conducted, results studied and used as the base to build on the interview and focus group questions. This was followed by the collection of qualitative data in the second stage through interviews and focus groups. While analysing and interpreting data as well, both quantitative and qualitative data were used.

#### 4.4 Theoretical Construct

According to Creswell (2009), social constructivism is an appropriate theoretical framework as it lends itself to qualitative analysis to understand how individuals interact with the world. I believe that human development takes place in a social setting and that a person learns and gains knowledge through interaction with others present in his/her environment (Vygotsky, 1978; McKinley, 2015). As the study involved understanding teachers' perspectives and developing a suitable professional development plan for them, social constructivism was considered an appropriate theoretical framework as it would help to place the learning and understanding of teachers in the context of their environment, background and work setting. Teachers are considered as learners here and their interactions with the children as well as their understanding of how children learn also play a part in determining teachers' actions and behaviour towards students.

Constructivism is an approach that considers how individuals construct meaning and how thinking and learning take shape along with its implications for teaching (Mvududu and Thiel-Burgess, 2012). There are two commonly described views or variations which are widely accepted when talking about educational constructivism (Phillips, 2000; Kanselaar, 2002). They are based on firstly, Jean Piaget's personal constructivism and alternatively Lev Vygotsky's social constructivism. Piaget (1977) focused on the individual perspective and internal processes of individuals. He propounded that learners are not passive recipients but active participants in the construction of meaning. Therefore, when a learner encounters a new experience which does not correspond to his existing knowledge and thought processes, he alters it to accommodate the new information or knowledge. Piaget (1977) believed that learning takes place within the individual and is then transferred outwards to society. When Piaget's propositions are viewed as an educational theory, constructivism places importance on the pre-existing knowledge of learners and utilizing it to build further learning (Mvududu and

Thiel-Burgess, 2012). Teachers with a constructivist view don't rely only upon transmitting knowledge to students; instead, they act as facilitators, guiding students and providing them with appropriate opportunities for learning, utilising their prior knowledge and experiences and giving them adequate time to assimilate new knowledge (Hoover, 1996). The same principles should be kept in mind when designing professional development programmes for teachers.

The socio-cultural constructivism view on the other hand, influenced by Vygotsky (1978) essentially believes that learning is a social process and influenced by external factors such as community and culture. Unlike Piaget who proposed that learning is followed by development, Vygotsky held the opposite view. He noted that thought and cognitive development first take place in a social context and are then internalized by the individual. He also gave importance to language as a psychological tool. He considered learning to be a movement from the present level to a higher level in the zone of proximal development which he defined as "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers." (Vygotsky, 1978, p.86). Social constructivism theory proposes that individuals develop understanding and meaning through their interactions with other people and society (Leeds-Hurwitz, 2009). Social constructivist scholars argue that reality cannot be discovered as it does not exist beforehand. Therefore, emphasis is given to a person's environment and his interactions with others and the environment. When considered in the context of teacher professional development, it follows that teachers learn through their interaction with other knowledgeable members of society such as peers and other adults. Wertsch (1997) contends that social constructivism, much like constructivism not only recognizes the learner's individuality, but also encourages and makes use of this distinctiveness in terms of culture, background and knowledge in the learning process. Here again, in common with the constructivist approach, teachers act as facilitators who enable the students to gain an understanding of the subject matter. Rhodes and Bellamy (1999) add that teachers as facilitators interact with the students instead of giving a lecture as per a set curriculum and support them in developing their own understanding by providing the appropriate environment. Noting the significance attached to learning through collaboration, Amineh and Asl (2015) recommend that students initially work together in pairs, groups and teams and thereafter make their personal contributions to knowledge. Therefore, collaboration must be a feature of teacher training.

As a researcher, I subscribe to these constructivist views and believe that environmental factors and society impact the way one learns. The kind of society one is brought up in, the system of values and beliefs of one's family are all factors that influence the thought process of individuals and shape their personal beliefs and philosophy. This is true of both students and teachers. They also have a bearing

on the expectations that teachers have of students and their ability to learn. Naturally then, the actions teachers take and the kind of learning environment they create in the classroom stem from these internal factors within them. Lester and Onore (1990) support this view and add that the teachers' own construct system influences the way they perceive teaching and learning and their ability to make changes. Furthermore, they note that this view of the teachers is also impacted by their school's culture, systems and policies and needs to be examined in that light.

As knowledge is created through a process of interaction with others in social constructivism, this theory lends itself well to the researcher who is interested in the study of communities or institutions which are dependent upon personal interactions. Schools develop as communities through team work and partnerships in which the members of that community develop ideas, procedures and processes through interacting and working together. Such interactions shape the ideas of the school community and invariably influence policy and the ways in which the school operates. For the researcher, an opportunity for direct engagement with members of the school community can provide insights and understanding about the key decisions and influences that pervade within the school.

Obtaining data through direct interaction with those most closely involved in the school enables the researcher to understand those influences that have helped shape the ways in which the school operates. This was of relevance to my research questions which were focused upon gaining an understanding of how the school was addressing the needs of a specific part of its population. Enabling teachers to share their knowledge with me assisted as I constructed an understanding of those influences and factors that shaped their perceptions of the situation related to special educational needs in their schools. This knowledge was examined in relation to the range of opinions and experiences expressed and through a process of triangulation of data. Therefore, constructivism and social constructivism were the guiding framework for this research study- the questions it sought to answer and the background against which the findings are viewed.

The study aimed to answer the following research questions:

1. What are the difficulties/challenges faced by middle school and secondary teachers working in mainstream Indian schools in addressing the diverse needs of learners in a classroom?
2. What are the professional development needs of middle school and secondary teachers in mainstream Indian schools in urban locations in relation to inclusive education?
3. What methods such as teacher training, workshops etc. are being currently adopted to meet these needs and how effective are they?

4. How should a module/manual/workshop be designed such that these needs can be addressed for these teachers?

The research questions were based on the observations from my experience and my keen interest to gain a deeper understanding and find answers to the issues listed above. Additionally, it was important that they were precise (not too broad or general), were capable of being answered and the research was feasible in terms of securing access, ethics involved, time and resources at hand (Thomas, 2009).

#### 4.5 Ethics

This research study was undertaken in accordance with the British Educational Research Association's Ethical Guidelines for Educational Research (BERA, 2011). The two compulsory UON courses on Research Ethics and Research Integrity were completed at the beginning of the research process and prior to the data collection. This helped me to understand the wide ranging ethical issues involved in research and be aware and mindful of those that concerned my research study in particular. The research study was given approval by the UON Research Ethics Committee, reviewed at the time of transfer and subsequently monitored by the supervisory team. Data collection in the first stage involved an online survey and informed consent was sought from the institution as well as participants through a consent form (Appendix 1), information sheet and the ethical statement (Appendix 2A and 2B) which were attached along with the online survey link. These documents helped in building credibility of the research as well as the researcher. Although I could not interact with the participants of the survey face to face, sending these documents and requesting that they go through the same before they began the survey, helped to clarify the purpose of the research, answer their doubts and assuage their inhibitions, if any, in sharing their honest opinions. It also made it clear that although the link was sent to them, they had a choice not to complete the survey if they so wished. For the focus group discussions with teachers and semi-structured interviews with other stakeholders, informed, voluntary written consent was obtained. They were assured of the anonymity and confidentiality of their data and informed that they could withdraw from the research at any time. Since I was collecting the data myself, I could explain the purpose of the research as well as the ethical principles followed. This helped me in securing their trust and whole hearted participation. The sample of consent forms for focus groups and interviews are presented in Appendix 3 and 4. The recorded data from focus groups and interviews was personally transcribed. The transcription was done verbatim and where sentences were left incomplete or it was not clear what was being said, it was left as it is. Under no circumstance, words were filled in or assumed what was said as that would constitute unethical practice. As promised to the participants, all data were anonymised and safely stored. It was shared only with my supervisory team. The interviewees were also assured that after the transcription, the transcript would be sent to them to check the veracity of their statements and

whether what was written was what they had actually intended to say. If not satisfied, the participants could make edits and send it back. This provided reassurance and enabled a smooth and natural flow of the interview as they knew that they had the option to make changes later on even if what they had said during the interview at that time didn't seem appropriate to them later on.

#### 4.6 Chapter Summary

This chapter described the methodology followed in the study, the research design and the constructivist and social constructivist theoretical underpinnings of the research along with the ethical considerations. The next chapter considers the research instruments in detail, the process followed for sampling and piloting the instruments for the two stages, the justifications for the decisions taken, challenges in data collection and analysis.

## CHAPTER 5: METHODOLOGY II

### 5.1 Chapter Overview

This chapter discusses the research instruments used for data collection- web based survey, focus group discussions and semi-structured interviews. The justification for their use and the process of development of these instruments is explained along with the sampling and piloting of the instruments. The challenges encountered in data collection and how they were overcome are also discussed along with data analysis.

### 5.2 Choice of Research Instruments

The research instruments used for collecting the data were an online survey, focus group discussions and semi-structured interviews. A review of the relevant literature was carried out which enabled me to inform the research and place it in context. It provided an understanding of the kind of work that had been undertaken by other researchers in this field, the methods used and findings relevant to my research. This in turn helped me to select the framework for my research, identify an area that is relevant to me both personally and professionally and for which there is not much research data to be found.

#### 5.2.1 Internet Surveys

In recent times, internet surveys are increasingly being used by researchers. Roberts and Allen (2015) indicate that online surveys are a useful way of collecting data in educational research which offer flexibility and proficiency. They are also said to be the preferred method by both students and teachers (Harlow, 2010; Roberts and Allen, 2010, 2012). Internet surveys may take one of several forms such as distribution through e-mails, websites or on cell phones, computers or tablets. As in the case of paper-based surveys, some of the important points to be considered are the design of the survey, distribution, data collection and storage.

##### *5.2.1.1 Advantages and Disadvantages of Internet Surveys*

There are several advantages of internet surveys over paper surveys as listed by Cohen *et al.* (2018). One of the primary benefits for me as the researcher was that of convenience as internet surveys do not require the researcher's physical presence. They are not only convenient for the researcher but also for the research participants as they can complete it from any location and at any time that suits them. This was especially helpful for me to reach out to participants in the three other locations of Delhi NCR, Bangalore and Mumbai, as I was based in Kolkata. Hence the limitations of distance and time could be easily overcome. Additionally, as internet surveys do not need to be printed or sent,



they are a cost-effective means of collecting data due to savings with regard to printing, postage and travel. Speed and accuracy are also factors in favour of internet surveys and they enabled a quick distribution of the survey for me which would not have been possible with any other means. The data collection was also much faster and almost immediate. In certain cases, like mine, where I used a paid version of Survey Monkey, the data also got processed automatically saving an enormous amount of time and effort and decreasing the possibility of incorrect or missing entries due to human error. Additionally, web-based surveys are likely to foster greater honesty due to anonymity. As there is no personal interaction involved in case of internet surveys, it may lead the participants to be more honest and forthcoming. This was all the more pertinent as during the course of answering the survey questions, the participant teachers may hesitate in expressing something which might not be construed to be in favour of the school.

As with any method, there may be disadvantages of which the researcher needs to be aware. The primary one here being that the respondents may consider the mail as spam or junk and therefore not respond to it. Also, similar to paper-based questionnaires, it is not possible to probe the respondent further if the researcher so wishes and therefore is suitable for collecting only limited kinds of data and at an initial stage. Furthermore, if instructions or questions are not understood the respondent doesn't have an opportunity to clarify and this may lead to poor interpretation or irrelevant answers. Carbonara *et al.* (2002) describe different approaches to data collection via internet surveys. These include e-mail contact-e-mail response, e-mail contact-web response and off-line contact-online response. In the first method the sample population is approached through an e-mail and they record their responses and return these via e-mail. In the second method, while participants are initially contacted through e-mail, they are directed to a url to complete and record their responses. In the third method the participants may be approached through either postal mail or telephone and the respond either through e-mail or a web form. The second approach to electronic data collection was used wherein the schools were approached through email which contained a link. The teachers had to click on the web link and complete the survey. This self-administered web-based questionnaire provided several benefits over other methods. As the survey was routed through the school, there was no question of there being a trust deficit or it being considered as junk mail. Also, the questionnaire could be quickly and easily accessed by the participants, either from their computers, laptops, tablets or even mobile phones. Furthermore, since the data was being collected through Survey Monkey, it made it possible to record and download data in different formats, greatly reducing data entry and coding errors.

In the context of this research, internet surveys were beneficial as this was a multi-location study that involved cities quite far apart from each other. Since I was based in only one of the four locations, it

would have been extremely difficult for me to travel to give out or send the questionnaires, keep a track of them, or have them sent back. It removed the barriers of time and space and helped me reach out to the participants easily, quickly and conveniently. The cost that would have been involved had I used paper questionnaires was also substantially reduced. I believe it also played a part in the schools giving their consent for the research as it was a non-intrusive method, less time taking and convenient for their teachers, involved less of their time and effort as all they had to do was send a link to the teachers and they didn't need to monitor or collect anything.

#### *5.2.1.2 Problems and Solutions in Using the Internet-based Survey*

Cohen *et al.* (2018) provide a comprehensive list of the problems that may be experienced in internet-based surveys and suggest possible solutions. One of the arguments against using internet-based surveys is that it is a non-probability sampling method. There is also the issue of non-response and volunteer bias. However, in this research these problems were overcome because the school was requested to send the web link to all members of the targeted sample population which consisted of teachers teaching academic subjects from Class 6 to 12. Also, since the research design involved the school authorities sending out the e-mail with the link and asking it to be completed by a certain date, the chances of non-response were very low. Wherever the sufficient number of responses did not come in after the stipulated date, a reminder was again sent to the mediating person from that school, who in turn sent a reminder to the teachers, many of whom responded. Adherence to ethical norms is a requirement, as in any kind of data collection. Therefore, informed consent, anonymity, privacy, confidentiality, non-traceability and data storage and security assume significance. Along with the web link, the participants were also sent two documents attached, which provided them with all requisite information about the research through an information sheet and the ethical guidelines being followed by the researcher through an ethical code which clearly elucidated their rights. No identification details were asked for anywhere in the survey and since they could fill it in from their devices at their convenience, it was not possible either for the school or the researcher to trace them in any way. Additionally, data was coded and securely stored (Fox *et al.*, 2003; Hammersley and Trianou, 2012).

It is argued that in internet-based surveys there may be technical problems such as the configuration and display varying due to the different machines and software being used by the respondents or slow network that makes downloading the questionnaire difficult. However, these issues were circumvented by keeping the survey simple, devoid of any graphics that might get distorted or make the file heavy to download and by piloting the survey on different machines such as phones, tablets and laptops. Respondent familiarity, readiness and ability of the sample population to use the internet and media and be familiar with things such as drop-down menus and other types of questions such as

Likert scales is undoubtedly a crucial factor in web-based surveys. This particular factor did not pose any difficulty in this research as the sample population consisted of mainstream teachers in private, English medium schools. These teachers were all well-educated and familiar with the usage of technology, which was an integral part of the functioning of all these schools; as learnt in interactions with them. Hence, they were comfortable in filling it up. Besides, the survey was simple and easy to use, with clear instructions and was piloted with different teachers. Redline *et al.* (2002) identify several factors that need to be kept in mind while designing internet surveys as their success is affected by these variables. The important ones are the number of words, the number of response categories per item, location of items, location of instructions and the primacy effect which says that respondents are likely to choose items that appear in a list earlier rather than those that appear later. All these parameters were kept in mind while designing the survey. For instance, the commonly anticipated responses were not kept at the top of the list and the responses were mixed up to persuade the participants to go through all the responses carefully as can be seen from Appendix 5 which contains all the questions in the survey that have multiple options.

#### **5.2.1.3 Survey Monkey**

Some of the commonly used platforms for designing surveys are Survey Monkey, Google Forms, Free Online surveys and Survey Planet. I used Survey Monkey for the research. This was guided by the fact that I was familiar with it, found it easy to use and work with. I used one of the paid versions which provided me with the functionality and features that I required such as unlimited number of questions and possibility to export data in pdf, PPT or xls formats. Colleagues who had used it suggested that surveys designed through it are quite user friendly; an essential factor for respondent engagement and hence survey completion. This was found to be true while doing a first stage piloting. In addition, Survey Monkey offers a reasonable level of confidentiality assurance and was approved through University of Northampton ethical procedures in 2019.

#### **5.2.1.4 Designing of the Survey**

The survey was designed keeping in mind the principles described above. It comprised 24 questions which began with the very simple, factual ones and progressed to more complex, thinking questions which sought to bring out the teachers' perspectives and opinions. The first 9 questions were regarding demographic details such as age range, qualification, teaching experience, location of school and slowly warmed up the participants to more substantial questions. Q.10 was an attempt to make the teachers reflect on the percentage of students in their classes whom they knew well and get them to think about each student so that it gets them into the right frame of mind and sets the pace for answering the questions ahead. The next question sought their views on inclusion while also reiterating what was meant by diverse learners (though it was also explained in the information sheet to be read before filling up the survey). They could tick more than one option and also write their

own views if they wished in the ‘Any other, please specify’ choice. This question helped to understand the general perception of teachers about inclusive education. The questions then progressed in a logical sequence covering RQ 1 to RQ 4. So, Q.12 and Q. 13 asked about the challenges faced by teachers in addressing the needs of the diverse learners and any challenges that were specific to teaching this section of students (RQ 1). The next question was related and asked about the category of students they found most difficult to cater to which was followed by a Likert scale on how equipped they felt to handle a class of diverse learners. Q.16 was related to RQ 2 which was about the professional development needs of teachers. However, since the respondents might not be aware of the exact meaning of this phrase and it was not possible to explain the same, the question was phrased more simply as ‘the areas in which you would like to develop your skills’. Q.17 was about the preferred methods of acquiring these skills as these choices would have to be considered while designing a PDP and would invariably form a feature of the programme. The next three questions aimed to find out whether the teachers in general were attending training programmes (whether through their institution or on their own) and if yes, what were their objectives in doing so. Q. 21 and 22, which represented RQ 3, were about the methods currently adopted by the respective institutions for the professional development of teachers and their effectiveness. The survey questions ranged from yes/no choices to Likert scales and multiple choice, where they could often choose more than one option. There was also the option of ‘any other, please specify’ to capture those responses which did not fit into any of the categories. Therefore, some questions were open ended to enable those who wished to give a different, more elaborate response to record their views. The last question was completely open ended and optional. So, while it gave a window to participants who wished to express their views on any of the previous issues touched upon to do so, it did not force participants to respond.

Going through the literature on teacher concerns, attitudes and teacher preparation for inclusion (Shah, 2005; Sharma *et al.*, 2009; Bhatnagar and Das, 2013; Yadav *et al.*, 2015; Shah *et al.*, 2016; Bhatnagar and Das, 2014; Singal, 2008; Jangira *et al.*, 1995; Das, 2001, Das *et al.*, 2013b; Kundu and Rice, 2019; Sharma, 2011), helped me in being aware of the research in the field so far in India, the questions that have been asked, the standardised and modified versions of commonly scales used such as the Concerns about Inclusive Education (CIES), Attitudes Towards Inclusive Education (ATIES) and the Inclusion Competencies of Indian Teachers (ICIT) and the gaps yet remaining. This knowledge along with the research questions I wanted to answer, helped me in framing the questions for the survey. Please refer to Appendix 6 for the survey. The survey was frequently sent to my supervisors for their views and comments. Changes such as reordering of questions, change in wordings, adding options to the multiple-choice questions, changing the ranking question (Q 23.) to a multiple-choice question were made based on their feedback and response received after piloting

the instrument. On an average, the survey took approximately ten minutes to complete as was found in the pilot study. This was also mentioned in the mails to the school and participants so that they knew the time commitment beforehand and were therefore more likely to complete it.

### 5.2.2 Focus Groups

Focus groups are a form of group interviews where the participants discuss a topic provided by the researcher (Morgan, 1988). Cohen *et al.* (2018) contend that these mutual interactions between group members assume significance as it is from here that data is generated. However, there is a moderator or facilitator who guides the discussion and ensures that this remains in the realm of the topic provided. Focus groups can be used in combination with a quantitative study to provide greater insights and understanding or as the initial stage of a quantitative study to gain an understanding of the sample population in order to formulate a survey. Focus groups were used in this research to supplement other quantitative and qualitative methods; to gain a better and deeper understanding of the data collected previously through the survey and to help in the triangulation of data collected through them.

Cohen *et al.* (2018) draw upon the work by Morgan (1988) and Gibbs (2012) when listing the factors that need to be considered when using focus groups. First, the number of focus groups was an important point to consider. If only one group is used, the researcher may not be able to gauge whether the results are due to the distinctive characteristics of the group or a more generalised phenomenon. Keeping this in mind, I used two focus groups for each school. Taking into account that on an average there were about 30 teachers teaching Class 6 to 12, two focus groups of about 6-7 teachers each were considered to be sufficient and fairly representative. Additionally, any more were not possible because of practical reasons and limitations. Not only would the schools not give consent to make available any more teachers but also the fact that I had to travel to the three locations to complete the data collection process which included interviews and focus groups within the one day that was allotted by the schools.

Second, the size of the focus group was another important factor as the ideal number is required to have a meaningful and manageable discussion. While Morgan (1988) puts the number between four and twelve, Fowler (2009) suggests six to eight as ideal. Therefore, having discussed this with my supervisory team it was decided that six to seven teachers would be an ideal number. The minimum number of teachers in all the focus groups was six whereas in two schools a few teachers joined mid-way increasing the number to eight or nine. Also, in two of the focus groups one of the teachers was called out for a short while for some urgent work. They were allowed to join mid-way because

stopping to speak to them would have interrupted the flow of the discussion that was going on. Also, the fact that they took the initiative to come and be part of the discussion indicated that they had something to share on the topic which might be valuable. Once the discussion that was going on when they joined was over, the new incumbents were quickly apprised of the context and purpose of the research.

Third, it is important for the sampling to be representative of the population for the discussion to be relevant, meaningful and focussed (Morgan, 1988; Gibbs, 2012). Therefore, I was extremely careful in recruiting the sample. The school was requested to provide a subject-wise list of teachers in different sections, such as middle school, high school and secondary school. In some cases, there was an overlap of teachers. To keep the sample representative and understand the perspectives of the range of teachers in the particular school set up, care was taken to include teachers teaching different subjects, to have a similar ratio of male to female teachers as the school had, as well as a balance of new and experienced teachers wherever possible.

Fourth, it is essential to have a knowledgeable and efficient facilitator who can clearly establish the basic rules to be followed during the discussion and manage the group dynamics well (Newby, 2010; Gibbs, 2012). Therefore, I tried to ensure that the discussion stayed on track and that everyone in the group was comfortable and participated. I investigated further or explained as required and in general helped the group to contemplate. Since I considered this a crucial element for a successful focus group discussion, I did not delegate the data collection in other cities to anyone else and personally conducted all the focus group discussions.

Finally, there are ethical and other issues that need to be considered. I sought to address and ensure the management of ethical matters such as informed consent, voluntary participation and confidentiality in addition to effectively managing other issues which may arise during the course of the discussion such as arguments, strong emotions and non-participation. Before beginning the focus group discussion, I took some time to clearly explain the purpose of the research, how would the data provided by them be used and stored and answered any other queries or apprehensions they may have. Thereafter an information sheet and ethical code was given to each participant to read and a written consent for participation was taken (Appendix 2A and 2B).

#### *5.2.2.1 Process*

Participants were seated around a long table and the format of a focus group seating plan was filled up as per the manner in which the participants were seated. Two recording devices, a Sony recorder and my mobile phone were placed on each side of the table to capture all the voices. After the initial

process of explaining about the process and taking consent, certain instructions related to the conduct of the discussion were given to the respondents. These included taking their name or participant number (such as P2, P5) before they started saying anything, at least for the initial few responses and then as far as possible, speaking one at a time and being loud and clear. The respondents were given ample freedom to interact among themselves on the given topic or question. Occasionally, certain questions had to be clarified using prompts and probes and at times when the respondents went on a tangent and digressed from the topic of discussion for a considerable length of time, they had to be gently guided back to the topic.

#### 5.2.2.2 *Advantages and Disadvantages*

Although the artificial or manufactured nature of the focus groups can be considered a disadvantage, it is the very same factor that also makes them useful. The pre-planned and controlled nature of the discussions enabled my participants to focus on the topic, giving greater understanding than would have been possible through interviews. Also, focus groups are less time consuming than interviews as a large amount of data can be generated in a relatively short period of time.

Some weaknesses of the focus groups are that data generated from there does not yield itself to quantification, therefore making generalisation and analysis difficult (Cohen *et al.*, 2018). However, the purpose here was not to quantify the results but to generate qualitative data and gain a greater insight and understanding about the perspectives of teachers. This was successfully achieved as the topic spurred a good discussion and participation from group members which helped me to collect rich data from each of the locations. However, this also meant that at times the teachers got carried away, digressed from the topic and started talking to each other about internal school matters that were not related to this research study.

Another challenge, as argued by Smithson (2000) is that one dominant member may suppress the opinions of other group members and disagreements or conflicts may arise. However, these factors can be taken care of by a skilled researcher who can steer the group clear of any such situation and ensure that every participant has an equal opportunity to participate. I did not face any particularly difficult situation, although in every group there were a couple of dominant voices. However, very gently and subtly the less participative members were drawn in and before proceeding to the next question, the opinions of all participants were sought. Creswell (2015) highlights other difficulties associated with focus group discussions such as differentiating between participants when transcribing and taking notes during a focus group because of the number and pace of interactions taking place. Being aware of these challenges, I had requested the participants to mention the codes assigned to them like P2, P5 and then start speaking. However, in the natural flow of the discussion

this was sometimes missed out. Hence, in my notes I made sure that I documented the order in which participants spoke so as to be able to correlate it during the transcription. Also, I tried to do the transcription soon after the focus group was held while it was fresh in my memory.

### 5.2.3 Interviews

Cohen *et al.* (2018) state that an interview is an instrument for data collection that allows the use of different sensory modalities. Face to face interviews make it possible for the researcher to not just hear and see the interviewee but also observe expressions and gestures, body language. Also, interviews accord a flexibility to the data collection process as there is an element of spontaneity and freedom to seek clarifications or probe further as required, even though the order of questions may be fixed.

#### 5.2.3.1 Types of Interviews

There are various classifications of interviews provided by different writers, including the five kinds mentioned by Cohen *et al.* (2018). They are the structured interview, the semi-structured interview, the unstructured interview, the non-directive interview and the focussed interview. As the name suggests, in structured interview there is very little scope or freedom for the interviewer to make any changes and everything such as the question wording and sequence are fixed. Semi-structured interviews allow a little more scope to the interviewer to change the wording or sequence of questions as per the individual participant, though the questions and content is pre-determined. The unstructured interview provides the researcher maximum freedom and allows complete flexibility as it is completely open ended. A non-directive interview is one where the interviewee has the freedom to express his/her thoughts with negligible interference or control from the interviewer. As described by Merton (2008), the focussed interview involves interviewing respondents who have been involved in a certain situation, which the researcher has already analysed and formed a hypothesis on. The researcher formulates the interview schedule based on the same.

A semi-structured interview was used for the research as it was considered the best option to conduct the interview within a reasonable duration of time as all the respondents were busy and were being interviewed at the workplace. Although an interview schedule was in place, I had the liberty to seek clarifications or modify the questions slightly as required during the course of the interview. At the same time, it allowed the interviewees to express what they felt was important to them, not just their thoughts on aspects related to the teachers but also on inclusive education in general and challenges faced by them and the institution. A conversational approach helped to establish rapport and helped the participants feel at ease to elaborate on their thoughts.



### 5.2.3.2 Designing the Interview

There are several steps in designing an interview. An interview schedule needs to be prepared before conducting the interview. The questions need to be formulated based on the objectives of the research and the research questions. This has to be done keeping in mind that the questions framed are able to collect data that answers the research questions (Tuckman, 1972). Some of the factors that govern the choice of question format in the interview schedule include the purpose of the interview, nature of the content, the estimated level of understanding and motivation of the respondent and the kind of answers that are sought; brief or elaborate. (Cohen *et al.*, 2018). Arksey and Knight (1999) recommend certain factors while framing questions for the interview schedule. The primary ones pertinent to this research were: to keep the language and vocabulary simple, be clear and precise, not to ask more than one question at a time (also called double-barrelled questions) and do not include questions which make assumptions. All these factors were kept in mind while designing the schedule. The number of questions were also limited to a maximum of 9 in number, keeping in mind the busy schedule of most of these respondents.

There were two slightly different schedules that were drawn up. One was for the head of school - Principal or Vice Principal (Appendix 8) and the coordinators or section heads and the other one for the counsellor and SENCo (Appendix 9). This was because while the counsellors and SENCos were likely to have a particular view of teachers based on their limited interaction relating to students with special needs, the coordinators or section heads would have a more comprehensive knowledge of teachers' overall needs, strengths and challenges. The section heads were also likely to have an understanding of the administrative aspects such as challenges in organising a training programme; owing to their proximity to the school management. Most of the questions in both the schedules were the same. Additionally, the questions that related directly to the research questions such as teacher challenges in implementing inclusion in the classroom, the professional development needs of teachers for inclusion and the ideal framework of a professional development programme were also common to the interviews as well as focus groups and survey to enable easy comparison between all responses, triangulation and coding of data.

### 5.2.3.3 Advantages and Disadvantages

There are several advantages of interviews over questionnaires. As Robson (2011) contends, the dynamic and flexible nature of interviews, provides the researcher an opportunity to make changes based on the responses or follow a line of thought through further questioning. Personal interviews also allow the interviewer to observe non-verbal cues which can greatly substantiate or contradict what is being said, which is not possible in questionnaires. Hochchild (2009) also expresses similar

ideas and says that unlike surveys, interviews help to gain an understanding about the thought processes of people and allow the deeper exploration of issues. Furthermore, interviews provide the opportunity to delve deeper by means of prompts and probes. Prompts help the researcher to clarify questions or misunderstandings that may arise by citing examples and probes can be used to seek further information, clarify something the interviewee has mentioned, shed more light on a topic or explain something in greater detail (Morrison, 1993; Patton, 1980; Wellington, 2015). However, there may be a number of challenges in the interview process. Interviews are time consuming and require a lot of careful planning and preparation. They involve procuring permissions, making arrangements and ethically recording the data. In case a respondent cannot make it for some reason, they have to be rescheduled. I had to carefully schedule my visits to the schools in the other locations based on the availability of these individuals and get a suitable date at least two three months in advance so that I could plan my travel as rescheduling was not an option. Transcription of the interview also takes a lot of time and that is something that needs to be carefully considered before making it the chosen instrument for data collection. My decision to use the interviews only for the heads of schools, coordinators and counsellors and not for the teachers was also guided by this factor. Interviews are dependent on the skills and experience of the researcher as well. Additionally, they may be affected by interviewer bias or interviewee fatigue. Since it is a direct interaction, requiring the physical presence of the respondent and interviewer, it may not just be problematic for the participant but maintaining his/her anonymity is also difficult. I did not experience researcher fatigue as there was a gap in conducting the interviews in different cities and being conscious of researcher bias helped me to be objective. Despite the challenges, interviews can yield rich and meaningful data (Robson, 2011).

Observation though a useful research tool, was not a suitable method for my research as it involves understanding perspectives, which cannot be readily understood through observations. The presence of an observer may not only prevent the display of genuine behaviour but also just a few observations may be insufficient to gather any meaningful data as the behaviour and actions on a particular day or session may be due to various extraneous circumstances (McGrath and Coles, 2013). Hence, semi-structured interviews were used for the second stage of the data collection. Semi-structured interviews involve the use of an interview protocol as a guide; though question sequence as well as wording could be changed as the interview takes place. Additional questions or probes may also be posed as required to investigate further (Lodico *et al.*, 2010). They were conducted with some of the important stake holders in the teaching learning process such as the heads of schools, SENCOs, counsellors and section heads or coordinators. While the survey and focus group discussions were directed towards understanding the perspectives of the teachers on their professional development needs, these interviews aimed to get the views of these significant others, all of which could be different coming from different perspectives. For instance, the way a situation is viewed by the head of a school would

perhaps be quite different from a counsellor who often interacts with teachers owing to behavioural and emotional issues. On the other hand, a special educator's perspective might have more to do with the learning needs of the diverse learners. The section heads or coordinators by virtue of their position which involves working closely, guiding and monitoring teachers on a day-to-day basis would have a different outlook. I thought that it was necessary to capture all these very important and interesting perspectives to get a holistic view of the issue.

### **5.3 Sampling**

The research questions helped me to determine the sample population which consisted of all mainstream English medium schools in urban areas in the locations of Delhi-NCR, Mumbai, Bangalore and Kolkata. These were inclusive schools which were affiliated to one of the two Central Indian Boards-CISCE (Council for the Indian School Examination) or CBSE (Central Board of Secondary Education). Only private schools were chosen for the study owing to various reasons. These included difficulty in securing access to government schools and language barriers posed due to non-prevalence of English as a medium of instruction as the regional language is used in many government schools. Additionally, private schools have become increasingly popular at all levels of education in the last couple of decades in India, owing to the inferior quality of education provided in government schools (PROBE, 2009; Muralidharan, 2006; Desai *et al.*, 2010). Studies have indicated several reasons for this deteriorating standard of education such as the inadequate quality of resources, lack of infrastructure including information and communication technologies, teaching learning materials, teacher absence and vacant teacher posts, large class sizes and lack of teacher training to cater to student diversity (Narayan and Mooij, 2010). Hence, well-known, private schools were chosen for the study as they were not likely to be heavily influenced by these challenges and therefore other factors and challenges to inclusion and teacher professional development could be uncovered.

There are two broad types of sampling approaches, namely probability Samples and non-probability samples. In probability sampling, as the name suggests, the probability of selection of each respondent is known, whereas in the non-probability one, it is not known. Probability sampling is also known as representative sampling as statistical inferences can be drawn from this kind of sampling and it is supposed to be representative of the population (Robson, 2011). Within probability samples also, there are generally recognized to be four kinds: simple random sample, systematic sample, stratified sample and multi-stage cluster sample. Stratified sampling is used to obtain more representative and therefore more accurate samples as it involves unbiased sampling frames (Vaus, 2002). In convenience sampling, research participants are selected based on their readiness, willingness and

ability to participate (Saumure and Given, 2008). In purposive sampling, the researcher's judgement regarding the suitability of the respondent chosen comes into play.

The research was conducted in four of the five major metropolitan cities of India- Kolkata, Bangalore, Delhi-NCR and Mumbai. The national capital region (NCR) includes the cities of Delhi, Gurgaon and Noida. As the researcher was based in only one of the above locations, the constraints of resources such as time, cost and practicality had to be considered in deciding upon a sampling frame. A sampling frame of about 3-4 schools was considered for the data collection in the first stage. On an average, it was estimated that each school had 30-40 teaching staff in the middle school and secondary section, that is teachers taking academic subjects from Grade 6-12. Only academic teachers were considered as the study focussed on professional development needs of teachers pertaining to inclusion in the regular classroom. Sports and activities are an entirely different setting requiring different skills and investigating the training needs of these educators was beyond the purview of this study. A list of private, mainstream, English medium schools following an ICSE or CBSE curriculum that were located in urban areas in these cities and had a reputation of providing inclusive education was established. Schools which were inclusive and therefore likely to have a mixed population of students as against schools which have strict admission criteria were considered. Thus the school selection was a purposive sample as schools chosen had to meet a particular criterion as described for answering the research questions. However, from this list, only those schools could be approached which had mail addresses on their websites, other than for admission. So, although mails were sent to 6-7 schools on an average, in each of the locations, ultimately only 2 schools in Delhi and Kolkata and 3 each in Mumbai and Bangalore gave consent for the research project to be undertaken. Thus, it was also convenience sampling as the study could be carried on only with the schools who gave consent. Purposive sampling was used for the sample population of mainstream teachers as the focus of the study was teachers who taught students in the upper primary and secondary section of the school.

### 5.3.1 Sampling for First Stage of Data Collection

The first stage of data collection was an online survey where a link was sent to schools, which in turn they were requested to forward to all teachers from upper primary to secondary sections other than sports and activity teachers. Hence, I had no control over this part of the process and the link was sent by the schools to their teaching staff who fulfilled the criteria as mentioned above. Since schools varied somewhat in their sizes and structure, the exact number of teachers that this would involve was not known. Based on interactions with two participating schools and my interaction with colleagues as well as my own experience of working in schools of similar size and student strength,

it was estimated that there would be an approximate number of 30 teachers per school teaching in the upper primary and secondary section who would be likely to complete the survey. Hence a sample of 120 teachers was targeted. However, a total of 280 teachers finally filled out the survey, thus exceeding my expectations.

The table 5.1 below depicts the location and number of schools for the first stage of data collection.

**Table 5.1- Location wise distribution of schools**

<b>Location</b>	<b>Number of Schools</b>
Delhi NCR	2
Mumbai	3
Bangalore	3
Kolkata	2

### 5.3.2 Sampling for Second Stage

The second stage involved different participant groups:

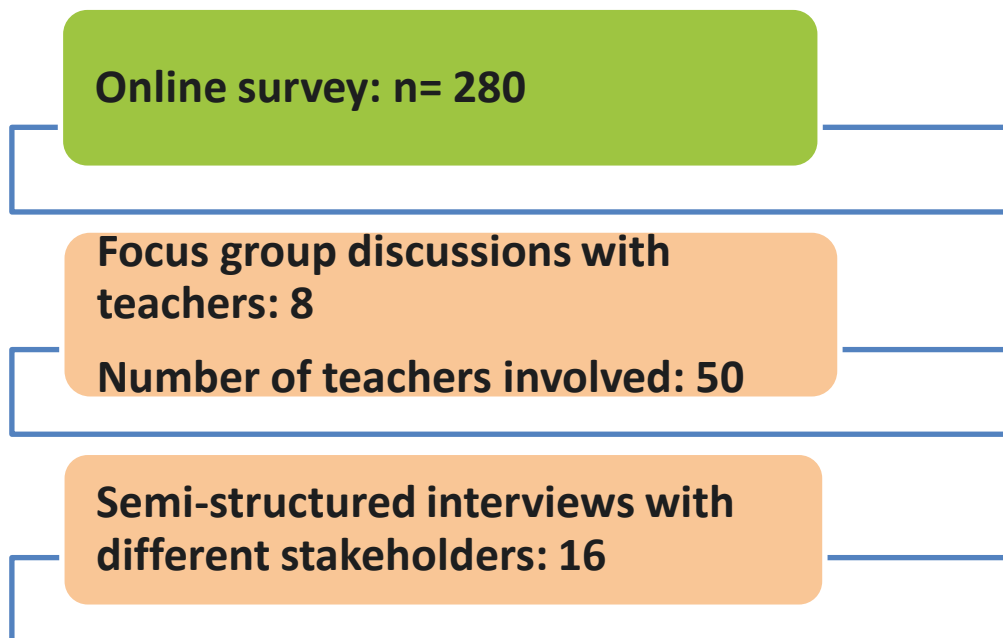
- Teachers
- SEN Co-ordinators
- Counsellors
- Principal/Vice Principals
- Section Heads/Coordinators

For the second stage, along with obtaining the in-depth views of the teachers, understanding the perspectives of the other important stakeholders such as the Principal/Vice Principal, counsellor, SENCo and section heads was also important. This was because each of them by virtue of their position would have the opportunity to view not just the teachers but also the inclusive education scenario in a different light. Their interactions with the teachers would also be under distinct circumstances. For instance, while the SENCos and counsellors would have insights on teachers' abilities as well as training needs pertaining to students with special needs, the section heads/coordinators; owing to their regular and close working with teachers, would have their own evaluations on teachers' proficiency, skill deficits and areas of development concerning not just students with special needs but all learners, along with other areas such as lesson planning, classroom management and parent interaction. The heads of schools on the other hand would have a wider perspective on teachers' strengths, challenges and areas of professional development. It interested me to know whether these views were similar or different from that of the teachers and how these beliefs and thought processes impacted their behaviour and decision making. Additionally, placing all these

views together would help me get a cohesive picture and deeper understanding of the status of inclusive education in general and the teachers' role in particular. As I was using the support of the schools, I had to make sure that I was not disrupting their school routines and teaching schedules. For the focus group discussions, when I went to the schools, I requested to be given the timetables of the upper primary and secondary teachers who were present that day. I first found a common free slot for teachers and then made a list trying to incorporate a mix of different subject teachers and male and female teachers so that I could get all perspectives. I requested the person in school I was coordinating with to then send the list of teachers I had found with this process. Thus the sampling here was purposive convenience sampling because a selected group was asked and from that whoever was free and willing to participate came forward.

The following figure 5.1 is a snapshot of the number of participants involved in both the stages.

**Figure 5.1- Number of participants**



## 5.4 Piloting

Pilot studies are used to test various aspects of a study before it is finally launched so that modifications if any, can be made and the veracity of the instruments checked. They give the researcher an opportunity to fine tune parameters such as data collection instruments, design and other logistical issues including procedures involved in field work (Yin, 2015).

### 5.4.1 Piloting the Survey

The details on the designing of the survey have been discussed in the next chapter. After the survey was designed, it was piloted with three respondents. These were all teachers in the middle and

secondary sections and taught in schools similar to the ones in the actual sample. One of them was a reference from an old colleague from the school in Delhi where I worked and who had joined after I left, the other one was an acquaintance in Bangalore who lived in the same apartment complex while I was there and the third one was a reference from a present colleague working in another school in Kolkata. The piloting was helpful as it enabled to ensure the efficacy of the instrument in respect of collecting relevant data. This was especially important as this was the first time the researcher had used online questionnaires and wanted to know whether the instrument worked well, yielded data that could be easily interpreted and was user friendly. Two of the respondents were requested to open the survey on their phones and check whether the survey could be managed easily through this medium, functioned well, was easy to navigate and responses could be easily entered. This was especially important in an Indian context where the use of smart phones is the most commonly used approach to accessing electronic communication.

All the respondents found the content of the survey as well as the terminology used, easy to understand. One pointed out that the title of the survey, which was initially, “An investigation into the professional development needs of middle school and secondary teachers” did not highlight the contents of the survey. This was an oversight on the part of the researcher and it was subsequently changed to, “An investigation into the professional development needs of middle school and secondary teachers to meet the diverse learning needs of students in a classroom.” The sequence of the questions and the general flow of the questionnaire was also logical and sequential as per the participants, however based on the feedback from one participant, two questions were swapped to enable a smoother flow. Following the feedback from the pilot, two more options were added to Question 13 which was on additional challenges particular to teaching the middle school and secondary section. The two options added were -Pressure of exams and Greater parental expectations. Also, Question 23 on the salient of the features of an ideal professional development program was initially a ranking question that was found to be confusing. Hence it was changed to a multiple-choice question where participants could choose more than one option and the last question which then became unnecessary was deleted. Thus, the pilot gave useful insights to make changes to the questionnaire.

#### 5.4.2 Piloting the Focus Group and Interview Schedule

The piloting of the focus group could not be done with a group of participants due to logistical problems of getting 5-6 participants on board at the same date and time, finding a suitable place and professional setting and not being able to travel to other schools/locations owing to time and financial constraints. Hence, it was piloted with one of the teachers who had earlier been approached for the

focus group pilot study, as an interview. She was a senior school teacher who had recently left my present school and kindly consented to be part of the pilot study. The interview schedules for the counsellor and special educator were piloted with a special educator in Mumbai who was referred by my known circle of special educators in Bangalore. Two references of heads of schools were received through my Masters alumni group for piloting the interview schedule for the Principal. It was piloted with one of the Principals of a school in Bangalore who gave consent and time for the same. All the participants of the pilot study matched the profile of the participants in the study. The pilot interviews yielded useful data that helped me to understand the efficacy of my focus groups and interview schedules in collecting the data required. The participants when asked later, said that the questions were easily understood. The interview lasted for about half an hour on an average and the respondents seemed comfortable answering the questions. However, some answers to the latter part of the interview schedule came earlier, so the wording of two questions had to be slightly modified and made more specific. One of the respondents did not seem to be very clear on the term 'professional development needs'. So, although the term was not replaced in the question as it was a key phrase, the researcher had to be alert to such a possibility during the actual process of data collection and be prepared to explain the question further and gently guide the respondents back if they seemed to be going off track.

### 5.5 Challenges in Data Collection

The challenges in collecting data in this study were primarily due to the fact that it was a multi-location study. I was based in one of the four locations and had access to the schools in the region where I worked. However, getting consent from schools in other locations for the research was an arduous task. E-mails were sent to several schools in each of the locations, both in my network and those which seemed to fit the defined sample of being English medium co-educational schools in urban areas. These mails introduced the researcher, explained the research study in brief, elucidated the requirements from the schools and requested consent for participation (Refer to Appendix 7).

However, very few responses were received to such mails. Out of the responses received, while some expressed regret at not being able to help since they had examinations going on in their schools, others cited the involvement of too many people who would be required for the study as a problem. I wrote back to each response explaining the time requirements from each research section involved such as teachers and counsellor and requesting a reconsideration of their decision. An option of participating only in the first stage of the survey was also given since that would require the participation of teachers in an online survey, which would take only about ten minutes. Some of the Principals responded by asking for a face-to-face meeting with me in order to understand the study in further



detail. However, as I was not based in any of these locations, I was unable to be present in person for a meeting before the second stage of the research. An information sheet which gave details about the research along with the ethical code and questionnaire consent form were attached with the e-mail to reassure the Principals regarding the veracity of the research and ethical standards maintained.

The timing of approaching the schools for consent also played an important part in deciding the outcome. The general poor response was compounded by the fact that at the time of sending out the e-mails, in February and March, most Principals and schools were busy with the annual examinations and planning for the next session. Hence, they either chose not to respond at all or when they did, they said it would not be possible as they were busy. Further explanations of the research and requests to participate did not help in securing consent. Soon after, the summer vacations began and hence the teachers were not available. This led to a further delay in getting responses as many teachers were not approachable during the vacations. Some other schools which were part of a larger group or chain of schools, required permission from the Head office, so even though the heads of schools were agreeable, the permission never came through, leading to their dropping out eventually. Eventually, out of the ten schools which participated, I was working in one of these schools at the time of conducting the research and had previously worked with two other schools. Although the Principals and many of the Coordinators and teaching staff had hence changed, the question of establishing credibility of the researcher was not a serious element for consideration. Of the other seven schools which gave their consent and participated in the research, four were approached through acquaintances who either worked there or knew someone in a position of authority in the school. They became the link to the schools and helped in securing the consent. Therefore, getting consent from schools even before starting the research posed a huge challenge, though this situation is not unique and is often seen as a particular difficulty which has to be overcome by researchers (Thomas, 2009).

Thereafter, getting the participants to take the online survey and obtaining the requisite number of responses also proved difficult. Since there was no direct contact with the participants, it was not possible for me or the school to trace who had completed the questionnaire and who hadn't. Hence, it was also not possible to send any reminders directly and they had to be routed through the school. It was a fine line between not pushing the schools so hard as to make them feel pressured and at the same time making sure I obtained the number of responses I wanted by requesting them to remind the teachers to fill up the survey. It was after three months of hard work that the first stage of data collection could be completed. It involved sending out several e-mails and further requests, initiating regular follow-ups and reminders. Finally, 280 responses were obtained from the online survey. The second stage came with its own challenges. I had to visit the schools in person this time for conducting

focus group discussions with teachers and interviews with the head of schools, coordinators, counsellor and Special Needs heads/Co-ordinators. Since teachers were involved and they had different schedules on different days, it was difficult to get 6-7 teachers together for 30-45 minutes during any of the regular teaching days. Hence, while some schools preferred to allot a non-teaching working day where teachers were available in school but had no classes, some asked me to come on a working day. The availability of other participants was also essential. Since I had to travel to three locations for the purpose of data collection, it was necessary that I completed the entire work the same day that was allotted to me as multiple visits were not feasible if something was left out. Hence the date and day had to be carefully planned. Travel also involved the booking of flight tickets well in advance to ensure I could work within a reasonable budget. It required a lot of follow up and requests to get the dates from the schools as they themselves found it difficult to allot a date two to three months ahead when everyone required would be available. As I was also working as a special educator and had to take time off from my own place of work for the purpose of this data collection, the second stage of data collection posed a greater challenge.

During the second stage of data collection, I experienced challenges pertaining to being an insider-researcher for the school in which I was working. Insider research can be defined as that conducted by people who are already a part of the system or organization they are studying, by virtue of their employment, education, social or political network (Coghlan and Brannick, 2005 cited in Humphrey, 2012, p.572). It is important to clarify one's role and position as a researcher, especially when doing qualitative research. This necessitates the specification and clarity of awareness of roles and measures taken to prevent any biases arising out of them in order to make research credible. The fact that I was a part of the special needs team conducting workshops for teachers and working with a section of teachers closely made my position rather complex as I was in a way seeking feedback on my team members and my own performance. As Humphrey (2012) also contends, this might be especially sensitive, when conducting research with participants who are students and colleagues. To prevent the teachers from considering this as a personal comment on the team's performance and efforts, the objectives and context of the research were clearly explained, and it was repeatedly reiterated that my role as a researcher was to be seen as distinct from my role in the organization. Once the research objectives and larger context of the study were clarified along with the fact that this was one of the schools that were part of my research, the participants seemed quite comfortable in sharing their honest views.

## 5.6 Data Analysis

The data collection process was completed in two stages through the three research instruments. The survey data was downloaded from the Survey Monkey system into Excel and pdf formats. It was securely stored and backed up. The focus group discussions and interviews were transcribed. The survey as well as all the focus groups and interviews were in English, so no translation was required. Cohen *et al.* (2018) state that transcribing is a vital step in the process as there is a possibility of data getting lost, misinterpreted or read out of context. They further suggest that even at this stage it depends on the interviewer's interpretation and understanding of the situation. Therefore, one needs to tread very cautiously and record not just the words but also the actions, gestures, tone of voice, facial expressions, mannerisms, pauses, body language of the respondent/s and any other events or occurrences during the time of the focus groups and interviews. Consequently, I was careful to record using two devices: which were kept at each end of the table, in order to capture all voices well and also to make a note of other factors for each of the focus groups and interviews. However, since I was the only person recording, observing and moderating I might have missed out on certain aspects.

The data was then segmented as per research question. The segmented data was carefully scrutinised to arrive at codes and develop code definitions. Coding helps to organize data by clustering it into various categories such that conclusions can be drawn later (Bell, 2005). Since the initial codes were obtained from the survey, these codes as applicable to a particular research question were taken from the survey and beginning with one location, the other codes were added while going through the data. Some codes were also added or refined by expanding or strengthening definitions to incorporate more issues being discussed. There were 53 initial codes which were reduced to a manageable number of 26 after merging of similar codes and elimination of the unessential ones as suggested by Creswell (2015).

These codes were then grouped together into a few major ideas that answered the research questions and these became the major themes. They also linked back to the themes found in the literature review. Details of the entire process and example of segmentation are provided in the next chapter. The 5 major themes finalised were: Teacher challenges in addressing the diverse needs of learners, professional development needs of teachers, professional development program for teachers (PDP), methods currently adopted and effectiveness and inclusion in schools. Having arrived at the themes and sub themes, the data was then reorganised thematically to enable easy access and appropriate analysis.

## 5.7 Chapter Summary

This section focussed on decisions pertaining to the choice of instruments, the challenges encountered and a brief about data analysis. An internet survey was chosen for the first stage to enable the simultaneous and quick collection of data from different locations. Focus group discussions with teachers and semi-structured interviews with other stakeholders were chosen for the second stage to obtain wider and in-depth perspectives and understanding, keeping the constraints of time, cost and feasibility in mind. Challenges such as getting consent for participation, securing timely responses and other challenges during the process of data collection were elaborated on. The next chapter describes in detail the procedures and methods used for data management and analysis for both quantitative and qualitative data.

## CHAPTER 6: DATA MANAGEMENT

### 6.1 Chapter Overview

The previous methodological chapter explained the methods used to collect data, the development and reasons for the choice of the research instruments along with the obstacles faced in data collection and how they were tackled. This chapter moves on to describe in greater detail the organisation, storage and management of data for analysis. The process of coding and evolution of codes has also been explained. As the study collated and analysed both quantitative and qualitative data, data management for these two approaches has been discussed separately.

### 6.2 Data Management for Quantitative Data

An online survey was used for initial data collection. A version of Survey Monkey was used, which enabled the collection of data from ten schools in four different locations simultaneously. The target was to have two schools each from the four locations and a minimum of 30 participants from each school in the first stage of data collection through a survey. With this objective in mind several schools in all four locations were approached. The consent was received from two schools each in Kolkata and Delhi NCR and three schools each in Mumbai and Bangalore. As and when the consent was received, the link to the survey along with the information sheet, ethical statement and consent form was sent to the respective school. However, the minimum target of 30 responses in two of the schools in Mumbai and Delhi was not met while participants from certain schools exceeded 30. Since the intention of the survey was to collect data from a wider range of schools and had been limited to two schools per location only keeping in mind the practical difficulty of obtaining consent, therefore each response was valid and none of the responses was discarded. This stage of the data collection process was completed over a period of three to four months.

Once the responses started coming in, I scrutinised the data in order to begin to develop an understanding of emerging and recurrent themes. These themes were then considered in respect of the more detailed data required and assisted as I began to frame the schedule for the focus group questions and the semi-structured interviews. Once all the data from the questionnaires were collected and the survey was closed after the due date given to the participants, it was automatically stored and categorised according to both school and city location. The Survey Monkey tool had the option of downloading the data in different files and formats. With the objective of getting an overall picture emerging from the survey, the composite data, comprising all responses was downloaded in both pdf and excel form. The pdf version helped to obtain a clear understanding regarding the overall trends. However, since I wanted to do my own analysis of the data the excel format was downloaded too. To

enable comparison between responses as per location and individual schools and to cross check the results with the composite data, should it be required, individual school data and location wise data were also downloaded. The tool provided various options to choose from while downloading the data.

The questionnaire provided 280 responses. As this constituted a significant amount of data, it had to be organised and prepared in a way that made it possible to access and analyse. The composite data in excel form contained all the responses in the order they were filled up along with the responses to all 24 questions, many of which were multiple choice questions in the same row. This made it very difficult to decipher and extract any meaning from. There were also some extra and unnecessary columns. Therefore, the excel sheet that contained the data of all the schools was further developed to simplify it and make it possible to read and understand. To begin with, it was considered important to give a code to each participant and school as well as the location he or she was from so that the open-ended responses could be traced back to each participant, whilst maintaining data anonymity. Therefore, the school names were replaced by codes and participants assigned individual numbers and codes.

The schools were coded in the following manner:

**Table 6.1- School Coding**

<b>SCHOOL AND LOCATION</b>	<b>CODE</b>
Delhi school 1	DS1
Delhi school 2	DS 2
Bangalore school 1	BS 1
Bangalore school 2	BS 2
Bangalore school 3	BS 3
Mumbai school 1	MS 1
Mumbai school 2	MS 2
Mumbai school 3	MS 3
Kolkata school 1	KS 1
Kolkata school 2	KS 2

Thereafter, the first person who responded was considered as Participant 1 or P1. For example, the first respondent from Delhi school 2, was coded as DS2 P1. In the first stage of organisation, unnecessary columns were removed and the participant numbers and source codes were assigned. However, there was still a lot of clutter and this did not make for easy reading as many of the questions had multiple options and all of them appeared next to each other. Also, the questions and question numbers were not showing clearly on the top. Hence in the next stage, responses to all the questions for each participant were compressed into one excel sheet, by simplifying the questions, using alphabets for responses to multiple choice questions and also including the responses to open ended questions. After this final process of simplification, the data could be easily read and understood at a

glance. Appendix 10 provides a snapshot of the initial data, Appendix 11 for the data after the first stage of organisation and simplification and Appendix 12 for the final data that was ready for analysis. This process enabled me to scan the data, develop an initial overview of it and to begin the identification of any emergent themes. There were certain responses that I hadn't anticipated and the partly open-ended questions provided several interesting points, which could be probed further during the more personal, intensive stage of data collection involving focus group discussions and interviews. After the qualitative data was transcribed, segmented and arranged in relation to each research question into one excel sheet for each location, the responses to the open-ended questions from the survey were incorporated wherever relevant and applicable. This enabled me to see the data pertaining to each research question from all three sources at one glance and assisted in the early process of triangulation of data.

### 6.3 Data Management for Qualitative Data

Focus group discussions with teachers and semi-structured interviews with other stake holders such as the heads of school, SENCOs, section heads or coordinators and counsellors enabled the collection of more in-depth qualitative data. Only one school per location was chosen for the second stage of data collection. For each of these four schools, two focus group discussions were conducted for teachers. As this involved travel and seeking consent and negotiation to find a time of convenience for each school, this process took place over a period of eight to nine months. In qualitative research, unlike quantitative research, the collection of data and its analysis are often a simultaneous process (Mason, 1998). Reflecting on the data I had collected after my visit to the first school, helped me to fine tune my questioning strategy and approach which I could apply in my subsequent data collection. After the initial interviews and focus groups, I gained increased confidence with regards to how a particular question needed to be asked, where prompts might be required, and where further explanation might help. This became an iterative process because it involved movement from data collection to analysis and back (Creswell, 2015; Gibbs, 2007; Teddlie and Tashakori, 2009). As the data from each school was collected, it was transcribed and I made an initial read through in order to ensure the veracity of the data. Transcription involves converting the recorded interviews into text. The recordings were transcribed verbatim. The focus groups were transcribed first, while they were still fresh in my memory as it was a slightly more complicated process than that involved in individual interviews and consisted of six to seven participants on average in each group. This was followed by transcription of the interviews. An example of the transcription format is included in Appendix 13.

Transcription involved going through the recordings several times and listening to certain segments repeatedly to ensure understanding. Since two devices were used for recording, this provided a good

back up and both had to be employed to get an accurate account of what was said in these sessions. India being a large and diverse country, people in different states tend to have slightly different accents, which at times made it difficult to understand a particular word or phrase. Even after several attempts to decipher the audio if there were words or phrases which were unclear, they had to be left out and noted as unclear or inaudible in the transcript. This problem was majorly encountered in the interview with the principal of the Bangalore school as this had to be done telephonically and hence parts of the recording were unclear and muffled. No attempt was made to fill in words or assume what was said as that would constitute unethical practice.

### 6.3.1 Verification of Transcripts

Once all the interview transcripts were ready, the next management process involved sending it back to the participants to check for accuracy and provide them an opportunity to accept the verbatim transcript as it was or edit it if they felt their thoughts or comments were not accurately recorded or understood. This process known as ITR or interviewee transcript review helps in establishing the validity and rigour of the data collection process (Gillham 2000; 2005). There were a total of 16 interviews conducted in all. Opportunities were given to participants to go through the transcript and verify if it was accurate and represented what they wanted to convey. They were informed that they could also make edits if required but were requested to make the changes in a different colour or highlight them so that it was easy for me to identify them. A time frame of 15 days was provided to them to reply after which it would be considered that they were agreeable to the contents of the transcript. They were also assured about the anonymity of the data and neither their name nor the school's name appearing anywhere. Six participants responded with minor changes primarily related to grammar or rephrasing of the previously expressed thoughts. After making the changes, the verified transcripts were saved and prepared for analysis.

## 6.4 Data Organisation

Due to the amount of data collected in qualitative research, organising this for analysis becomes crucial. There are different ways of organising the qualitative data collected such as; by type (observations or interviews) or other parameters such as location or participant. Data organisation also involves the safe storage of data and keeping multiple copies (Creswell, 2015). After all the focus groups and interviews were transcribed, there was a sizeable quantity of data which needed to be organized and prepared before any kind of analysis could be done. Since the data was collected from four different locations, it was decided to store it as per the location, which would make it easy to retrieve and refer back to. Therefore, folders for each location were made. Thereafter sub folders within each folder for focus group transcripts and interview transcripts were made. These sub folders contained the individual files. A back up was taken on the hard drive as well as mailed to myself. The



first step undertaken was segmenting the data using the research questions as a focus for this activity. To make this clearly visible, each research question was assigned a colour. Each of the transcripts was read several times and segments of data from the transcripts which provided data likely to assist me to answer a particular research question were marked out in a pre-assigned colour accordingly. Some broad codes such as School Systems (SS) and Suggestions for making inclusion effective (SugI) were jotted down in the margins while going through the transcript. An example of segmentation of a transcript with the colours assigned and with some of the raw codes is provided in Appendix 14. There were also certain parts in the transcript which didn't seem to directly answer any of the four research questions at the outset but still seemed relevant to the study. Some of them highlighted aspects that I had not thought about such as new teachers joining mid-term being a problem or contained other reflections such as benefits and drawbacks of inclusion and other interesting suggestions. Therefore, these were highlighted in bold and the decision regarding whether and where to include them was left until all the data was collected.

In the second step, one excel file was opened for each of the four locations. Within this file, one sheet was assigned for each of the research questions. The segmented data from each of the transcripts along with the details of the source was then copied into these excel sheets. A fifth sheet was used for the undecided but relevant data that was earlier placed in bold. This process was repeated with all the focus group and interview transcripts until all the data had been scanned repeatedly and all relevant data had been placed into the respective sheets as described above. Once the process was completed with the focus groups and interviews, the relevant data from the open-ended questions of the survey was also incorporated into the sheets for each location. Thus for each location, there was one complete sheet with data from all three instruments. Appendix 15 provides a visual representation of the data organisation of all the locations.

## 6.5 Coding

As the data was transcribed for each location, I devoted time to read the data to familiarise myself with it and scrutinise this for recurring themes and ideas that were emerging. This exploration of data is essential to get an overall sense of the data before beginning a formal process of analysis. The nature of the data generated in qualitative research is such that every time one goes through it, a deeper sense of understanding is developed and one uncovers new layers of meaning. While going through the data any thoughts or ideas that came to mind were jotted down in the margins of the document as is recommended as good practice (Creswell 2007; Stuckey 2014). The next step involved coding of the data. Coding helps to organize data by clustering it into various categories such that conclusions can be drawn later (Bell, 2005). According to Robson (2011), coding is a technique to

organize and retrieve data that helps to cluster similar themes, concepts and questions together. He also contends that coding acts as a solution as qualitative data can become too overwhelming and chaotic, due to its unstructured nature. At the outset, the volume of data accumulated did make the task of analysis seem rather daunting and it was therefore important that a well-organized coding process be followed.

#### 6.5.1 Initial Codes:

The coding was done according to the research question as the data was already arranged accordingly. The next step involved going through the segmented data and arriving at codes. However, because I had used a survey in the first step of data collection and the primary research questions were part of all three instruments of data collection, namely surveys, focus group discussions and interviews, I already had a set of parameters, which needed to be coded. For example, Q 12 of the survey directly asked about the challenges faced by teachers in addressing the diverse needs of learners in a classroom. The answer to this had multiple options, so through careful organisation of responses I was able to identify a starting point to begin with the coding. Thereafter the data was scanned again, keeping these codes in mind and I found that all of the coded options in the survey were also emerging from the focus groups and interviews. This provided a valid premise for using the survey options in the creation of initial codes.

Beginning with the Delhi school, the excel sheet for RQ 1 was read several times and new initial codes were found. At this point text segments which pertained to a particular idea were assigned a code. In another word document, a table for codes and code definitions was maintained. The code and a description of it in phrases was entered in the table. This exercise was strengthened by a similar process conducted by my supervisor who through discussion of our code allocation was able to confirm the security of interpretation. Patton (1999) describes this process as multiple analyst triangulation where by the trustworthiness of the data is more readily assured. The coding process for the data of one location for RQ 1 resulted in 20 codes. The process of going through the excel sheets for the remaining three locations led to the creation of 6 more codes and altering the definition of the existing ones. There were 26 codes at the end of this exercise. The code sheet for RQ is presented in the Table 6.2 below:

**Table 6.2- Codes for RQ 1:Teacher Challenges**

<u>S.No.</u>	<u>Code</u>	<u>Description</u>
1.	<u>Div</u>	Wide range of diversity in level of students in a classroom, including gifted children
2.	Time	Time constraints during and outside class in reaching out to different kinds of learners and addressing their needs
3.	<u>Curr</u>	Pressure of curriculum/ demands of completion of syllabus
4.	<u>LoRS</u>	Lack of resources and support structure such as adapted material, equipment, physical environment, worksheets and an additional teacher/special educator in the classroom
5.	<u>Att</u>	Maintaining students' attention, low and wavering attention span of students
6.	Disc	Discipline issues in school
7.	WWRI	Students' work and writing related issues
8.	PS	Parent understanding, support and cooperation, ineffective parenting strategies, too harsh or too pampering, home environment not conducive
9.	<u>LoK/A</u>	Lack of knowledge and awareness about the kinds of disabilities/special needs/emotional and behavioural difficulties that can be found in students in a mainstream classroom
10.	<u>LoS/T</u>	Lack of skills/ training in inclusive teaching practices, identification of needs, addressing emotional and behavioural difficulties
11.	AI	Adolescent issues in children such as peer pressure, anxiety, distractions, gadgets, addictions, attitudes
12.	WP	Work Pressure (substitutions, corrections, burdened with other responsibilities)
13.	BI	Understanding student behaviour and appropriately responding to behaviour issues
14.	<u>TrAt</u>	Negative/unfavourable attitudes and mindset towards inclusion
15.	<u>LoA/I/D</u>	Lack of awareness/interest/drive in the teachers
16.	<u>LoSS</u>	Lack of maturity/patience and other soft skills in teachers
17.	GG	Generation gap/ lack of understanding of <u>present day</u> children-their lives, language, lingo, motivations
18.	SSC	Subject specific challenges
19.	E/A/B	Too many events/activities/breaks in a school year
20.	<u>FoM</u>	Parent's/Child's only focus on marks
21.	<u>LoEI</u>	Lack of early intervention/ ineffective, children come to higher grades with poor skills that are difficult to cater to then, especially CWSN
22.	SS	School systems and policies related to teacher's authority, discipline policy, number of assessments conducted, inclusion policy etc
23.	CS	Number of students in a class is a hindrance in catering to individual needs
24.	UEC	Lack of understanding, empathy and cooperation of students towards peers, especially those who are different from them
25.	SAEK	Children of these times being smarter, more aware, having more exposure and knowledge testing teachers' knowledge, patience
26.	TC	Tuition classes used for studying and school considered as place for fun/ teaching different strategies

The same process was followed for the other three research questions. The initial codes as applicable to each research question were taken from the survey and beginning with one location, the other codes were added while scrutinising the data. Some codes were also added or refined by expanding or strengthening definitions to incorporate more issues being discussed as I went through the data for the other locations. During the process of reading and re-reading the data, I also came across some data which seemed to answer a different research question from that under which it was placed. This is a common occurrence when managing the coding of qualitative data (Belotto 2018) and involved moving codes to appropriate sections of the data. A lot of text segments were earlier placed under a sheet 5 as I was not clear which research question they answered. I was able to place most of these gradually in the sheet corresponding to the relevant research question. There were some other data which did not seem pertinent anymore and after careful consideration these were discarded.

As the nature of research questions in the study was such that the questions had some similar features repetition codes were sometimes common across research questions. Especially, the codes for RQ 2 which deals with the Professional development needs of teachers often included some reflection in RQ 4 that focused on the features of a professional development program. After the process of initial coding, there were 50 codes from all four research questions and 3 additional codes which did not pertain specifically to any research question but captured certain aspects of the data collected which warranted a discussion. Thus, there were 53 distinct initial codes. See Appendix 16 for the table of all the initial codes for each research question. The common codes have been highlighted with the same colour.

### 6.5.2 Merging of Codes:

Since 53 was a large and unwieldy number of codes to manage, they needed to be merged and collapsed to a more manageable number. The importance of this process is suggested by Creswell (2015) who is against over coding the data as the codes can become unmanageable and will invariably need to be reduced at some point in the analysis. He suggests that similar codes should be grouped and the unessential ones should be eliminated. Beginning with the first research question, I went through the table of codes and definitions a number of times. On careful consideration, I decided that there were several codes which seemed to highlight different aspects of the same issue and hence could be combined into one category. For example, in RQ 1, which deals with challenges faced by teachers in addressing the needs of a class of diverse learners, some of the points that emerged were to do with lack of knowledge about the different difficulties/special needs, lack of skills, lack of interest or awareness, lack of patience, teacher attitudes and inability to understand the students of

the present generation. As all these factors related largely to teacher competencies, skills and attitudes, they were clubbed under an umbrella term of TACT (Teacher attitudes, competencies and training) which formed the new code. There were some codes which came from few interviews or came from just one or two locations. Although they were important and threw light on different aspects, they were dropped as a code but have been discussed in the findings. For instance, TC (Tuition classes) was an initial code because it was mentioned by a few respondents in the Delhi and Bangalore schools. However, this issue was not brought up in the data of Mumbai and Kolkata. Hence, it was dropped as a code from the list of codes but has been mentioned in the findings chapter. Please refer to Appendix 17 for the table related to the merging of codes and the rationale behind them. There were 29 codes left after the process of merging, which were the final codes used for analysis in the research. See Appendix 18 for the table of final codes and definitions.

## 6.5 Themes

Thematic analysis is a common approach in qualitative research (Houghton and Houghton 2018; Vaismoradi, and Snelgrove 2019). When codes are reduced and combined together into a few major ideas that answer the research questions these become the major themes. Usually, a study may have five to six major themes and a few minor themes or sub themes under each major theme. Themes are ideas that are recurrent in the database, unravel unexpected or surprising findings or are topics that are expected to come up when studying a particular subject (Creswell, 2015). The primary themes such as teacher challenges and professional development needs, emerged early in the analysis process and were clear from the beginning. However, multiple readings and understanding of the data led to the creation of these final themes. Data was analysed until a point of saturation when even after several readings of the data, no new information could be found that would not fit into any of these existing themes or sub themes (Hennink and Kaiser, 2019).

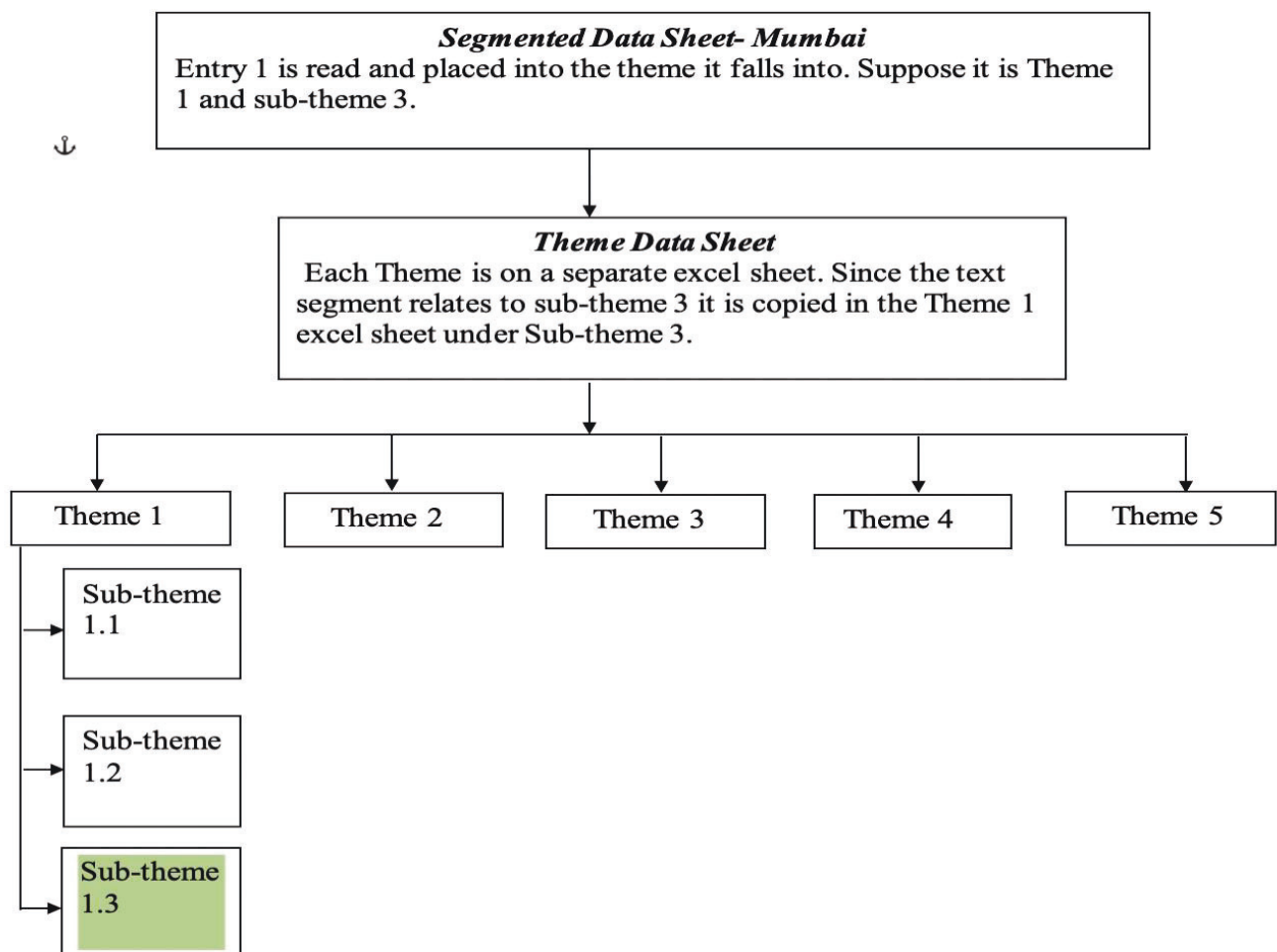
Although the survey and focus groups collected data only for teachers, the interviews obtained the views of other stakeholders including heads of schools, section heads or coordinators, SEN heads and counsellors. These data sets were also from four different locations. Hence a theme was explored from all these multiple perspectives, taking into account the viewpoints of different categories of individuals (such as teachers, SEN heads), locations (such as Mumbai, Bangalore) and sources of data (such as focus groups). Cohen *et al.* (2018) also underpin the importance of identifying and presenting multiple views and explanations of an incident or process. After careful consideration and study of the data, the final themes that emerged were as given in Table 6.3 below:

[Table 6.3- Final Themes and Sub-themes

<i>RQ 1</i>	<i>RQ 1+ RQ 2</i>	<i>RQ 1+ RQ 2 + RQ 4</i>	<i>RQ 3</i>	<i>RQ 1+ RQ 2 + RQ 3 + RQ 4</i>
THEME 1	THEME 2	THEME 3	THEME 4	THEME 5
Teacher challenges in addressing the diverse needs of learners	Professional development needs of teachers in relation to inclusive education	Professional development program for teachers (PDP)	Methods currently adopted and effectiveness	Inclusion in schools
<b>Sub-theme 1.1</b> Teacher Attitudes, Competencies and Training	<b>Sub-theme 2.1</b> Knowledge & skills related to diverse needs	<b>Sub-theme 3.1</b> Features of the PDP	<b>Sub-theme 4.1</b> Methods currently adopted related to professional development needs of teachers	<b>Sub-theme 5.1</b> Strategies currently used to support students
<b>Sub-theme 1.2</b> Student Centered Issues	<b>Sub-theme 2.2</b> Curriculum related	<b>Sub-theme 3.2</b> Content of the PDP	<b>Sub-theme 4.2</b> Effectiveness of the methods currently adopted	<b>Sub-theme 5.2</b> Suggestions for making inclusion more effective in schools
<b>Sub-theme 1.3</b> School systems and policies	<b>Sub-theme 2.3</b> Personal attributes	<b>Sub-theme 3.3</b> Challenges of organising the PDP (for school)		
<b>Sub-theme 1.4</b> Curriculum based				
<b>Sub-theme 1.5</b> Parent understanding, support and cooperation				

Having arrived at the themes and sub themes, the data was then reorganised theme wise to enable easy access and analysis. A new excel book was opened which had one theme on each sheet. Each sheet was further subdivided into sub themes. All the data pertaining to a particular sub theme was then transferred to this sheet. As depicted in Figure 6.1, the process began with considering the segmented data sheet of the Delhi School pertaining to RQ 1. After going through each entry carefully, I determined which theme it fell into and which particular sub-theme in particular. It was then copied from the segmented data sheet to the corresponding theme sheet on the theme data file. The process was repeated for every entry on the segmented data sheet for RQ 1, until all the sheets related to the Delhi school had been scanned and the relevant data transferred to the theme sheet under its respective sub theme.

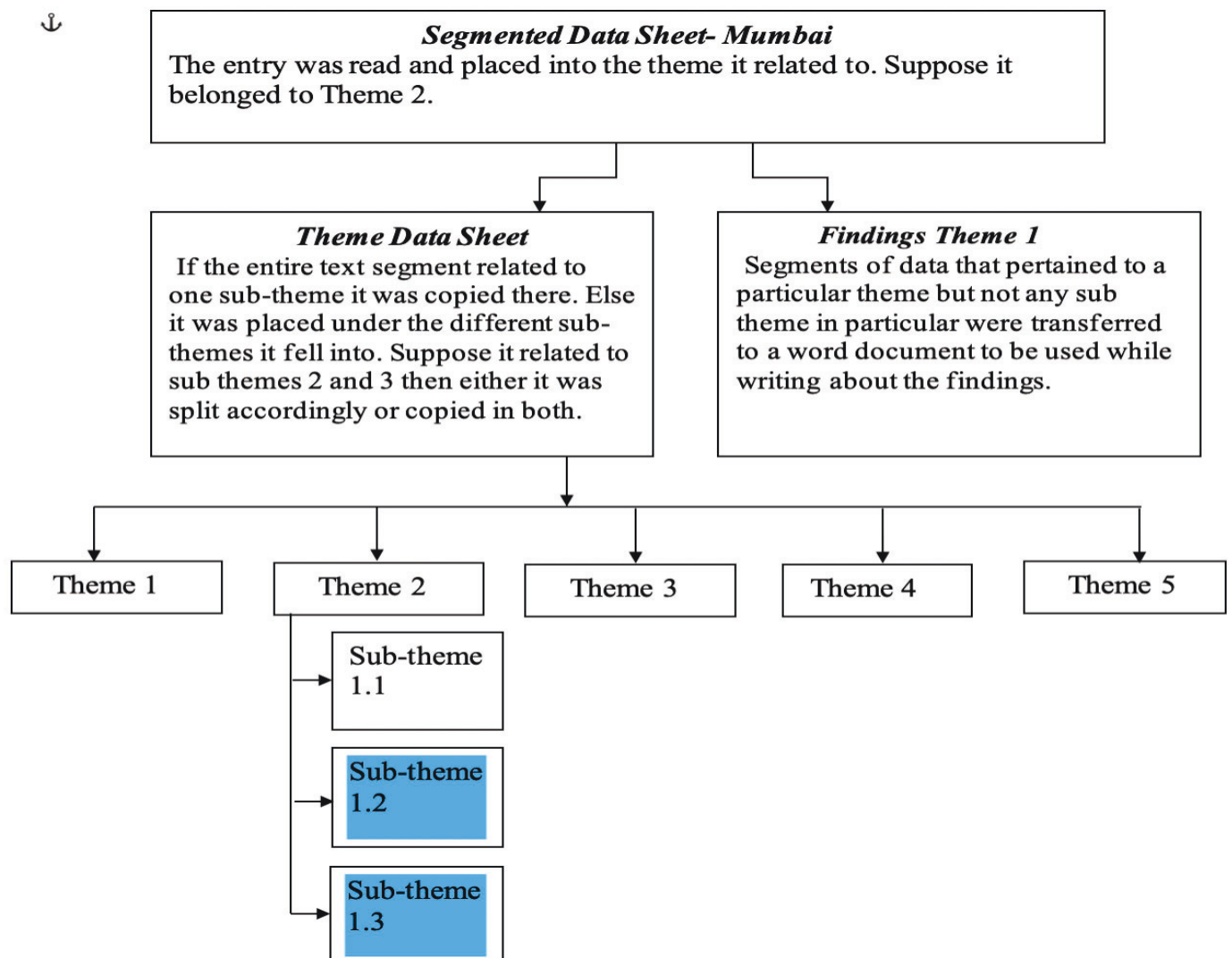
**Figure 6.1- Flowchart depicting process of data organisation**



However, while scanning the data there were entries in the segmented data that had text segments belonging to different sub-themes. This initially posed a challenge. As a solution, wherever possible, the text was split into that pertaining to a particular sub theme and these split texts were then transferred to their respective sub-themes. However, wherever this kind of clear division was not

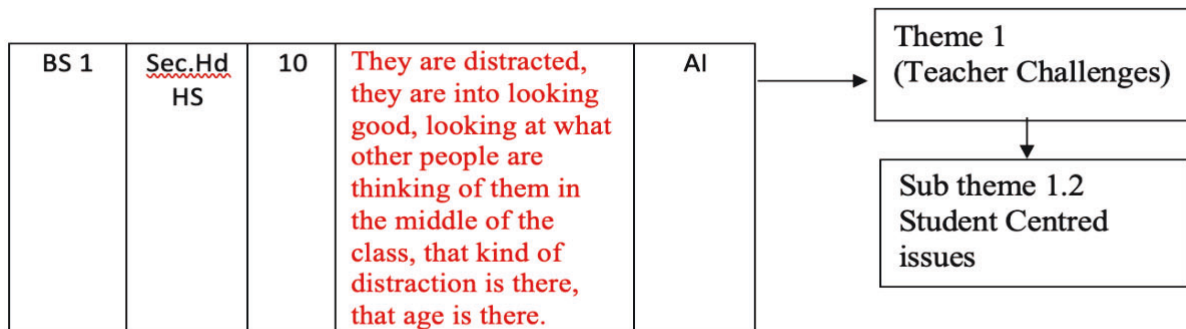
possible and took away something from the meaning or context, it was retained as it is and just transferred under the different sub-themes but only the relevant code was assigned. Therefore, there is a duplication of some text segments in the theme wise data sheet. See Figure 6.2 for examples of this process. Furthermore, there were entries which did not seem relevant and hence they were not transferred to the theme wise data file. I also found data that I thought was important but did not fit neatly into any of the sub themes. Hence, it needed to be considered while writing the Findings chapter. With this in mind, different word documents for each theme were opened titled Findings Theme 1, Findings Theme 2 and so on. All such data that was related to a particular theme but did not necessarily fit into any sub-theme was then transferred to the respective Findings Theme word document.

**Figure 6.2 – Process of organising segmented data as per Themes**

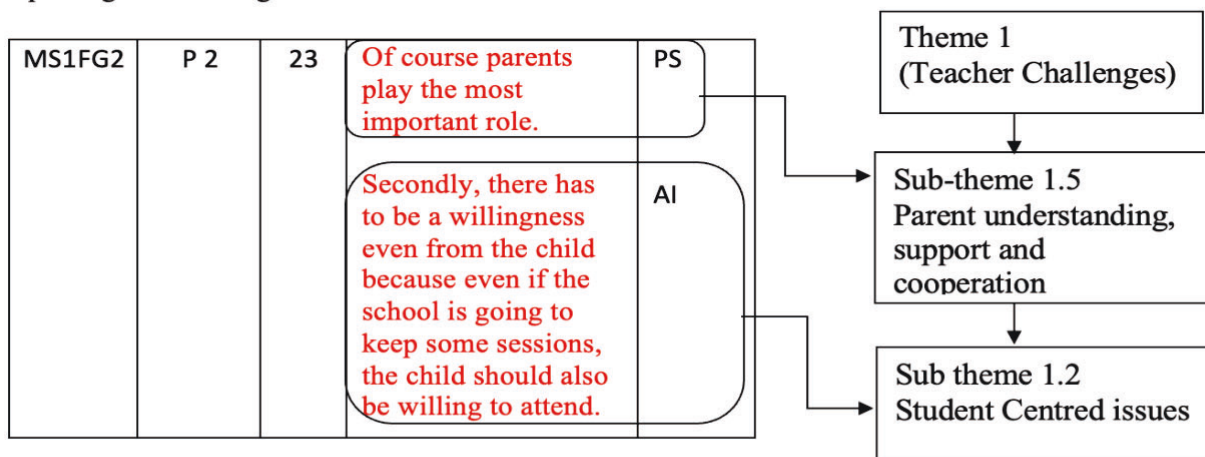




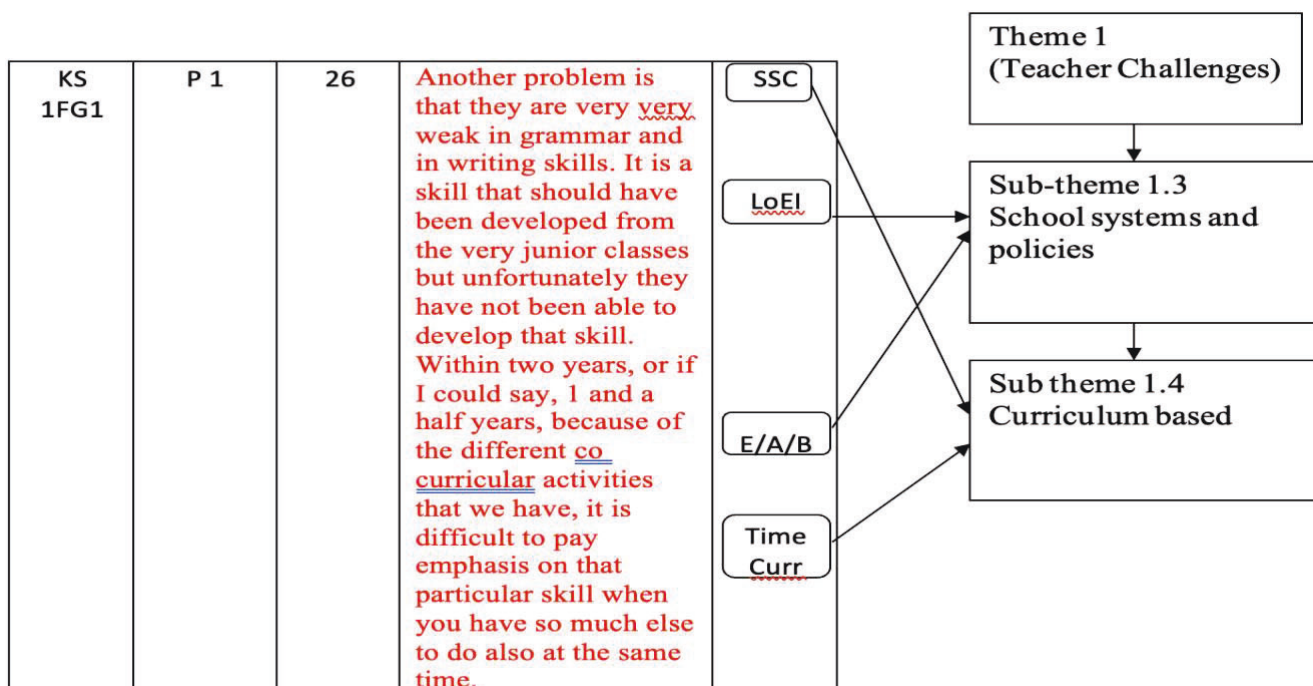
Example 1: The entire text segment belongs to one sub-theme and can be easily copied as it is.



Example 2: The text segment involves two sub-themes but it's possible to split them without impacting the meaning.



Example 3: The text segment below involves more than two sub-themes but it was not possible to split them without losing out on the context or impacting the meaning. Hence the entire text had to be copied in both the sub-themes but only with the code relevant to that sub-theme.



The process was carried on until all the relevant data pertaining to all locations was transferred to the theme wise file. At the end of this exercise, the data in the research question form was reorganised as theme wise data. Also, I had managed to collect important information for the Findings chapter by identifying some good quotes from the qualitative data and collating other significant and interesting findings, deviances and different points of view which could then be elaborated upon.

## 6.6 Chapter Summary

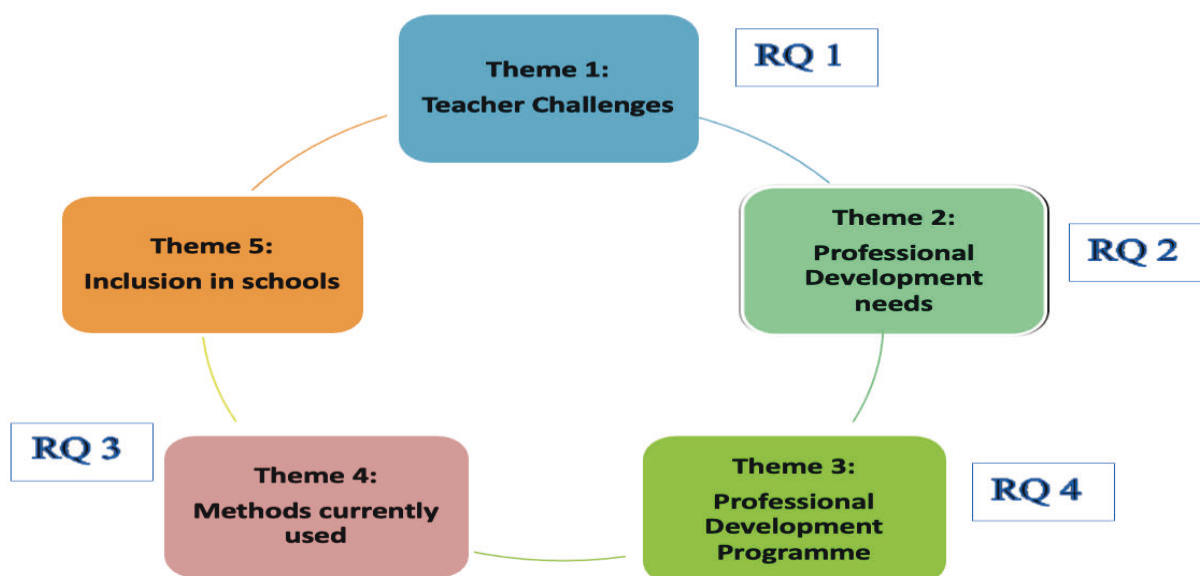
In this section of the thesis, management related to both quantitative and qualitative data was explained. The downloaded survey data was simplified and reorganised for easy analysis. The transcribed qualitative data was first segmented, coded and then the codes were merged to arrive at themes. A thematic analysis of both qualitative and quantitative data was carried out. The next section of the thesis describes the findings as per the themes and discusses them in relation to the existing literature.

## CHAPTER 7: FINDINGS- THEME 1 (RQ1)- TEACHER CHALLENGES IN ADDRESSING THE DIVERSE NEEDS OF LEARNERS

### 7.1 Chapter Overview

In the previous chapter I considered the process of data organisation, segmentation and coding of data and the approach applied in analysing data. Data was collected using three instruments and from a sample of two distinct groups of participants, namely the teachers, and other key stakeholders (SEN Heads, Counsellors, Section heads and Heads of school). A survey was utilized for the first stage of data collection from teachers, and was followed up by focus group discussions with teachers and semi-structured interviews with the other stake holders. This chapter presents the findings from the study. The findings are presented thematically. While four of the themes directly answer the four research questions, there is an additional fifth theme. However, they are presented thematically because there is a lot of overlap in the data due to the nature of the questions. If they had been presented as per the question, then I would be bound by the research question and be able to write the answers obtained to that question only. However, as participants have not answered strictly as per the question and responses given to one question often pertain to some other question/s as well, following this structure would lead to a loss of valuable data along with a lot of confusion. Presenting the findings as per the themes allowed me to consider all relevant data that pertained to the theme while also answering all the RQs. All the four research questions were answered using the same method of data analysis from all the instruments. After data organisation and analysis, the following five themes emerged, as depicted in Figure 7.1 below, along with the research questions they correspond with.

**Figure 7.1- Final Themes and Relation to Research Questions**



## 7.2 Sub-theme 1.1 :Teacher Attitudes, Competencies and Training

The survey had a question directly related to this theme which sought data related to the challenges faced by teachers in addressing the diverse needs of learners in a classroom. It was a multiple-choice question in which respondents could tick as many options as applicable. The options are listed below in Table 7.1 with the responses obtained to each indicated. The highlighted options are the ones that related to this sub-theme.

**Table 7.1- Teacher challenges in implementing inclusion in the classroom- Survey**

<i><b>Q12. What are the challenges faced by teachers in addressing the diverse needs of learners in a classroom?</b></i>		
<b>ANSWER CHOICES</b>	<b>RESPONSES</b>	
	<b>NUMBER OF PARTICIPANTS</b>	<b>PERCENTAGE</b>
Classroom size	96	34.29%
Pressure of syllabus completion	221	78.93%
Lack of knowledge/understanding of different kinds of learners	90	32.14%
Lack of skills of teachers to cater to the diverse learning needs of students	78	27.86%
Lack of training of teachers in inclusive teaching practices	101	36.07%
Lack of resources	60	21.43%
Negative/unfavourable attitudes of teachers towards handling a class of diverse learners	39	13.93%
School policies and systems not supportive	22	7.86%
Lack of time (both during class and for extra preparation of material/resources required to cater to all students)	152	54.29%
Others	11	3.93%

These findings from the survey were verified with the findings from the focus groups and interviews, where lack of skills and training in inclusive practices (LoS/T), lack of awareness/interest/drive (LoA/I/D) and teacher attitudes (TrAt) were the most common issues identified in the data, across all locations as inferred from Table 7.2 in the next page.

**Table 7.2- Teacher challenges in implementing inclusion -Focus Groups & Interviews**

Participant Category	Location				Total Number	Total No. (of participants)	Description	Code
	Del	Mum	Blr	Kol				
Teachers	7	5	7	5	24	50	Lack of skills and training in inclusive practices (Related to managing diversity, DI, assessing learning etc.) Lack of soft skills	LoS/T    LoSS
Principal		1	1	1	3	4		
Section Head	---	---	3	2	5	5		
Counsellor/ SEN Coord.	1	1 1		1 1	3 2	3 4		
Teachers	2	1	3	1	7	50	Lack of skills and training (Related to handling behavioural and emotional issues)	
Principal		1			1	4		
Section Head	---	---	3		3	5		
Counsellor/ SEN Coord.	1 1	1 1	1		2 2	3 4		
Teachers		1			1	50	Lack of awareness/interest/drive	LoA/I/D
Principal		1			1	4		
Section Head	----	-----				5		
Counsellor/ SEN Coord.		1			1	3 4		
Teachers		2	1	2	5	50	Teacher attitudes	TrAt
Principal		1	1		2	4		
Section Head	-----	-----				5		
Counsellor/ SEN Coord.		1 1		1 1	2 2	3 4		

Teachers in all locations mentioned that they lacked the skills and training in catering to a class of diverse learners. They shared that the identification of needs and difficulties of students was a problem in itself. Even when they were aware of student needs, they felt that they were not equipped to address them within a classroom while also catering to the needs of all the other students. In particular, both the identification of needs and difficulties and positive engagement of all students within a classroom presented as a concern. As one teacher from Delhi indicated:

*I may not have the right skills to be able to cater to so many diverse needs. So I might want to do something with a child but may not have it in me to get out the level.*

A teacher from Mumbai spoke about a lack of understanding and awareness,

*Since we ourselves do not know the root of the problem, we cannot help the students.*

The senior section head of the Bangalore school stated,

*Lack of time, identification and we really don't know what type of learners they are...*

Another teacher from Delhi articulated her challenge thus,

*For children of this type, differentiated learning, to what level can I bring it down, that is the biggest challenge, I am not aware of that.*

Similar views were expressed by the Principal of the Kolkata school,

*By primary and middle school, the content becomes heavier and they move at their own pace. They may be understanding but not at the same speed as the others and that is what may slow down a class so the teacher has to find ways of working with different children; this is what they call differentiated learning....*

As the statements from different participants show, teachers found it difficult to manage the diversity of student needs with the expected pace of learning and understanding of students in the class. The challenge was perceived to be one of accommodating the needs of the academically weaker children at one end of the spectrum and gifted children at the other. Most respondents suggested that they often struggled with keeping the entire class productively engaged. As one teacher from Mumbai said,

*If I'm catering to one child's needs, then the rest of the class just waits. And I have to repeat the same thing, two or three times.*

Another teacher from Delhi said,

*I have such learners in my class and when I'm delivering in the class to the other 20, there are 6-7 who need support...so my track goes haywire....so again coming down to their level, switching over to the other level, becomes at times very difficult.*

Speaking about the academically more able children, a teacher from Mumbai suggested,

*Some understand very fast, they become restless when the teacher starts explaining again and again to those who take time to learn. So there is restlessness in the class.*

These views found resonance in the statement of a teacher from Kolkata,

*Sometimes some of the bright students grasp it very quickly or they might have already done it at home so when I'm teaching the same thing, they find it little boring or want to get involved with some other children. It becomes very difficult to keep these children calm...*

It was evident that teachers across locations seemed to be grappling with the same challenge. As some respondents shared, this was also because until Primary when the curriculum was not so vast they could slow down and spend more time on explaining concepts again or with students who required more individualised support. However, from upper primary onwards they did not have this facility as there was a paucity of time at their disposal. This exacerbated their difficulty in identifying and catering to student needs within the classroom. Some of them were unaware of differentiated instruction and even if they had heard of it, they were not trained in it.

Lack of skills and training in terms of addressing the emotional and behavioural difficulties of children also featured prominently across all locations. As a counsellor from Delhi said,

*The struggle majorly comes when it comes to responding to the children at a feeling level and more in terms of emotional and behavioural level.*

Another counsellor from the Mumbai school conveyed a different aspect,

*Yes, so class discipline becomes a very, very major factor in the teacher's profile. So more than lesson planning and curriculum execution, the teacher half the time is just struggling with keeping a control in the classroom.*

One of the section heads of the Bangalore school voiced the challenges as follows,

*Some groups have highly hyperactive children, we are at a loss what to do. ...some batches we face this problem. That time really we need some help. We try to diagnose and get some help but still, challenge remains.*

A teacher of the same school conveyed her thoughts in the following words,

*Sometimes we are not able to handle children because of problems they face at home. ...like parents are not together or have quarrelled or some other disturbances at home are reflected in the child when he or she comes to school and that time that indifferent behaviour we are not able to manage at all.*

Another teacher expressing her dilemma said,

*We don't know how to handle the situation, whether we should take a situation seriously or take it as a trivial matter and leave it. So some kind of scaffolding should be done for the teacher also.*

Social, emotional and behavioural difficulties are a common occurrence, especially in adolescent children which teachers seemed to be uncomfortable and ill-prepared to manage. There was an acknowledgement from some teachers and suggestion from counsellors that genuine emotional and behavioural problems were often misunderstood by teachers as indiscipline and insolence. It is important that teachers are equipped to handle these behavioural difficulties which are invariably

present in every class as they have the potential to disrupt the learning and progress of not just the child in question but the entire class.

A related factor was the negative and unfavourable attitudes of teachers. Some challenges faced in a classroom could be attributed to this factor.

A teacher from Mumbai said,

*It's not possible to meet the needs of every child as we have to be firm enough to complete the curriculum.*

The SEN Coordinator and Counsellor of the Mumbai school added:

SENCo:

*For some teachers I would say that they don't have a very positive approach towards these children who require extra attention.....Because there is a PLC (Resource room) in the school, they directly refer the child here. So for such teachers when we interact and try to give them strategies, it doesn't go very well with them because they feel it is our job, it is not their job versus there are some teachers who will not refer a child even if the child has genuine concerns and the child needs intervention because they feel if I refer the child then it is my shortcoming.*

Counsellor:

*Most of the times they end up outsourcing it if there is a department in the school. What happens is, OK this is the department of the special needs, it's not my job.*

Similar thoughts were expressed by the SENCo of the Kolkata school who said,

*I think in the case of special needs, in an inclusive school, there is overdependence on special educators. not every difficulty needs a special educator.... If there is somebody then I can push my responsibility aside ...it's more attitudinal... How can I manage? I'm not trained to do this, they are trained. They will manage.*

The unfavourable attitudes of the teachers though not always directly mentioned, were reflected in the following statements made by them:

Teacher from Mumbai,

*I feel that when you are in a class it's not possible to do any kind of different thing, differentiation, only marking scheme you can do it so I would prefer that in question paper and all, that way if you can do, it's possible. That's the only way.*

Teacher from Bangalore

*Or those children should be separately trained.*



A teacher from Kolkata also had comparable views,

*If I get special children in the class, normal ones and brighter ones, then how do we deal....so in that case, though it will defy the concept of inclusion, but if the special section is there where they can be given special training or a teacher can deal with them better, I think that would work better.*

The Principal of the Bangalore school summed it up thus,

*In a system like ours where the teacher education itself is circumspect, where the people who are trying to get into the profession are themselves not having the right kind of training, the right kind of attitude, even before they get into the profession, then it is quite challenging.*

Having the right attitude was of paramount for teachers as it was an important determinant in implementing inclusion effectively, guiding their actions and behaviour unconsciously. Lack of sensitivity and soft skills of teachers was a related aspect that featured in the list of challenges along with unfavourable attitudes. Soft skills refer to the personal attributes of teachers such as empathy, communication, problem solving and other interpersonal skills.

The Principal of the Mumbai school expressed it thus,

*Everyone does not have that drive, the drive or the patience to handle situations like this because now more than teaching skills, you need patience and tolerance. So everyone is not equipped to handle them.*

A teacher from the Delhi school echoed the same thoughts when she said,

*There are personal challenges, I would say that sometimes children test the patience of a teacher, we get drawn into a power struggle.*

A counsellor from Kolkata,

*They get so flustered sometimes that they get agitated and that's not helping.*

Lack of skills also pertained to gauging the learning of children, especially the ones who were quiet in the class.

The primary challenges faced by teachers as found in this sub-theme related to addressing a wide range of diversity within the confines of the classroom, lack of skills and training in reaching out to different kinds of learners (differentiated instruction) and in catering to the behavioural and emotional difficulties of children. There also seemed to be a lack of sensitivity and soft skills in teachers. Harboured attitudes that were not conducive to inclusion also posed a hindrance in their ability to cater to the diverse learners in a classroom.

### 7.3 Sub-theme 1.2: Student Centred Issues

This sub-theme discusses the challenges due to student related issues. Although there was an overlap with the findings of the other themes, what was interesting to note was that these challenges were attributed to within student issues, suggesting that the teachers had no control over them. The common ones that were cited were a wide diversity in the classroom, adolescent issues, behavioural and emotional issues, wavering or low attention span of students and students' work and writing related issues. These were mentioned by several participants across locations and range of participants. As the research pertained to teachers teaching students specifically in the upper primary and secondary section there was a question in the survey about additional challenges of teaching this particular group of students. The question and the responses received are as depicted in Table 7.3:

**Table 7.3- Specific teacher challenges in teaching middle school & secondary students -Survey**

<b>Q13. Apart from those mentioned in the previous question, are there any challenges particular to teaching the middle school and secondary section?</b>		
<b>ANSWER CHOICES</b>	<b>RESPONSES</b>	
	<b>NUMBER OF PARTICIPANTS</b>	<b>PERCENTAGE</b>
Syllabus/curriculum demands	122	43.57%
Adolescent issues in children such as peer pressure, anxiety, behavioural issues	217	77.50%
Pressure of exams	114	40.71%
Greater parental expectations	153	54.64%
Others	15	5.36%

The table below (Table 7.4) gives a distribution of the responses as per the major issues that were discussed within this sub- theme.

\*The open-ended responses of the survey have not been included in the table below but feature in the description of findings below.

**Table 7.4- Specific teacher challenges in teaching middle school & secondary students - Focus Groups & Interviews**

Participant Category	Location				Total Number	Total No. (of participants)	Description	Code
	Del	Mum	Blr	Kol				
Teachers	1	1	9	3	14	50	Adolescent issues in children such as peer pressure, anxiety, distractions, gadgets, addictions, attitudes	AI
Principal	-	1	-	-	1	4		
Section Head	---	---	3	-	3	5		
Counsellor/ SEN Coord.	1 -	1 1	---	- -	2 1	3 4		
Teachers	1	3	8	6	18	50	<u>Behavioural</u> and emotional issues in children	BI
Principal	-	1	-	-	1	4		
Section Head	---	---	2	2	4	5		
Counsellor/ SEN Coord.	1 -	1 1	---	1 -	3 2	3 4		
Teachers	2	1	3			50	Maintaining students' attention, low and wavering attention span of students	<u>Att</u>
Principal	-	-	-	-	-	4		
Section Head	----	-----	2	2	4	5		
Counsellor/ SEN Coord.	1 1					3 4		
Teachers	2	8		9		50	Wide range of diversity in level of students in a classroom, including gifted children	<u>Div</u>
Principal		1		1		4		
Section Head	----	-----	2	1		5		
Counsellor/ SEN Coord.		1		1		3 4		
Teachers	2	1	8	3	14	50	Students' work and writing related issues	WWRI
Principal	-	1	-	-	1	4		
Section Head	-----	-----	1	-	1	5		
Counsellor/ SEN Coord.						3 4		

One of the primary challenges faced by teachers was having students with a diverse range of abilities in the classroom. The respondents indicated that either the difficulty was due a huge variance in the academic abilities of students or having students with different kinds of special needs in one class, making it an arduous task to cater to their needs at the same time.

As the Delhi school SENCo said:

*When the situations are really difficult or the range of diversities is huge then they might get stuck somewhere.*

Elaborating on this further, another teacher from the school mentioned,

*Now even in Class 8 these children are not able to do what our Class 5 children are also doing. So again even though they are in the same class, still that level is totally different, now catering to those children, meeting the requirements of Class 8 also, it seems like impossible.*

Another teacher from Mumbai commented,

*At times, there are more than 2 kids with such issues in same class so it becomes very difficult to manage them with rest of the class. Maybe their issues are different, like one is academic and one is behaviour but to manage them with rest of 22 or 25 becomes very difficult...*

The Senior Section Head of the Bangalore school added,

*There are some learners who have severe disabilities, like you need to go one to one with them and from the basics we need to explain. At that time what happens is we cannot allot time in a classroom.*

The presence of a wide range of diversity included having gifted children in the class along with the other students and this seemed to also pose a problem as mentioned by participants in all schools. It is known that teaching pedagogy in India is largely didactic in nature, designed for the masses. The statements of the participants reveal that teachers are used to catering to the average child using the same set of techniques and methodology and anyone lying on either side of the spectrum who cannot be taught the same way as the others presents a challenge, testing the teachers' ability, skills and attitude in many ways.

The counsellor of the Mumbai school explained,

*One is the category of the gifted children because these children need that extra and something which is intellectually more challenging, sometimes it comes across as very threatening for the teachers also because if there is a gifted child in the class, teacher's intelligence is also under the scanner so that population and the other end of the spectrum they find difficulty.*

This was echoed in the statement of a teacher from Delhi who said,

*Many times problem comes with gifted learners also because many times it happens, whatever I am teaching in class, they have already studied or they are quick enough to pick that concept very fast and then you are catering to them, other children are still working at their own pace... catering to those children is also a challenge.*

The Middle School Section Head summed it up thus,

*All these factors, it is very difficult for the teachers to you know, take the class together, with all of them, varied interests, varied problems, different family backgrounds and 40 in a class and then the hormonal imbalance and all...middle school, that is a major problem.*

As the study focussed on teachers' professional development for students in the age bracket of 11-17 years, adolescent issues were frequently mentioned as a factor. Within the broad umbrella of adolescent issues there were concerns like addiction to gadgets (smart phones, gaming consoles, TV, ipods, ipads), gaming, lack of urge to learn, attitudes, being conscious of others and their impression, peer pressure and lack of respect towards teachers. These, the respondents felt, had an adverse impact on students' academic and social behaviour. Also noticed, was a tendency amongst participants to compare the current generation and their habits with the norms and expectations at their own time which seemed to translate into a general disappointment with the present generation of students.

As a Delhi school teacher said,

*They get into addictive habits like gaming, gaming is a huge issue with children.*

This was echoed by the SEN Co-ordinator of Mumbai,

*Very common problem these days is gadget addiction, getting addicted to the social media.*

In answer to one of the open-ended questions in the survey, a participant teacher from Kolkata wrote,

*Adolescent issues as well as the fact that students coming from privileged families are more into gadgets and distractions.*

Talking about attitudes and lack of respect, a Section Head from Bangalore reflected,

*It's an array, like they are exposed to too many things now and so many priorities, so they feel this is nothing. The respect towards the profession itself is coming down so it's a challenge, definitely a challenge how to address.*

The Mumbai school counsellor shared similar experiences,

*In middle school and high school the respect that the children are supposed to show towards the teachers is not shown due to peer pressure... so the teachers struggle over there in trying to gain respect from this population of students.*

Along with these, other adolescent issues such as students not having an urge to learn, being conscious of their image among the peer group, peer pressure to be smart and fit in were some other common problems identified with this adolescent group of students. Even when the teachers were ready to give them additional support, students seemed unwilling to take it, probably because they didn't want to stand out and be seen as lacking or requiring support in any way.

As a teacher from Kolkata stated,

*They get conscious, then that self-image gets hurt, there it causes depression, they don't like to come to class, they don't like to talk about it, they don't even raise a question in class, they think that their question might be a stupid one.*

A related aspect that the teachers grappled with was dealing with the behavioural and emotional issues of students at this age. These were not only difficult to tackle in themselves but also interfered with the teaching learning process. The fact that teachers had never received training on handling behavioural and emotional issues of students meant that they were not confident in identifying genuine difficulties and operated from their own belief systems and conditioning. Their behaviour and responses are therefore likely to be highly variable, unscientific and might lead to more harm to the students and classroom atmosphere than good.

As these teachers from the Delhi school and Bangalore school respectively said,

*Generally you know, children disturbing the class, that is the biggest challenge. Half of the time is wasted on correcting their behaviour.*

The school authorities too seemed to be well aware of this difficulty. The Mumbai Principal mentioned,

*When they have behavioural concerns the issue is to proceed with the teaching learning process, they interrupt a lot in the class, they make teaching difficult and what happens is, because of that one child, the entire decorum of the class is upset.*

The Middle school section head of the Bangalore school spoke about the aspect of violent behaviour in students.

*Children nowadays are very violent, they don't have patience, very violent. Even a small issue, like dropping somebody's pencil also creates a havoc in the class, how dare you do that. They don't have tolerance at all, zero tolerance.*

This was also mentioned by one of the Kolkata school teachers:

*Some children are very violent also...lot of behavioural problems.*

Low attention span of students and distractibility was also mentioned as a challenging factor. Apart from diagnosed difficulties that lead to a high level of distractibility such as ADHD (Attention Deficit Hyperactivity Disorder) and ADD (Attention Deficit Disorder), the lack of attention could be a product of the teacher's inability to hold the attention of the students. Strangely, this was not considered as a possibility by any of the participants.

A teacher from Delhi when discussing these challenges said,

*Wavering attention spans... Some children can't sit for more than five minutes and that makes their learning difficult..*

The Senior Section Head of the Kolkata school added,

*Those who are very restless in class and whose attention span is very less, teachers find it more difficult to handle them.*

Another student-centred issue the teachers had trouble with, related to student's work which included their disinterest in writing, non-completion of work and lack of practice especially as required for subjects like Maths.

Here are some statements in this regard from teachers in Delhi and Bangalore,

*The writing part is a problem. They don't want to write anyways and by the time they come to Class 6, the writing part becomes quite a lot.*

*Sometimes everything we'll do but some children, don't complete at all.*

Some of the findings of this sub-theme are very similar to the previous sub-theme that focussed on teacher challenges. However, while in the previous sub-theme of teacher challenges there is an acceptance that it is a challenge for the teachers to address the issues due to lack of training, skills or competence on their part, when the same issues are mentioned here, the implication is that the challenges are due to factors within the child and therefore the teachers cannot do anything about it. For instance, some teachers in the previous sub-theme mentioned that they did not have the skills or training to reach out to diverse learners whereas here the teachers said that because there is so much diversity in the class, they have a difficulty. This sub-theme dealt with all challenges that were attributed to students. The primary ones mentioned were- having students with very diverse needs in the same class, behavioural and emotional problems in children, 'adolescent issues' which covered several aspects such as indifference and attitudinal problems common at this stage and peer pressure. Other obstacles mentioned were the attention span of students which participants said was flickering or going down and students' work and writing related issues.

#### **7.4 Sub-theme 1.3: School Systems and Policies**

Within this sub-theme the primary concerns shared in relation to catering to the diverse learners in a class were class strength, lack of resources and school systems. However, other aspects such as lack of early intervention, work pressure and discipline issues were also highlighted by some teachers in the open-ended question of the survey and participants in the interviews and focus groups. Since most of these were impacted by and formed a part of school systems, they were merged into the code School systems and policies (Appendix 17). As seen in Table 7.1 below, in response to a question in the survey about the challenges faced by teachers, the lack of resources accounted for 21.43% (60 responses) whilst school policies and systems not being supportive accounted for the views of 7.86% of participants (22 responses).

**Table 7.1- Teacher challenges in implementing inclusion in the classroom-Survey**

<b>Q12. What are the challenges faced by teachers in addressing the diverse needs of learners in a classroom?</b>		
<b>ANSWER CHOICES</b>	<b>RESPONSES</b>	
	<b>NUMBER OF PARTICIPANTS</b>	<b>PERCENTAGE</b>
Classroom size	96	34.29%
Pressure of syllabus completion	221	78.93%
Lack of knowledge/understanding of different kinds of learners	90	32.14%
Lack of skills of teachers to cater to the diverse learning needs of students	78	27.86%
Lack of training of teachers in inclusive teaching practices	101	36.07%
Lack of resources	60	21.43%
Negative/unfavourable attitudes of teachers towards handling a class of diverse learners	39	13.93%
School policies and systems not supportive	22	7.86%
Lack of time (both during class and for extra preparation of material/resources required to cater to all students)	152	54.29%
Others	11	3.93%

Talking about the class strength, one of the section heads of the Kolkata school said,

*It may not always be possible for the simple reason given the numbers ...the children who have these specific learning disabilities for the teachers to track them at that point of time because with 30 children it is not always possible to give them individualised attention.*

The Principal of the Bangalore school agreed,

*Giving that degree of customisation where you have individual, that is still a far cry I would say. They are realistically feasible only when numbers are much more manageable.*

Expressing her thoughts, a teacher from the Kolkata school stated,

*It actually doesn't work. Actually in a class it can be inclusive with 10 children or 15 children maybe you can do it with a longer period of time or with a shorter curriculum but at present the curriculum we have, the number of children in class we have and the way we are time bound..... how do we do it.*



Therefore, with the existing number of students in a class, the teachers found it difficult to pay attention to individual needs. It was also, as they reasoned, due to a lack of resources and support. This posed a challenge for teachers in supporting all students. The resources mentioned were not limited to teaching learning aids and infrastructure facilities, but the presence of another teacher/special educator was also considered to be necessary to enable better attention and intervention to all students.

A teacher from Delhi, in response to a question in the survey about challenges faced mentioned,

*Lack of some support which would make learning easier for a mixed group.*

Another teacher from the same school added,

*If I classify my children into 4 different levels also, to cater to those 4 different children, I need four different resources... even if it is worksheets, my worksheet has to be at 4 different levels, from where do I get the information. It is not necessary that I will be able to devote so much of time outside the school.*

Talking about a similar aspect, a teacher from Mumbai said,

*Preparing worksheets at different levels takes double the amount of time, preparation plus implementation.*

A teacher from Kolkata mentioned in the survey,

*Teachers must be provided with proper resources.*

The Section Head from the Kolkata school suggested that it may not be possible for a teacher to cater to the needs of all the children unless there is another teacher to support her.

*The class strength and on top of that these children have different areas of disabilities. So you have to tap their problem, look at and target that problem which the child is facing and it is not possible to do it in a larger group setting because that child already has that unless you have another resource person with you. For a single teacher, it cannot be possible, however much she may try.*

The Senior school section head from Bangalore highlighted another aspect when she spoke about infrastructure facilities. She said,

*We have projectors but we don't have separate work stations like in Western countries where you can cater to children with different needs.*

Lack of resources has also been identified as a concern in studies on pre-service teachers as well. The findings from this study indicate that the presence of inadequate resources also translates into real life problems encountered by teachers when trying to cater to the diverse learners in a classroom. Another factor that was brought up was by participants, especially those teaching the secondary sections, was lack of effective intervention at the early stages of schooling. This meant that students with special

needs as well as some other students with significant skill and knowledge deficits had come up to senior classes where it was extremely difficult to bridge that gap due to the focus on the board examinations. The senior school section head of the Bangalore school said,

*But still the disabilities existing continue ...at this level, we can't do much. It should be taken care at the lower level, when they are on the verge of entering the Boards, we cannot do to a great extent.*

A teacher from another school added,

*Sometimes we are not able to deal with problems related to children with learning disabilities, those gaps keep on building from primary to middle school to high school and at high school where we are teaching the core content, I think we are not able to bridge that gap at all. So I think we are not able to cater to the needs of every child.*

Since the research involved teachers only in the upper primary and senior school section, they felt that because early intervention was either not done or was not effective, the students came up with huge gaps which were difficult to cater to with the demands of the curriculum at that stage. This finding stresses the importance of early intervention, in the absence of which the gaps in the knowledge and abilities of students with special needs keep widening, making it very difficult not just for the students to cope with the mainstream curriculum but also for the teachers to cater to their needs at that level.

Another component of school systems and policies was work pressure. Work pressure being cited as a challenge was something that was not anticipated but came up as a factor across all schools. Although it would seem to be highly dependent on the particular school being discussed, it was a common factor mentioned by participants in all locations; though of course the nature and severity of the burden being felt would vary.

As teachers from the Delhi and Kolkata school stated,

*In a day of say 8-9 periods, if we are having 7 out of those 9 classes and then also you are given substitution or whatever you know, we have some or the other meeting, it becomes very difficult to be able to give time to any child...*

*Being a teacher, we are serving very long hours in school as a school time here, staying after that, again from our part, doesn't become possible always. So remedial outside the class, or after the school hours, keeping the kind of schedules we have in mind, it's a roller coaster ride.*

Respondents also highlighted the problem of teachers being burdened with different types of work these days.

Counsellor-Delhi school:

*Apart from just teaching these days, there are too many other responsibilities you know that they are taking care of.*

Counsellor-Mumbai:

*The teachers are under a lot of time crunch so there is a lot of stress already on their head, because they are being observed throughout.*

SENCo of the Bangalore school:

*Sometimes though we want to do it, we are aware that the child needs it, with the time and other challenges, a teacher is stretched beyond the limit.*

When it came to school systems and policies, respondents from different schools had different concerns to share that were specific to their particular institution. The teachers from Mumbai and Kolkata school spoke about giving more authority and liberty to the teachers to function and take independent decisions. Discipline issues in children was also something teachers primarily from Mumbai and Bangalore seemed to grapple with.

As one teacher from Mumbai said,

*Authority should be given to the teacher. A little bit of authority because there's lot of leniency and when we follow up on things then we find that at one end, things are left unattended to and therefore then, we are helpless.*

This sub-theme explored teacher's challenges that were caused by school systems and policies such as the number of students in a class, lack of resources in terms of materials, space and presence of a support teacher. Also mentioned were too much pressure of work on teachers that prevented them from being able to devote that additional time or prepare resources to support the students who needed it. It was also found that lack of early intervention or ineffective intervention in the early years of a student's life caused the students to reach the upper primary and secondary stage with very poor skills or abilities which teachers then found extremely difficult to address with the vast syllabus and focus on academics at that level. Issues with other school systems such as the discipline policy, the authority and autonomy given to teachers to function were also raised by the participants.

### 7.5 Sub-theme 1.4-Curriculum based challenges

The curriculum based challenges faced by teachers pertained to just three factors: time, curriculum and subject specific challenges. The responses in green in Table 7.1 show the curriculum based challenges as obtained in the survey.

**Table 7.1- Teacher challenges in implementing inclusion in the classroom-Survey**

<b>Q12. What are the challenges faced by teachers in addressing the diverse needs of learners in a classroom?</b>		
<b>ANSWER CHOICES</b>	<b>RESPONSES</b>	
	<b>NUMBER OF PARTICIPANTS</b>	<b>PERCENTAGE</b>
Classroom size	96	34.29%
Pressure of syllabus completion	221	78.93%
Lack of knowledge/understanding of different kinds of learners	90	32.14%
Lack of skills of teachers to cater to the diverse learning needs of students	78	27.86%
Lack of training of teachers in inclusive teaching practices	101	36.07%
Lack of resources	60	21.43%
Negative/unfavourable attitudes of teachers towards handling a class of diverse learners	39	13.93%
School policies and systems not supportive	22	7.86%
Lack of time (both during class and for extra preparation of material/resources required to cater to all students)	152	54.29%
Others	11	3.93%

Across locations and types of respondents, syllabus completion, curriculum and time were considered to be a significant challenge especially for teaching students in the upper primary and secondary sections of the school.

As one of the Section heads of the Kolkata school said,

*Because they have the pressure of completion of syllabus also so they can't afford to give extra time to those slow learners.*

The Heads of the Mumbai, Kolkata and Delhi school were also in agreement.

Principal- Mumbai:

*Mainstream teachers need to complete their portions, they need to do what is assigned to them.*

Principal- Kolkata:

*They do need to do their syllabus, they do have a broad plan which they need to follow and this becomes a little more obvious from middle school onwards.*

Vice principal-Delhi:

*The most difficult challenge teachers face is delivering the curriculum in a specified time. So we plan our lessons accordingly. While in teaching, teachers sometimes get slow as they have to take the children forward together. We have to go at a pace so that these children are also at par with the class. So somewhere the most important challenge is completion of syllabus.*

Bangalore SENCo:

*Difficulties they have is time limit.....you know that this child needs help but you can't pull them out separately, because we believe that even non core subjects like Games or Computer they cannot miss, it is also a part of learning. So if you have to pull them out and work with them separately then, when do you do it, that's a challenge so mostly it's the time.*

Mumbai teacher-

*The major issue basically what we face is time constraint. We are so time bound with what we have to do that we cannot pay attention to a child who is maybe an under achiever so we need more time basically.*

A teacher from Delhi sums it up,

*Time constraints teachers are having and second, it is the demand of the curriculum. The curriculum is so much, that we are not able to configure our teaching as per the requirements of all the different children that are there in a class. The pressure of completing the curriculum on time is the biggest hindrance.*

Subject-specific challenges faced by teachers were varied though most of them were related to Mathematics and languages. Mentioned below are snippets from each:

Math teacher from Bangalore:

*Some children, especially in subjects like Maths, they don't want to do that extra practice. They just want ready made answers on the board, copy it from the board, which will never be useful to them.*

Regional language teacher from Delhi:

*Building their interest in the regional languages is a challenge.*

History teacher from Kolkata:

*Being a History teacher, I do face this problem because it's very subjective, lots of information, lots of data they have to remember so at times we face this problem, when they are writing answers it's very evident that they could retain only 10% of it. ...So as teachers we face problem with some kids to make them remember so much of data when they are writing an examination actually.*

This sub-theme focussed on curriculum based challenges. As the volume and difficulty level of the curriculum increases at the upper primary and secondary level the completion of syllabus and preparation for the Board exams takes priority. Teachers therefore cited this as the most important challenge not just in the survey but also in the focus group discussions and interviews followed by lack of time which was the second highest rated factor in the survey. Apart from these two factors, subject specific challenges were also spoken about by various subject teachers.

#### 7.6 Sub-theme 1.5-Parent understanding, support and cooperation

Parental cooperation, understanding and support was also something all schools seemed to struggle with. Participant concerns ranged from a lack of acceptance on the parent's part (about their child's difficulties/abilities/support required) to excessive focus on marks, unhealthy parenting styles and lack of involvement. As parents were important stakeholders in ensuring the well-being and progress of children, their cooperation and support was of utmost importance. In the case of students with special needs, this was all the more pertinent as parental agreement, involvement and support was required in planning and implementing strategies and intervention such that the specific needs of their child were being met.

Talking about acceptance, different respondents expressed their thoughts in the following words:

Teacher -Delhi (Survey)

*Non acceptance of the condition of the child on the part of parents.*

Principal-Mumbai

*See one thing is acceptance. We know there is a problem with a child. The parent refuses to acknowledge it. Then giving special education becomes difficult.*

Teacher- Kolkata

*Sometimes parents are also at fault because they don't understand the capability or capacity of their child. They force them to study in a regular course where the child was best suited for NIOS (Open school curriculum). So now these children become a problem for the class. They disturb the others who are paying attention, so half of our energy goes in maintaining the class decorum.*

Parents' focus on marks in general and lack of involvement were also matters of concern. On the one hand some parents put undue pressure on their children to secure high marks while there were others who didn't seem to be involved much in their child's life and performance. Neither extreme was good for the child. Academic success is known to be highly rated in India and most parents have high expectations from their children. Therefore, understanding the parents' perspective, interacting with them effectively and maintaining a positive home-school relationship is a skill that teachers must be trained in. The challenges faced by teachers in regard to parents are discussed by respondents as below:

Teacher-Delhi

*Older they grow, parents are not really bothered, they are only concerned about marks but they don't monitor them.*

Section head-Senior school –Bangalore

*Parents are also not ready like they say that from the board point of view if you train our children it is more than enough. We will take care of it later.*

Teacher-Mumbai

*There's a special needs child with a shadow teacher. However, there's no communication from his parents as well. None of the meetings have been attended by them ....that is one of the challenges I face.*

Teacher-Kolkata

*As teachers we feel, we need some kind of follow up, some kind of reinforcement from the parents end. Whatever we are doing, we are trying, we need some kind of follow up from their end also.*

Problems also seemed to stem from inappropriate parenting styles and expectations that affected children and their behaviour and performance in school as stated by the following respondents:

Teacher-Mumbai

*Sometimes they over expect from their children, that also becomes a problem. You know, to nag them for each and everything, even if they are doing it right, still sitting on their head and seeing that it is over right. Sometimes that also creates a problem with the students- then all the frustration the students take it out in school.*

*I personally feel that the parents you know are very harsh with the children. We see two extremes, either they are very harsh with the children or they pamper. Like corporal punishment they take up. So parents when they do like this, the children you know, their emotional development is not complete so the children are very restless, they don't sit, they show it in some way or the other.*

Therefore, parenting styles that were either too permissive or too harsh and demanding seemed to be detrimental for the children's learning and progress. It was observed by participants that children's behaviour in school was impacted by what they went through at home and often manifested as behavioural issues, aggression, anxiety and distraction at school.

## 7.7 Chapter Summary

Findings from within the last sub-theme emphasised a completely different aspect to teacher challenges than was anticipated. However, findings from all locations reveal that parent involvement, cooperation and support is indeed an important factor that has an indirect bearing on the difficulties faced by teachers. Inappropriate parenting styles that ranged from excessive indulgence to lack of involvement to harsh discipline, all impacted the performance and behaviour of the child in school. In many instances, it was denial of the child's condition and capability that obstructed teachers and school from extending the requisite support. Therefore, this theme dealt with the different aspects of challenges that teachers face when catering to a class of diverse learners. The sub themes and findings that emerged ranged from the more obvious one like lack of skills, training and attitudes of teachers, pressure of syllabus completion and lack of time to the unapparent ones like parent cooperation and support. One of the sub-themes discussed difficulties that were attributed to the student population, (especially in this age bracket) such as adolescent issues, attention and wide range of diversity in the classroom. School systems and policies were placed in another sub-theme that discussed how policies and practices in different school systems proved to be an impediment in teachers being able to cater to the diverse learners in a class.



## CHAPTER 8: FINDINGS- THEME 2 (RQ 2): PROFESSIONAL DEVELOPMENT NEEDS OF TEACHERS IN RELATION TO INCLUSIVE EDUCATION

### 8.1 Chapter Overview

The previous chapter on Findings explored the difficulties faced by mainstream teachers in catering to the diverse learning needs of students in the classroom and what unique challenges were presented when teaching students in this age group. This chapter discusses the Findings in relation to Theme 2, which focuses on the professional development needs of teachers with respect to inclusive education- that is, catering to the needs of the diverse learners in a classroom. This theme also represents and directly answers RQ 2.

### 8.2 Sub-theme 2.1: Knowledge and Skills related to Diverse Needs

The first sub-theme in this section accounted for the knowledge and skills of teachers in addressing the diverse needs of students. There were several factors that were apparent in the data obtained from the participants, such as knowledge about special needs, identification of needs, inclusive teaching techniques, differentiated instruction, managing behavioural issues in children and classroom management. In response to a question in the survey about the areas in which they would like to improve their skills the table 8.1 below indicates how the teachers responded. Other than ‘Use of technology in the classroom’, all the shaded responses were also received in the focus groups and interviews.

**Table 8.1-Areas of professional development- Survey**

<b>Q16. In which areas would you like to improve your skills?</b>		
<b>ANSWER CHOICES</b>	<b>RESPONSES</b>	
	<b>NUMBER OF PARTICIPANTS</b>	<b>PERCENTAGE</b>
Lesson Planning	18	6.43 %
Inclusive teaching techniques to reach out to diverse learners	125	44.64 %
Use of technology in the classroom	77	27.5 %
Knowledge about the kinds of disabilities/special needs/behavioural difficulties that can be found in students in a mainstream classroom	133	47.5 %
Strategies and techniques to cater to these special needs and students from different backgrounds	145	51.79 %
Classroom management techniques for an inclusive class	79	28.21 %
Preparing differentiated assessments	84	30 %
Modifications that may be required in order to cater to the different kinds of learners	96	34.29 %
Others	8	2.86 %

The open-ended responses from the survey pertaining to this sub-theme have been incorporated in the description of the findings. The table 8.2 below provides a distribution of the responses across

different parameters in the focus group and interview data. It does not include responses from the survey. Each respondent talking about the same parameter has been counted only once. For example, respondent P5 from the Delhi school may have spoken about differentiated instruction five times during the focus group but it has been recorded as one response under DI in the Delhi school.

**Table 8.2- Areas of professional development- Focus Groups & Interviews**

Participant Category	Location				Total Number	Total No. (of participants)	Description	Code
	Del	Mum	Blr	Kol				
Teachers	4	4	11	3	22	50	Identification of student's needs and kind of support required	IdNS
Principal	1	1	-	1	3	4		
Section Head	---	---	3	1	4	5		
Counsellor/	-	1	-	1	2	3		
SEN Coord.	-	1	1	1	3	4		
Teachers	1	5	4	9	19	50	Inclusive teaching techniques and strategies to reach out to diverse learners	ITTS
Principal	1	1	1	1	4	4		
Section Head	---	---	3	2	5	5		
Counsellor/	-	1	-	1	2	3		
SEN Coord.	1	1	1	1	4	4		
Teachers	5	5	6	5	21	50	Learning Differentiated instruction	DI
Principal	1	1	1	1	4	4		
Section Head	----	-----	3	2	5	5		
Counsellor/	1	1	-	1	3	3		
SEN Coord.	-	1	1	-	2	4		
Teachers	1	2	5	3	11	50	Knowledge about the kinds of disabilities/ special needs/emotional and behavioural difficulties that can be found in students in a mainstream classroom	Kw
Principal	1	1	1	1	4	4		
Section Head	-----	-----	3	2	5	5		
Counsellor/	1	1	-	1	3	3		
SEN Coord.	1	-		1	2	4		
Teachers	-	6	1	1	8	50	Classroom management techniques for an inclusive class	CM
Principal	-	1	-	-	1	4		
Section Head	-----	-----	1	1	2	5		
Counsellor/	-	-	-	-	-	3		
SEN Coord.				1	1	4		

Knowledge about the different kinds of difficulties and their identification in the classroom were amongst the most frequently mentioned factors while discussing the professional development needs of teachers.

As a group of teachers from Delhi revealed during the focus group, they need training:

*To understand each learner very well...where exactly is the problem.....and also identify their problems, their traits.*

The Principal of the Mumbai school stated,

*Teachers will need to learn to identify different needs. They don't understand that those children who disrupt the entire class they are also someone, so the needs I would say are ...what's different , to pinpoint...see it's all about awareness.*

In the absence of the requisite training and understanding, teachers mentioned that they often misunderstood the children in their classes. This was a candid admission from one of the teachers herself who explained it in the following words:

Bangalore teacher

*Most of the time we feel that the child is lazy, hence he is acting like that but when other people for example, those trained in this, say that it is not like that, that laziness is because of that difficulty, some problem but superficially we feel it is not related. So we need to know that.*

The SENCo of the Kolkata school elaborated on this factor as quoted below:

*First of all teachers need to realise which child can't do and which child won't do. They are not the same...generally some children cannot do because they don't have that skill. And some children are not doing because they have other issues, behaviour, bad habits or work habits, lack of interest or something like that. That is a different sort of challenge. Once that is identified then teachers will be able to decide better who needs their understanding and support, who needs counselling support, who needs parents to be spoken to or the home to be managed better for the child. So that is the kind of training I think teachers require and need.*

Therefore, awareness and identification of students' diverse needs was essential as the starting point. All other strategies could follow only once the needs were correctly established. The other important factors mentioned by participants across schools were inclusive teaching strategies and differentiated instruction. The Principal of the Kolkata school sharing her thoughts said,

*Each teacher, first needs to understand the different kinds of learners she has in her class ,incorporate different teaching methods which reduce dependency on oral instruction and adapt varied types of teaching in class, whether activity, audio- visual or kinaesthetic.*

Section head –Senior school, Kolkata

*The strategies need to be changed or designed as per the child's situation and needs.*

The Vice Principal of the Delhi school expressed her opinion thus,

*Basically dealing with these children, getting the work done, means if I know that I have a child who has say , learning difficulty , dyslexia or dysgraphia , so how*

*do I get the curriculum done, what sort of support can I give that child, these things a teacher should be very well aware of.*

She went on to add,

*Basically you have to give strategies to the teachers. Some are not equipped, some may need time, so if we give that tool to them, they are ready to accept and it works for them.*

The SENCo of the Bangalore school mentioned,

*It is the strategies, the children's needs, learning styles that are a challenge.*

A section head of the same school explained the situation as follows,

*Some teachers are not able, they don't know techniques to handle. We are exposed to workshops but sometimes we have diverse learners, we cannot read their mind. We think this is the deficiency and we try to address that but finally we come to know that sometimes the child is also very smart. She or he tries to escape from learning.*

Teacher -Mumbai

*If some training, some input is given to us like if you have a child with this kind of a thing, you can deal with the child in this particular manner, so something like that. Even if it's in a normal class, you have high achievers like what can you do, some workshop, training on that.*

Teacher-Delhi

*We don't know... what is the basis for assessing these children.*

Some responses to the open-ended questions in the survey also mentioned this aspect.

Teacher- Kolkata (Survey)

*Also to understand the different kinds of learning difficulties in children and to learn the strategies to handle them.*

Teacher-Mumbai (Survey)

*Equip themselves with strategies to meet the diverse needs of the children with special needs.*

Although most participants didn't seem to be aware of the term 'differentiated instruction' as it was rarely used by any of them, many of the aspects they mentioned were in the realm of differentiated instruction. Participants wanted teacher training on how content, assessment and teaching could be tailored to suit each learner and how could a teacher cater to the needs of all the diverse learners within a classroom. Classroom management, lesson planning and appropriately dealing with the behavioural issues of students were also some of the other commonly mentioned professional development needs.

As a teacher from Bangalore stated,

*More than academics, behavioural issues have to be addressed. We need to be trained properly in that.*

Another teacher from the same school mentioned,

*How to cater to the class, we need real training for that, how to handle all this in a given situation, given 40 minute period and 40 children, we need to be trained well, because we are not trained for that sort of a thing.*

A teacher from Kolkata also expressed similar training needs of teachers. She mentioned,

*How to deal with the special children and common children at the same time in a class.*

The Delhi school counsellor had this opinion,

*What is the acceptable limit, how much are we supposed to give in and how much are we supposed to hold back, what is the expected academic level of the child, what it should be is where they falter.*

Talking about lesson planning, the participants made a number of observations.

Teacher- Delhi

*Proper planning is required...planning and implementation of lessons is an area where training is required .*

Section head-Senior school- Kolkata

*And planning is required, detailed planning where they can plan out for each and every child in the class and the teachers need to have that perception that in that given time how she can implement her plan.*

Principal- Bangalore

*The other thing is in the lesson planning itself if you are able to factor for different kinds of activities that can cater to needs of different learners.*

Within this sub-theme teachers discussed the knowledge and skills required to address the diverse learners in a class. These focussed on the various steps of the process to make inclusion effective beginning with awareness and knowledge about different kinds of difficulties and their identification to learning inclusive techniques and strategies, differentiated teaching, planning and classroom management. A few respondents also spoke about learning how to appropriately interact with and support parents.

### 8.3 Sub-theme 2.2 : Curriculum Related

This sub-theme dealt with training needs pertaining to aspects of the curriculum. The associated codes were board related assessments and concessions and training that was designed for a particular subject and age-group of students.

As the Delhi counsellor said:

*Teachers should be more in tune , informed about the kind of checking and concessions that the various educational boards grant, what is acceptable in terms of how much are they supposed to be lenient, how much are they supposed to be strict, assessing the child's academic abilities.*

Highlighting the second factor, participants mentioned that training was usually of a generic nature and they would like something that was specifically formulated for their particular subjects.

A teacher from the Delhi school stated,

*And there should be subject specific training, not a generalised thing but something subject specific.*

As mentioned in the survey by Bangalore teachers,

*Need to update their knowledge in their respective subject according to present student mind set.*

*Special programmes for language teachers.*

Elaborating on the difficulty she faced, a teacher from Delhi stated,

*Actually we need to bring the curriculum, whatever we are doing for the normal children to their level and how in my particular subject I can bring it down and to what level we need to bring it down, that also, many times we are not aware of it.*

The Principal of the Bangalore school explained,

*It needs to be subject specific then we are setting into the domain of understanding what kind of learning difficulties people are facing and what are the kind of strategies that need to be applied for each one of these.*

Therefore, the findings of this sub theme reveal that teachers require specific training and strategies that are applicable for the subjects taught by them. Although certain content could be common for all, subject specific training that delves into the nuances of the particular subject and explores the most effective strategies would garner the interest of the teachers and be beneficial for them.

#### 8.4 Sub-theme 2.3: Personal Attributes

This sub-theme identifies the professional development needs of teachers that could be related to their personal attributes such as teacher attitudes towards inclusion, sensitivity towards students, soft skills or interpersonal skills such as patience, communication, empathy and conflict resolution. Participants across locations and categories of stakeholders spoke about both teacher attitudes and sensitivity and soft skills training as important areas for training and development. The cross section of responses presented below are a testimony to the fact that this was identified as an important aspect of teacher training irrespective of the location.

Teacher-Kolkata (Survey)

*By inculcating more sensitivity among teachers.*

Teacher-Bangalore (Survey)

*Every teacher should undergo a training ...specially on how to counsel children with special needs or slow learners and such programme needs to be conducted by the school for the betterment of the system.*

SENCo-Delhi

*Attitudinal changes and that can be created by creating awareness and sensitising the teachers.*

SENCo-Bangalore

*Sometimes it's also that though we create awareness, acceptance doesn't come so easily, the mindset to accept that the child has a real difficulty comes very very slowly, that is the biggest challenge for special educators.*

Teacher-Kolkata

*We have to be patient enough, we have to understand their problems, it is a child, we are dealing with a life, so we have to keep that in mind.*

As can be seen from the above statements, some participants viewed training in these skills necessary to enhance the learning process, progress of the students and the effectiveness of the teachers and school as a whole. On the other hand, some participants considered it as a tool for teachers to protect the own mental health and well-being by learning how to maintain their equanimity and not lose their temper and get upset. The following is an account of how they expressed themselves.

Teacher-Mumbai

*More patience, tolerance, control on temper...soft skills.*



Counsellor-Mumbai

*I feel lot of workshops need to be done for soft skills, empathy, inter-personal, intra-personal skills because for the teachers also, their health is also important because they are dealing with teenagers.*

Teacher-Bangalore

*Special kind of a training and probably some kind of a training to help the teachers themselves to have the patience to teach such students, probably counselling or some kind of a support system to help the teachers maintain that kind of a balance because sometimes what happens we also lose our temper.*

The Heads of schools presented their own perspectives and justification for the need of training in soft skills to enhance the teachers' sensitivity and develop positive attitudes towards diverse learners. Their responses are as stated below:

Vice Principal-Delhi

*Other than that the teacher also has to be sensitive to understand , get the best out of the child.*

Principal- Mumbai

*Now we have to learn to be flexible, be nice and yet be firm, get our work done. ...because children are super sensitive these days and so are parents.*

Principal- Kolkata

*A whole lot of sensitisation is needed. Also because we've all grown up in traditional schools, where this concept of inclusive education did not exist, what existed was school and everyone was supposed to come up or conform to that level and expectation of that school. So there was nothing like the school changing its agenda or curriculum to fit a different learning style or a different learner.*

Principal-Bangalore

*Knowledge that is conforming to more advanced level of understanding about learners is not everyone's cup of tea, they may not be interested in learning about it, maybe that is one more area but the notion of inclusive education is just catching up slowly in this country . Now a lot of work needs to go into why we need everybody to be included ..to understand why that needs to happen and need to have a strong support structure that complements the rhetoric.*

Emphasising the importance of this aspect, the Section Head-Middle school of the Kolkata school said,

*Teachers sensitisation to the entire thing. If she is sensitive and understands and invests her time, that is the most important challenge is what I feel. If she is not invested enough then nothing will work.*

Thus, not only was there a strong recommendation from all participants for teacher training in personal attributes, there were various reasons put forth for the same. The respondents reasoned that positive attitudes, sensitisation and a good repertoire of soft skills was a significant factor in enhancing the effectiveness of the teaching learning process as well as the experiences of both students and teachers.

### **8.5 Chapter Summary**

This chapter explored the findings pertaining to the professional development needs of teachers. The areas were categorised into the sub-themes of knowledge and skills, curriculum related and personal attributes. The findings reveal that along with factors identified in the sub themes of knowledge and skills and curriculum, developing sensitivity, appropriate teacher attitudes and personal skills that enable teachers to understand and cater to the needs of all students was of paramount importance. The next chapter discusses findings related to the structure of a professional development programme as suggested by participants.

## CHAPTER 9: FINDINGS- THEME 3 (RQ 4): A PROFESSIONAL DEVELOPMENT PROGRAMME FOR TEACHERS (PDP)

### 9.1 Chapter Overview

The previous chapter explored the professional development needs of teachers. This chapter discusses the findings related to the framework of a professional development programme for teacher. It represents Theme 3 and also answers RQ 4. The findings reflect the responses not just to a direct question on the features of an ideal professional development programme in all the research instruments, but also draw on participant responses throughout the data collection. There are three sub-themes that deal with different aspects of the programme.

### 9.2 Sub-theme 3.1 : Features of the PDP

The first sub-theme addresses the features that should be present in an ideal professional development programme, as suggested by the participants of the study. In response to a question in the survey about the important features of a professional development programme for teachers, the Table 9.1 below presents the responses received. The highlighted rows depict the common findings across all the survey, focus groups and interviews.

**Table 9.1-Salient features of an ideal PDP- Survey**

ANSWER CHOICES	RESPONSES	
	NUMBER OF PARTICIPANTS	PERCENTAGE
<i><b>Q23. According to you, what are the salient of the features of an ideal professional development program for teachers?</b></i>		
Easy to grasp	133	47.5 %
In-depth	111	39.64%
Conducted within the school	126	45 %
Having a lot of <u>hands on</u> activities/examples/practice	185	66.07 %
Free of cost	73	26.07%
Compulsory for all teachers	78	27.86 %
Regularly conducted at frequent intervals	145	51.79 %
Focus on concrete strategies and techniques along with knowledge	169	60.36 %
Tailor-made to each participant's learning style and pace	54	19.29%
Should allow back and forth movement, that is, possibility of revisiting a portion or module that one has not understood or wants to master	106	37.86%
Others	5	1.79 %

The open-ended responses from the survey that are related to this sub theme have been included in the description of the findings that follow.

There were several features mentioned by the participants as being important for a professional development programme. The prominent ones being the need for the programme to be hands on and

practical, to be conducted regularly and at frequent intervals, involve simulation of actual classes, have follow up workshops and involve an exchange of ideas and practices with other schools. The Table 9.2 below provides a distribution of the responses across the most frequently mentioned parameters in the focus groups and interviews.

**Table 9.2- Salient features of an ideal PDP- Focus Groups & Interviews**

Participant Category	Location				Total Number	Total No. (of participants)	Description	Code
	Del	Mum	Blr	Kol				
Teachers	2	3	1	6	12	50	Having a lot of hands-on activities/examples/practice/case studies	A/E/P
Principal	-	1	-	1	2	4		
Section Head	---	---	2	2	4	5		
Counsellor/	1	1	---	-	2	3		
SEN Coord.	1	1	1	1	4	4		
Teachers	-	3	-	7	10	50	Simulation of an actual class/ classroom situations	SAC
Principal	-	1	-	1	2	4		
Section Head	---	---	-	-	0	5		
Counsellor/	-	-	-	-	0	3		
SEN Coord.		1			1	4		
Teachers	4	-	-	1	5	50	Follow-up/ <u>Review workshops</u>	FU
Principal	1	-	1	-	2	4		
Section Head	----	-----	1	1	2	5		
Counsellor/	-	-	-	-	-	3		
SEN Coord.			1	1	2	4		
Teachers	-	3	-	-	3	50	Regularly conducted at frequent intervals	R/F
Principal	1	-	-	-	1	4		
Section Head	-----	-----	-	1	1	5		
Counsellor/	1	-	---	1	2	3		
SEN Coord.	1		1	1	3	4		
Teachers	1	-	-	-	1	50	Involve intra-school and inter-school exchange of ideas and best practices	ISE
Principal	-	-	-	1	1	4		
Section Head	-----	-----	2	1	3	5		
Counsellor/	-	-	---	-	0	3		
SEN Coord.		1		1	2	4		

The feature about the programme being activity based, with examples and hands-on activities was the most frequently mentioned in both the survey (66% participants) as well as the focus groups and interviews. This is what the respondents shared on this matter:

Mumbai teacher-Survey

*Professional development training courses involving activities & practical experiences.*

Teacher- Delhi

*It should include lot of real life examples and hands on activities, so they can understand the strategies.*

The Mumbai Counsellor added,

*It should be a hands on workshop where they do and learn and implement it in their classroom.*

The Mumbai-Principal also spoke about the practical aspect of a training during her interview. She said teachers should be trained....

*....through real life situations, role-plays to give them that kind of exposure.*

Several teachers reflected on their experiences with previous training programs which were primarily theoretical and idealistic and the learnings from them could not be practically implemented in the classroom.

As a teacher from Kolkata shared:

*Whatever workshops I have attended, I have seen that there is a huge gap between what is ideal and what is practical. So it has to be case study based.*

Elaborating on this aspect, a Section head of the Bangalore school expressed her thoughts quite candidly in the following words,

*Workshop which has more of hands on, benefits the teachers and all are ready for it, all are ready to take the information and they participate and interact very well. We don't want any person just coming and giving 'gyan' (knowledge) like this should be there, that should be there, nobody wants that because with amount of work pressure they are in, they would prefer being in the staffrooms doing their work.*

Respondents indicated that since they were already stressed with work, they were not really interested in spending their time over programmes which were not relevant or useful. A few respondents also suggested having the simulation of an actual class as part of the training programme. They stated that they would like to attend the simulation of an actual class, similar to the ones they teach, to see how

the teacher conducts the class with a variety of diverse learners, within the given time and with the given curriculum.

As one of them stated:

*We want workshops related to deal with students with diverse learning abilities, how to deal with such a class, we need a demo of that. So if somebody is an expert, must give us a demo that how to manage a class of 40 minutes or one hour with such a diverse class. We are all very much updated about our academics.*

A teacher from Mumbai echoed similar views,

*I feel they can keep workshops or sessions you know, like they can set up one ideal classroom like how teacher can manage and all so that we understand actually what to do.*

The Principal from the Kolkata school advised,

*The most important thing is simulating such classroom situations, it could be visually and then a discussion or it could be an actual class where the people can go in but then the training can only be in twos and threes because you can't flood the class but if you want to address a large number of teachers, in that case, maybe you have to capture a scenario in a classroom and then show.*

As is evident from the statements above, while some participants only recommended making the programme hands-on and role play/ case study based, some felt that it should balance knowledge with practical exposure.

Kolkata teacher-Survey

*After providing them with theoretical knowledge there should be provisions of doing hands-on experience / practical work then only their learning will happen properly.*

The Delhi Counsellor also suggested,

*It should start with a little bit of giving out information that they need to know about based on the education system that you are following, then move on to dealing with more hands on, case wise discussions because once you start discussing cases with them, that is when they start getting ideas as to how they can manage, even similar cases in future. So I think it should be a balance of both.*

Along with the knowledge and practical aspect, findings suggest that having follow-up workshops was seen as important. Some participants also spoke about having access to the trainer or resource person conducting the training or workshop so that if they required any support later, they could

approach the person at that point of time. Highlighting the need for a follow up workshop one of the Delhi teachers said,

*Whenever we have such workshops or programs, there should be a follow up also, like one day the workshop happens, the next day we try to apply those things in our teaching in class, if there is no follow up, we don't get the trigger to take it to the next level so if there are regular follow ups, along with the programs and workshops, it would actually help us to achieve the goals.*

Adding to the discussion other teachers from the same school added,

*Not just somebody to come and check, but also a follow up so that we can give a feedback whether we have been able to do it properly or not.*

*Or once in six months ...a refresher...A forum is important. If we could have somebody to go back to, share our ideas, nothing like it....maybe once a month.*

The SENCo from Bangalore had similar thoughts.

*It should be having a follow up. Like any successful program should have a follow up to see, what was suggested, is it being understood, is it being implemented, is it as successful as we claimed it to be. Not all the time it happens, so probably that's the way.*

A teacher from Kolkata explained the practical difficulties teachers faced.

*If at the beginning of the year, the training is there, it is implemented for one month, two months, then if we get stuck somewhere, we don't know what should be the solution. We try our new ways which may fail.*

And continued a little later...

*That this is the problem, I tried it this way and it's not working, what should we do...because it's one long year, right.*

Several participants in the survey as well as in the interviews and focus groups mentioned having regular workshops as being important.

Teacher- Mumbai

*Instead of having only once at the beginning, if we have it on a regular basis.*

Section head-Senior school- Kolkata

*Not once a year I think these workshops should be held at least twice or thrice a year because you know trends are changing, children's behaviour is changing so I feel that it should be done more often.*

Counsellor-Delhi

*It should be conducted every quarter because if you want to discuss cases, then every quarter they are going to have something better, a new challenge that may have come across ..so at least twice in a year you should definitely have a workshop like that.*

The findings also revealed some interesting points regarding the salient features of a Professional Development Programme that teachers would like to have; some of which I had not expected. These included the advantages of interaction within and outside the school to facilitate an exchange of ideas and best practices, having experts in the field come and interact with the teachers and for the workshop to be conducted at a convenient time.

Discussing about the exchange program/interaction with other schools, there were many views from participants that highlighted the importance of formalised successful strategies.

Teacher –Delhi

*There should be a sharing, like suppose what we are doing, what they are doing, what different schools are applying ...so there should be an exchange program between the teachers so that we can share ideas. Maybe on a regular basis if we are interacting and know the strategies they are applying, it might also help us.*

Section head- Bangalore school

*We would like to really experience how it happens in other places. I think that can help as an experience. We have our own techniques but definitely learning from others, how other schools do it, they may be more successful in handling children, we may not be that successful.*

Principal- Kolkata

*More than formal training, I think exchange programs with such schools would really help. If I could send teachers, for about two weeks or a month to a place where this is really working effectively.*

A related but different factor was that of involving experts in the field who could interact with the teachers and guide them. A teacher from Delhi suggested,

*One more thing, I think we should be exposed to more people who have handled such situations, maybe have interactions with them because there are people who are doing wonders in these fields and if teachers can interact with them and learn from them, there would be nothing like it.*



The Principal of the Mumbai school opined,

*Instead of doing it through internal resources, we should outsource. So maybe a psychiatrist like Harish Shetty. (a well-known practicing psychiatrist in Mumbai) If he could come in and teach the teachers about it then the receptivity would be higher.*

This highlights the importance of getting the right resource person to conduct the workshop/training as participants tend to place a great deal of importance to the person's experience and credentials and it has a direct impact on their receptivity. Speaking about another aspect which is not often spoken about but may have a bearing on the receptivity of the programme was that of having the workshops at a convenient and suitable time for teachers. As a few teachers from Delhi suggested,

*Workshops should happen at a time when we are relaxed, maybe just before the beginning of the session, maybe that break, when we are planning and everything.*

*Or at the end of the session.*

The Middle school Section head of the Kolkata school also brought out this aspect.

*And we should always tap the teachers at a time when they are lesser occupied with work, they are more free to focus. We can't rush them into workshop after workshop. They need time to reflect. That reflection is very important.*

Taken together the findings represented in this section account for the salient features of a professional development program. It was very clear that all participants favoured a practical, case-study based, hands-on program which included simulation of a class/classroom situations rather than just theoretical knowledge. Having follow-up workshops that are conducted regularly and at frequent intervals, access to the resource person conducting the workshops, interaction with experts and other schools were some of the other commonly mentioned features across schools.

### 9.3 Sub-theme 3.2: Content of the PDP

The findings of this sub-theme relate to the content that should form the professional development programme. While Theme 2 dealt with the professional development needs of teachers, this sub-theme examines the content of the programme. There is an obvious overlap between the two with most findings being common. However, when asked to discuss the features and content of the programme the participants responded with some points in addition to those identified in the question regarding the professional development needs. The table 9.3 on the next page provides the distribution of the frequently mentioned responses across locations and category of participants from the interview and focus group data. It does not include responses from the survey but they have been included in the description.

**Table 9.3-Content of the PDP- Focus Groups & Interviews**

Participant Category	Location				Total Number	Total No. (of participants)	Description	Code
	Del	Mum	Blr	Kol				
Teachers	8	3	4	-	15	50	Inclusive teaching techniques and strategies to reach out to diverse learners	ITTS
Principal	1	-	-	1	2	4		
Section Head	---	---	2	1	3	5		
Counsellor/	-	1	-	1	2	3		
SEN Coord.	1	1	-	1	3	4		
Teachers	5	2	1	1	9	50	Identification of student's needs and kind of support required	IdNS
Principal	1	-	-	1	2	4		
Section Head	---	---	-	1	1	5		
Counsellor/	1	-	-	-	1	3		
SEN Coord.	-	-	-	1	1	4		
Teachers	13	1	1	-	15	50	Learning Differentiated instruction	DI
Principal	1	-	-	1	2	4		
Section Head	----	-----	3	-	3	5		
Counsellor/	1	-	-	1	2	3		
SEN Coord.	-	-	-	1	1	4		
Teachers	2	6	-	1	9	50	Provide resource material such as handbook, booklet, videos, websites etc.	RM
Principal	-	1	-	-	1	4		
Section Head	-----	-----	1	-	1	5		
Counsellor/	-	1	-	-	1	3		
SEN Coord.	1	-	-	-	1	4		
Teachers	1	1	-	-	2	50	Knowledge about the kinds of disabilities/special needs/emotional and behavioural difficulties that can be found in students in a mainstream classroom	Knw
Principal	1	1	-	1	3	4		
Section Head	-	-	-	-	0	5		
Counsellor/	1	-	-	-	1	3		
SEN Coord.	1	-	-	1	2	4		
Teachers	-	-	2	4	6	50	Subject/ Age-specific training	S/AST
Principal	-	-	1	-	1	4		
Section Head	-----	-----	1	-	1	5		
Counsellor/	-	-	-	-	-	3		
SEN Coord.	1	-	1	-	2	4		
Teachers	-	1	-	-	1	50	Soft skills training including sensitivity training	SST
Principal	-	1	-	-	1	4		
Section Head	-----	-----	-	1	1	5		
Counsellor/	1	-	-	1	2	3		
SEN Coord.	-	-	-	1	1	4		

The findings reveal that some of the frequently mentioned points were also common with the findings of Theme 2 on the professional development needs of teachers as discussed in Chapter 8. These were identification of needs, inclusive teaching techniques and strategies, knowledge, differentiated instruction and soft skills training. There was an overlap between responses and there were participants who recommended including several aspects such as creating awareness and knowledge about student needs, identification of needs, strategies to be used in the classroom and other facets.

As the Vice Principal of the Delhi school said:

*First of all it should start with why are we doing it, how are we helping the child and then identifying if a child has a need or not, how do we sense those needs, what are the techniques to identify and then once identified how do we go about. So basically we should give lot of strategies.*

SENCo-Kolkata:

*So what kind of situation she is likely to encounter and in that case what she can do, where she needs to seek help, how long she is to wait before seeking help...how to evaluate in her own way... what kind of modifications and accommodations she should make because everything cannot be left to the special educators. Simple things like seating or a little bit of extra time, maybe just reading out the paper, things like that can be done by her.*

Section head-Bangalore

*Are there any other techniques or any other way that could be used, included in the lesson itself, in the day to day .Instead of bringing them outside and teaching them separately while we are doing our lessons, if something else could be done.*

Also common were lesson planning, classroom management, behavioural issues, subject/age specific training, teacher attitudes and teacher's well-being. Highlighting the need for Classroom management, a Section head from the Bangalore school said,

*Plus classroom management. That's lacking in most of the teachers. They don't know to manage, 40 children... they panic , they don't know what to do, what not to do so.*

During the group discussion, a group of teachers from Delhi agreed that the PDP,

*Should train teachers to have that flexibility in planning and implementation of lessons.*

Discussing the program having content that is subject and age specific, a teacher from Bangalore stated,

*If it is subject specific also, it will be very useful because not all subjects, all strategies will work. In each particular subject the child is different so it will be very useful if it is subject specific also.*

Talking about different aspects-age wise and subject wise training, two teachers of the Kolkata school shared:

*It's a very different scenario when you are dealing with Class 7 and 8 and Class 10 and 12. So how to cater to that. So class specific, age specific methodology because the learner also changes.*

*Generally I'll tell you, when teaching methodology is being spoken about or told about from my point of view I'm telling, lot of experiments, examples are given, for English, mainly for English and Science...nothing for Geography, which is my subject. So subject specific it should be done.*

The Bangalore school Principal also underscored the need for subject specific training,

*And then see, with all these things, it shouldn't be interpreted as just being some theoretical ideation with very little something for the specific subject in question. So we also need to be able to give them specific strategies which pertain to the subjects that they teach which can make learning more grounded, in that sense.*

A few participants spoke about the programme catering to the teachers' well-being also, in terms of stress management, encouragement and motivation. The new and interesting additions to the content of the PDP were providing resource material and the programme containing latest knowledge related to learning, children and technologies in the field of education. In total 13 participants across locations discussed the need for making appropriate resource material available to teachers as they said it would support the teachers and enable them to reach out to all learners. These could be in the form of a handbook, manual, website, videos or worksheets.

As one of the teachers from Delhi suggested,

*Maybe if websites that offer resources easily are shared with us...So that we can just directly flip through them (resource material), we don't have to wait for someone...we can directly access them.*

Another teacher in the same discussion proposed having a handbook.

*So a handbook that we can go back to ...even an online thing would work, though some people work better with a hard copy.*

The Principal of the Mumbai school also suggested having a handbook.

*You can give them a handbook to read through. If I face this situation, this is the way. You know there are tackling methodologies, so those could be adopted. Or case studies.*

One of the section heads from the Bangalore school expressed her opinion in these words,

*More of resources, we need the resources, where to find the resources, how they can be used by the teacher, like some case studies or websites, the resources that we could tap in so that day to day they can equip themselves better.*

Expressing the difficulty faced in a classroom situation and how the resource material would help her, a teacher from Kolkata said,

*There should be special worksheets for these students, which are already there. Like resource materials –worksheets, books, which children can read, because see most of the time, some of these children don't write and disturb others, how many times will I stop myself. So if there is something to keep them occupied, it's easy for us.*

The counsellor of the Mumbai school highlighted another aspect where she said that the worksheets and hands-on material used in the resource room should also be shared with the mainstream teachers so that they could also use them as required.

*Yes, for every child...like you have these Rebus puzzles, Anagrams, all these things are used here (Resource room) but if the same material can be given to the teachers, for using in the entire classroom...and then maybe she can link it up to the curriculum or her chapter also.*

The PDP comprising latest available knowledge and technology and incorporating the most modern and up-to-date strategies and was also mentioned by some participants. Discussing the need for continuous up-dating, respondents expressed their thoughts as follows:

Teacher-Delhi:

*It should help to learn new methods and methodologies of teaching concepts better. We do use graphic organisers, we do use all of that but then every other day we hear of new things.*

Principal –Mumbai:

*So those kind of modules on how to deal with new generation children, because every two years we have a different set and a different type of children. See what we practised five years ago is not applicable now, we have to learn to change our methodology to suit the convenience of children.*

Principal- Bangalore

*Like I said, a generic awareness of why all of these things are necessary, a generic awareness about the contemporary research with regard to learning, should all be a part of it.*

Teacher -Bangalore (Survey)

*Continuous upgradation programmes will help teachers to deal deftly with diverse learners in a class.*

Teacher-Kolkata (Survey)

*Keeping oneself updated with the present knowledge.*

The findings of this sub-theme were very similar to that of Theme 2 which looked at the professional development needs of teachers. The participants suggested that the content of the programme include modules on identification of needs, inclusive teaching techniques and strategies, differentiated instruction, knowledge about the kinds of disabilities, classroom management and lesson planning. It was also suggested that the content should be updated to contemporary times and include subject and age specific training to make it more relevant and meaningful for the teachers. This might also help in addressing and positively influencing teachers attitudes and develop their sensitivity and soft skills along with taking care of their well-being.

#### **9.4 Sub-theme 3.3: Challenges of Organising the PDP (for the school management)**

This sub-theme focussed on the challenges faced by the school management in organizing a PDP. Some of the most commonly mentioned aspects were finding a good trainer and the cost involved. Additionally, schools had to find a suitable time frame during the busy school term when teachers were less occupied and free at the same time across the school. The resistance or lack of receptivity of some teachers also posed a challenge. The foremost difficulty mentioned was finding a good resource person/trainer to manage and conduct the programme.

As the Vice Principal of the Delhi school mentioned,

*Finding a good resource person, that is a challenge.*

The Kolkata school section head also said,

*Yes. That is also a problem sometimes. Availability of the resource and getting the right kind of resource.*

The Principal of the Bangalore school elaborated from his experience,

*The reality is on the ground, the kind of people that are available to impart such training, I think there is a huge gap there. To find well qualified trainers who have some amount of grounding in school teaching, in school reform per se, I think that is very important. That is one thing that is missing.*

Another factor mentioned was the lack of time due to work pressure on teachers and finding a common time when all the teachers were free. As schools were usually divided into different administrative sections such as junior school, middle school and senior school, which often ran on different schedules, finding a common time was a challenge.

As the Senior school Section head of the Kolkata school explained,

*One of the most important problem that we face is time span because we have the pressure of the syllabus, the teachers need to finish things on time so time is one factor. The other factor is putting everybody together, that is another one.....because the different levels work for different timings and sometimes if some levels are free then the other levels may have examinations or maybe occupied with something else so making everybody free at the same time is another problem.*

The Bangalore school Principal added,

*It is quite difficult. I mean see, when you are a staff, a full-fledged practitioner to find time in between all of these things, is quite challenging.*

Expressing similar views, the Mumbai school Principal said that time was a challenge as teachers had several responsibilities and were involved in so many activities.

*Because teachers by themselves, have so many things to do –lesson plans, question papers, corrections, inter-house competitions, Sports Day, Viva (School fest), all of it. And then there are these teacher follow-up meetings that they have for children with special needs.*

Mentioning cost as a factor, the Mumbai school Principal suggested,

*So I would say that either hand pick-do it with the coordinators first and then let them do it with the teachers rather than to do it with 300 teachers, I would might as well do it with 10 coordinators. So it is educating through every level and then from there it percolates to the next level. Train the trainer kind of a thing. Then your cost is not a problem.*

Teacher attitudes and resistance in attending the training sessions and learning from them was another challenge faced.

The Mumbai school Principal stated:

*A teacher would say when you have a special educator, why do I have to take up more. Resistance from the teacher. She would like to help but the work capacity is so much, her work load is so much that it is adding to her work load. If you expect her to deal with children, counsel them, so that is one resistance that I see there.*

The Senior school section head of the Kolkata school also expressed,

*And another one is the attitude also because everybody's perception and everybody's level of compassion is different. So that is another factor which I feel needs to be taken care of...*

This sub-theme explores another aspect of the Professional development programme - the challenges faced by the school management in organizing it. These would have a bearing on the actual planning and organizing of the training programme and are thus important to understand.

## 9.5 Chapter Summary

This chapter discussed the suggestions offered by participants about the framework of a PDP that would equip them to include and cater to the needs of the diverse learners in their class and the challenges in organising such a PDP mentioned by the school management. Suggestions for inclusion in the content of the programme were knowledge about the kinds of disabilities, identification of needs and support, inclusive teaching techniques and strategies, differentiated instruction, classroom management, lesson planning, subject and age specific training. Several participants across locations suggested that exemplar programmes should be of a practical nature and involve case studies, activities and simulation of an actual class. Other aspects discussed were having follow-ups, trainings conducted regularly and at frequent intervals, access to the resource person conducting the workshops, interaction with experts and other schools. The primary challenges mentioned by the senior management were related to the availability of a good resource person, lack of time with teachers amidst other responsibilities and difficulty in finding a common free time, cost and resistance from or negative attitudes of some teachers. The next chapter explores the findings of Theme 4 which is about the methods presently used by used schools to meet the professional development needs of their teaching staff and the efficacy of these methods.



## CHAPTER 10: FINDINGS- THEME 4 (RQ 3): METHODS CURRENTLY ADOPTED FOR PROFESSIONAL DEVELOPMENT AND EFFECTIVENESS

### 10.1 Chapter Overview

The findings of this theme report the methods currently adopted in schools to cater to the professional development needs of teachers such as trainings within and outside school, guidance from seniors/ Section Heads and from special educators/counsellors. The effectiveness of these methods as gauged by the participants themselves was also discussed. This theme also directly answers RQ 3.

### 10.2 Sub-theme 4.1 : Methods Currently Adopted for Professional Development

All schools participating in the research used in-house department support, workshops conducted within the school and also sent a select few teachers for external workshops. The school in Bangalore had an arrangement with an external organization for conducting workshops for teachers and also had some internal ones from time to time. In response to a question in the survey about the methods currently in force in their respective schools, for professional development of teachers, the Table 10.1 below presents the responses received:

**Table 10.1-Methods currently used for teacher professional development-Survey**

<b><i>Q21. What methods are being currently adopted by your school for the professional development of teachers to handle a class of diverse learners?</i></b>		
<b>ANSWER CHOICES</b>	<b>RESPONSES</b>	
	<b>NUMBER OF PARTICIPANTS</b>	<b>PERCENTAGE</b>
Training/workshops/seminars conducted in house	210	75 %
Sending a few teachers to attend programs outside of school	152	54.29%
Mentoring and guidance by seniors at school	118	42.14 %
Support and guidance from special educators/counsellors	178	63.57%
Providing reading material	52	18.57%
None	5	1.79%
Others	5	1.79 %

The table shows that a large majority (75%) of the participants reported that they had attended in-house training pertaining to professional development for inclusion, 63% said that they received support from the internal resource persons such as special educators and counsellors and 42%

mentioned receiving mentoring from section heads and coordinators. Data from the focus group and interview also reflect a similar picture. Sharing about the in-house support from the special educators, counsellors and senior authorities at school, participants stated:

SENCo-Delhi:

*Specifically, if they find any difficulty they ask us to help them. Counsellors and special educators are around. We go for observation and find out what really is the cause for that particular behaviour which the teacher is facing and we try to remove that cause first.*

Principal- Mumbai:

*The guidance is happening, one on one is happening as in we have that teacher counselling, teacher feedback, all of that is taken. So on a one on one the counsellor, the special educators are meeting the teachers but it's not done as a group.*

Teacher-Kolkata:

*Whenever we need support, definitely our heads, Section Heads and teachers are also with us all the time, any kind of co-operation we need, they are there.*

Middle school section head –Bangalore:

*There is a lot of interaction among suppose middle school and high school teachers, whatever strategies they have, they exchange, Coordinators also share.*

In-house training sessions on different topics were also conducted by most schools though they were not necessarily related to inclusion. Some of these were on general topics such as class management or related to teaching pedagogy of a particular subject, mostly English, Maths and Science. These seemed to be more dependent on the availability of good resource people/organisations and what they had to offer at that point of time rather than be a part of a thought out or planned PDP designed for inclusion.

A teacher from Delhi shared,

*Circle time, workshops...we have a lot of workshops, training, sensitisation, differentiated learning.*

The Mumbai school Principal stated,

*We are into a lot of soft skill development. We've done team building, we've done other things about knowing each other, inter-personal, intra-personal skills.*

The SENCo of the same school explained,

*In the month of June, we do conduct an induction for all teachers wherein we make them aware of the various disabilities that we cater to and the concerns that the children facing those difficulties exhibit and strategies how to deal with them.*

A teacher from Kolkata said,

*Time to time, school conducts workshops for us, we learn different types of activity based learning, we get the training to make the topics more interesting for the children. We have done meditation and other courses, even our students have done.*

The Principal of the Bangalore school shared the details about his school,

*We have regular trainings done for the teachers. CBSE also mandates certain trainings to be done for the teachers. Over and above that, whenever we find effective resource personnel, we employ their services as well. If it is for a special educator, we would do it for a special educator, if it is something more generic, it would be for the others.*

Findings also reveal that schools sent teachers for external workshops.

The Vice principal of the Delhi school stated,

*We do workshops. We give them strategies and techniques not just of dealing with these children but also the curriculum, we send them for some workshops outside also, so they get to understand how to deal with the children as well as effectively manage the classes.*

The Senior school section head of the Bangalore school said,

*Some people go outside for workshops, they get the knowledge and we all have it as a separate workshop so that all can learn.*

The Senior school section head of the Kolkata school said,

*The school conducts a lot of workshops and sends them for different trainings and workshops from outside and even in-house lot of trainings and workshops are conducted to help equip the teachers.*

The Bangalore school had outsourced its training to an organization called the Teachers Training Foundation (TTF). Since this was an on-going engagement with the agency, it sometimes asked the school the topics on which training was required while some of the modules were fixed.

As one of the teachers shared,

*Training is being given by Teachers' Training Foundation- 8 full day sessions for one year.*

The SENCo added,

*They do this inclusive kind of training for teachers on how to handle these children. So, they have their CPDs-Continuous Professional Development. They have their CPD modules about twice a term. Sometimes they have a fixed module, sometimes they ask us what we need.*

Findings from this sub-theme reveal that while most schools had in-house training sessions from time to time, they also sent teachers for external workshops as and when they could. All schools had an internal support system in the form of the SEN department-counsellors, special educators and also seniors at school to guide and mentor teachers. One of the schools, located in Bangalore, also had a partnership with an external agency who conducted workshops under their professional development programme.

### 10.3 Sub-theme 4.2 : Effectiveness of the Methods Currently Adopted

This sub-theme explores the effectiveness of the methods used by various schools to address the professional development needs of teachers as discussed in the previous sub-theme. A question in the survey asked the teachers to rate the effectiveness of the methods used by their respective organisations in helping them to acquire the requisite skills and competencies. The responses were as presented in Table 10.2 below:

**Table 10.2-Effectiveness of methods used presently for teacher professional development**

<b>Q22. How effective in your opinion are these methods to help teachers gain the requisite knowledge, skills and expertise required?</b>		
<b>ANSWER CHOICES</b>	<b>RESPONSES</b>	
	<b>NUMBER OF PARTICIPANTS</b>	<b>PERCENTAGE</b>
Extremely effective	26	9.29 %
Very effective	99	35.36%
Fairly effective	118	42.14 %
Somewhat effective	34	12.14%
Not at all effective	3	1.07%

The maximum responses in the survey (42%) were towards the average of being 'Fairly effective'. Also, the majority of responses were positive and clearly indicated that most respondents felt that the training programmes they attended or the other methods used for professional development were effective. However, the findings of the focus group discussions and interviews present a slightly different picture which varies from school to school. There were very few responses at both ends of the spectrum but between the two extremes, there were more responses for not effective and only 3

responses for very effective. One reason for this could be that the question in the survey was considered an evaluation of the training sessions conducted in schools. Though not directly related to teacher preparation for inclusion, these sessions might have been quite effective in themselves in delivering what they intended to deliver. However, the focus groups and interviews made it possible to clarify and probe so that the question was correctly understood and hence the answers seemed different. Also, guidance and support from in-house staff was one of the major methods relied on by teachers and this is an element that is inherent and depends on the individuals present in school and therefore cannot be evaluated or changed.

The findings of this sub-theme have been discussed school-wise as the effectiveness of any method followed is very organisation specific. This enabled me to capture the views of all the stakeholders and triangulate the findings. It was only in the Delhi school, that all three responses for ‘very effective’ were received. Also, in this school, both the teachers as well as the other stakeholders said that the training was fairly effective. However, their responses to other questions clearly indicate that teachers did face challenges in managing an inclusive class and their professional development needs were similar to other schools. As one of the teachers said:

*Teachers are more empowered now, we are more empowered to identify the children, who needs support, who doesn't need support, what are the strategies that I can apply, so I can change things.*

The SENCo of the school supported this view and added,

*I find that the faculty development program and workshops are helping teachers to be equipped with techniques.*

The Counsellor concurred,

*Yes, so far, they've been effective, even if a teacher is struggling, there are other people who are going to support her to assist the child.*

So as per the responses received to this question, the current methods in the Delhi school seemed to be effective and helping the teachers pick up some of the skills and strategies required for an inclusive class.

Kolkata School:

The SENCo shared that it was fairly effective but needs to be more systematic.

*Fairly, but the point is there is always a lateral admission of teachers and you may have done the sensitization with one group of teachers who are already working with children with special needs in their classrooms and they have been with the process. But, there are always, people every year go, new people come in. So, that has to be a more systematic process.*

The Senior School Section head from the same school said,

*I would not say that they are 100 percent effective but definitely a lot of teachers are also gaining first- hand experience by dealing with situations in the class itself and also going out to the workshops and in-house workshops are also slowly equipping teachers to handle such situations..*

Speaking from a practical point of view, teachers also highlighted the difficulties faced in implementing what they learn from workshops, on a regular basis.

*It is effective. If we can actually stick to it, it is good. But again, the same challenges come...the time, the curriculum, all chapters cannot be done in that way.*

*Half of the session we might do it but later we find that we have so much of assessments and other things to take, we might not be able to do it.*

Therefore, while the sessions in themselves seemed to be good, the learnings from therein could not always be consistently and practically implemented.

Bangalore school:

Talking about the training received from the external organization, Teachers Training Foundation, teachers from the Bangalore school presented slightly different views:

*Whatever strategies we are given by TTF, teachers follow them on a regular basis. It definitely helps as the underperforming students are able to achieve a little bit.*

*Maybe in the longer run, they will be effective.*

*We are all doing, we are getting support but not very effective.*

The Senior School Section head said,

*Like there have been many workshops conducted and we are aware of few techniques but one to one, they just tell us these are the techniques, you can use this, you can do this. But really, we don't know. Sometimes we feel they should come to the situation and see what is the real problem.*

The SENCo summed it up in the following words,

*See, at least it brings in awareness. Attitudinal changes don't come with one workshop, nowhere, not for anybody. It takes more than that for you to internalise what you have learned. Yes, I find that after every workshop most of them feel very good, come out excited, feel more aware but to really implement it on an everyday basis with the practical problems that everybody faces, doesn't come. Yes, it does help the teacher to at least be aware that such a thing is there and there is help at hand and I have the power to do at least a little, even within this group.*

Therefore, in the Bangalore school, the trainings conducted seemed to benefit the teachers to some extent in developing awareness and learning techniques. However, they did not seem to be very effective in helping them cater to a diverse class of learners.

Mumbai School:

Not a single respondent in the Mumbai school said that the current methods used were fairly effective. In fact, most responses indicated that sessions were not effective though a few were reported to be somewhat effective. Further probing during the focus groups and interviews revealed that currently there were hardly any workshops being conducted for the entire group of teachers related to inclusion and diverse learners. Only the special educators and counsellors who made up the PLC or Personalised Learning Centre in the school guided the teachers in whose classes there were known cases of students with special needs and conducted a basic workshop on identification at the beginning of the year for everyone. The responses reveal their thoughts on the efficacy of these methods used: In both the focus groups, the teachers had similar things to say:

*No, no, these methods are not helping us in the classroom.*

*The methods are not effective at all.*

Another teacher elaborated;

*PLC is there but we are not doing anything in the class. On one to one basis, whatever we feel we are doing that. It's only that they are going to the PLC and they are handling it and we are not even talking about it in the class because they go in such periods that no one gets to know about it.*

The SENCo shared,

*When there are workshops that happen conducted by various external professionals who come to schools, I think the Head teacher and teachers from every grade should attend, which I don't see happening much so anything that comes, comes here. See we are already trained.*

She went on to add,

*To be very honest, we haven't met teachers for such workshops as frequently as we have been meeting parents.*

The Principal admitted to there being more workshops for parents than for teachers:

*We do have workshops. The thing is that we have workshops by PLC (Personalised learning centre) for parents, the Art of Parenting workshop...but for teachers also we should have these workshops like that.*

Thus, in this school the primary reliance seemed to be on the Personalised Learning Centre for students with any special needs. The guidance as well as whatever little orientation was given about students in this matter was provided by the Personalised Learning Centre.

This sub-theme interrogated the efficiency of the methods that were presently being used by schools to meet the professional development needs of their teachers. It was found that the perceptions of the participants of each school on this matter were different. This is understandable given that each school had its own ways and methods of training and supporting its teachers.

#### 10.4 Chapter Summary

This chapter explored the methods currently used by schools to cater to the professional development needs of teachers and their effectiveness. The methods ranged from in-house training sessions for all, external workshops for few teachers and guidance and mentoring from in-house staff. One of the schools had outsourced the PDP to an external agency who conducted workshops twice a year as per a planned schedule. The effectiveness of the methods as mentioned by the respondents not only varied from school to school but also from the quantitative method (survey) to the qualitative methods (focus groups and interviews). While the vast majority of the survey responses were positive, discussions and interviews revealed a different picture. This lack of standardization in training across schools was one factor that clearly emerged. The next chapter explores the findings pertaining to the current status of inclusion in schools- the support system available for students and suggestions from participants for schools to become more inclusive.



## CHAPTER 11: FINDINGS- THEME 5: INCLUSION IN SCHOOLS

### 11.1 Chapter Overview

This theme explores the broad topic of inclusion in the schools that were part of this research study. Though there was no specific question asking for views on inclusion, either in the surveys or the focus group discussions and interviews, many respondents spoke about how they support students in their school and offered their suggestions for policy and practices to make inclusion more effective. Thus, these were incorporated into two sub-themes- strategies currently used by schools to support all students especially those with special needs and suggestions for making inclusion more effective.

### 11.2 Sub-theme 5.1 : Strategies Currently used to Support Students

This sub-theme considers the strategies and methods presently used by schools to support the diverse needs of learners in a class. The most commonly mentioned strategy was the provision of extra classes or remedial classes as some schools called them, both for students with special needs as well as other students falling behind academically or requiring some support. The classes for students with special needs were mostly taken by special educators and sometimes by the mainstream teachers in most schools, while remedial classes for the other students who required support were taken by the respective subject teachers. Discussing extra/remedial classes, this is what the participants across locations said,

SENCo-Delhi

*(Students with special needs) we have started keeping them part of the group for extra-curricular activities and the education part is taken by special educators differently according to their pace and their needs.*

Principal-Mumbai

*Also, they go for special education classes and there they are given instructions and re-taught and things like that, so strategies are given, that helps them a lot.*

SENCo-Mumbai

*Children who require extra help in academics are provided extra classes during Saturdays. So, they can come for those classes.*

SENCo-Bangalore

*We have remedial classes happening every weekend, the same students who are not doing too well are pulled out and they do additional classes, almost from the beginning of the year or at least after first term tests.*

Guidance and mentoring of students individually, a buddy system, monitoring and identification of children and referral to the special educators/ counsellors as required, preparing and implementing a plan for support were some of the other methods followed. Schools had their own systems of identification and referral to higher authorities such as Section heads, special educators and counsellors. Explaining the entire system of referral and action taken thereafter in the Delhi school, the Counsellor said,

*There is a proper channel of communication that takes place. Even when we are creating a plan to support a child who is academically not able to perform to a particular level, then all of us, heads, the teacher involved, the special educator and the counsellor are all sitting together and creating a plan. We have combined meetings, where the parents are also involved and informed about the plan. Then regular follow ups are taken to see whether the child is able to achieve as per the plan or do we need to alter it and figure out a better support system.*

A teacher from Mumbai shared,

*Those who have genuine issues, for them we have got a department which deals with it , they deal with behavioural issues, they deal with all these learning disabilities. So the teachers always find out those who show these concerns, they are referred and they are given assistance.*

The Counsellor from the Kolkata school reported,

*Let's say there's a child who is having some difficulties, with behaviour or academics, it is routed through the section head. The Section head and the teacher put their heads together trying to sort it out. If they can't they'll come to the special educator or counsellor. Then we will work.*

The High School Section head from Bangalore gave the details of the system followed at their school,

*I mean we have a resource room here so maybe teachers are trained there. They do send the children and when they have an issue, they do go the teachers in the resource room and discuss what we can do. They talk to the parents as well, bring the parents there, make them talk to the parents because it's very difficult for them to understand our kind of language so when these people talk to them, they send them to be tested somewhere else and then they get the report, then they understand the magnanimity and they also pitch in to help.*

Teachers also spent time outside the confines of a class clarifying their doubts, guiding and mentoring them. The Mumbai school seemed to have a more formal system of mentorship. The SENCo divulged,

*Teachers are assigned a couple of students or maybe one teacher, one child, wherein teacher provides guidance to the child in whichever area possible.*

Mentioning how teachers reach out to students at a personal level not just for their academic difficulties, the Senior school section head of the Bangalore school said,

*Definitely we help them emotionally, we talk to them, we counsel them; even though we are not counsellors, but as parents we have always seen our children grow, so we know few difficulties and we try to, as teachers, we try to help them.*

A teacher from Kolkata shared,

*Cent per cent effort is made on the part of every teacher, a lot of time is given outside the classroom, children often come with their doubts and clarifications outside the classroom.*

Apart from the methods mentioned above, reduction/modification in curriculum for students with special needs, giving them concessions as allowed by the Board guidelines (CBSE or ICSE) and a system of hand over where the information about children of a particular class (especially the ones who had special needs) was documented and passed on to the next year's teachers were the other frequently used practices by schools. Sharing the systems of hand over in their respective schools the participants from the Delhi and Bangalore schools said,

Vice Principal- Delhi school:

*What we in our school do, we have this handing over from the previous class teacher to the next teacher, they tell about these children and how to deal with them. That is very helpful, so already the teacher knows that I'm going to deal with this child in this manner.*

Teacher- Bangalore school:

*Final promotional exam we write all the behavioural issues and why they are being promoted to the next level. Their class teachers will mention exactly what the real issue is, so it will come to me, so we have that as a written document also, though it is not recorded on a regular basis, term wise it is recorded. Only for problematic students, not for everyone.*

On giving concessions and accommodations as provided by the Board that the school followed - (ICSE or CBSE), the participants stated,

Teacher- Mumbai:

*We are also told about the concessions which have to be given to such children, so that is what we are told about and while corrections and all we follow that, and we cannot be very strict with the weak students or something, so we are sensitised to those situations.*

Vice-Principal-Delhi:

*Whatever concessions the Council allows we give from Class 6 onwards where the formal testing starts.*

Discussing about the buddy system some schools follow, some of the respondents shared:

Principal-Mumbai school

*We usually have this buddy system, so we have one of the good children sitting with him and every time they keep counselling him.*

SEnCo-Bangalore

*A study-buddy thought is also there always. Put them onto children who can help them. So, the hope is this child who is having a severe difficulty learns from the other children because we are aware that one third of the learning or let's say one-fourth of the learning comes from peers. So, we try to utilize that fact.*

A few participants also spoke about altering the teaching methodology for different sections/students and giving a variety of questions to cater to the different levels of learners. These approaches might be termed as differentiated instruction which they were practising in some way without knowing it by this name.

Senior school Section head- Bangalore school

*We try in our own small ways, tell them how to study, bring in some change in the methodology.*

A few teachers from the Kolkata school spoke about how they cater to students on different ends of the spectrum:

*In Commerce they are mostly the slow learners, so I give them more of summarised form, more notes and more diagrams so that they can pick up very fast.*

*...Since we have such classes where we have extremely intelligent children and extremely slow maybe, like very polarised, in that case I try to give questions that can be attempted by all, questions that can be attempted by the gifted ones, questions that should be repeated for the weak ones, in the same class only, because they take longer time to finish this, so the ones who are sitting, being intelligent those who have finished, there should be some challenging questions for them because otherwise they are getting bored.*

This sub-theme considered ways and means different schools had adopted to support students in their schools. The nomenclatures and systems were slightly different, but all schools had some kind of extra support or classes for students who required more support. Other than this, students were also guided and mentored for academic, behavioural and emotional matters. All schools that were part of the research also had a system of identification of students with special needs or those who needed

support and the process involved referrals to the section heads and the Special Needs department with special educators and counsellors stepping in as and when required. Other strategies involved assigning a helpful and bright student as a buddy to the ones who required that support. Schools also followed the guidelines of the respective educational boards and gave accommodations and concessions to students accordingly. Individual teachers also reported devising their own strategies and adopting a change in methodology at times to involve all learners.

### 11.3 Sub-theme 5.2 : Suggestions for Making Inclusion More Effective in Schools

This sub-theme reports all the solutions or suggestions given by participants that would enable teachers to cater to the diverse learners of a class more effectively. There were a multitude of suggestions and the most common ones have been mentioned below. Better coordination between the special educators/counsellors and mainstream teachers, access to more resources and materials, a support teacher or shadow teacher in the class, more parent engagement, support and more time given to the teachers were some of the suggestions that frequently featured in the findings. The findings reveal that several participants favoured the presence of a special educator/ shadow teacher/ support teacher in the class as they felt it would enable them to support all the diverse learners, conduct different activities and ensure better class management. A teacher from the Delhi school stated,

*I feel the inclusion of special educator in a class would be good. It would solve the problem for those who need support in the class.*

The SENCo of the Bangalore school looked at it from the child's point of view. She said,

*Because you need a dedicated person to help the child throughout in the classroom. It should not only be in the weekend during remedial class. It would probably hasten the whole process of coming out of their difficulties if we had done it on an everyday basis. So, since that has not happened yet, probably we have not come up with a solid solution as of yet.*

A teacher at the same school shared her point of view,

*Practically it may not be possible to; but we can have totally differentiated activities for different groups. it's not practically possible with one teacher but that may be helpful for the children.*

The Principal of the Kolkata school explained her thoughts on this topic,

*I think a shadow teacher in the classroom would benefit. A second person, may not be a very highly trained teacher but could be trained in differentiated teaching, making worksheets, simplifying things, fond of children, looking for different qualities in that second teacher. May not be a technically qualified special educator, but I think a shadow teacher would help.*

Access to other resources and material was also considered essential by participants to help them in reaching out to the diverse learners in the classroom.

A teacher from the Delhi school suggested,

*More materials, if they are already available from the school's side like a resource bank from the school, we could have that....that would be really helpful or the special educator may pitch in, work for us, help us out.*

Teacher- Bangalore (Survey)

*More teaching aids and smart board in class.*

The counsellor from the Mumbai school reiterated,

*Special educators do an excellent job here, but that material never reaches the teacher. So, if the teacher has to use the same fish bone diagram or if the teacher wants to use mind mapping, so maybe a PPT on that can be given to the teacher by the special ed or maybe a few worksheets on that like critical thinking or creative thinking, divergent thinking.*

More coordination and team work between the special needs team and the mainstream teachers, was also considered an important factor in making inclusion across the school more effective.

The Delhi school counsellor said,

*Regular trainings, orientations, constantly having case wise discussions, giving an open platform to the teachers to walk up to the counsellor or special educator to discuss the challenge they are facing and discussing possible solutions, taking it back and implementing it and everyone working in harmony together is what can help sort it out.*

Speaking about the lack of mutual understanding between the Special Needs Department (called the Personalised Learning Centre) and the mainstream teachers, the Principal of the Mumbai school stated,

*Acceptability of the PLC team ..it is the perception that the teachers have of them...they feel that they deal with them separately, I doubt whether they themselves understand ... So, while we are training the teachers to understand special education needs, we should train a resource person also to understand a mainstream teacher because the expectations of the Personalised learning centre from the teachers is too much, unrealistic. So, more compatibility and cohesion between the two.*

A teacher from the same school corroborated this lack of cohesion and suggested better coordination.

*I would suggest that PLC department should also work hand in hand with teachers because we get to see them only twice or thrice a year when they are orienting us about the child. But what about the progress, if we are involved in that. And at least if on a fortnightly basis we discuss that this is what the child is actually doing in class and this is the progress, then I think it will work better.*

As an extension of the same idea, participants also recommended that within school the teachers should confer, deliberate, discuss and plan to brainstorm, find solutions and share best practices with each other. Teachers teaching a particular group of children who had academic or behavioural difficulties could also plan common strategies for them. Conducting trainings in small groups was also suggested. The High School Section head of the Bangalore school stated,

*Teachers should themselves form a group and come out with variety of techniques that they can use to tackle issues that arise in class.... behavioural, most of it is behavioural.*

A teacher from Delhi mentioned in the survey,

*Conducting small group training within school premises and practising same as a policy and then selecting the next group.*

Speaking about small group trainings and interactions, the SENCo of the Kolkata school said,

*If there are smaller groups where we are able to discuss these then we can say that OK, this is what you do with this one, you do not need us, after all, an ADHD child, taken out of the classroom, what is he learning? That in a one-to-one situation he can behave himself, he's not distracted. Does he learn any skill that will actually help him in real life? One to one is not real life.*

A teacher from the Mumbai school spoke about a common strategy.

*...if I am applying some strategy, not necessary that it is going to work with the other teacher. She may have her own strategy but if we come together, if we discuss about it and come up with a strategy which is going to help all the teachers, that is going to help the child as well as all the teachers.*

It was also suggested that all teachers should be given exposure to teaching students with SEN for experience and practice. This was essential to reduce dependence on a few teachers and empower each teacher to efficiently provide for all the diverse learners in her class with confidence.

The SENCo of the Delhi school highlighted this point in her statement,

*They should be given an opportunity to work with diverse learners. It should not happen that one teacher is sensitive, one teacher is efficient so every time children with special needs are given only to that teacher. So, I think if everybody is getting experience and exposure, so teacher can evolve herself.*

Teacher-Delhi (Survey)

*It might be a good idea to have teachers teach within an inclusive classroom regularly - maybe once a week. Training coupled with regular experience is the best way out in my opinion.*

Teacher-Bangalore (Survey)

*...by applying the strategies and getting repeated exposure to such students*

Furthermore, participants said that teachers needed to have more time and opportunities to know the children, their learning style and develop a good rapport with them. This would aid them in reaching out to them and catering to their needs better. Having proper documentation such as anecdotal records and a well-established system of handover was also one of the suggestions. A Delhi teacher said,

*Somewhere I feel that Circle time can be integrated with the subjects. As a subject teacher I should be having the same rapport with a child. So, I think we should plan our lessons in such a way that at least once in a month we can all have a circle time with the children.*

The SENCo of the Mumbai school also underscored the importance of rapport building.

*I feel that time should be there wherein children can bond with their teachers and teachers can also connect well with the children and maybe if whatever guidance required at that point of time can be given so many things can be under control.*

A teacher from Bangalore mentioned in the survey,

*By being sympathetic and kind towards the students would help in gaining their confidence. Later we can mould and shape them as a beautiful human being. At the end of the day it's behaviour not academics that matters.*

Highlighting the need for documentation, a teacher from Delhi said,

*I might have interacted with a child, I get to know something about a child, if I have it put somewhere, then the next teacher teaching can refer to it...*

*... As a school I think there should be a record of each child, you can get back to. Maybe you've joined midterm and the teacher who has taken the handing over has left or something, then what do you do?*

Similar thoughts were expressed by a teacher from Mumbai.

*Every year, we get a new bunch of students. So, what I feel is it would be beneficial for me if I come to know about each child. So, if I am pre-equipped, from the school's end, from the previous teacher, it would help.*

Additionally, several participants advocated modifying or reducing the curriculum and or assessment. They felt that it was unfair and very demanding for some students with special needs to navigate the complexities of the ICSE and CBSE curriculum and for teachers to help them do it in the constraints of the given time. A couple of teachers from two locations stated in the survey,

Kolkata:

*Strength of the syllabus and curriculum should be reduced.*

Bangalore:

*If no. of lessons and some activities are reduced the teacher gets enough time to cater to individual students and their requirements.*



Teachers felt that it was unfair not just to the students but also to the teachers to complete the same syllabus in the same time frame for all students such that they are able to actually learn and assimilate the knowledge. This seemed a very valid point as the syllabus in these boards is designed for the average child. When the content, level of difficulty and evaluation were all the same then it was inevitable that some children were going to be at a disadvantage and teachers were going to struggle doing justice to their learning. During the focus group discussion, a teacher from Kolkata elaborated,

*I also feel that no matter how much we say that these children need to be included, I also feel under certain circumstances the syllabus needs to be tweaked a little to suit the needs of certain children. I'm not asking them to be put in separate curriculum, no, either you increase the time for us to complete the syllabus or you allow us to deal with the child separately, because the child may not always be able to grasp what the entire class is studying. It becomes embarrassing and uncomfortable for the child also occasionally.*

Another teacher added,

*If not content, the difficulty level should be different for them.*

A teacher from the Mumbai school reasoned,

*The major issue is time constraint then give us some time or give them some exceptions with the syllabus or something. An average child is trying to know that topic, so what about the child who is facing all these problems.*

Again, talking about assessment,

*...simplification...or the paper that is coming could be of simpler level than the others or explanation.*

Another aspect discussed was the work pressure on teachers. When various kinds of demands were placed on teachers, it took away from the time available with them to plan, prepare and provide for different learners. Hence teachers advocated reducing the work pressure on them to facilitate better inclusion.

Teacher- Delhi (Survey)

*Teacher should teach only. When she is expected to become a superhuman then only things start falling apart. Honestly it is not possible for a teacher to do so many things at the same time. Different type of learners need different strategies and this is not possible if the teacher is overburdened with other work.*

Teacher- Bangalore (Survey)

*Should reduce clerical work, should not over burden with classes*

Ensuring parent support and understanding and better discipline policy was also mentioned by participants. Sensitisation of everyone included in the system-students, teachers, staff and parents was considered important as well. The SENCo of the Delhi school conveyed her thoughts in the following words:

*Creating awareness of special needs which I think is one of the important areas.  
Then sensitization as a whole in the school, not only the teachers but everybody  
including the parents of other students.*

This sub-theme focussed on the suggestions given by participants from their experiences and from their own points of view as practitioners in the field to improve the efficacy of the inclusion process. There were a host of suggestions offered some of which have already been addressed in previous sub-themes such as reducing the work pressure, class strength, ensuring parental involvement, support and understanding, better discipline policy, getting more time and having access to more and better resources. Additionally, there were new recommendations such as modification of curriculum/assessment, building a rapport with children and better coordination between the SEN department and mainstream teachers and sensitisation of all stakeholders in the school system.

#### **11.4 Chapter Summary**

This chapter focussed on the practices prevalent in schools to support students who required additional help and guidance and suggestions to make inclusion more successful. Although some methods were unique to the schools, some of the common ones were identification of students requiring additional help and support, conducting extra classes, accommodations and concessions as per the board and buddy system. Several ideas and recommendations were given by the participants to effectively implement inclusive practices in schools. The primary ones that have significance for professional development were better collaboration between professionals, especially, special educators and mainstream teachers, soft skills, securing parental involvement and cooperation, time management and inclusive teaching strategies to simultaneously engage the entire class. This is the last of the Findings chapter. The next chapter discusses and interprets the findings of the first theme of teacher challenges in respect of the existing literature.

## CHAPTER 12: DISCUSSION – I

### 12.1 Chapter Overview

The previous chapters presented the findings related to the themes that emerged from the data. This chapter begins with an introduction followed by the framework of the Discussion chapters and the justification for the decision. The Discussion chapters (Chapter 12, 13 and 14) review the findings of the study in the context of previous studies and analyse and interpret them with reference to the literature in the field.

The primary research objectives were to find out the challenges faced by mainstream teachers in catering to a class of diverse learners, their professional development needs in relation to inclusive education and suggestions on the content and features of an ideal professional development programme that would address their training needs. The research was conducted in mainstream, inclusive, English medium schools in four of the five largest metro cities of India: Delhi NCR, Mumbai, Bangalore and Kolkata. Perspectives of other stake holders (such as heads of schools, SENCOs, section heads and counsellors) were also sought to gain a holistic understanding of the situation. Additionally, all participants were asked to provide their inputs on ways to overcome teacher challenges in inclusion and suggestions to make inclusive practice more effective in their respective institutions and schools at large.

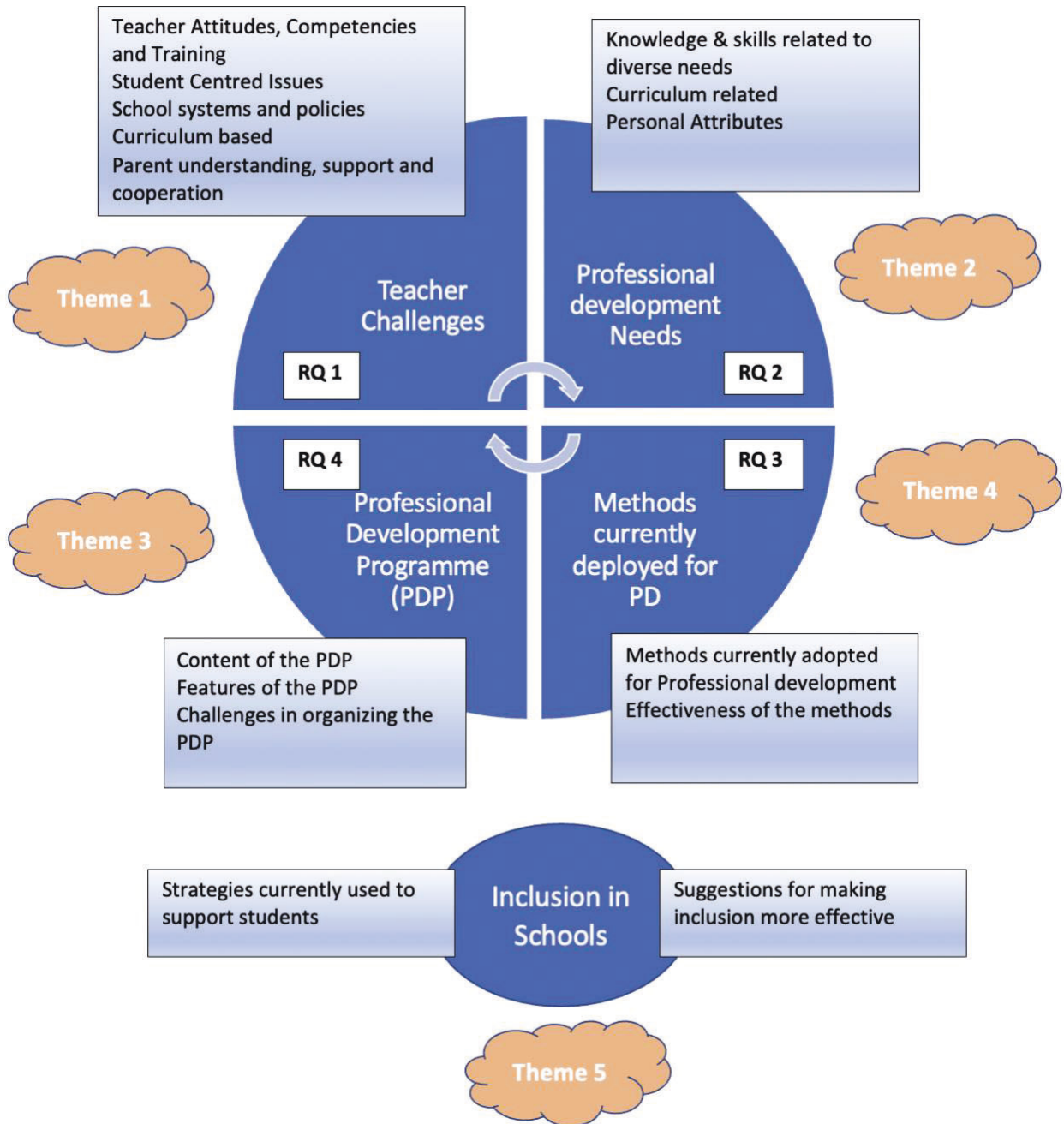
The study elicited some interesting findings with regard to each of the research questions. The research questions were:

1. What are the difficulties/challenges faced by middle school and secondary teachers working in mainstream Indian schools in addressing the diverse needs of learners in a classroom?
2. What are the professional development needs of middle school and secondary teachers in mainstream Indian schools in urban locations in relation to inclusive education?
3. What methods such as teacher training, workshops etc. are being currently adopted to meet these professional development needs and how effective are they?
4. How should a module/manual/workshop be designed such that the professional development needs can be addressed for these teachers?

There were several commonalities found between the data collected from the four locations on all the research questions and also some exceptionalities pertaining to two locations. From the research questions, a number of themes emerged. However, after data organisation and analysis, they were narrowed down to five themes and sub-themes. The themes, sub-themes and the relationship with the research questions is as shown in the Figure 12.1 below:

**Figure 12.1- Connection between Themes and Research Questions**

**Figure 12.1**



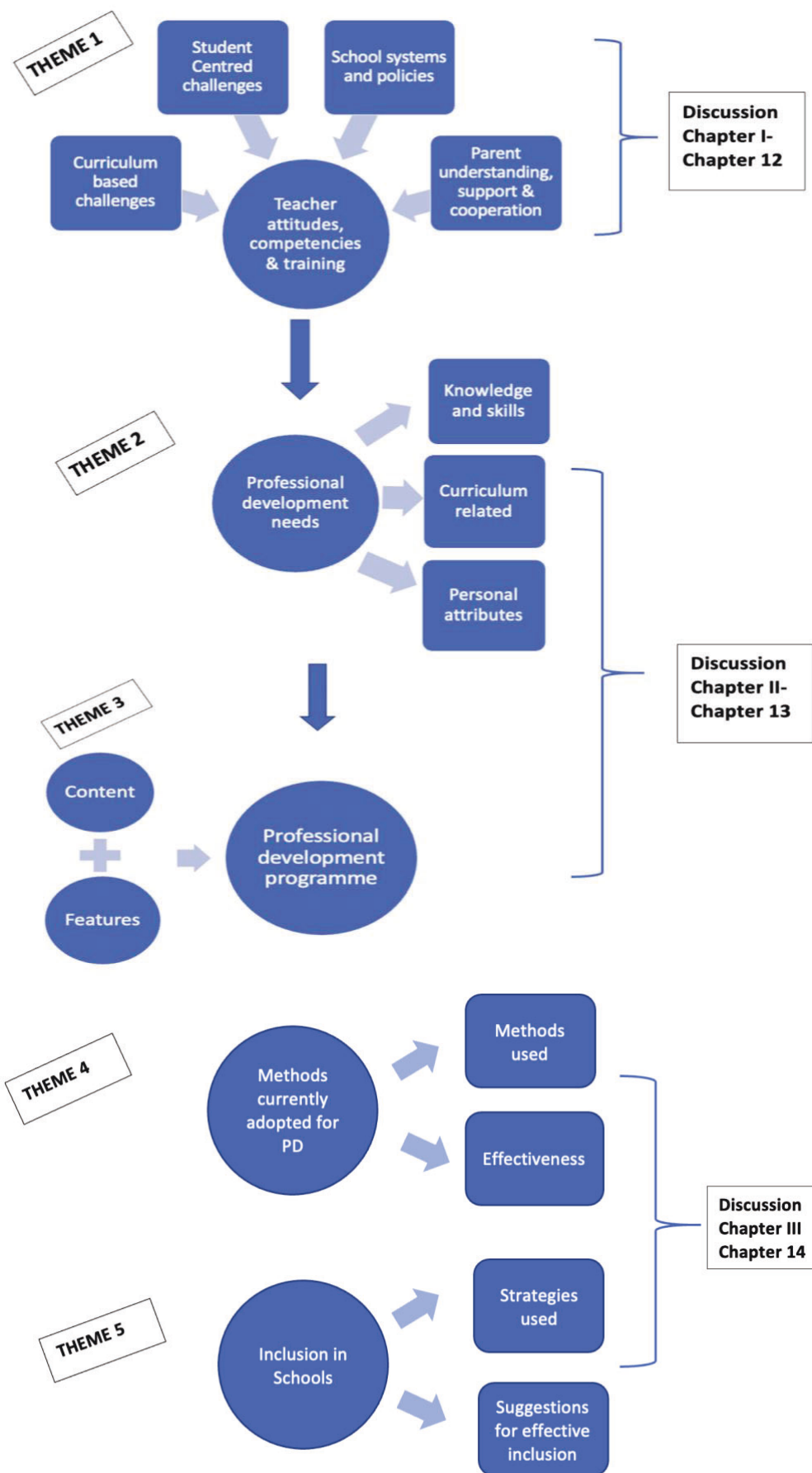
## 12.2 Framework/Structure of the Discussion chapter

The discussion within this thesis has been divided into three chapters. This first chapter explores the first theme on teacher challenges. The second chapter deliberates on Theme 2 and Theme 3 (professional development needs and the structure of a professional development programme) which are closely related. The third Discussion chapter (Chapter 14) explores the last two themes which deal with methods used for professional development and inclusion in schools, as practiced currently. Although there is an obvious overlap between all the themes, the chapters have been so divided because the first three themes flow into each other and are more closely related than the last two. However, for the purpose of clarity and maintaining ease of reading, these three have also been split as the first theme about challenges in Chapter 12 and the professional development needs and PDP in Chapter 13.

The Figure 12.2 depicts the organisation of all the Discussion chapters and the reason for adopting this sequence. As seen in the figure, I begin by discussing the first theme which pertains to the challenges faced by teachers in meeting the needs of the diverse learners in a class. Within this theme, the sub-theme of Curriculum Based Challenges is discussed first as that seems to be the predominant challenge as per the participants, especially as the teachers view it. However, it also points to the fact that the teachers are not equipped and trained to meet the diverse educational needs of the learners in their classes. The other sub-theme of Student-Centred Issues which highlights the difficulties teachers face due to the variance and diversity in their classes could again be attributed to the lack of competence and training for managing such issues.

Similarly, the other sub-themes of School Systems and Policies and Parent understanding, Support and Cooperation although seem like external factors over which the teachers do not have control, indicate the teachers' inability to negotiate these factors, which would be a given in every school, with some institution specific variances. Thus, doing their best within the given constraints is a skill which teachers need to develop and sharpen. Therefore, all the other sub-themes merge into the sub-theme of Teacher Attitudes, Competencies and Training. This directly leads to the second theme, which is the central focus of the study- the Professional Development Needs of teachers teaching upper primary and secondary level. Within this second theme, the different aspects of the training needs, which also form the sub-themes and were mentioned as challenges by the participants earlier: Knowledge and Skills, Curriculum related and Personal Attributes are discussed.

**Figure 12.2- Organisation of the Discussion Chapters**



This then connects to the third theme which is the logical end result that this research set out to achieve -provide a broad structure of a Professional Development Programme (PDP), which can meet the professional development needs of teachers as found out earlier. Here the structure is divided into the content of the PDP and features as elicited from the participants. Theme 4 and 5 are covered in Chapter 14, the last of the Discussion chapters.

### 12.3 Theme 1: Teacher Challenges in addressing the Diverse Needs of Learners

The survey taken by the teachers had a question about the challenges faced by them in catering to the diverse learners in their classes. The Table 12.1 below shows the responses and how they form part of different sub-themes.

**Table 12.1-Teacher challenges in an inclusive classroom and related sub-themes**

<i>Q12. What are the challenges faced by teachers in addressing the diverse needs of learners in a classroom?</i>		
Answer Choices	Responses	
	Number of Participants	Percentage
Classroom size	96	34.29%
Pressure of syllabus completion	221	78.93%
Lack of knowledge/understanding of different kinds of learners	90	32.14%
Lack of skills of teachers to cater to the diverse learning needs of students	78	27.86%
Lack of training of teachers in inclusive teaching practices	101	36.07%
Lack of resources	60	21.43%
Negative/unfavourable attitudes of teachers towards handling a class of diverse learners	39	13.93%
School policies and systems not supportive	22	7.86%
Lack of time (both during class and for extra preparation of material/resources required to cater to all students)	152	54.29%
Others	11	3.93%

The answer responses to this question cover three of the sub-themes. However, the other two sub-themes of Student-Centred Issues and Parent Understanding, Support and Cooperation were added based on the qualitative data from focus groups and interviews. Since the interviews were with the

different stakeholders such as the heads of schools, section heads/coordinators, SENCOs and counsellors, the themes were derived from the perspectives of all these different participants. Therefore, the findings from the survey were verified with the findings from the focus groups and interviews through a process of multi-methods triangulation. As inclusive education in schools has become more commonplace, students with special needs across different age groups are found in many schools. However, the challenges faced by teachers in upper primary and secondary school are more complicated from those in primary and lower classes. This is because of the increasing curricular pressure, increasing complexity of subject content, the demands of formal assessment procedures and the requirements for greater discipline through personal led study in senior classes as well as other factors such as structural, instructional and academic expectations (Reusen *et al.*, 2000)

#### 12.3.1 Sub-Theme 1.4 : Curriculum-based challenges

Curriculum based challenges seemed to be the most dominant challenge when teaching students at the upper primary and secondary stage of education. The pressure of syllabus completion was ranked the highest in the survey with 79% of the participants considering it as an obstacle for teachers in addressing the diverse needs of learners in a classroom. The other curriculum-based challenge was lack of time required to cater to all the learners of a class and this obtained the second highest vote with 54% participants marking it as a challenge. Participants shared that these challenges became even more pertinent in the secondary stage where students were to appear for a public examination and the focus was on academic achievement.

Teachers in most schools are expected to follow a fixed system of curriculum delivery with lesson plans and assessments that do not allow much scope for variance in methodology or doing anything outside of the plan. Motitswe (2012) also contends that this pedagogical and curricular inflexibility proves to be an impediment for the diverse learners in an inclusive classroom. Along with ensuing issues such as the content lacking significance, unsuitable and rigid assessment procedures and unavailability of appropriate teaching learning material, the difficulties are magnified for both teachers and learners. Not just the teachers but the other respondents were also in agreement with the presence of this obvious hurdle teachers had to encounter in senior classes as the pressure of academics increased. Participants also shared that teachers found it difficult to manage the two aspects of academics and meeting the diverse student needs together since it was not a very research or project-oriented study but primarily text based. Even though they realised that different approaches are needed, the paucity of time and the large portions of material that they need to complete did not allow them much room to work on any special kind of teaching methods. Teaching students with special needs using general mainstream methods does not cater to their learning needs and proves to



be challenging for both (Zimba, 2011). Also, since the schools involved in the study were all private schools, they were under pressure to show excellent results in the Class X and XII Board examinations in order to justify the fees paid by parents. Thus, all schools strived to present evidence of how they maximised the academic performance of their students and this expectation was automatically passed down to the teachers who focused on this issue in higher classes. This finding is supported by Yadav *et al.* (2015) and Sharma and Das (2015) who assert that teachers in private schools in India are under a lot of academic pressure and therefore, must be guided and supported to cater to all students, not just the academically bright ones.

It emerges that teachers find it difficult to cater to the diverse needs of students when faced with the task of focussing on completion of syllabus and proper delivery of content. This finding is supported by Clough and Lindsay (1991) who contend that a diverse class that has students with special needs poses practical difficulties for teachers focussed on subject content. Teaching in secondary inclusive classrooms is also complicated by the fact that teachers being subject specialists, there are different teachers for different subjects and there is greater expectation to produce good results in the examinations (Pearce 2009). The school management were aware of this difficulty and therefore schools required that teachers spend some extra time with students who require that support outside of class. However, even when the teachers were willing to give extra time to the children who required that assistance and guidance outside the class, some of them shared that they had a paucity of sufficient time during school hours due to their heavy workload. Teachers also stated that they were hard pressed for time if they had to do something like preparing additional/different teaching material/aids for some of the children. Thus, this study highlights the work pressure and curriculum challenges faced by educators even in leading, urban private schools in India, especially those teaching students at the senior school level. It indicates that curriculum inflexibility and paucity of time are a ground reality in all schools, irrespective of the kind of school (government or private) and location. Teachers must therefore be supported in all possible ways to make inclusion a reality.

The other challenge was knowing when to pull out the children for the extra help sessions, as even Games and activity periods were deemed important for the overall development of children. Other curriculum-based challenges encountered by teachers were subject specific. English teachers found it difficult to cater to the needs of children who had reached upper primary and secondary level with very poor skills in language that were way below the expected level. This huge deficit they said was difficult to fill and it was not possible to teach basics at this stage, though it hampered their learning of English as well as other subjects. Similarly, teachers of Maths felt that students weren't prepared to put in the regular practice required in the subject. Also, in the context of catering to the needs of different learners, they mentioned that explaining abstract concepts at that level through activities and

other aids was an arduous task. Teachers of History, Geography and Biology had their own subject specific challenges such as children not being able to draw diagrams in Biology and not being able to memorise and recall large portions of the text in History. Regional language teachers felt that students did not have enough interest in the subject.

While the challenges pertaining to the vast curriculum and relatively less time in senior classes cannot be denied, the fact remains that teachers are not equipped enough or adequately trained for the mammoth task they are entrusted with; that of providing for the diverse learning needs of students while also managing the curriculum in the given time. This has been confirmed in several other research studies (Jangira *et al.*, 1995; Bhatnagar and Das, 2013; Das *et al.*, 2013b).

### 12.3.2 Sub-Theme 1.2: Student Centred Challenges

Respondents also pointed to factors in the students as being the cause of their problems or inability to cater to all of them. These included adolescent issues like gadget addiction, indifferent and/or arrogant attitude and peer pressure, low or wavering attention span, behavioural issues and the huge variance in the cognitive level, behaviour and learning needs of students in their classes. This thinking seemed to be an outward projection of the difficulties faced by the teachers on to the students. Teachers across locations mentioned in the focus groups that there was a lack of respect for teachers in general and students were unwilling and disinclined to follow their instructions or take their help even when they were ready to provide it. Respondents also spoke about the challenge of engaging the students with attention deficit and gaining and maintaining the attention of the class as a whole.

Behavioural issues in students were a major issue that most of the mainstream teachers struggled with. In response to a question in the survey about the category of students they found most difficult to cater to, behavioural difficulties was the top most choice with 62.5% teachers marking it. This is in accordance with previous research studies where it was found that teachers are most unwilling and hesitant in including students with social-emotional and behavioural difficulties and found it most difficult to meet the needs of these students (Clough and Lindsay, 1991; Forlin, Douglas and Hattie, 1996; Avramidis and Norwich, 2002; Sharma *et al.*, 2006). In their study on attitudes and concerns of pre-service teachers conducted by Sharma *et al.* (2009), they found that participants in their study had the least favourable attitudes towards inclusion of students with behavioural difficulties while they had the most positive attitudes towards including students who require academic modifications.

Discomfort, fear and avoidance often come from a lack of awareness and confidence. Lack of knowledge and skills in handling the emotional and behavioural difficulties of students in turn stem from a lack of understanding and training in this aspect. These could be some of the reasons teachers

face challenges with social-emotional and behavioural difficulties of students. Not having a real understanding of such difficulties makes it difficult for teachers to distinguish between a genuine behavioural/other difficulty (such as ADHD) and regular adolescent behaviour which may result in the impulsive and restless behaviour owing to ADHD, often wrongly interpreted as disrespectful and bad behaviour. Additionally, there may be attitudinal factors and lack of soft skills which might lead to teachers taking the behaviour personally and getting offended or upset and reacting inappropriately which is likely to make matters worse.

Although understanding and appropriately responding to student behaviour is an inherent skill required of a teacher, the ones who mentioned this believed that it was something within the students over which they had no control. They seemed to operate from the premise that their teaching, which was otherwise perfect, suffered as a result of these behavioural issues of a few children in class and not once considered it as being something they could have contributed to or that was because of a lack of skill on their part. That there are a range of learning needs in a classroom is a given fact. However, the teaching methodology adopted is usually 'lecture' which obviously is not an effective method for active learning and definitely not suitable for all students. Thus, when the class is not interesting enough and the students are not engaged, they are bound to be distracted and also cause disturbance for others. This challenge of not being able to account for the diverse learners in the class was also mentioned by the participants. The range was vast - from the gifted on one end to the not so bright, to the ones with learning disability and to those with attention and/or behavioural problems and catering to all of them in a large group setting and within the constraints of time and syllabus completion was a huge ask for all teachers. Work and writing related problems such as students not willing to do written work or not being at par with the written work required at their class level or not completing the classwork/homework given by teachers was a common complaint from teachers. They struggled to get the required output in terms of both quality and quantity of the written work from students.

All the challenges mentioned above, are directly or indirectly linked to class management, lesson planning, soft skills in teachers, teacher attitudes, knowledge and understanding of different kinds of special needs that can be found in a class and ways to cater to them. The successful inclusion of diverse learners hinges on these abilities of teachers and their feelings of self-efficacy to individualise instruction, adapt and modify the curriculum and assessments and work collaboratively with parents and other professionals to ensure the academic attainment of all children (Operti *et al.*, 2014, Wilson *et al.*, 2016). Bhatnagar and Das (2014) also reported that barriers to inclusion included a lack of trained teachers and a lack of differentiation in instruction among others. The teachers in this study

clearly required training in all these areas and these form part of their professional development needs to cater to an inclusive class.

### 12.3.3 Sub-Theme 1.3: School Systems and Policies

School systems and policies not being conducive for practicing inclusive education was another challenge faced by teachers. This was not about the schools' philosophy on inclusion as such but rather other systems and practices followed by schools which indirectly hindered the teachers' ability to implement inclusion in the classroom. They mentioned factors such as lack of resources, class strength, work pressure, lack of effective early intervention, too many events and activities throughout the academic year and discipline issues. Lack of resources has been found to be a concern for teachers in several studies conducted earlier (Sharma, 2001; Shah, 2005; Bhatnagar, 2006). In a study conducted by Sharma *et al.* (2009) in Pune, India to study the concerns and attitudes of pre-service teachers, participants were found to be most concerned about lack of resources. Although the results are not directly comparable as the concerns in this study were measured using the CIES scale and the study was on pre-service teachers while I used a self-designed survey in my study and participants were in-service teachers, it can be stated that lack of resources is a factor that poses a challenge for teachers.

Lack of resources was mentioned by participants in my study too as an impediment to the effective inclusion of all students. In response to a question in the survey about the challenges faced, 21% of the respondent teachers mentioned lack of resources as a challenge. Participants in the focus groups and interviews said that better resources, whether in the form of an additional teacher in the classroom or teaching learning material, would help the teachers in ensuring the learning of the diverse learners in their classes. These findings are similar to those of Shal *et al.* (2016) in Ahmedabad where teachers were most concerned about lack of infrastructural resources. The counsellor of one of the schools pointed out a slightly different facet where she said that although the resource room was equipped with the necessary resources in terms of teaching learning aids, equipment and worksheets, it was not shared with the mainstream teachers in class. Thus, the resource room seemed to work in isolation and there was a lack of collaboration between the special needs department and the regular teachers.

Class strength or the number of students in a class also posed a hurdle for teachers as larger class sizes impeded the successful implementation of inclusive practices. In the survey, 34% of teachers mentioned classroom size as a challenge. It was also mentioned by respondents in the focus groups and interviews. This finding is similar to the results obtained by Bhatnagar and Das (2014) and Singal (2008) in schools in Delhi where large class sizes were identified as a major impediment in inclusion.

In another study by Bhatnagar and Das (2014), poor infrastructure and large class sizes were some of the primary concerns expressed by teachers.

Lack of early intervention in case of students with special needs was a factor not anticipated as a finding and is not directly mentioned in literature read for this thesis but it was recognized as a problem area by teachers. They felt that since children with special needs were not identified at a younger age/lower class, they came up to senior classes with significant gaps which were not possible to address when the focus was on the curriculum and preparation for Board exams. This is indeed a significant and new finding and underlines the importance of early intervention in the successful inclusion of diverse learners.

Work pressure came up as another reason teachers were not able to adequately support all learners. Not only did they have several teaching periods in a day, they also had substitutions and other responsibilities which made it difficult for them to give additional time to children. These findings are in line with the study conducted by Singal (2008) in Delhi where teachers shared that work pressure and time constraints were a challenge in addressing student diversity. Participants in my study also shared that they were under a lot of stress due to the additional work assigned and being observed constantly. Some respondents felt overburdened with their present workload and this seemed to have a negative effect on their willingness as well as efforts towards including all learners. This view is supported by Ingram (1997) who posits that teachers who are already stressed with their existing work schedules, are likely to be apprehensive and unwilling to take on extra work and responsibilities on account of integration.

It is true that a teaching job in the current time is no longer restricted to just teaching related work but involves so many administrative and other responsibilities. While school specific concerns would vary and need to be addressed by the respective institutions, teachers' efficiency and skills including time management could definitely be increased through a well-designed professional development programme that takes into account all these factors. In an American study conducted by Vaughn *et al.* (1996) to investigate the perceptions of mainstream and special teachers towards inclusion, the teachers mentioned several factors that impact the successful implementation of inclusion. These factors such as class size, lack of resources, the benefit of all students from inclusion and lack of adequate teacher preparation are also factors mentioned by participants in my study.

Discipline was mentioned as a major concern by participants in two locations- Mumbai and Bangalore. This was different from the behavioural issues mentioned in student centred issues as it pertained to the discipline policy of the school. Teachers felt that the policy was inefficient and

because of it, adequate discipline had not been instilled in the children. This was not a behavioural problem with just a few children they thought, but a lack of discipline in the school overall. They felt that due to the policy they were unable to take appropriate action on issues of indiscipline. However, it hampered their teaching and their ability to reach out to different learners because they lost a lot of class time in dealing with these discipline issues. This finding is consistent with that of Singal (2008) where the issue of discipline was raised by participant teachers who expressed the same feelings as the teachers in my study about time getting wasted in disciplining the children.

Although the teachers who mentioned this difficulty considered it as an external variable over which they had little or no control, it also suggests a lack of understanding of children of today's age, lack of soft skills such as patience and an inability on the teachers' part to build a rapport with the students. While it is beyond the scope of this research study to comment on the individual discipline policies of the schools and their efficacy, the fact remains that understanding of different kinds of learners and skills in reaching out to them can definitely be developed in teachers through training.

#### 12.3.4 Sub-Theme 1.5: Parent Understanding, Support and Cooperation

This was an aspect not considered to be directly affecting the teachers' ability to effectively cater to all students in a classroom. Hence, it was not mentioned in the survey. However, it came up as a factor during the focus groups and interviews and was mentioned by participants across all locations. The participants shared that on one end of the extreme there were parents who were very harsh with their children, had high expectations from them and pressurised them over marks and academic performance and on the other end there were parents who either pampered their children or were too busy/unbothered and neglected the children's needs.

Another significant hindrance seemed to be due to parents not accepting the child's difficulties/limitations and thereby not seeking/accepting the support required whether from school or externally. Furthermore, a lack of acceptance of the reality made some parents push the child towards achieving impossible targets leading to frustration and emotional issues in children, which often manifested inappropriately as behavioural concerns in school. The Principal of one school also stated that non acceptance of the child's difficulties on the parents' part made it difficult to provide the requisite help to the child. Parents not working in tandem with the school, not following up with the work at home or providing the support required to the child was another common challenge because teachers felt that the desired results couldn't be achieved unless parents were supportive. Eccleston (2010) also stresses on the necessity for school professionals and parents to work together to enable students with special needs to meet their academic goals. While this again seems to be a

variable that is outside the teacher's control, it should be considered as part of the home-school relationship which a teacher needs to maintain. Fostering good parental engagement and dissemination is likely to result in making the teachers aware of the struggles, concerns and challenges of parents of students with special needs, help build empathy and enable them to support the children as well as parents more effectively. Sukys *et al.* (2015) concur with these views and state that parental involvement of children with special needs has a significant impact on inclusive schooling. They further recommend that parent engagement should be actively sought and facilitated by teachers and other professionals through appropriate communication and by making parents feel like equal partners in the education of their children. They assert that greater parental involvement leads to better academic outcomes for children with special needs. Additionally, appropriate training which includes knowledge about the different kinds of special needs, strategies to support them and benefits of the same for children would give teachers the necessary confidence and skills to interact with parents effectively and enlist their cooperation.

#### 12.3.5 Sub-Theme 1.1 : Teacher Attitudes, Competencies and Training

While the other four sub-themes also indicated a lack of skills and training on the part of teachers, this was a separate sub-theme as well. Negative teacher attitudes towards inclusion, lack of skills and training, lack of knowledge and awareness, interest and drive and lack of soft skills were mentioned under this sub-theme. While negative/unfavourable attitudes towards inclusive education was mentioned by 14% participant teachers directly in the survey, they have also been inferred from the statements of the participants in the focus groups and interviews. The other factors such as lack of skills and training were also at times directly mentioned by teachers in the survey as well as in the focus groups and interviews and at times indirectly inferred from something they might have said in response to some other question or during the course of the discussion. The perspectives of other stakeholders such as heads of schools, counsellors, SENCOs and section heads were also crucial here as this aspect was directly related to the teachers themselves and it wasn't easy for anyone to accept that there was something they lacked, especially in front of an unknown external person (researcher).

Some of the factors mentioned by the participants for lack of skills and training pertained to dealing with behavioural and emotional issues, catering to the diverse needs and different pace of learning of students in the classroom and managing the class discipline. While some like these were directly stated, some could be inferred. For instance, teachers lacked skills in differentiated instruction could be implied from their statements though the term as such was not mentioned. However, differentiated instruction would help them address the needs of the different learners at the same time leading to positive engagement of all students in a class. This aspect is the most crucial as it is the teachers' skill

and readiness to alter their teaching practices in order to cater to the different learning needs of the students in their class that determines the success of inclusion (Forlin *et al.*, 1996; Forlin *et al.*, 2009). Therefore, a good lesson plan which is designed with care and awareness, has built in flexibility and takes into account the different learners of that class is essential. Similarly, ‘classroom management techniques for an inclusive class’ was also not directly mentioned here as a factor but is something required by teachers to establish an orderly and stimulating classroom environment that is conducive to the learning of all students. Sharma *et al.* (2009) contend that despite having policies on inclusion in place, one of the reasons India has not made substantial progress in the inclusion of students with disabilities into regular schools is teacher training. They suggest that with most of the teacher training institutes in India not having enough content or training related to the teaching of students with disabilities, the teachers are not adequately trained in this area and might therefore be unwilling and hesitant towards the concept of inclusion. Being able to identify the needs of students, whether academic or behavioural was also a challenge some teachers struggled with. Especially when teaching students in this age group, teachers often found it difficult to differentiate between a genuine need and usual adolescent behaviour.

Teachers clearly lacked competencies in the above-mentioned areas. This is similar to findings by Das (2001) who reported that teachers did not consider themselves to possess the knowledge, skills and competencies required to teach students with special needs. Another important set of skills required to succeed, especially when teaching students at this stage is soft skills. These are personality traits or attributes such as empathy, communication, patience and emotional intelligence or maturity. These soft skills that are required to understand and appropriately engage with students at this age level were also lacking in some teachers. This was mentioned by teachers as well as other stakeholders. A couple of counsellors mentioned that some teachers often lost their temper and got flustered. One of the Principals of a school also shared that all teachers did not have the same drive, patience or tolerance to cater to the diverse student needs.

Negative or unfavourable teacher attitudes and lack of interest and drive in them towards the inclusion of students with diverse needs were major impediments. While this was clearly mentioned in the statements of the other stakeholders like SENCos and counsellors who owing to their roles, had an opportunity to closely observe and work with teachers and as such were privy to their behaviour and attitudes in the day to day running of the school. There were also statements from the teachers themselves where they said that it was not possible to do anything in the class other than in the assessment part.



This indirectly reflects the attitude and mindset of some teachers where they have already decided that nothing can be done by them to provide effective learning opportunities to the diverse learners in their class. It is obvious that teachers with this approach to their role in making inclusion effective are not going to make any efforts to learn strategies, find solutions, change their pedagogy or take any concrete steps to support students with diverse needs in their classrooms. These findings are in line with studies conducted by Parasuram (2006) in Mumbai where in-service teachers and Sharma *et al.* (2009) in Pune, where pre-service teachers were found to have somewhat negative attitudes towards implementing inclusive practices. Similar findings were obtained in studies conducted in countries such as the United States, the United Kingdom, Canada, Australia and New Zealand which reported that teachers are often anxious and hesitant in carrying out the changes required for the successful implementation of inclusive education (Avramidis and Norwich, 2002; Harvey and Green, 1984; Scruggs and Mastropieri, 1996).

In response to a question in the survey that asked for the participants' views on inclusion, the following responses were received as shown in the Table 12.2 below. The green coloured rows highlight positive views towards inclusion while the others represent negative perceptions of inclusion.

**Table 12.2 – Teachers’ views on inclusive classrooms**

<b>Q11. How would you best describe your views on an inclusive classroom?</b>		
<b>Answer Choices</b>	<b>Responses</b>	
	<b>Number of Participants</b>	<b>Percentage</b>
Inclusive classrooms make teaching very difficult	28	10.00%
Inclusive classrooms foster greater understanding, respect and co-operation between children	188	67.14%
Having all kinds of learners slows down/hampers/disturbs the learning of the other children in class	47	16.79%
All students' needs are better met as there are greater resources for everyone	84	30.00%
Inclusive classrooms require extra time and effort from the teacher	135	48.21%
Inclusion leads to cognitive development of all and provides opportunities for children to gain mastery by practicing and teaching others (peer tutoring)	157	56.07%
I'm not sure	18	6.43%
Others	15	5.36%

Although this question doesn't ask about attitudes directly, they can be inferred from the participants' responses which have been framed in a way that reveal their underlying beliefs and attitudes about inclusion. While the positive statements talk about the benefits of inclusion from the point of view of children, the negative statements are written from the teachers' perspectives on inclusion and its impact on them. As seen from the table, the majority of the participants agree that inclusive classrooms are good for children- fostering greater understanding and respect among children, leading to cognitive development of all and providing opportunities for children to gain mastery. However, when looking at inclusion from the teachers' standpoint, close to half of the respondents (48%) were of the opinion that inclusive teaching requires more time and effort from the teacher. Around 17% of the respondents believed that having students with diverse needs in the class slows down and disrupts the learning of the other children in class. A small percentage (10%) also felt that inclusive classrooms made teaching very difficult. Das *et al.* (2013b) in their study on general education teachers also found that though many of them supported inclusion as a concept, they had concerns about their competence to implement inclusive practices. These results also find resonance with the findings of Chiner and Cardona (2013) who in their study on regular classroom teachers in Spain found that even though teachers might be neutral or favourably disposed towards inclusive education, they might have

concerns regarding the training, time, resources and material and support available to them to teach an inclusive classroom.

It could be said that the results are surprising given that after more than two decades of the inclusion movement gaining momentum in India, teachers in private English medium schools, in urban locations seem to be grappling to educate a class of diverse learners. However, they are hardly shocking because though there has been a general acknowledgement of the need for teacher preparation for inclusion, there is no clarity or consensus on what this preparation entails and how this is to be achieved. There is no standardization in either the pre-service or in-service training, undertaken by individual academic institutions as part of Continuous Professional development nor is such training mandated by the government. Hence teacher educators and academic institutions are clearly at a loss about what exactly teachers need to be trained for to become inclusive practitioners and this is an important issue for further research.

#### 12.4 Chapter Summary

This chapter reviewed the findings of the first theme of ‘Teacher Challenges’ in terms of previous studies. The results from this research study corroborate the findings of previous research in terms of teacher concerns about negative attitudes, lack of resources, behaviour problems, making curricular and pedagogical adaptations, lack of preparedness and skills for inclusion, large class sizes, stress, additional work and responsibilities, difficulties with time and scheduling and teacher training (Avramidis *et al.*, 2000; Das, 2001; Rose, 2001; Sharma *et al.*, 2009; Das *et al.*, 2013b; Forlin and Chambers, 2011; Hemmings and Woodcock, 2011). Additionally, the findings from my study indicate the vital role of parental cooperation in the achievement and effective inclusion of students. Also, most studies in India so far have focused on the ‘concerns’ of teachers while this study drew on the actual, lived experiences of in-service teachers who have had students with diverse needs in their classes and could therefore be said to provide a more accurate description of the reality. Another important implication is that educators teaching this section of students, need to be updated not just about content and pedagogical methods but also the current trends and issues in society that impact these children’s lives. Furthermore, teachers need to add soft skills, maturity and sensitivity to their repertoire of skills to appropriately engage with these adolescents.

## CHAPTER 13- DISCUSSION II

### 13.1 Chapter Overview

The first chapter on Discussion focussed on Theme 1 and its sub-themes which dealt with teacher challenges in inclusion. This chapter looks at the two themes of Professional Development Needs (Theme 2) and the structure of a Professional Development Programme (Theme 3). These themes also directly answer RQ 2 and RQ 4 which pertain to the professional development needs of teachers for inclusion and the structure of a professional development programme respectively.

### 13.2 Theme 2: Professional Development Needs

There was a direct question in the focus group discussions as well as the interview schedule on the professional development needs. Another question in the survey enquired about the areas in which teachers would like to improve their skills. As it was an online survey, the term professional development needs was not used as it was likely to be unclear and there was no possibility of explanation. Though not a direct translation, it serves the same purpose as it outlines the areas in which the teachers require more competencies and it can be reasonably assumed that these would be areas where they lack and hence also their professional development needs.

The spread of the responses in the survey as well as data from the focus groups and interviews indicated that the three most important areas in which teachers would like to improve their skills and learning are knowledge about the diverse learners in a class, inclusive teaching techniques such that they are able to effectively teach the diverse learners in their class and concrete strategies and techniques that they could apply in their inclusive classrooms. As discussed in the previous chapter, teachers faced several challenges with respect to including the diverse learners in their classes which also indicated their professional development needs. This theme talks about these needs directly here and categorises them into the sub-themes of knowledge and skills, curriculum related and personal attributes.

#### 13.2.1 Sub theme 2.1: Knowledge and Skills

There were several points mentioned by the participants under this sub-theme which have been clubbed under knowledge and skills. Participants across schools and locations mentioned these common factors. These include identification of student's needs and support required, knowledge about the different kinds of disabilities/special needs/emotional and behavioural difficulties that can be found in a mainstream classroom, DI which covers inclusive teaching techniques and strategies,

classroom management, lesson planning and skills of understanding and supporting parents. These results corroborate the findings of previous studies by Jangira *et al.* (1995), Das (2001), Das *et al.*, (2013b) which found that teachers lacked the specific knowledge, skills and techniques required to cater to the diverse learning needs of students.

Participants shared that they needed training in identifying the needs of the children. They stated that if they were apprised of the general traits it would help them to identify the concerns of the child and plan their teaching accordingly. Some also stated that they had difficulty in identifying learning needs as they were often hidden and didn't become apparent until much later when assessments took place. While behavioural concerns were more apparent and easier to identify, they also had difficulty in distinguishing between a genuine emotional/behavioural difficulty and normal adolescent behaviour. This was especially pertinent because of the age group and usual behaviour patterns of adolescent students they taught. Misjudging genuine difficulties for purposeful behaviour was common and led to teachers harbouring negative attitudes towards these so called 'mischievous' and 'indisciplined' children. Obviously then the misdiagnosis or misunderstanding caused them to take actions which were not in the interests of the child and made the situation worse by driving the child further away from them. Furthermore, classroom management then became an onerous task and several teachers mentioned not being able to teach as they ended up spending a lot of their time on managing student behaviour and class dynamics. Maintaining a positive classroom atmosphere that is inclusive, positive and conducive to every child's learning is an important skill that teachers must be equipped with. Therefore, it is imperative to give teachers the knowledge and tools to identify and provide the kind of support students need.

Teachers also wanted to learn about the logical next step after identifying the needs. They needed to be trained in the strategies and techniques they could use, once they had the knowledge of the difficulty/condition of the child and how could they employ these methods to effectively cater to his/her needs. While participants had a broad idea about some of the commonly heard special needs such as learning disability, they did not have sufficient knowledge and understanding about what it entails, how children with those difficulties learn and therefore how exactly should they alter their pedagogical approach and teaching methodology to reach out to these children. Differentiating the content, pedagogy and assessment were also areas teachers faced difficulty in. They specifically wanted training in how to complete the syllabus in the given time while also catering to the needs of all children. Though some of the teachers mentioned 'differentiation/differentiated learning', none of them seemed to be familiar with Universal Design for Learning and it was not spoken about by any of them. Only a SENCo of one of the schools cited it as one of the techniques teachers must be trained in to be able to cater to all learners. These findings are similar to a study conducted by Das (2001)

with primary and secondary teachers in Delhi, where he found that most of them were not trained in special education, lacked skills and competencies in providing individualised instruction to children with special needs, classroom management and differentiated instruction. Teachers in both studies were also not up to date with the latest and correct terminology related to special and inclusive education as well as the policies relating to students with special needs and disabilities. In spite of the positive changes in policies, efforts at awareness and measures taken towards inclusion in the last two decades, it is unfortunate that there doesn't seem to be much change when it comes to teacher preparedness or teacher effectiveness in implementing inclusive education.

Several participants spoke about the need for proper planning and accounting for the diverse learners in the class while drawing out a lesson plan and keeping the given time in mind. Lack of awareness in teachers about the difficulties the students face was also one of the reasons teachers often couldn't understand or relate to children. This prevented them from reaching out to these children and taking appropriate steps necessary for their learning. Lack of this knowledge also had an obvious influence on teacher attitudes as without the requisite knowledge they not only tended to misjudge the child's difficulties but also did not take any positive, concrete measures to cater to the learning needs of the child. As behaviour is closely linked to attitudes, as per the social constructivist view, if teachers harbour negative attitudes towards children with special needs they are also not likely to take any positive steps to effectively include them or make any changes required in their teaching practices or attempt to assess them differently.

In effect, due to the lack of knowledge, skills and right attitudes, teachers were not being able to be inclusive in their approach and actions. These findings are in sync with those of previous studies that found that teachers lacked the specific skills and training in special education that was required to cater to the diverse needs of learners (Jangira *et al.*, 1995; Das, 2001; Bhatnagar and Das, 2013). As with children, participants also spoke about the challenge of interacting with different kinds of parents and the need for securing their cooperation for the betterment of their children.

### 13.2.2 Sub theme 2.2: Curriculum Related

The professional development needs related to curriculum mentioned by some of the participants were that teachers should receive training specific to the subject and age group of students they taught. Trainings in school often tended to be generic or related to primarily English, Maths and the Sciences. Hence teachers of other subjects often felt left out. It is definitely important to have subject and age specific training so that teachers can actually apply the techniques to their particular subject and learn how to modify the content in their subject for different learners in the class, use alternate means of

teaching and assessing. Additionally, participants mentioned that teachers should be trained in the concessions and accommodations available for students with special needs as per the Board (ICSE or CBSE). It is true that this knowledge would enable the teachers to guide and support the students with special needs to prepare for the Board examinations which can be an enormous challenge for them considering the huge syllabus and assessment methods.

### 13.2.3 Sub theme 2.3: Personality Attributes

Along with the requisite knowledge and skills, developing positive attitudes, sensitivity and soft skills are also key to the effective implementation of any inclusive programme. Across locations, participants spoke about the need for teachers to be empathetic, patient and have good interpersonal skills so that they are able to build a good rapport with their students, relate to them and encourage them. As discussed earlier, managing behaviour became a major concern in children of this age and teachers were often found short on not just understanding, knowledge and techniques to tackle behavioural issues but also on attributes such as patience and maturity. This led to them losing their temper, getting upset and further escalation of the situation which was neither good for the child/children in question, the class atmosphere or their own health.

Participants also mentioned emotional quotient and that while it would be different for different teachers, it was considered necessary to have a high emotional quotient to be able to effectively interact with students, empathise with them, build a good bond and motivate them to work, study and behave appropriately. This is in consonance with the study of Jiminez (2020) who found that there was a significant relationship between emotional quotient and work attitudes and better work attitudes were linked to better performance. Findings from my study also indicate that sensitisation of teachers towards students with diverse needs and difficulties was closely linked to their attitudes and their approach towards inclusion. Building sensitivity in turn was related to developing awareness about the different kinds of special educational needs and disabilities students may have, how these manifest, how they impact the child's learning and behaviour. Thus, it was considered necessary to build awareness, sensitivity, positive attitudes and soft skills in teachers, all of which of course are closely linked.

### 13.3 Theme 3: Professional Development Programme (PDP)

The findings related to this theme have been split into features, content and challenges of organizing a PDP that meets the professional development needs of teachers as have been discussed. This also directly answers RQ 4. Kimmel *et al.* (1999) list three factors that are necessary for the success of

any professional development programme for teachers. They suggest that it must be able to cater to the needs of individual teachers by offering a range of activities, keep the readiness level of teachers in mind as it is likely to be different for different teachers and involve teachers in the process from the beginning. This involvement in the identification of their own professional development needs as well as the planning and design of the programmes is likely to secure their enthusiasm and commitment towards inclusive education. In this study as well, the teachers were asked not just about their challenges in inclusive education, but also specifically their professional development needs and suggestions on the important characteristics of a PDP. The underlying purpose was to get an inside view of the situation from the very practitioners who were going to implement the learning as well as to enlist their cooperation and commitment to the cause through their involvement at every stage.

### 13.3.1 Sub-theme 3.1 : Features of the PDP

Over the years, the trend has shifted to training that takes into consideration the needs and preferences of teachers as stated by them rather than programmes that are generic in nature and primarily controlled by school management and university professors (Sharma and Deppeler, 2005). The survey as well as the focus groups and interview schedules had direct questions on the design and features of an ideal PDP.

The top most chosen features in the survey were - it should have a lot of hands-on activities/examples/practice, knowledge and focus on concrete strategies and techniques and be regularly conducted at frequent intervals. These also happened to be the most frequently mentioned features by participants in the focus groups and interviews. However, there were several other characteristics suggested by participants in the focus groups and interviews that were not included in the survey. The most frequently used code was Hands on/Practical which included characteristics such as the PDP being practical, having activities and examples, case studies, being interactive and including simulation of an actual class with diverse learners. Dyer (2005) contend that usually training programmes in India are lecture based and do not actively involve the participants or give them an opportunity to engage in the practical aspects. They also do not take into account the local conditions. Teachers in my study also shared that the trainings are usually very theoretical where they are passive listeners and just lectured on various topics and told what to do. They suggested interactive sessions which also involved the opportunity to see and apply what was being told. They wanted strategies, demonstrations, simulation of an actual class, examples and case studies.

Teachers seemed to view academics and catering to the diverse learners as two different things. The focus seemed to be on delivering the content in a fixed manner which did not take into account the



differences in learners. Since this was not in-built in their thought process and hence their planning, that was probably the reason why they struggled with it. This was evident from their statements where they wondered how to take care of the diverse needs of learners along with academics in the duration of class. Also, as teachers had heavy workloads, they did not want to spend their time on programmes they did not find practically useful to them. Participants also suggested a mix of both theoretical knowledge and practical experience. It is advisable that an ideal PDP includes both: the information required by teachers to effectively practice inclusive education and the opportunity to observe or practice the application of that knowledge. Obviously certain aspects would be more theoretical and some more practical but a mix of both is advisable for real learning to take place. For example, the PDP would have to include information on the kinds of disabilities and emotional and behavioural difficulties, special needs that a teacher is likely to come across. As part of the practical aspect, they could be shown videos or samples of the work of these children and then as one of the activities they could be asked to identify the difficulty followed by discussion. However, it is imperative to note that though the participants have shared that teachers wish to know more and hence should be taught about the different difficulties and disabling conditions, this may not form part of new teaching material/curriculum material to prepare educators to teach in inclusive classrooms in India. This is because research (both from the countries of North and South) indicates that it could be problematic as more knowledge about disabling conditions can sometimes raise teachers' concerns and make them more apprehensive about inclusion (Forlin *et al.*, 2009, Sharma *et al.*, 2009). Hence these findings need to be applied cautiously so as to not have a negative effect on teachers' perceptions and attitudes towards inclusion.

Another feature mentioned by participants was that the PDP should be an on-going process. It should have follow-up/ review workshops and participants should also have access to the resource person so that they could get in touch with him/her if required. This was considered important to maintain the continuity of the process for it to be meaningful and long lasting. In the absence of a follow-up and no one to reach out to, it just became a one-off affair with teachers having no one to go back to, give and receive feedback and discuss their difficulties or successes in implementation of strategies learnt. This finding is corroborated by David and Kuyini (2012) who state that one-time or short-term sessions are not as effective as a long-term and on-going PDP where teachers gain and benefit more.

There were other factors mentioned by the participants which have been clubbed under the code Institutional factors. These include CT (Organised at a Convenient Time), Exp (Involve interaction with stalwarts and experienced people in the field), SG (Conducted in small groups), ISE (Involve inter school and intra school exchange of ideas and practices) and TWB (Teachers' well-being including stress management and motivation). Participants suggested conducting trainings at a time

of the academic year that is not very busy or stressful for teachers so that it is convenient for them to attend and they do not have a resistance towards it to start with. This also indicated that presently trainings were not really thought out and planned keeping the school calendar in mind. Participants also proposed that the PDP should involve interaction with experts in the field of special and inclusive education. Instead of internal resources, they seemed to prefer learning from someone who had expertise and experience in the area and inspired confidence in them. In a similar vein, participants also suggested more sharing of knowledge, experience, discussion of case studies and application of strategies both within the school as well as with other schools. It is undoubtedly a good idea to facilitate the exchange of ideas and best practices, both within and outside school. The understanding of how inclusion is practiced in other schools, the methods they use, the strategies that have worked and also those that haven't enable teachers to learn, share and reflect on their own practices.

It was also suggested that the PDP should be updated to the current times in terms of methodologies, knowledge about the process of cognition and learning, relevant laws and children of the present generation. This seems to be a valid point because one, the teachers who are experienced have obviously completed their teacher training courses several years back and their knowledge and skills are therefore likely to be outdated, and two, because teachers, especially the middle-aged ones had an apparent disconnect with the present generation of children and found it difficult to understand and build a rapport with them. Also, mainstream teachers need to be well versed about the laws related to inclusion in India and how they impacted them so that they could act accordingly. Another feature mentioned was that the workshops need to be conducted regularly, at frequent intervals so that knowledge can be refreshed and feedback can be given. Participants suggested having it more than once a year and at frequent intervals.

Some participants also mentioned that the PDP should be so designed that it is simple and easy to grasp. Furthermore, as discussed in the previous chapter, a part of the PDP should also have subject/age specific information and strategies so that it is relevant for all teachers. Another important aspect of the PDP is the mode of delivery as teachers may have different preferences for receiving the PDP. Das *et al.* (2013a) quote the work by researchers such as Andreason *et al.* (2007), Buell *et al.* (1999) and Cotton (2000) to contend that in so far as the content of in-service training programmes is concerned, there is sufficient knowledge regarding teaching practices and methods that work in diverse classrooms. Therefore, the focus should now be on the in-service delivery modes that would be best suited to all participants (Hardy 2009, O'Gorman and Drudy 2010). Furthermore, Das *et al.* (2013a) argue that as teachers may have their own preferences for learning, the content delivery should include different methods and a variety of ways should be provided to the participants for developing their skills and gaining knowledge. However, since this is not possible when a large

number of teachers is involved, it is necessary to find out about the most preferred methods of receiving the training. Different modalities of training have their own limitations. Not only are some of the commonly used methods such as lectures and workshops inflexible in adapting to the needs of different learners, they also need to be properly planned and executed and involve active participation from the attendees in order to be effective.

In any training that involves a lot of lecture and therefore listening for participants, after a while the interest invariably wanes. This is more so if the participants perceive the session as not being relevant to them, the resource person not being knowledgeable enough or the content or delivery ineffective. Interesting and interactive sessions that engage participants are essential. It has been recommended that lectures could be used in the initial part of the training and made more lively and effective by including audio-visual aids, PowerPoint presentations and interaction with participants. Workshops, though more hands-on and interactive, cannot accommodate a large number of participants and are therefore more time-consuming and less cost effective. Also, some participants are not very comfortable with workshops and the tasks/activities they are required to perform. Thus, in keeping with the recent times and the different preferences of teachers, training programmes should make use of different methods of teaching (Gough and James, 1990; Das *et al.*, 2013a). This was also mentioned by participants in my research who wanted training programmes to include more hands on and practical elements such as case studies and role plays as well as visits to other schools where inclusion is practiced. There was a question in the survey that asked teachers to choose their preferred methods of acquiring the knowledge and skills and they could choose more than one option. The following Table 13.1 shows the options and responses received:

**Table 13.1 – Preferred methods of professional development**

<b>Q17. What would be your preferred method of acquiring <u>this knowledge/skills</u>?</b>		
<b>ANSWER CHOICES</b>	<b>RESPONSES</b>	
	<b>NUMBER OF PARTICIPANTS</b>	<b>PERCENTAGE</b>
Reading	104	37.14 %
Attending an in-house workshop/training/seminar	181	64.64%
Attending a workshop/program conducted outside school	112	40 %
Joining an online course	66	23.57%
Joining a correspondence course	23	8.21 %
Joining a part-time course	23	8.21%
Through experience/ learning on the job	155	55.36%
Others	5	1.79 %

The responses indicate that a majority of respondents (65%) preferred attending an in-house programme and 55% of them favoured learning on the job or through experience. Attending a training programme outside school and reading were the next most chosen options.

In a study conducted by Das *et al.* (2013a), it was found that conferences/conventions related to inclusion and workshops conducted by experts from outside were the most preferred professional development delivery modes for secondary teachers, followed by in-service programs conducted by personnel from Ministry of Education. The least preferred modes were Correspondence course offered by university, Formal self-study program and Full-time university courses in inclusion. While the options provided in this study are not directly comparable to my study, there are certain similarities in the result. The most preferred mode in my study was attending an in-house training/ seminar/workshop while in the other study it was conferences/conventions related to inclusion. Although they are similar, the conferences/conventions mentioned in the other study were the ones organised by the Ministry of Education held offsite at the national or regional institutes for various disabilities whereas the option given in my study was an in-house programme. Das *et al.* (2013a) recommend having these kind of training programmes that are held on-site in order to meet the needs of the large number of teachers.

Additionally, findings from the qualitative data in my study indicate that teachers would like to include learning from an expert in the field (though not necessarily from abroad) as a part of the training which is similar to the findings of Das *et al.* (2013a). As the knowledge and practice of

inclusive education has grown in India over the past decade, this lack of emphasis on experts from abroad in my study could possibly be attributed to this factor. Modes which were less preferred in both the studies involved participants learning on their own through a course such as a correspondence course, part-time or full-time university course. Another similarity between the findings of my study and that of Das *et al.* (2013a) was ‘School visits and observation of model inclusive classrooms’ which was mentioned by some participants in their study when asked about additional delivery modes. This point was mentioned by participants in my study as well during focus groups and interviews where they recommended visits to schools that had better, more established and successful models of inclusive education in practice and observe such classrooms.

### 13.3.2 Sub-theme 3.2 : Content of the PDP

The professional development needs discussed in the previous Discussion chapter are clear indicators of areas in which educators need training and are therefore added to the content of the PDP. Participants also shared their thoughts and ideas separately on some of the broad areas that should be covered in the PDP. The common points mentioned were knowledge and identification of student needs and support required, differentiated instruction, lesson planning, classroom management, understanding student behaviour and appropriately responding to behaviour issues and soft skills training including sensitivity training. These results reflect those of Bhatnagar and Das (2013) who found that teachers need to be provided opportunities to gain knowledge about students with special needs and learn skills on classroom management, suitable methods of teaching and policies and practices for an inclusive class. The results also corroborate the findings of Buell *et al.* (1999) and the common areas established in the two studies for training of general education teachers are modification and adaptation of curriculum, assessment of progress and managing student behaviour. These findings are also similar to the results of the study conducted by Chow and Sharma (2022) on the perceived support needs of in-service teachers in Hong Kong where they found that areas in which teachers required more support were inclusive teaching strategies, resources such as teaching material, time and curriculum flexibility. Though the results are not directly comparable as professional development needs cannot be directly equated with perceived support needs, these are definitely common areas in both studies where teachers have said that they require support.

It was extremely essential for teachers to be equipped with the requisite knowledge about the different special needs and disabilities, behavioural and emotional issues that can be found in a regular mainstream classroom with students in upper primary and secondary. As the next step, the PDP should also include the identification of these needs and then the appropriate ways of catering to these needs. As discussed, teachers needed concrete strategies and techniques that they could put to use for

each of the categories. Though each child is undoubtedly different, having exposure to similar cases and situations would give teachers the confidence and ability to support the students they have and find their own strategies based on their learning. It has been found through this study and is supported by previous studies that teachers find it most challenging to deal with the behavioural issues of students. Therefore, the PDP should have a special focus on this particular aspect of identification of needs, support and strategies.

Having diverse learners in the class also requires teachers to be well-versed with differentiated instruction so that they can effectively reach out to all students and ensure that they are engaged in the learning process. Students being positively engaged and learning as per their skills and abilities would also help in classroom management. These findings are consistent with those of Chow and Sharma (2022) who found that teachers in their study perceived knowledge and guidance on inclusive teaching strategies to be important and that they were not receiving enough of it. However, to be able to practice differentiated instruction teachers also need to know their students well and plan as per their strengths, difficulties and needs. At the same time, they also need to plan well to be able to cover the content which is quite heavy. Teachers have expressed their concerns in managing this aspect. Hence, lesson planning for a diverse class should be an integral part of the PDP. Developing positive attitudes towards inclusion and sensitivity towards students with special needs in teachers is at the heart of any successful inclusion effort. Soft skills training that includes sensitization and developing skills such as empathy, effective communication skills, problem solving, flexibility and inter-personal skills is essential for teachers. This would enable them to establish a better rapport with students, communicate more effectively and to create a positive, respectful classroom atmosphere that would invariably help with classroom management and behaviour issues. Students have been seen to respond positively to teachers who are kind, empathetic and understanding.

Additionally, participants recommended that the PDP should provide resource material. It could be in the form of a booklet or manual or digital resources such as websites and videos. Participants felt that having ready access to these resources would greatly benefit them as they wouldn't have to hunt for credible resources for which they often do not have time due to existing heavy workloads. These results corroborate the findings of Singal (2019) where she found that teachers struggled to cater to the needs of diverse learners due to their heavy workloads and sought accessible teaching learning material and support.

Understanding and supporting parents of students with special needs was also an area in which teachers required and requested for insights and training. Parents undoubtedly form an integral part of the home-school relationship and their positive involvement and support are vital to the child's

development. This is even more so when the child has certain special needs because parents' understanding, acceptance and support are essential for the school and teachers to provide any intervention in the form of classes or modifications and accommodations as may be necessary to cater to the child's needs.

### 13.3.3 Sub-theme 3.3: Challenges of Organising the PDP (for the school management)

When the heads of schools and other section heads were asked about the challenges from their end in organizing a PDP, they mentioned a few points. There was the problem of finding a good resource person to start with.

Talking about the training personnel or resources available to conduct the training, Das *et al.* (2013a) suggest exploring other pools of resources such as special educators, private consultants, researchers and state or regional educational agency staff other than the oft used university academic staff. Institutions such as NIMH (National Institute for the Mentally Handicapped) and NCERT (National Council of Educational Research and Training) in India have taken the help of experts from outside who are more experienced with implementing inclusive education in their countries. As teachers in my study have also suggested learning from experts, it would do well to look at professionals and experts who are in tune with the latest developments in the field of inclusion while designing PDPs.

Another common challenge was the resistance from a section of the teachers. Teachers who harboured negative or unfavourable attitudes about inclusion did not feel accountable for all children in their class and felt that it was not their job to teach children with special needs. Hence, they didn't have any interest or inclination to spend their time attending a training programme which they thought was not for them. The time for conducting the PDP was another obstacle. One part of it was that since teachers these days had heavy workloads, finding a time when they were relatively free was a challenge. This was also related to their disinterest in attending workshops/trainings. Two, since schools had different sections and Upper primary and Secondary often had different time tables and events, finding a common time when all the teachers were free was a difficult task. Another Head of school shared that the cost for conducting a PDP for all the teachers could be a constraint and suggested using a train the trainer model.

The PDP needs to be an integral part of the school schedule and planning it well in advance should take care of the problem of teachers' availability. As far as resistance and unwillingness of the teachers is concerned, this is one of the very aspects the PDP is hoped to address. Additionally, if it well planned and formulated as per their suggestions, they would find more value in it and are likely to be more willing and enthusiastic about being a part of it.

### 13.4 Chapter Summary

This chapter discussed the professional development needs of teachers in relation to inclusive education and the features and content of a professional development programme that can cater to these needs. The professional development needs pertained to knowledge about different kinds of disabilities/special needs/emotional and behavioural difficulties, identification of student needs, inclusive teaching techniques and strategies, classroom management, lesson planning and skills of understanding and supporting parents. It also included developing positive attitudes towards inclusion and soft skills and sensitivity training. The content of the PDP included all these professional development needs. The primary features suggested were that the PDP should be hands-on and practical, involving case studies and workable strategies, have regular follow ups, involve interaction with experts in the field and exchange of ideas and best practices within and outside the institution. It was difficult to find similar documented research studies in India that covered both these aspects (content and features of an ideal PDP), used a combination of survey and qualitative methods such as focus groups and interviews and were conducted in more than one location in India. Thus this study contributes to new knowledge which would help those responsible for teacher training in India to design the programmes appropriately. Inclusion as practiced in schools is further explored in Chapter 14 with suggestions from the participants of the research to make it more effective.



## CHAPTER 14- DISCUSSION III

### 14.1 Chapter Overview

The first chapter in which I discussed the findings focused on teacher challenges in inclusion while the second chapter discussed findings related to the professional development needs of teachers and the structure of a professional development programme. This chapter combines Theme 4 and 5. It addresses RQ 3 which is about the methods currently adopted by schools to meet the professional development needs of teachers and the efficacy of these methods. It also explores the current status of inclusion in schools and possible conditions for making it more effective based upon data collected through the research.

### 14.2 Theme 4: Methods Currently Used and Effectiveness

The research started with understanding the challenges faced by regular mainstream teachers in efforts to include the learners with diverse needs in a class and their professional development needs in this regard. It was also considered necessary to investigate the methods used by schools presently for the training of their teachers and their effectiveness in meeting professional development needs before the structure of a new professional development programme was explored. A question in the survey about the different means adopted in schools for the professional development of teachers provided the following responses.

**Table 10.1- Methods currently used for teacher professional development-Survey**

ANSWER CHOICES	RESPONSES	
	NUMBER OF PARTICIPANTS	PERCENTAGE
Training/workshops/seminars conducted inhouse	210	75 %
Sending a few teachers to attend programs outside of school	152	54.29 %
Mentoring and guidance by seniors at school	118	42.14 %
Support and guidance from special educators/counsellors	178	63.57 %
Providing reading material	52	18.57 %
None	5	1.79 %
Others	5	1.79 %

Similar results were obtained from the qualitative data where in-house training programmes and support and guidance from the special educators/counsellors as well as section heads/coordinators at school, were the most commonly used methods for raising teacher awareness and competences. Occasionally teachers from the institution were also sent for external training sessions.

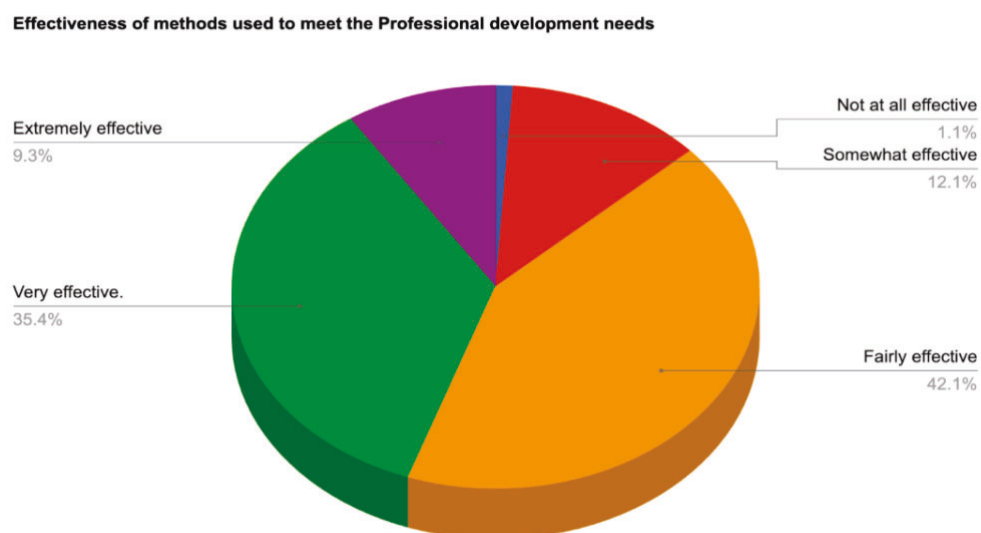
So, while there were training programmes in all the schools surveyed, they were often ad-hoc in nature. There was limited thought given, in any of the participating schools to prepare teachers for the challenges of teaching a diverse class of learners. Training and other professional development sessions varied in frequency and happened either at a certain time of the year, for example, before the close of the academic session or twice a year or as and when a certain resource person was available. What was notable across schools was that these training opportunities were not part of a larger, systematic professional development plan geared towards inclusion. However, such a plan is essential as professional development programmes that are carefully planned and efficiently executed can help teachers remain abreast with the latest knowledge and trends in inclusive education and enable them to practically apply the learnings in their teaching (Kosko and Wilkins, 2009). Das *et al.* (2013a) state that recognising the significance of in-service training of regular school teachers, policies and legislation around the world, including those in India have laid emphasis on professional development geared towards inclusive education. As per the draft Persons with Disabilities Act 2011, 'All educators should be trained to teach a student with disabilities in an inclusive classroom' (Center for Disability Studies 2011, p. 71). The need for reforming teacher education has also been stressed on by researchers such as Sharma *et al.* (2009) and Mitchell and Desai (2005).

In spite of the intention and policies, this focus on preparing teachers for inclusive education seems to be lacking, not just in pre-service but in-service training programmes. Instead, it emerged from my data that teachers and schools tended to rely heavily on guidance and learning from the special needs department- special educators and counsellors as well as with seniors and Section Heads.

Apart from this in-house support, schools organised a range of workshops and training sessions for teachers from time to time. This was also a common method currently used for professional development of teachers across all schools and locations. These programmes however varied from school to school as there is no standardisation in training programmes across India. Therefore, schools decided on the content, duration as well as timing of the professional development programmes for their teachers based on various factors such as the academic calendar, non-academic working days for teachers and availability of resource personnel.

Additionally, schools sent a few teachers for external workshops occasionally. This again depended on several factors such as the content of the workshops, affordability, timing and perceived usefulness. For example, a special educator would be sent for a workshop on special education, a Maths teacher for a Maths workshop and so on. Teachers attending such workshops then disseminated the knowledge and learning gained to other teachers in the school for whom it was relevant through a train the trainer model. One of the schools had outsourced its professional development programme to an external agency and most programmes were conducted by this agency through the year. However, they also had some internal sessions and occasionally sent teachers for external workshops. All educational institutions employed a mix of these methods for the professional development of their teachers. In a subsequent question on the effectiveness of these methods to gain the necessary knowledge, skills and expertise the participants were asked to rate their responses on a Likert scale. The chart below depicts the responses received. The highest percentage of responses (42.1%) was received for 'Fairly effective', which was the mid-point of the scale. The second highest percentage of responses (35.4%) was received for 'Very effective'. Only 12.1% participants mentioned that the methods were 'Somewhat effective'. This is rather interesting because during the focus group discussions and interviews several participants stated how the current training programmes were not actually preparing them to teach in an inclusive class. In themselves, they were probably good, but they were not related to teaching inclusively and didn't seem to be helping teachers to acquire the skill sets required for inclusion.

**Figure 14.1-Effectiveness of professional development methods presently used**



Data from the focus group discussions and interviews present a mixed picture. Unlike the survey, the participants here were not asked to rate the effectiveness using any label such as 'very effective' or 'not at all effective' but their responses were interpreted to fall into one of the categories and coded accordingly. Although very few responses were received which stated that the methods were

extremely effective there were some participants who felt that they were fairly effective. On the other end of the spectrum however there were quite a few voices which stated that the methods used were not at all effective. Some confused the effectiveness of the workshops in themselves with their usefulness in preparing the teachers for teaching an inclusive class and mentioned how a particular workshop had helped them gain some knowledge on a particular topic or learn a specific skill.

On the other hand, some participants didn't seem to be satisfied with the training they were receiving. Some said that it didn't really help them navigate the practical challenges faced in the classroom. Some participants also shared that the trainers conducting the workshop just came and presented some techniques but were not aware of the real challenges teachers face in their respective contexts. So there seemed to be a disconnect between what was being taught in the workshops and the feasibility of implementing it in the classroom. Similar findings were reported about the lack of relevance of training received by teachers in a study by Singal *et al.* (2018). Teachers also spoke about the difficulty of implementing the strategies learned in the workshops/training sessions. Some others suggested that they did not receive any training for inclusive education as such. This finding is in accordance with previous studies which state that there is a lack of professional learning opportunities for inclusive education (Net *et al.*, 2014; Able *et al.*, 2015; Chow and Sharma, 2022; Das *et al.*, 2013).

This indicates that there is still a clear and distinct sort of demarcation in training for regular teachers and that for special educators in India. It also reflects the thought process that the role of special educators and regular teachers is considered different and that anything related to special education is not necessary for the mainstream teachers to learn as it is not 'their job' to teach and be responsible for these children. However, the bulk of the responses seemed to suggest that while the methods used and training given were definitely useful and the teachers were better prepared than before but there remained much to be done. Therefore, it emerges that schools employ a variety of methods for professional development of teachers such as in-house and external workshops, external resources and guidance and support from special educators, counsellors and section heads or coordinators. While some of these were stated to be helpful, none of them were specifically geared towards inclusion or preparing teachers for a class of diverse learners. Teacher training for inclusion is therefore an area in need of immediate action.

Das *et al.* (2013) contend that carrying out in-service training programmes is not an easy task and dependent on several factors that vary from one institution to the other. Literature from other countries adopting in-service training programmes sheds light on some of the reasons for their not being successful. One of the causes identified was that the programme objectives were not designed to meet the needs of teachers. Other reasons were teachers not being involved in the entire process, lack of

clarity in the programmes and the characteristics of adult learners not being taken into account by those responsible for the execution of the programmes (Hsien 2007, Philpott *et al.*, 2010). Thus, findings from my study in terms of training programmes not being directed towards the actual needs of teachers, lack of a cohesive professional development strategy and the lack of teachers' involvement in the entire process find resonance in literature and help explain the reason why the current programmes are not effective. Therefore, it is essential to keep these factors in mind when planning any professional development initiative for teachers.

### 14.3 Theme 5: Inclusion in Schools

Throughout the data collection process in the second stage, respondents invariably mentioned the ways in which their institutions or they themselves supported students with special and additional needs. They also shared several suggestions on how inclusion could be implemented more effectively in schools. These related topics which were not directly a part of any other theme were thus clubbed into a new theme, comprising the two sub-themes: Strategies currently used to support students and Suggestions to make inclusion more effective.

#### **14.3.1 Sub-theme 5.1: Strategies Currently Used to Support Students**

Conversations during the focus groups and interviews led to many participants sharing what they presently did to 'include' students, though it was not inclusion in the real sense or in the classroom as most of it pertained to the help and support provided to certain students outside the classroom. It also included measures like referring students to the Special Needs department- special educators for academic issues and counsellors for behavioural and emotional concerns/support. The usual procedure followed by schools involved screening of children which was first done by the regular teachers and depending on their observations, these children were then referred to the section heads and from there on to the Special Needs Department as deemed necessary. The mainstream teachers were then guided by the relevant professional and the appropriate intervention was suggested. Their progress and performance were monitored thereafter and action taken accordingly. In some cases, referrals for an external assessment by a certified agency were also made. Where students had diagnosed special needs, they were then given the accommodations as allowed for by the particular board the school was affiliated to. These included provisions including extra time during examinations, use of scribes, readers and ignoring of spelling errors where the meaning was clearly conveyed.

Other in-class strategies mentioned by the participants involved simple strategies such as seating students with difficulties in the first bench or close to the teacher and giving them extra time to complete their work. Das and Kattumuri (2011) in their research on classroom-based practices conducted in inclusive schools in Mumbai mirrored the finding that preferential seating of students with special needs in the first row was a common practice followed by teachers. In previous research on schools in New Delhi, Singal (2008) reported that teachers even in the schools charging high fee had a limited repertoire of skills and adopted simple teaching practices such as asking students to copy from the text or reciting lessons.

Some teachers assigned a 'study buddy' – an academically brighter and helpful classmate who would help them complete their work and in general help them with understanding and following various other instructions and procedures. Some of the educators spoke about giving a variety of questions in the class that were pitched at different levels of difficulty. So, they had a common set of questions for all students considering the level of the average learner and then some higher order thinking questions which could be attempted by anyone who completed the previous ones. These were to keep the gifted and faster learners engaged. These however seemed to be more teacher-driven strategies and were dependent on the skills and initiative of the particular teacher.

Some schools had a system of 'hand-over', wherein the students details or records of the previous year were passed on to the current class teacher. This prior information regarding the specific needs and difficulties of students in the class was believed to be helpful in planning strategies and appropriate support. While this information on the medical history and diagnosis is necessary to be conveyed to the next year's teachers, it might prejudice the teachers and inhibit them from coming up with solutions and strategies of their own and challenging the perceived limits of potential and performance of the child. General strategies such as sensitisation of classes which had students with special needs were also said to be followed. This involved both students and teachers. For instance, students on the spectrum might have peculiar habits and tendencies which might be misinterpreted, leading to their ridicule, bullying or alienation in class as peers might find their mannerisms funny or teachers might find them disrespectful. Therefore, this sensitisation is an extremely crucial step as there is still a stigma attached to differences and disability in Indian society (Singal, 2006). Schools also had first generation learners who could appear and speak differently from the rest and become the object of ridicule.

Other common strategies used across schools were providing remedial classes for students with special needs by special educators or extra classes for other students who were weak or struggling with learning (not necessarily those with identified special needs) by mainstream teachers. These

again varied as per the policy of the respective institution. So, while some schools had these classes in a more organised set up, the others had classes which were more need-based. For example, if a teacher felt that a child or a small group of children required help with a particular topic, he/she would explain it to them separately, in the break time or any free period.

In certain cases where there were identified special needs, reduction/modification of curriculum and assessment was also done for these students. However, invariably this job was not considered to be the mainstream teacher's responsibility and was done by the special educators. This could be attributed to several factors such as the lack of training of regular teachers, their negative attitudes in some cases and the fact that they have heavy workloads and have practically very little time to plan and prepare for any kind of differentiation.

As the schools that were part of the research were mainstream schools following the ICSE or CBSE Board, the students would normally pass out after completing their 12<sup>th</sup> Boards. However, there were a few students who were unable to cope with the demands of the curriculum, either due to their special needs or their backgrounds, being first generation learners. Such students were taken up to a certain grade level and prepared for NIOS (National Institute of Open Schooling) which is considered easier and more flexible than these two boards. This option was used by the Delhi and Kolkata schools only.

#### **14.3.2 Sub-theme 5.2: Suggestions for Making Inclusion More Effective**

Several suggestions were given by teachers to implement inclusive practices more effectively in their schools as well as in general. While some were indirectly stated when participants spoke about challenges faced by teachers in inclusion, their professional development needs and efficacy of the methods currently used by institutions for professional development, there were some new suggestions as well. Out of the five sub-themes of teacher challenges the ones that were mentioned in response to this question were recommendations related to school systems and policies, curriculum-based challenges and suggestions to secure the support and cooperation of parents. As the professional development needs and the structure of an ideal professional development programme have already been discussed in the previous chapter, they are not mentioned here again. These automatically include suggestions on areas of training and the features of a professional development programme.

Creating more awareness and sensitisation of all stakeholders including teachers, parents, staff and other students of the class was suggested by participants as a necessary first step to foster a culture of inclusion. Participants also suggested that all teachers should be given an exposure to work with

students with special needs. They shared that it was usually a handful of teachers who were considered caring, sensitive and efficient in whose classes these students were placed. However, all teachers needed that experience and exposure to get adept at teaching the diverse learners and this practice of selective placement was depriving some teachers of developing their skills while placing extra pressure on a select few.

Teachers had cited the lack of resources as a challenge in response to a previous question and they again suggested the availability of more resources in the form of teaching-learning materials, worksheets at different levels, a resource bank and the presence and help of another teacher or a special educator in the classroom. Teachers in the study by Singal *et al.* (2018) also cited provision of these resources as one of the ways in which they could be supported. Lack of resources has been identified as an area of teacher concerns in implementing inclusion in several studies in the past as well (Sharma, 2001; Shah, 2005, Sharma *et al.*, 2009).

While the presence of a special educator in the class might be a useful strategy if applied in the right way, using the principles of co-teaching and collaboration between the mainstream teacher and the special educator, it would in a way tantamount to exclusion if the regular teacher abdicated her responsibility and involvement in the learning and development of children with special and additional needs and they were just left to the special educator to teach in a corner of the classroom. There was also the suggestion from some participants that the academics of students with special needs is dealt with separately by the special educators while they join their peers in the class for activities. These views reflect some teachers' lack of skills, confidence and willingness to make the extra effort and adopt the measures required to include the diverse learners in their classes. Similar perceptions were also shared by teachers in a research study by Singal (2006a) where the teachers expected either the special educator or parents or tutor at home to take up the primary responsibility for the child. This was linked to their lack of knowledge, skills and relevant training.

Literature shows that mainstream teachers often lack confidence in their abilities to cater to the needs of diverse learners and do not feel equipped to implement inclusive education (Shah, 2005; Forlin and Chambers, 2011; Das *et al.*, 2013b; Bhatnagar and Das, 2014b). This is hardly surprising as many of them have not received training in inclusive skills and practices. It is therefore imperative that opportunities for professional development in inclusive practices are provided to in-service teachers while at the same time, pre-service training modules incorporate inclusive education as an integral part of teacher training and ensure that participants get exposure to teaching students with diverse needs as part of the preparatory process (Bhatnagar and Das, 2013; Bhatnagar and Das, 2014b).



Another important limited resource that the participants spoke about throughout the data collection was time. The lack of time required to plan for all students, to procure the material needed, collaborate with other professionals or give that extra time to the students who needed it was an impediment in their efforts towards inclusion. Teachers felt constrained by the demands of the curriculum for both the ICSE and CBSE Boards. Although these boards did provide concessions for certain categories of students such as those with dyslexia and dyscalculia, the syllabus was still the same for all students. Participants therefore suggested modification of the curriculum and assessment where required or extra time to teach these children.

The lack of time was also closely linked to the work pressure on teachers who felt overburdened with not just teaching, syllabus completion and corrections but various administrative and other tasks required of them that took away from the time available with them. They lamented that it was not possible for a teacher to do so many things at the same time. While they realised that different types of learners needed different strategies, they said this was not possible if the teacher was overburdened with other work. Singal *et al.* (2018) reported similar findings in a study on educating children with disabilities in government schools that teachers grappled with catering to the diverse learners and were burdened with a heavy workload that also comprised non-academic work. Another related factor that the teachers said would be helpful in the successful implementation of inclusion was the presence of a supportive school structure and management that not just allowed but enabled the adoption of inclusive practices. This included 'time to plan, time to collaborate'. This finding is corroborated by Singal (2006a) who states the absence of a collaborative culture in schools and the fact that the Heads of schools were aware but did not take any initiative to bridge the divide between the mainstream teachers and special educators. Time and opportunity for collaboration was needed as several participants had stated that there was a lack of coordination between special educators and mainstream teachers and that teamwork between all professionals was essential to cater to all learners. Miegheem *et al.* (2020) highlight the benefits of co-teaching as a useful tool not just for managing diversity in the classroom but also developing professional competence in teachers. They stress the importance of teacher training and time for the entire co-teaching process of planning, teaching, assessing and reflecting.

Respondents also spoke about having a scheduled time where teachers can bond with the children and build a rapport which many thought was lacking as their focus was always on teaching to complete the syllabus. This was also because of the large class sizes. Large class sizes have been found to be a major impediment to effective implementation of inclusion (Singal, 2008; Bhatnagar and Das, 2014a). Furthermore, this entire struggle for time was directly related to the demands of the curriculum prescribed by the Boards of education. Schools were bound by the portions to be taught

within a given time frame and hence there was always a paucity of time. Participants suggested that there should be some differentiation in the curriculum and/or assessment procedures. They mentioned that the major issue was time constraint and as some of them argued, when the syllabus was designed for the average learner, how were children with difficulties expected to cover the same portion in the same time as the others. They demanded extra time to prepare these children or some exceptions to be made with the syllabus such as simplification of the paper. This finding is consistent with that of Zwane and Malale (2018) where they found that lack of flexibility in the curriculum was an impediment for teachers in the implementation of inclusive education at high schools in Swaziland, South Africa. Motitswe (2012) also stresses on the importance of the curriculum being inclusive and catering to the needs of all learners. Similar findings were also reported in research on secondary school teachers in Delhi by Bhatnagar and Das (2014a) where participants stated that there was no planning for inclusive education and teachers neither had the time or skills to do it. Hence there was no differentiation in instruction either that the teachers could provide. Earlier research also shows that mainstream teachers taught as per the larger group and rarely differentiated instruction or made adaptations based on individual students' needs (Baker and Zigmond, 1990; Florian, 2005; Bhatnagar and Das, 2014a).

Other suggestions put forth by participants that were impacted by school systems and policies were 'conducting small group training within school premises and practising same as a policy', 'a forum where concerns and queries can be voiced and discussed immediately', 'greater access to resources and guidance while handling diverse learners in a classroom, 'regular feedback to teachers on their skills in handling diverse learners' and a proper system of documentation and maintaining anecdotal records of each child. Participants also recommended practices such as 'visits to institutions like schools for the blind and deaf', 'peer classroom observations', 'exchanging ideas within school' and having a common strategy for a particular child so that there is a consistency in approach and all teachers teaching that child can brainstorm and come up with solutions. These discussions are vital and demonstrate how important it is for institutions to utilise their internal talent pool which is resourceful and knows the system well. This is because no external person can come and solve your day-to-day problems for you or train teachers to deal with the myriad situations they come across on a regular basis. If there is scope for internal dialogue and an environment of cooperation and collaboration, teachers and the entire team of special educators, counsellors, and Section Heads; along with parents can work out strategies for each child to learn and develop. Parents are important stakeholders in ensuring the progress of the child and their lack of understanding and cooperation has been found to be an impediment in the successful implementation of inclusion as mentioned by participants in my study who called for joint parent-teacher workshops and counselling of parents to

ensure their support. Parental pressure was also one of the themes that emerged as a barrier to inclusive education in the research conducted by Bhatnagar and Das (2014a).

#### 14.4 Chapter Summary

This chapter discussed the present status of inclusion in schools, methods currently employed by schools for professional development of educators and the efficacy of these methods in developing the skills and competencies required for an inclusive class. The primary methods used were in-house support (from seniors, SENCOs and counsellors), in-house and external workshops and training sessions for teachers. There were mixed results on the effectiveness of these methods. While the workshops in themselves were considered to be useful by teachers in gaining some knowledge and strategies, they were sporadic efforts. Most importantly, none of the schools had an integrated training plan that was directed towards preparing teachers for inclusion. The chapter also considered the measures being taken by schools to cater to the diverse learners. Suggestions received from the different stakeholders to implement inclusion more effectively were also discussed vis a vis literature in the field. This study therefore not just corroborates findings from previous studies but makes new contributions to the understanding of in-service professional development for inclusion in schools. It brings to light the reliance placed by school systems and teachers on in-house resources for day to day functioning and support on inclusion. By eliciting responses from teachers who are practitioners themselves and other stakeholders such as counsellors, SENCOs and heads of schools who are integral parts of the school system on the effectiveness of the methods currently used and the gaps therein, it also gives specific, concrete suggestions based on their inputs for moving the field forward and would be useful for teacher educators and policy makers, as well as school managements.

## CHAPTER 15- CONCLUSION

### 15.1 Chapter and Thesis Overview

This last chapter presents the overview of the research reported in this thesis. The study was undertaken to investigate the professional development needs of mainstream educators in regard to inclusive education. The sample comprised ten mainstream, private schools in urban areas and teachers from these schools who were teaching in the upper primary and high school section. The objective was to uncover their concerns and difficulties in addressing the diverse learning needs of all students and thereby arrive at their professional development needs in this area. Suggestions on the preferred features and content of an ideal PDP were then sought from them. The expectation was that by empowering and equipping the regular teachers, more equitable and better learning opportunities for all children could be ensured. The research study was conducted in four of the five major metropolitan cities of India (Noida in U.P, Mumbai in Maharashtra, Bangalore in Karnataka and Kolkata in West Bengal) and used a mixed methods approach.

The thesis has been presented in 15 chapters. The introduction chapter provides the overview of the entire research and sets the context. The literature review chapters, inform the research study as they review the existing research done in the field, identify the gaps in knowledge and place the current study in context. The two methodology chapters elaborate on the actual procedure followed, the research instruments, sampling, pilot study and several other issues of research design, along with the justifications for making those choices. Similarly, the data management chapter explains how the data was stored, organised and utilised for analysis. Specifically, aspects of coding and emergent themes are examined at length. The findings and discussion chapters provide an in-depth insight into the rich qualitative and quantitative data gathered. Indeed, in the final few discussion chapters the originality of the research project in tandem with existing knowledge is showcased. Within this final chapter the contributions to knowledge are considered. The implications of the findings for policy and practice, the limitations of the research study, personal reflections and recommended areas for further research are also discussed.

### 15.2 Originality of the Research Project and Contribution to Knowledge

There is now an increasing amount of literature around inclusion of children with special needs in India and the role of the mainstream teacher in making inclusive education a reality. However, there is very little qualitative or mixed method research documented to understand the situation from the teachers' perspective within private school settings. The focus of most Indian research has been on

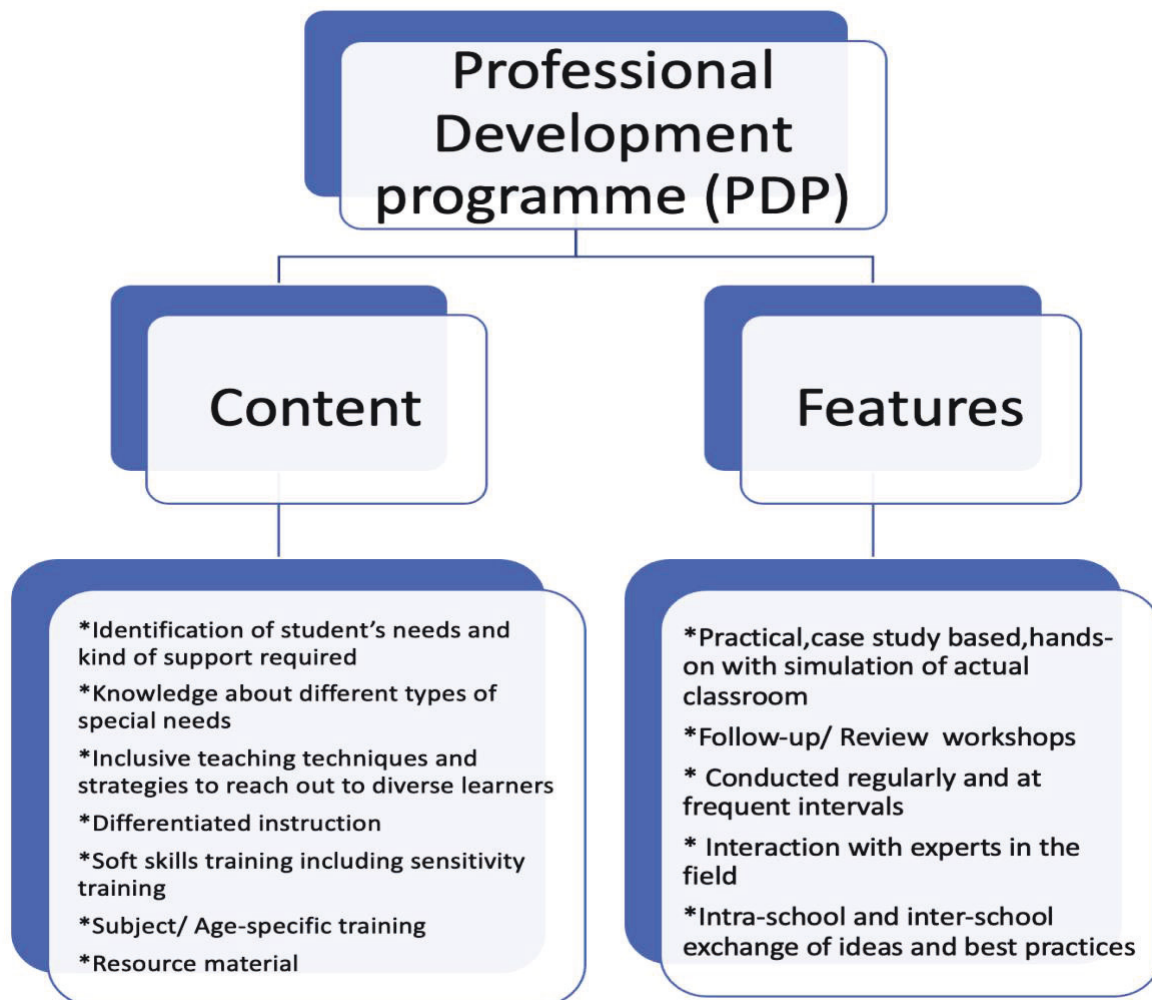
regular school teachers' attitudes, concerns, preparedness and competencies for inclusive education, there have been few research studies which have focused on the professional development needs of in-service upper primary and secondary school teachers. Much of the research undertaken has been limited to a single aspect of inclusion or a single location. Until now, there is also a lack of literature which is focussed upon how secondary school teachers can be better equipped to cater to the diverse needs of students and make appropriate provisions for them. Greater consideration has been given to attitudes and concerns of teachers regarding inclusion using scales like ATIES and CIES and to pre-service and primary teachers as emphasised in the literature chapter. Studies related to training needs have established the lack of training and competencies in teachers related to inclusion and have gone only so far as to understand the preferred delivery modes (Das *et al.* 2013).

The findings from this study make several contributions to the current literature and our understanding of the phenomena under investigation. Firstly, they shed light on various aspects of inclusive education from the perspective of in-service teachers and other key stakeholders. The present study not only confirms the findings of existing literature on teacher 'concerns', it also expands our understanding of the actual 'challenges' that teachers encounter while teaching this particular age group, such as adolescent issues, increased pressure on syllabus completion and students' performance. This adds to the growing body of research which indicates that teachers' professional development needs with regard to inclusion have not been met through either their pre-service training or the training methods used in their institutions. The current study has made one of the first attempts to involve teachers, right from the beginning in the process of designing a PDP that they as actual practitioners need and with specifications of content and features they have suggested, based on their real life teaching experiences and thus which they feel would be effective. The study does not stop at unravelling their obstacles, training needs and obtaining their inputs on the structure of a PDP but also seeks their suggestions on measures that could be taken to implement inclusive education in schools more effectively. As other key stakeholders were also interviewed, deeper insights into their perspectives, suggestions and experiences were attained. Thus, the findings of the study were able to integrate the perspectives of both teachers and other stakeholders and provide a more holistic picture of the situation. Since the current study reflects on the different aspects of the teachers' role in effectively implementing inclusive education as highlighted above, it proves useful in our understanding of the inter-relatedness of the various aspects and enables us to obtain a complete picture by placing the regular teachers at the centre of the school system. This multi-location study that utilised both qualitative and quantitative data is the first of its kind in India that examined several aspects of in-service teachers regarding inclusive education. Its findings might be of significance to

educators, University educators and policy makers entrusted with the implementation of inclusive policies in the country, as well as in other countries with similar context and challenges.

The findings of this investigation complement those of earlier studies and go a step further by offering possible solutions. The figure 15.1 depicts the broad framework for designing a professional development programme which can then be adapted or built on as per the context in which it needs to be applied such as the kind of school, location, teaching level of teachers involved (pre-primary, and secondary).

**Figure 15.1- Framework of an exemplar PDP**



These findings have important implications for teacher educators and academic institutions who can use the evidence from these findings to design their teacher training curricula and implement it accordingly. The current study also helps school managements to gain an insight into the challenges of teachers and extend all the necessary support to them.

### 15.3 Personal Learning, Reflection and Positionality

An important part of the research process for me was the opportunity I had to analyse my own position and understanding of teachers and other stakeholders in my sample. I have always been passionate about inclusive education and improving the learning and experiences of children with diverse needs. However, it would be naïve to put the onus on just teachers for successful implementation and blame them for the current status of inclusive education without a thorough understanding of their perspectives, experiences and the real-life situations they face. Singal (2019) also questions the tendency to treat the mainstream education teachers as problems in the context of inclusive education without an understanding of the constraints of the environments under which they operate and are often limited in terms of resources and time at their disposal. She urges the need for respecting their knowledge and situation and involving them in the process as equal partners. The fact is that inclusive education is still at a nascent stage in India even after several years of formulation and adoption of various legislation in the field. The aim of the present research was to find workable solutions to one aspect of the problem-which was teacher preparation.

My awareness and understanding of this area were primarily based on my personal experience of working in schools in India as well as knowledge gained during my Masters course. However, this research through the University of Northampton has helped me to gain new knowledge and widen my understanding of inclusion in India, UK and across the world. The exposure I have gained through the process of reading literature, attending conferences and workshops (within the University and outside), engaging in discussions and interaction with professionals in the field, senior researchers and colleagues has truly been insightful and valuable, broadening and enriching my thought process. Undertaking this research study has enabled me to critically think and reflect on the status of inclusive education in India and the role of the mainstream teacher in its successful implementation. It has made me ponder on the possible solutions to empower teachers with the requisite knowledge, skills and competencies to confidently cater to the diverse learning needs. My resolve and commitment to work for the empowerment and preparation of the regular mainstream teacher which I believe would ultimately result in provision of better and fairer education for all children has strengthened.

Additionally, it has enabled me to develop my skills as a researcher in designing and conducting a research project, with an awareness about research methodology, research ethics and procedures. I do intend to continue research in the field of inclusive education, preferably partnering with other researchers and the knowledge and experience gained through this study will certainly be of immense benefit to me in this regard. Furthermore, this research journey of the past five odd years has helped me develop patience and perseverance, the strength to dig deep and carry on even when things don't

seem to be going right and motivation wanes, resilience to fight all odds and stay committed and most importantly, finding the right balance between family and home, work commitments and research. I have also learnt that one can't really force the pace of things or get affected by matters beyond one's control. Backing myself at all times and placing trust in the Higher power has kept me going. These are skills and learnings for life which will stay with me no matter what the context or situation.

#### 15.4 Limitations of the Research

Although the research project was conducted in the four of the five major metropolitan cities in India and involved 10 schools, it is still a small scale study. The schools that were part of the sample were all in urban environments and followed one of the two national boards (the CISCE or CBSE). Involving government schools or schools following the State Boards of the respective states could have provided additional information in respect of understanding the challenges faced by teachers who worked in those contexts and their training needs might have been different from what I found from the current sample. Furthermore, India is a large country with 28 states and 9 union territories and a variety of cultures, languages and development status. Hence the findings are not generalisable within the state or country, even in similar schools.

However, findings from my study have several commonalities not just across locations in my study but also with previous studies conducted in different locations in India and internationally and with different samples such as pre-service teachers and teachers in government schools. Though no one single study has looked at all the aspects that I have, the findings are comparable on different aspects of my research such as teacher concerns and preferred modes of learning. The thought behind conducting the study in these well-known, private schools in metro cities with good infrastructure and also with supposedly more qualified, experienced staff and better school systems and policies was that if there were challenges faced in implementing inclusive education even in these settings then these were bound to be present in aided schools or schools in rural areas. Nevertheless, it must be kept in mind that the teachers and other stakeholders who were part of my study are likely to have better school experiences than those available to many of their peers especially in rural settings and government schools where the profile of both the students and their parents is different and their workload involves more administrative work. Therefore, caution must be exercised in applying the findings from this study to teachers operating in different environments and settings. The nature of the school is bound to affect factors such as availability of resources, school policies and structure, staff being up to date about current trends, teacher attitudes, motivation and commitment in government jobs vis a vis private school jobs where the teachers as well as the school are continuously supposed to prove themselves.



Notwithstanding these limitations, the work lends valuable insights into teacher challenges and their training needs which would help individual institutions and teacher educators to design a professional development programme that would benefit teachers in all settings with certain variations as per the local context and culture.

### 15.5 Implications of Findings and Recommendations

The implications of the study emerge from the findings. The findings related to teacher challenges and professional development needs highlight the areas in which teachers require training. Many of these areas such as differentiated instruction, planning for an inclusive class and strategies to reach out to the diverse learners have hitherto been ignored in teacher training programmes in schools as well as pre-service training curricula. Several studies have shown that the initial teacher training provided by teacher training institutes in India leaves much to be desired and have advocated reforming teacher education (Sharma *et al.*, 2009). The non-standardisation of curriculum taught at these institutes and their ineffectiveness in training future teachers to perform their duties in inclusive classrooms is a serious issue that needs to be addressed. There needs to be a rethinking, reforming and standardisation of both pre-service and in-service training programmes, based on evidence and ensured that an inclusive way of thinking is ingrained into the curriculum and not relegated to the status of something ‘also-taught’ or taught in isolation. However, there is hope. Despite the diversity and complexities involved in implementing inclusive education in a populous country as India, decent progress has been made in terms of legislation, awareness and steps taken by the government with the support of other international organisations and NGOs. This study also reveals that schools are making efforts towards teacher professional development which is definitely helping teachers to pick up new skills. However, these programmes need to be more systematic, planned and geared towards inclusion. Until the time we reach the stage that in-service training programmes can be standardised in India, school heads and management should be made aware of the need for a comprehensive and systematic PDP that is aimed at preparing teachers for teaching a class of diverse learners effectively. Several pertinent issues such as how this can be done nation-wide and how best can schools be supported by providing the knowledge, content and resources, including resource personnel to make this possible need to be looked into.

The PDP must be designed incorporating the features suggested by participants in the study such as involving a balance of theory and practice, having simulations of actual classes and relevant for that section of teachers as per the subject and age level of students they teach. In the current times a hybrid model which combines both elements of online and physical format could be considered. It is also important to recognise that adult learners have certain characteristics and also have their unique needs

and learning preferences. Hence, when it comes to delivering professional development, what works for some teachers may not work for others. Hence, efforts to identify effective methods to reach out to all teachers and the need for pedagogical approaches that are culturally responsive are imperative. Also, although the timing of the training sessions is a school-related matter, findings have highlighted the need for these to be scheduled in periods when teachers are relatively less busy and in the right frame of mind to take in the learning. Otherwise, it might become just one more activity in their long list of tasks to be undertaken.

At the heart of the other challenges lay the curriculum-based challenges. As teachers at the upper primary and secondary level are always under pressure to complete the curriculum and prepare students for Board exams, there is always a paucity of time. Additionally, the argument put forth and rightly so was that if average students struggled to complete the curriculum, how were the students with certain difficulties and special needs expected to complete the same curriculum in the same time frame. The curriculum is rigid in terms of both content and level of difficulty and even with concessions and accommodations, it remains unattainable for a section of students. Therefore, a curriculum, which is so heavy, inflexible and at times unfair and irrelevant to students with special and additional needs and first-generation learners needs to be revisited by the educational boards under the supervision of the Ministry of Education.

On their part, schools could relook at their systems and policies that might be unintentionally hindering the adoption of inclusive practices. Maintaining a reasonable student-teacher ratio which enables the teacher to know each of her students and cater to his/her individual needs is recommended. Teachers should also be supported by providing necessary resources in terms of teaching learning aids-online as well as physical resources such as useful websites, worksheets, games and manipulatives and a manual that may serve as a ready reckoner. Regular and non-judgemental access to special educators and counsellors and a platform to share their concerns as well as best practices within the school might go a long way in giving teachers the confidence and support they require in carrying out their duties.

It is advisable that schools take steps to ease the work pressure on teachers by reducing their non-academic and administrative work, providing them the requisite training and creating a culture of transparency and collaboration. Opportunities for staff to de-stress regularly and avenues for receiving counselling and mentoring were recommended by participants and should be provided by academic institutions. To become reflective and responsive practitioners, teachers must also be given that time and space instead of constantly being rushed from one task and activity to another. Also important is to stop using students' performance as a benchmark of the teacher's success and capability. This is likely to lighten the pressure on teachers to constantly 'perform' and prove

themselves and motivate them to spend more time and effort even on the average and below average students (Forlin, 2010). Identification of student needs and early intervention, though an indirect factor, would enable faster and better progress for the concerned child and in the long run be beneficial for both the children, their parents as well as teachers.

An unexpected finding in this research was that securing parental involvement, cooperation and support was also a major challenge for teachers. This involved factors like lack of acceptance and inappropriate parenting styles. Therefore, measures such as holding regular meetings with parents and involving them in drawing out plans for their child is vital. Also, creating awareness, organising relevant workshops and sessions for parents which help them in understanding, accepting and supporting their child appropriately is recommended.

### 15.6 Implications for Future Professional Practice

One of the intentions of this research was to raise awareness about the significant role of the regular teachers in making inclusive education successful and therefore the need to examine their professional development needs in this respect and design programmes to empower them to carry out their responsibilities in an inclusive class efficiently. I hope that this study will help me to make a positive difference for the promotion of a wider understanding of the professional development needs of regular teachers who suddenly find themselves responsible for teaching an inclusive class of learners without being adequately prepared for it. As the next step in the process of managing this research, I will be disseminating my findings. This will be focussed not just to the schools who were directly involved in my research, but also the wider research community and academic audience through publication in academic journals and conference presentations. If teachers are trained and equipped with competences in inclusive education right from their pre-service training along with the practical exposure and experience they require to apply it, it would prevent problems later on and make for more confident, efficient educators. Therefore, I also intend to reach out to teacher training centres in India and share my findings and recommendations with them.

It is also important to ensure that there is an awareness of the needs of both students with diverse needs as well as educators who are supposed to identify, understand and then be trained to address these needs. They are required to make changes to their pedagogical approaches, tailor content and formulate strategies to ensure all children are able to learn as per their potential. This requires a culture of inclusion in schools which involves all staff, parents, and management along with appropriate scaffolding and support for teachers. I hope that my work may contribute to furthering understanding and initiating appropriate action in this area. Workshops, seminars and presentations will be conducted as part of this effort, within a range of Indian contexts. The ultimate aim is that with

appropriate training and skills, teachers will be able to reach out to the diverse learners and all students would have an equal opportunity to achieve to the best of their ability. This study has also enabled me to gain insights into the challenges and very limited choices that both teachers and in some cases, the school managements actually have. Another important and personal implication of this study for me has been that it has brought to the fore pertinent issues and interesting themes and sub-themes related to the topic of the research study, which I have been able to understand and are of genuine interest to me.

### 15.7 Recommendations for Further Research

This study focused on regular teachers from private English medium schools, based in urban locations and following one of the national boards of education in India. Considering the multiplicity of education boards and kinds of schools in India, compounded by a vast diversity in the rural and urban environments, the present sample, could not represent all groups of teachers. Future research could focus on mainstream teachers from schools following State boards and International Boards, from government as well as private aided schools and schools located in other urban cities as well as rural backgrounds. Additionally, the sample consisted of educators teaching in the upper primary and secondary section. It could also be expanded to teachers in the pre-primary and primary sections since their challenges and training needs are likely to be different. The challenge lies in designing a professional development programme which has a common core part for all teachers and then different modules and modes based on the needs of the specific group. Examining the issues which affect these groups of educators in different contexts like government schools or urban settings would help in designing appropriate strategies that would be relevant to their specific contexts and needs. Furthermore, while this study took into account the opinions of other key stakeholders in a school context such as the heads of schools, SENCos, counsellors and section heads, parents of students with diverse needs who are also significant stakeholders, were not part of the study. Research in the future could also gain further perspectives to understand the challenges faced by parents and incorporate their feedback and suggestions. Student voices were also absent from this study. Taking a 360-degree view of the situation and seeking student responses to the research questions might have provided interesting insights especially since the students in the upper primary and secondary sections would be able to voice their thoughts better. More research is needed to collect useful large-scale data across India and to consolidate the findings of such research.

Future research studies, can focus upon questions that might include: Is there a way of getting more researchers and professionals in the field involved and designing a professional development programme that prepares teachers across the country and in different settings to teach a class of diverse learners? Can there be a standardisation of pre-service and in-service training on these lines?

How do we make sure that teacher training institutes and individual academic institutions are made accountable for the outcomes of all teacher training programmes in the absence of any well-defined policy and consequences? What additional support do teachers in state run schools need in order to deliver a good standard of education to all learners? What kind of support system needs to be in place for institutions themselves to deliver such professional development programmes? How and from where can we procure or prepare such good quality of resource persons, who have the knowledge, skills and experience to deliver such training? These could be some of the relevant questions that need to be asked so that research can inform the development of policies and practices. As Singal (2019) rightly states, “The fundamental question is not ‘why’ but how to deliver the vision of an inclusive education system.”

## REFERENCES

- Able, H., M. Sreckovic, T. Schultz, J. Garwood, and J. Sherman. 2015. "Views from the Trenches: Teacher and Student Supports Needed for Full Inclusion of Students with ASD." *Teacher Education and Special Education* 38 (1): 44–57. doi:10.1177/0888406414558096.
- Ahsan, M T, Sharma, U., & Deppeler, J. M. (2012). Exploring pre- service teachers' perceived teaching-efficacy, attitudes and concerns about inclusive education in Bangladesh. *International Journal of Whole Schooling*, 8(2), pp. 1–18.
- Ahuja, A. (2002a) Overcoming barriers to learning in developing countries, in: Proceedings of the International Special Education Congress 2000. Available online at: [www.isec.org.uk](http://www.isec.org.uk) (accessed on 15 January 2019).
- Ainscow, M. (2007). From special education to effective schools for all; a review of progress so far. In L. Florian, *The sage handbook of special education*. Thousand Oaks, California; Sage Publications.
- Ainscow, M., and M. César (2006) Inclusive Education Ten Years After Salamanca: Setting the Agenda. *European Journal of Psychology of Education* 21 (3), pp. 231–238.
- Ainscow, Mel and César, Margarida (2006). Inclusive education ten years after Salamanca: Setting the agenda. *European journal of psychology of education*, 21(3), pp. 231–238.
- Ainscow, Mel; Farrell, Peter and Tweddle, Dave (2000). Developing policies for inclusive education: A study of the role of local education authorities. *International Journal of Inclusive Education*, 4(3), pp. 211-229.
- Alur, M. and Rioux, M. (2003) Included. *An Exploration of Six Early Education Pilot Projects for Children with Disabilities in India*. Toronto: York University.
- Alzahrani, N. (2020). The development of inclusive education practice: A review of literature. *International Journal of Early Childhood Special Education*, 12(1), pp. 68-83.
- Amineh, R.J. and Asl, H.D., 2015. Review of constructivism and social constructivism. *Journal of Social Sciences, Literature and Languages*, 1(1), pp. 9-16.
- Andreason, Randall, J., Seevers, Brenda; Dormody, Thomas; VenLeeuwen, Dan (2007) Training needs of New Mexico agricultural education teachers related to inclusion of students with special needs. *Journal of Agricultural Education*, 48 (4), pp. 117–129.
- Anees, S. (2014) Disability in India: The Role of Gender, Family, and Religion. *Journal of Applied Rehabilitation Counselling*. [Online] 45 (2), pp. 32–38.
- Anuradha, D, & Dreze, J. (1999) *Public Report on Basic Education in India*. New York: Oxford University Press.
- Arksey, H. and Knight, P. (1999) *Interviewing for Social Scientists*. London: Sage
- Armstrong, Derrick; Armstrong, Ann Cheryl and Spandagou, Ilektra (2011) Inclusion: by choice or by chance?, *International Journal of Inclusive Education*, 15:1, pp. 29-39, DOI: 10.1080/13603116.2010.496192
- Aruna, S.K. and Lal, M. (2016) Inclusive education in India. *The International Journal of Indian Psychology*, 4(1), pp. 84.
- Avramidis, E. et al. (2002) Inclusion in action: an in-depth case study of an effective inclusive secondary school in the south-west of England. *International journal of inclusive education*. [Online] 6 (2), pp. 143–163.
- Avramidis, E., Bayliss, P. & Burden, R. (2004) 'A survey into mainstream teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school in one local education authority.' *Educational Psychology*, 20 (2), pp. 99–121.
- Avramidis, E., Bayliss, P., & Burden, R. (2000). A survey into mainstream teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school in one local educational authority. *Educational Psychology*, 20, pp. 193–213.

- Avramidis, Elias and Norwich, Brahm (2002). "Teachers' Attitudes towards Integration / Inclusion: A Review of the Literature." *European Journal of Special Needs Education* 17(2), pp. 129-47.
- Bacon, E.H., & Schultz, J.B. (1991). A survey of mainstreaming practices. *Teacher Education and Special Education*, 14(2), pp. 144-149.
- Baker, J. M. & Zigmond, N. (1990) Are regular education classes equipped to accommodate students with learning disabilities? *Exceptional Children*, 56, pp. 515-526.
- Bandura, A. (1997) *Self-Efficacy: the Exercise of Control*. New York: W.H. Freeman and Company.
- Barakat, B., Bengtsson, S., Muttarak, R. and Kebede, E. (2016) Modelling SDG scenarios for Educational Attainment and Development. *CESDEG: Education for all Global Monitoring Report* (EFA-GMR).
- Bell, J. (2005) *Doing your research project: A guide for first-time researchers in education, health and social science*. Buckingham: Open University Press.
- Belotto, M.J. (2018) Data Analysis Methods for Qualitative Research: Managing the Challenges of Coding, Interrater Reliability, and Thematic Analysis. *The Qualitative Report* 23 (11), pp. 2622-2633
- Berry, J. W. & Dalal, A. (1996) *Disability – attitude – belief – behavior study: report on an international project in community based rehabilitation* (Kingston, Ontario, Queen's University, International Center for the Advancement of Community Based Rehabilitation).
- Bers, T.H., 1989. The Popularity and Problems of Focus-Group Research. *College and university*, 64(3), pp. 260-68.
- Bhan, Sujata and Rodricks, Suzanne (2012) Indian perspective on child's right to education. *Procedia – Social and Behavioral Sciences*, 69, pp. 367–376.
- Bhatnagar, N. (2006) Attitudes and Concerns of Indian Teachers towards Integrated Education. Unpublished doctoral dissertation, Victoria University.
- Bhatnagar, Nisha and Das, Ajay (2013) Nearly Two Decades After the Implementation of Persons with Disabilities Act: Concerns of Indian Teachers to Implement Inclusive Education. *International Journal of Special Education* 28 (2), pp. 104–113
- Bhatnagar, Nisha, & Das, Ajay. (2014a). Regular School Teachers' Concerns and Perceived Barriers to Implement Inclusive Education in New Delhi, India. *International Journal of Instruction*, 7(2), pp. 89–102.
- Bhatnagar, Nisha, and Das, Ajay (2014b). "Attitudes of Secondary School Teachers towards Inclusive Education in New Delhi, India." *Journal of Research in Special Educational Needs* 14.4, pp. 255-63
- Bindal, S. & Sharma, S. (2010). Inclusive education in Indian context. *Journal of Indian Education*, 35(4), pp. 34-45
- Blanton, L. P., Pugach, M., & Florian, L. (2011). Preparing general education teachers to improve outcomes for students with disabilities. Retrieved from <http://aacte.org/research-policy/recent-reports-on-educator-preparation/preparing-general-education-teachers-to-improve-outcomes-for-students-with-disabilities.html>
- Booth, Tony (1999) Viewing Inclusion from a Distance: Gaining Perspective from Comparative Study. *Support for learning*, 14(4), pp.164–168.
- Bordoloi, R. (2011) Challenges in elementary education in India: various approaches. *Journal of Education and Practice*, 2 (7), pp. 39–45.
- Bouck, Emily C. 2004. "Exploring Secondary Special Education for Mild Mental Impairment. A Program in Search of Its Place." *Remedial and Special Education* 25 (6), pp. 367–379.
- Bradshaw, L. and Mundia, L. (2006). Attitudes to and concerns about inclusive education: Bruneian in-service and pre-service teachers. *International Journal of Special Education*, 21(1), pp. 35-41.
- Bradshaw, L. G. (2003). Brunei SENA teachers speak out. *Studies in Education*, 8(1), 1-10.

- British Educational Research Association (2011) *Ethical Guidelines for Educational Research*. Available at: <http://www.bera.ac.uk/researchers-resources/publications/ethical-guidelines-for-educational-research-2011> [accessed on 15.11.17]
- Buell, M., Hallam, R. and Gamel McCormick, M. (1999). A survey of special and general education teachers' perceptions and in-service needs concerning inclusion. *International Journal of Disability, Development and Education*, 46 (2), pp. 143–156.
- Carbonaro, M., Bainbridge, J. and Wolodko, B. (2002) Using Internet surveys to gather research data from teachers: Trials and tribulations. *Australasian Journal of Educational Technology*, 18(3).
- Carroll, A., Forlin, C., & Jobling, A. (2003). The impact of teacher training in special education on the attitudes of Australian preservice general educators towards people with disabilities. *Teacher Education Quarterly*, 30(3), pp. 65–79.
- Case Study of an Effective Inclusive Secondary School in the South-West of England.” *International Journal of Inclusive Education* 6 (2), pp. 143–163.
- Chadha, A. (2000) *From isolation to inclusion*. DPEP Calling, 8–10 December.
- Chow, Wing Sze Emily and Sharma, Umesh (2022): Are in-service teachers supported in Hong Kong? Teachers' perceived support needs in the implementation of inclusive education, *International Journal of Inclusive Education*, DOI: 10.1080/13603116.2022.2118379
- Chris Forlin & Dianne Chambers (2011) Teacher preparation for inclusive education: increasing knowledge but raising concerns, *Asia-Pacific Journal of Teacher Education*, 39 (1), pp. 17-32
- Clough, P. and Lindsay, G. (1991). *Integration and the Support Service*. Slough: NFER.
- Coghlan D, Brannick T (2005) *Doing Action Research in Your Own Organization*, 2nd ed. London, UK: SAGE.
- Cohen, L., Morrison, K. and Manion, L. (2007) *Research Methods in education*. 6<sup>th</sup>ed. London: Routledge
- Cohen, L., Morrison, K. and Manion, L. (2018) *Research Methods in Education*. 8<sup>th</sup>ed. London: Taylor & Francis Group.
- Cole, Cassandra, and James McLeskey (1997). “Secondary Inclusion Programs for Students with Mild Disabilities.” *Focus on Exceptional Children* 29 (6), pp. 1–15.
- Cotton, S.E., 2000. Professional development needs assessment for secondary vocational and technical education teachers related to students with special needs. *Academic Quarterly Exchange*, 4 (2), pp. 33–40.
- Creswell, J. W. (2015) *Educational research : planning, conducting, and evaluating quantitative and qualitative research*. 4th ed., International ed. Boston, Mass. ;: Pearson Education, Inc.
- Creswell, J. W., & Creswell, J. D. (2017). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. New York: Sage
- Creswell, J.W. (2018) *Educational Research : Planning, Conducting, and Evaluating Quantitative and Qualitative Research*, Pearson Education, Upper Saddle River.
- Das, A. K. (2001) Perceived training needs of regular primary and secondary school teachers to implement inclusive education programs in Delhi, India. Unpublished doctoral dissertation, The University of Melbourne.
- Das, A. K., & Shah, R. (2014). Special education in India. *Advances in Special Education*, 28, pp. 561–581.
- Das, A., and R. Kattumuri (2011) “Children With Disabilities in Private Inclusive Schools in Mumbai: Experiences and Challenges.” *Electronic Journal of Inclusive Education* 2 (8), pp.7
- Das, Ajay K. ; Gichuru, Margaret ; Singh, Ajay (2013a), Implementing Inclusive Education in Delhi, India: Regular School Teachers' Preferences for Professional Development Delivery Modes, *Professional Development in Education*, 39 (5), pp. 698-711



- Das, Ajay K.; Kuyini, Ahmed B.; Desai, Ishwar P. (2013b) Inclusive Education in India: Are the Teachers Prepared? *International Journal of Special Education*, 28 (1) pp. 27-36
- Davies, Susan, and Andrew Howes (2005) "What Difference Can We Make, and How? Interpreting the Challenge of Inclusion in Secondary Schools in England and Wales through Participants' Theories of Change." Paper Presented at the *British Educational Research Association Annual Conference*, University of Glamorgan, 14–17 September 2005, pp. 1–23.
- de Boer, A., S. J. Pijl, and A. Minnaert. 2011. "Regular Primary Schoolteachers' Attitudes Towards Inclusive Education: A Review of the Literature." *International Journal of Inclusive Education* 15 (3), pp. 331–353. doi:10.1080/13603110903030089.
- De Vaus, D.A (2003) *Surveys in Social Research*. 5<sup>th</sup> ed. Rawat Publication: New Delhi
- De Vroey, A., Struyf, E. and Petry, K. (2016) Secondary schools included: a literature review. *International journal of inclusive education*, 20(2), pp.109-135.
- Department of Education and Skills (DES). (1978). *The Warnock Report*. London: HMSO.
- Department of Education. (2004). *Overview. Annual report, 2004–2005*. Retrieved February 11, 2005, from [http://education.nic.in/Annualreport2004-05/ar\\_en\\_05\\_cont.asp](http://education.nic.in/Annualreport2004-05/ar_en_05_cont.asp)
- Department of Education. (2005). *Background: The current NFE scheme*. Retrieved May 10, 2005, from [http://education.nic.in/edu\\_guarantee\\_sch/edu\\_guarantee\\_back.asp](http://education.nic.in/edu_guarantee_sch/edu_guarantee_back.asp)
- Dev, Poonam.C. and Belfiore, Phillip.J. (1996). *Mainstreaming Students with Disabilities: Teacher Perspectives in India*
- Dickens-Smith, M. (1995). *The Effect of Inclusion Training on Teacher Attitude towards Inclusion*; ERIC Document No. ED 332 802.
- Disability India Information Resources. (2007). Retrieved from <http://www.disabilityindia.com/html/facts.html>
- Dixit, R.K., National Education Policy (NEP) 2020-Opportunities and Challenges in Teacher Education. *National Education Policy 2020*, pp. 120.
- Dreze, J., & Sen, A. (1995). Basic education as a political issue, *Journal of Educational Planning and Administration*, 11(1), pp. 1–26.
- Dyer, C. (2005) Decentralisation to improve teacher quality? District Institutes of Education and Training in India. *Compare: A Journal of Comparative and International Education*, 35 (2), pp. 139–152.
- Eccleston, S. T. (2010). Successful collaboration: Four essential traits of effective special education specialists. *The Journal of the International Association of Special Education*, 11, 40-47.
- Ellins, Jean, and Jill Porter. 2005. "Departmental Differences in Attitudes to Special Educational Needs in the Secondary School." *British Journal of Special Education* 32 (4), pp. 188–195. <http://opus.bath.ac.uk/10549/>.
- Ewing, Donna L.; Monsen, Jeremy J. and Kielblock, Stephan (2018) Teachers' attitudes towards inclusive education: a critical review of published questionnaires, *Educational Psychology in Practice*, 34(2), pp.150-165
- Florian, L. (2005). 'Inclusion', 'special needs' and the search for new understandings. *Support for Learning*, 20(2), pp. 96-98.
- Florian, Lani (2014) What counts as evidence of inclusive education? *European journal of special needs education*, 29(3), pp.286–294.
- Forlin, C. (1995). 'Educators' beliefs about inclusive practices in Western Australia', *British Journal of Special Education*, 22, pp. 179–185.
- Forlin, C. (2018a). *Teacher education and inclusion in the Asia Pacific region*. Oxford Research Encyclopaedia of Global Perspectives on Teacher Education, New York: Oxford University Press.

- Forlin, C. (2018b). Developing Sustainable, Accountable and Contextually Appropriate Policy to Ensure High-quality Inclusive Education, *Asian Journal of Inclusive Education*. 6 (1), pp. 3-20
- Forlin, C., Douglas, G. and Hattie, J. (1996). Inclusive practices: How accepting are teachers?. *International Journal of Disability, Development and Education*, 43(2), pp.119-133.
- 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), pp. 195–209.
- Forlin, Chris (2010) 'Reframing teacher education for inclusion', in *Teacher Education for Inclusion*. [Online]. Routledge. pp. 29–38.
- Forlin, Chris and Florian, Lani (2010) *Teacher Education for Inclusion*, London: Routledge.
- Fowler, F. J., Jr (2009) *Survey Research Methods*, 4<sup>th</sup> ed., Thousand Oaks, CA: Sage
- Fox, J., Murray, C. and Warm, A. (2003) Conducting research using web-based questionnaires: practical, methodological, and ethical considerations. *International Journal of Social Research Methodology*, 6 (2), pp. 167-180
- Gething, L. (1991). The Interaction with Disabled Persons scale: Manual and kit. Sydney: University of Sydney.
- Gething, L. (1994). The Interaction with Disabled Persons Scale. *Journal of Social Behavior and Personality*, 9(5), pp. 23–42.
- Ghai, A. (2002). Disability in the Indian context: Post-colonial perspectives. In M. Corker, & T. Shakespeare (Eds.), *Disability/postmodernity: Embodying disability theory*. London: Continuum.
- Gibbs, G. R. (2007) *Analysing Qualitative Data*. London: Sage
- Gibbs, G.R. (2012) Focus groups and group interviews. In J. Arthur, M. Waring, R. Coe and L.V. Hedges (eds) *Research methods and Methodologies in Education*. London: Sage, pp. 186-192
- Gillham, B. (2000) *The Research Interview*. London: Continuum
- Gillham, B. (2005) *Research Interviewing: The Range of Techniques*. Maidenhead: Open University
- Gough, B. and James, D. (1990) *Planning professional training days*. Philadelphia, PA: Open University Press.
- Graham, Linda, and Valerie Harwood. 2011. "Developing Capabilities for Social Inclusion: Engaging Diversity through Inclusive School Communities." *International Journal of Inclusive Education* 15 (1), pp. 135–152. doi:10.1080/13603116.2010.496208.
- Greene, J. C., Caracelli, V. J. and Graham, W. F. (1989) Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11, pp. 255-274.
- Hammersley, M. and Traianou, A., 2012. *Ethics in qualitative research: Controversies and contexts*. London: Sage.
- Hardy, I. (2009) Teacher professional development: a sociological study of senior educators' PD priorities in Ontario. *Canadian Journal of Education*, 32 (3), pp. 509–532.
- Harlow, A. (2010). Online surveys – possibilities, pitfalls and practicalities: The experience of the TELA evaluation. *Waikato Journal of Education*, 15, pp. 95–108.
- Harvey, D.H., & Green, K. (1984). Attitudes of New Zealand teachers, teachers in training and non teachers toward mainstreaming. *New Zealand Journal of Educational Studies*, 19, pp. 34–44.

- Hasnain, R., Shaikh, L.C., & Shanawani, H. (2008). Disability and the Muslim Perspective: An Introduction for rehabilitation and health care providers. CIRRIE Mono graph Series, Stone, J. (Ed.). Retrieved from <http://cirrie.buffalo.edu/culture/monographs/muslim.pdf>
- Hennink, M., & Kaiser, B. (2019). Saturation in Qualitative Research. In P. Atkinson, S. Delamont, A. Cernat, J.W. Sakshaug, & R.A. Williams (Eds.), *SAGE Research Methods Foundations*.
- Hernández-Torrano, D., Somerton, M. and Helmer, J. (2020) Mapping research on inclusive education since Salamanca Statement: a bibliometric review of the literature over 25 years. *International journal of inclusive education*, pp.1–20.
- Hobbs, T., & Westling, D. L. (1998). Promoting successful inclusion through collaborative problem solving. *Teaching Exceptional Children*, 31(1), pp. 12-19.
- Hochschild, J. L. (2009) Conducting intensive interviews and elite interviews. Workshop on Interdisciplinary Standards for Systematic Qualitative Research. Available from: <http://scholar.harvard.edu/jlhochschild/publications/conducting-intensive-interviews-and-elite-interviews> (Accessed 28 June, 2018)
- Hodgkinson, A. and Devarakonda, C. (2009) Conceptions of inclusion and inclusive education: a critical examination of the perspectives and practices of teachers in India. *Research in Education*, 82 (1) pp. 85–99.
- Hoover WA. 1996. The practice implications of constructivism. *SEDL Letter*, 9(3), pp. 1-2.
- Houck, C.K. & Rogers, C.J. (1994). The special/general education initiative for students with specific learning disabilities: A "snapshot" of program change. *Journal of Learning Disabilities*, 27, pp. 435-453.
- Houghton, F. & Houghton, S. (2018) An Appraisal of Thematic Analysis: Warts and All. *All Ireland Journal of Higher Education* 10 (2), pp. 3521 - 3525
- Hsien, M.L.W. (2007) Teacher attitudes towards preparation for inclusion – in support of a unified teacher preparation program. Post-script: *Post Graduate Journal of Education Research*, 8 (1), pp. 49–60.
- Humphrey, C. (2012) Dilemmas in doing insider research in professional education, *Qualitative Social Work* ,12(5), pp. 572–586
- Iacono, Teresa ; Tracy, Jane ; Keating, Jenny and Brown, Ted (2009) The Interaction with Disabled Persons scale: Revisiting its internal consistency and factor structure, and examining item-level properties, *Research in Developmental Disabilities*, 30 (6),pp. 1490-1501
- Ingram, P.D. (1997). Leadership behaviours of principals in inclusive educational settings. *Journal of Educational Administration*, 35(5), pp. 411–27.
- International Journal of Disability, Development and Education, 53 (3), pp. 351–369.
- International Journal of Technology and Inclusive Education (IJTIE), Volume 6, Issue 2, December 2017
- Jagannathan, Shanti (2001) The Role of Nongovernmental Organizations in Primary Education : A Study of Six NGOs in India. *Policy Research Working Paper*; No. 2530. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/19714> License: CC BY 3.0 IGO.”
- Jangira, N. K., Singh, A., & Yadav, S. K. (1995). Teacher policy, training needs and perceived status of teachers. *Indian Educational Review*, 30(1), pp. 113–122.
- Jha, M. M. (2001) Integrated education of the disabled children: a vision and programme, paper presented at the *National Workshop in Inclusive Education for Children with Disabilities, Prospects and Challenges* (New Delhi, NIPCD and Planning Commission).
- Jha, M. M. (2002), *School Without Walls: Inclusive Education for All*. Oxford: Heinemann.
- Jha, M.M, (2010), *From Special to Inclusive Education in India: Case Studies of Three Schools in Delhi*, 1<sup>st</sup> ed, India: Pearson

- Jhulka, A. (2002) Inclusion, concept and meaning, paper presented at *the National Workshop for Training Master Trainers: Orientation in Inclusive Education*, March (New Delhi, NCERT).
- Jiminez, E. (2020) Emotional Quotient, Work Attitude and Teaching Performance of Secondary School Teachers, *Journal of Pedagogical Sociology and Psychology*, 2 (1), pp. 25 - 35
- Kalyanpur, M. (1996) The influence of Western special education on community-based services in India, *Disability and Society*, 11(2), pp. 249–270.
- Kalyanpur, M. (2006) Inclusion in India: cultural influences and the transfer of Western special education technology in conflict. Paper presented at the Annual Conference of the America Educational Research Association (AERA), San Francisco, CA, USA, April 2006.
- Kanselaar, G., 2002. Constructivism and socio-constructivism. *Constructivism and socio-constructivism*, pp.1-7.
- Kaul, V. (2002). Early childhood care and education. In R. Govinda (Ed.), *India education report. A profile of basic education* Oxford, England: Oxford University Press, pp. 23–34.
- Kauts, A. & Bhardwaj, P. (2012). Inclusive Education: Concerns and Policy Perspectives, *University New*, 50(02), pg. 7 – 13.
- Kimmel, H., Deek, F. P., Farrell, M. L. and O'Shea, M. (1999) Meeting the needs of diverse student populations: Comprehensive professional development in science, math and technology. *School Science and Mathematics*, 99, pp. 241-249.
- Kingdon, Geeta. G (2007) The progress of school education in India, *Oxford Review of Economic Policy*, 23 (2), pp. 168–195
- Kingdon, G. G. (2020) The Private Schooling Phenomenon in India: A Review. *The Journal of development studies*. [Online] 56 (10), pp. 1795–1817.
- Kinsella, W. & Senior, J. (2008) Developing inclusive schools: a systemic approach. *International journal of inclusive education*, 12(5-6), pp. 651–665.
- Kosko, K.W. and Wilkins, J.L.M. (2009) General educators' in-service training and their self-perceived ability to adapt instruction for students with IEPs. *The professional educator*, 33(2), pp. 14–23.
- Krueger, J. (1988) *Focus Groups: A Practical Guide for Applied Research*. Beverly Hills, CA: Sage
- Kugelmass, J. and Ainscow, M. 2004. Leadership for education: a comparison of international practices. *Journal of research in special educational needs*, 4(3), pp. 133–141.
- Kundu, A. and Rice, M. (2019) Indian educators' perceptions of their inclusion implementation practices in secondary schools. *British Journal of Special Education*, 46(4), pp. 398-422.
- Leatherman, J. M., & Niemeyer, J. A. (2005). Teachers' attitudes toward inclusion: Factors influencing classroom practice. *Journal of Early Childhood Teacher Education*, 26(1), pp. 23–36.
- Leeds-Hurwitz W. 2009. Social construction of reality. *Encyclopaedia of communication theory*, pp. 892-895.
- LeRoy, B. and Simpson, C. (1996). 'Improving student outcomes through inclusive education. *Support for learning*. [Online] 11 (1), pp. 32–36.
- Lester NB & Onore CS. (1990) *Learning Change: One school district meets language across the curriculum*. Portsmouth, NH: Boynton/Cook Publishers.
- Lodico, M.G., Spaulding, D. T, &Voegtler, K. (2010) *Methods in Educational Research: from Theory to Practice*. San Francisco: Jossey Bass
- Loreman, T., Forlin, C., Chambers, D., Sharma, U. and Deppeler, J. (2014). Conceptualising and measuring inclusive education. In *Measuring inclusive education*. Emerald Group Publishing Limited., pp. 3–17.

- MacFarlane, K., & Marks Woolfson, L. (2013). Teacher attitudes and behavior toward the inclusion of children with social, emotional and behavioral difficulties in mainstream schools: An application of the theory of planned behavior. *Teaching and Teacher Education*, 29, pp. 46–52.
- McGrath, J. And Coles, A. (2013) *Your Education research Project Companion*. Harlow: Pearson
- Mehrotra, S. (2012).The cost and financing of the right to education in India: Can we fill the financing gap? *International Journal of Educational Development*, 32(1), pp. 65–71.
- Meijer, C. and Watkins, A. (2016). Changing conceptions of inclusion underpinning education policy. In A.Watkins and C. Meijer (Eds). *Implementing Inclusive Education: Issues In Bridging the Policy-Practice Gap*. Bingley: Emerald
- Menon, S. (2020) NEP 2020: Some Searching Questions. *Social Change (New Delhi)*. 50 (4), pp. 599–602
- Merton, R.K. (1987) The focussed interview and focus groups: Continuities and discontinuities. *The Public opinion quarterly*, 51(4), pp. 550-566.
- Merton, R.K. (2008). *Focused interview*. Simon and Schuster.
- Miegheem, Aster Van; Verschueren, Karine; Petry, Katja and Struyf, Elke (2020) An analysis of research on inclusive education: a systematic search and meta review, *International Journal of Inclusive Education*, 24(6), pp. 675-689, DOI: 10.1080/13603116.2018.1482012
- Miles, M. (2002) Community and individual responses to disablement in South Asian histories: old traditions, new myths?, *Asia Pacific Disability Rehabilitation Journal*, 13(2), pp. 1–16.
- Miles, Susie and Singal, Nidhi (2010), The Education for All and inclusive education debate: conflict, contradiction or opportunity? *International Journal of Inclusive Education*, 2010, 14 (1), pp.1-15
- Ministry of Human Resource Development (2000). *Sarva Siksha Abhiyan*. New Delhi: Government of India.
- Ministry of Human Resource Development, (2009), *Right of Children to Free and Compulsory Education Act. (RTE)* New Delhi: Government of India
- Ministry of Law and Justice (1996). *The Persons with disabilities (equal opportunities, protection of rights and full participation) Act, 1995*. New Delhi: Government of India.
- Ministry of Social Justice and Empowerment (2016). *Rights of Persons with Disabilities Bill*. New Delhi: Government of India.
- Mishra, R. K. (2015). Rashtriya Madhyamik Shiksha Abhiyan Takes a Nosedive. *Economic and Political Weekly*, 50(43), pp. 25–27.
- Mitchell, David (2000) Criteria of effective teaching in inclusive classrooms. Paper presented at *the annual conference of New Zealand Association for Research in Education*, 30 November–3 December, Hamilton, New Zealand.
- Mitchell, David. and Desai, Ishwar. (2005) Diverse socio-cultural contexts for inclusive education in Asia. In D. Mitchell (ed.) *Contextualizing Inclusive Education: Evaluating Old and New International Perspectives* pp. 166–201. London: Routledge.
- Mondal, A. and Mete, J. (2011) *Education of children with disabilities in India- Concerns and policy perspective*, Academic Press
- Morgan, D.L. (1988) *Focus Groups as Qualitative Research*. Beverly Hills, CA: Sage
- Morgan, D.L. and Spanish, M.T., 1984. Focus groups: A new tool for qualitative research. *Qualitative sociology*, 7(3), pp.253-270.
- Morrison, K.R.B. (1993) *Planning and Accomplishing School-Centred Evaluation*. Dereham, UK: Peter Francis Publishers.
- Motitswe, J. (2012) Teaching and learning methods in inclusive classrooms in the foundation phase, viewed 10 May 2015, from <http://hdl.handle.net/10500/6037>

- Mukhopadhyay, S., & Mani, M. N. G. (2002). Education of children with special needs. In R. Govinda (Ed.), *India education report: A profile of Basic Education* (pp. 96–108). New Delhi, India: Oxford University Press.
- Mvududu NH & Thiel-Burgess J. (2012) Constructivism in Practice: The Case for English Language Learners. *International Journal of Education*, 4(3), pp. 108-118.
- Myreddi, V. and Narayan, J. (2000) Preparation of special education teachers: Present status and future trends. *Asia Pacific Disability Rehabilitation Journal*, 10(1), pp.1-8.
- Nambissan, G. B. (2000). Dealing with deprivation. *Seminar*, 493, pp. 50–55.
- Narayan, J. and Patnaik, N. (2020) *Inclusive and Special Education Services in Rural Settings*; Oxford University Press (OUP): London.
- National Education Policy (NEP) (2020) (online) Available from [https://www.education.gov.in/sites/upload\\_files/mhrd/files/NEP\\_Final\\_English\\_0.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf) (Accessed August10, 2021)
- NCERT (2011). *The National Focus Group on Education of Children with Special Needs: Position Paper*. New Delhi: India.
- National Institute of Open Schooling (2017). *Vocational Education*. NIOS (online). Available from <https://www.nios.ac.in/departmentsunits/vocational-education.aspx> (Accessed 7th June 2017)
- Nel, M., P. Engelbrecht, N. Nel, and D. Tlale. (2014) “South African Teachers’ Views of Collaboration within an Inclusive Education System.” *International Journal of Inclusive Education*, 18 (9), pp. 903–917. doi:10.1080/13603116.2013.858779.
- Newby, P. (2010) *Research Methods for Education*. Harlow, UK: Pearson Educational Ltd.
- O’Gorman, E. and Drudy, S. (2010) Addressing the professional development needs of teachers working in the area of special education/inclusion in mainstream schools in Ireland. *Journal of research in special education needs*, 10 (1), pp. 157–167.
- Office of the Registrar General (2011) Census of India. Retrieved from <http://www.censusindia.gov.in/>.
- Opertti, R. and Brady, J. (2011). Developing inclusive teachers from an inclusive curricular perspective. *Prospects*, 41 (3), pp. 459-472.
- Opertti, R., Walker, Z. and Zhang, Y. (2014) Inclusive Education: From Targeting Groups and Schools to Achieving Quality Education as the Core of EFA. In Vol. 1. *The SAGE Handbook of Special Education*, edited by L. Florian, pp. 149–169. London: Sage Publications.
- Otilia Clipa, Liliana Mata & Iuliana Lazar (2020) Measuring In-Service Teachers’ Attitudes Towards Inclusive Education, *International Journal of Disability, Development and Education*, 67(2), pp. 135-150
- Pachigar, V., Stansfield, J. & Goldbart, J. (2011) Beliefs and Attitudes of Primary School Teachers in Mumbai, India Towards Children Who Stutter. *International journal of disability, development, and education*, 58(3), pp. 287–302.
- Parasuram, Kala (2006). Variables that affect teachers’ attitudes towards disability and inclusive education in Mumbai, India. *Disability and Society*, 21(3), pp. 231–242.
- Patton, M.Q. (1980) *Qualitative Evaluation Methods*. Beverly Hills, CA: Sage
- Patton, M.Q. (1999) Enhancing the quality and credibility of qualitative analysis. *Health Services Research*. 34(5), pp. 1189–1208
- Pearce, M. (2009) “The Inclusive Secondary School Teacher in Australia.” *International Journal of Whole Schooling*, 5, pp. 1–15.

- Pedro-Ricardo, Alegre-de-la-Rosa, Olga-María y López-Aguilar, David (2012). The difficulties of adapting university teaching for students with disabilities: an analysis focussed on inclusive guidance. *RELIEVE*, 18(2) DOI: 10.7203/relieve.18.2.1992
- Peters, Susan J., (2003). Inclusive education: Achieving education for all by including those with disabilities and special education needs. *Washington, The World Bank, 26690*, pp.1-133.
- Peters, Susan. J (2004). *Inclusive education: An EFA strategy for all children*. Washington, DC: World Bank
- Phillips D.C. (2000). Constructivism in Education: Opinions and Second Opinions on Controversial Issues. *Ninety-Ninth Yearbook of the National Society for the Study of Education*. University of Chicago Press, Order Dept., 11030 South Langley Avenue, Chicago, IL 60628.
- Philpott, D.F., Furey, E., and Penney, S.C. (2010) Promoting leadership in the ongoing professional development of teachers: responding to globalization and inclusion. *Exceptionality Education International*, 20 (2), pp. 38–54.
- Piaget J. (1977) The development of thought: Equilibration of cognitive structures. (A. Rosin, Trans). New York: The Viking Press.
- Piaget, J. (1951) *Judgement and Reasoning in the Child*. 2<sup>nd</sup> ed. London: Routledge and Kegan Paul
- Pijl, S. J., Meijer, C. J. W., & Hegarty, S. (Eds.). (1997). *Inclusive education: A global agenda*. London: Routledge.
- Pit-ten Cate, I.M., Markova, M., Krischler, M. and Krolak-Schwerdt, S. (2018) Promoting Inclusive Education: The Role of Teachers' Competence and Attitudes. *Insights into Learning Disabilities*, 15(1), pp. 49-63.
- Plano Clark, V.L. (2017) Mixed methods research. *The Journal of Positive Psychology*, 12(3), pp. 305-306.
- Porakari, J., Sevala, B.; Miniti, P.; Semane,G.; Sharma,U.; & Forlin, C. (2015). Solomon Islands School Leaders Readiness for Inclusive Education. *International Journal of Inclusive Education*
- Rai, A., & Palit, S. (2016). New Education Policy: A Critique and a Submission. *Social Change*, 46 (3), 444–450.
- Redline, C.D., Dillman, D.A., Carley-baxter, L. and Creecy, R. (2002) Factors that influence reading and comprehension in self-administered questionnaires. Paper presented at the *Workshop on Item-Nonresponse and Data Quality*, Basel, Switzerland, 10 October.
- Rhodes LK & Belly GT. (1999) Choices and Consequences in the Renewal of Teacher Education. *Journal of Teacher Education*, 50(1), pp.17.
- Riley, E. A. (1997) The Attitudes and Concerns of Catholic Parish Primary School Principals and Teachers toward the Integration of Students with Disabilities into Regular Schools. Unpublished Masters dissertation, The University of Melbourne
- Roberts, L. D., & Allen, P. J. (2010). Enhancing the teaching of research methods: Student perspectives on the value of research participation. Paper presented at the *4th International Conference on Psychology Education*, University of New South Wales, Australia.
- Roberts, L. D., & Allen, P. J. (2012). Student perspectives on the value of research participation. In S. McCarthy, K. L. Dickson, J. Cranney, A. Trapp, & V. Karandashev (Eds.), *Teaching psychology around the world* (Vol. 3), pp. 198–211. Cambridge, UK: Cambridge Scholars Publishing.
- Robson, C. (2011) *Real World Research: A Resource for Social Scientists and Practitioner-Researchers*. 3<sup>rd</sup> ed. Oxford: Blackwell Publishers Inc.
- Rose, R, & Rajanahally, J. (2019), The application of inclusive principles and practice in schools in South India: Successes and challenges. In S, Johansson, & N, Singal (Eds.) *Education and Disability in the Global South*. London: Sage

- Rose, R. (2017), Seeking practice informed policy for inclusive education in India. *Asian Journal of Inclusive Education*. 5 (1), pp. 5 – 22
- Rose, R., Narayan, J., Matam, S, & Reddy Sambram, P. (2021) A Comparison of Provision and Access to Inclusive Education for Children with Disabilities in a Metropolitan City and a Rural District in Telangana State, India. *Educational Sciences*, 11(3) doi.org/10.3390/educsci11030111
- Rosenthal, G. (2018) Interpretive Social Research. Göttingen: Göttingen University Press
- Saluja, A. (2023). Education for social justice: A critique of national education policies of India. *Policy Futures in Education*, 21 (2), pp. 136–144.
- Saumure, K. and Lisa, M. (2008), Convenience Sample. In: Lisa M.(ed.) The SAGE Encyclopedia of Qualitative Research Methods. SAGE Publications, Inc. City: Thousand Oaks Print
- Schumm, J.S., & Vaughn, S. (1991). Making adaptations for mainstreamed students: General classroom teachers' perspectives. *Remedial and Special Education*, 12(2), pp. 18-2
- Scruggs, T.E., & Mastropieri, M.A. (1996). Teacher perceptions of mainstreaming/inclusion, 1958-1995: A research synthesis. *Exceptional Children*, 63, pp. 59-74.
- Seetharam, M. (1982) Study of the Centrally Sponsored Scheme of Integrated Education for Handicapped Children in Normal Schools in Delhi (New Delhi, Council for Social Development).
- Shah, R. (2005). Concerns of Indian educators in Integrated Education. Unpublished doctoral dissertation, University of Pune.
- Shah, R., Das, A., Desai, I. and Tiwari, A. (2014). Teachers' concerns about inclusive education in Ahmedabad, India. *Journal of Research in Special Educational Needs*, 16(1), pp. 34-45.
- Sharma (2001) The attitudes and concerns of school principals and teachers regarding the integration of students with disabilities into regular schools in Delhi, India. Unpublished doctoral dissertation, The University of Melbourne.
- Sharma, O.P (1991). *Administration of Education Boards in India*. New Delhi: Ashish Publishing House
- Sharma, U. (2011). Teaching in inclusive classrooms: Changing heart, head, and hands. *Bangladesh Education Journal*, 10(2), pp.7-18.
- Sharma, U. and Das, A. (2015) Inclusive education in India: past, present and future. *Support for Learning*, 30(1), pp. 55-68.
- Sharma, U. and Deppeler, J. (2005) Inclusive education in India: challenges and prospects. *Disabilities Studies Quarterly*, 25 (1) [online]. Available from: <http://dsq-sds.org/article/view/524/701> [Accessed 12 July 2018].
- Sharma, U., & Desai, I. (2002). Measuring concerns about integrated education in India. *Asia & Pacific Journal on Disability*, 5(1), pp. 2–14.
- Sharma, U., Forlin, C., Deppeler, J., and Yang, G. (2013). Reforming teacher education for inclusion in developing countries in the Asia Pacific Region, *Asian Journal of Inclusive Education*, 1 (1) pp. 3–16.
- Sharma, U., Forlin, C., Loreman, T. and Earle, C. (2006) Pre-Service Teachers' Attitudes, Concerns and Sentiments about Inclusive Education: An International Comparison of Novice Pre-Service Teachers. *International Journal of special education*, 21(2), pp. 80-93.
- Sharma, U., Moore, D, & and Sonawane, S. (2009) Attitudes and concerns of pre-service teachers regarding inclusion of students with disabilities into regular schools in Pune, India. *Asia-Pacific Journal of Teacher Education* 37 (3), pp. 319-331



- Sharma, Umesh ; Loreman, Tim ; Forlin, Chris (2012), Measuring teacher efficacy to implement inclusive practices, *Journal of Research in Special Educational Needs*, 12(1), pp.12-21
- Singal, N. (2006) Inclusive Education in India: International concept, national interpretation. *International journal of disability, development, and education*. [Online] 53 (3), pp. 351–369.
- Singal, N., M. Samson, and M. Sommerville (2018) “Educating Children with Disabilities in Government Schools in India: Classroom Based Insights.” Presentation made at *Re-mapping Global Education, The Comparative and International Education Society Annual conference*, Mexico City, March 25–29.
- Singal, N., Ware, H. and Bhutani, S.K (2010), ‘Inclusive Quality Education for Children with Disabilities’, Education for All Global Monitoring Report, UNESCO
- Singal, Nidhi (2005a) *Responding to Difference: Policies to Support ‘Inclusive Education in India*. Paper presented at the *Inclusive and Supportive Education Congress 2005*, University of Strathclyde, Glasgow.
- Singal, Nidhi (2005b), Mapping the field of inclusive education: a review of the Indian literature, *International Journal of Inclusive Education*, 9(4), pp. 331-350
- Singal, Nidhi (2008), Working towards inclusion: Reflections from the Classroom, *Teaching and Teacher Education*, 24 (6), pp. 1516-1529
- Singal, Nidhi (2019) Challenges and opportunities in efforts towards inclusive education: reflections from India. *International Journal of Inclusive Education*, 23:7-8, pp. 827-840, DOI: 10.1080/13603116.2019.1624845
- Singh Kainth, G. (2006), A Mission Approach to Sarva Shiksha Abhiyan. *Economic and Political Weekly*, 41(30), pp. 3288-3291.
- Smith, M. (2000) Secondary teachers perception toward inclusion of students with severe disabilities, *National Association of Secondary School Principals (NAESP) Bulletin*, 84(613), pp. 54–60.
- Smithson, J. (2000) Using and analysing focus groups: limitations and possibilities. *International Journal of Social Research Methodology*, 3 (92), pp. 103-119
- Soni, R. B. L. and Rahman, A. (2013) *Status of Implementation of RTE Act 2009 in the Context of Disadvantaged Children at Elementary Stage*. New Delhi: National Council of Educational
- Srivastava, Meenakshi; de Boer, Anke and Pijl, Sip Jan (2015) Inclusive education in developing countries: a closer look at its implementation in the last 10 years, *Educational Review*, 67(2), pp. 179-195, DOI: 10.1080/00131911.2013.847061
- Stepianiuk, Inna (2019) Inclusive education in Eastern European countries: a current state and future directions, *International Journal of Inclusive Education*, 23(3), pp. 328-352
- Stewart David, W. and Shamdasani, P.N. (1990) *Focus groups: Theory and practice*. London: Sage
- Stuckey, H. (2014) The first step in Data Analysis: Transcribing and managing qualitative research data. *Journal of Social Health and Diabetes*, 2 (1), pp. 6- 8
- Sukys, Dumciene, A., and Lapeniene, D. (2015). Parental Involvement in Inclusive Education of Children with Special Educational Needs. *Social Behavior and Personality*, 43(2), pp. 327–338. <https://doi.org/10.2224/sbp.2015.43.2.327>
- Teddlie, C. and Tashakori, A. (2006) A general typology of research designs featuring mixed methods. *Research in the Schools*, 13 (1), pp. 12-28
- Thomas, G. (2013) “A Review of Thinking and Research about Inclusive Education Policy, with Suggestions for a New Kind of Inclusive Thinking.” *British Educational Research Journal* 39 (3), pp. 473–490.
- Thomas, G., (2009). *How to do your research project: A guide for students*. 1<sup>st</sup> ed. Sage.

- Tuckman, B. W. (1972). *Conducting Educational Research*. New York: Harcourt Brace Jovanovich
- Tulli, U. (2002) Challenges of inclusive education and government initiatives: disability is no barrier, paper presented to *the National Seminar on Disability Issues*, February (Chennai, Government of India).
- UNESCO (2005) *Guidelines for Inclusion: Ensuring Access to Education for All*. EFA Global Monitoring Report. Paris: UNESCO.
- UNESCO (2006) *Guidelines for Inclusion: Ensuring Access to Education for All*: New York: UNESCO
- UNESCO (2013/4). *Teaching and learning: Achieving quality for all*. Education for all global monitoring report. Paris, France: UNESCO
- UNESCO (2017) from <http://unesdoc.unesco.org/images/0024/002482/248254e.pdf> Accessed on January 04, 2019
- United Nations Convention on the Rights of Persons with Disabilities (UNCRPD). 2006. "United Nations Enable. Convention on the Rights of Persons with Disabilities." Accessed April 25, 2011. <http://www.un.org/disabilities/default.asp?id=150/> [Google Scholar]
- United Nations Educational, Scientific and Cultural Organisation. (1994). *The Salamanca Statement and Framework for Action on Special Needs Education*. Paris: UNESCO.
- United Nations Educational, Scientific and Cultural Organisation. (2000). *The Dakar Framework for Action, Education for All. Meeting our Collective Commitments*. Paris: UNESCO.
- Unnikrishnan, P. (2010). Inclusive Education in India – Challenges and Implications for Persons with Special Needs. *Educational Quest*, 1(1) pp. 21 -25
- Vaismoradi, M, & Snelgrove, S. (2019) Theme in Qualitative Content Analysis and Thematic Analysis. *Forum Qualitative Social Research*, 20 (3)
- Van Reusen, Anthony K; Shoho, Alan R ; Barker, Kimberly S ( 2000). High School Teacher Attitudes toward Inclusion. *The High School journal*, 84(2), pp.7–20.
- Vaughn, J. S., Schumm, J., Jallad, B., Slusher, J. And Saumell, L. (1996). 'Teachers' views of inclusion', *Learning Disabilities Research and Practice*, 11, pp. 96–106.
- Velu, R. (2015). Designing a qualitative and flexible case study to investigate the opportunities and challenges for primary education offered to first-generation learners in a rural community in the state of Maharashtra, India. *Support for Learning*, 30(3), pp. 223–238
- Villa, R., Thousand, J., Meyers, H. And Nevin, A. (1996). 'Teacher and administrator perceptions of heterogeneous education', *Exceptional Children*, 63, pp. 29–45.
- Vislie, Lise, (2003). From integration to inclusion: focusing global trends and changes in the western European societies. *European journal of special needs education*, 18(1), pp.17–35.
- Vygotsky LS. 1978. *Mind in society*. Cambridge: Harvard University Press.
- Ward, J., Center, Y. and Bochner, S. (1994). 'A question of attitudes: integrating children with disabilities into regular classrooms?', *British Journal of Special Education*, 21, pp. 34–39.
- Wellington, J. (2015) *Educational Research*, 2<sup>nd</sup> ed., London: Bloomsbury Academic.
- Wertsch JV. 1997. *Vygotsky and the formation of the mind*. Cambridge, MA.
- Wilczenski, F. L. (1992). Measuring attitudes towards inclusive education. *Psychology in the Schools*, 29, pp. 307-312.
- Wilczenski, F.L. (1995). Development of a scale to measure attitudes toward inclusive education. *Educational and Psychological Measurement*, 55(2), pp. 291-299.
- Wilson, C., Woolfson, L. M., Durkin, K. and Elliott, M. A. (2016) The Impact of Social Cognitive and Personality Factors on Teachers' Reported Inclusive Behaviour. *British Journal of Educational Psychology* 86 (3), pp. 461–480. doi:10.1111/bjep.12118.
- Winter, Eileen. C. (2006). Preparing new teachers for inclusive schools and classrooms, *Support for Learning*, 21(2), pp. 85– 91.

- Yadav, Monika; Das, Ajay; Sharma Sushama; Tiwari, Ashwini (2015), Understanding teachers' concerns about inclusive education. *Asia Pacific education review*, 16(4), pp. 653–662.
- Yin, Robert K. (2015) *Qualitative Research from Start to Finish*, 2<sup>nd</sup> ed, New York: Guilford Publications
- Zimba, Z. (2011) *Managing an inclusive school in Swaziland*, Research report, Rhodes University, Grahamstown.
- Zwane, S.L. & Malale, M.M., 2018, Investigating barriers teachers face in the implementation of inclusive education in high schools in Gege branch, Swaziland, *African Journal of Disability* 7(0), a391. <https://doi.org/10.4102/ajod.v7i0.391>



## APPENDICES

Appendix 1 Consent form Online survey

Appendix 2A Information sheet

Appendix 2B Ethical statement

Appendix 3 Consent form for focus groups

Appendix 4 Consent form for interviews

Appendix 5 Survey questions with multiple options

Appendix 6 Survey

Appendix 7 Sample mail sent to schools for participation in research

Appendix 8 Snapshot of initial data

Appendix 9 Snapshot of data after the first stage of organisation and simplification

Appendix 10 Snapshot of the final data that was ready for analysis

Appendix 11 Transcription format used

Appendix 12 Example of segmentation of transcript

Appendix 13 Visual representation of the data organisation

Appendix 14 Table of the initial codes, research question wise

Appendix 15 Table related to the merging of codes and the rationale behind them

Appendix 16 Table of Final codes and definitions



**Online Survey Consent Form**  
**SCHOOL CODE-Bangalore-B1**

**Investigating the professional development needs of middle school and secondary teachers to meet the diverse learning needs of students**

Thank you for agreeing to fill up this questionnaire as a part of this research. The researcher working on this project is required to abide by an ethical code of practice informed by BERA (British Educational Research Association, 2011) and approved by the Research Ethics Committee of the University of Northampton, UK. It protects the rights of all individuals involved in the research process.

Participation is voluntary and participants have a right to withdraw at any time during the research process. Anonymity and confidentiality of the participants shall be duly maintained and no individual taking part in this research study shall be named anywhere.

By agreeing to fill up this questionnaire, you are giving your consent for participation.

Thank you.

Divya Dubey.

## **INFORMATION SHEET**

I am a research scholar pursuing my PhD with the University of Northampton, UK. I hold a Masters degree in Special Educational Needs and Inclusion from the same University and am presently located in Kolkata.

My research looks at investigating the professional development needs of teachers in the middle and secondary sections to meet the diverse learning needs of students in a classroom. I am focussing on mainstream co-educational English medium schools in four urban Indian locations- Delhi, Mumbai, Bangalore and Kolkata.

Additionally, the mainstream schools I am hoping to work with should be affiliated to the ICSE/CBSE board, having a mixed population of students (in terms of their abilities, socio-economic background, religious beliefs etc). In the first stage, I would be collecting data through questionnaires (online) and in the second stage, focus groups with teachers in the secondary and middle school would be conducted along with interviews with the Principal, Special education Head/Co-ordinator and School counsellor.

There have been a lot of studies that look at the difficulties faced by students but there are fewer studies, that look at the situation from a teachers' point of view. This study looks at understanding the teachers' perspective in handling a class of diverse learners, with an aim to prepare and empower them for the same. It would also help in designing professional development programs for teachers to equip them to handle a class of diverse learners, ultimately benefitting all the stakeholders- the teachers, students, parents and the school itself.

Should you have any queries while filling in the survey, please feel free to contact me over mail (**divyadubey1778@gmail**) or a message/ call at **9663358712**.

Definition of terms:

### **Diverse learning needs**

Diverse learning needs include the needs of all children, including those with disabilities and other special needs, gifted children, children from economically disadvantaged backgrounds and first generation learners.

### **Inclusive education**

"a process of addressing and responding to the diversity of needs of all learners through inclusive practices in learning, cultures and communities and reducing exclusion within and from education. It involves changes and modifications in content approaches structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children."

(UNESCO, Guidelines for Inclusion: Ensuring Access for All)

### **First generation learners**

"First generation learners refers to those who are first in their family to go to school and receive formal education. The parents of these children have no academic background or formal education at any level, which leaves students at a disadvantage as a significant part of the learning process demands support from home. "

(Anuradha and Dreze 1999)



## Appendix 2B : Ethical statement

### **Research investigating the professional development needs of middle school and secondary teachers to meet the diverse learning needs of students**

The research is being conducted by Divya Dubey.

#### **Ethical Statement**

The study is being conducted within an ethical code of practice informed by the British Educational Research Association (BERA) Ethical Guidelines 2011 available from [www.bera.ac.uk/system/files/3/BERA-Ethical-Guidelines-2011.pdf](http://www.bera.ac.uk/system/files/3/BERA-Ethical-Guidelines-2011.pdf) and approved by the Business and Education Research Degrees Board (BERDB) at the University of Northampton. The research is being carried out under the supervision of Prof. Richard Rose and Dr. Mary Doveston.

#### **Ethical Code**

The researcher recognises the rights of all participants in the research to have their confidentiality protected at all times.

Voluntary informed consent will be sought before any surveys are given out or focus groups/ interviews are conducted with any respondent as part of the research process. In the case of school teachers, SEN Heads/Coordinators and Counsellors, this consent will be sought through the Heads of schools and obtained in writing before any direct contact is made with the participants. Participants have the right to refuse participation and will not be pressured or coerced into taking part in the research. They shall also have a right to withdraw from the process at any time and will be informed of this right.

Data collected as part of the research process will be securely maintained and will be accessible only to the supervisors involved in this project.

The researcher has an obligation to report accurately, objectively and fairly the findings of the research in any written or verbal report. The researcher will report the procedures, results and analysis of the research accurately, and in sufficient detail to allow all interested parties to understand and interpret them.

The researcher will make herself available to discuss the procedures, conduct, or findings of the research with any party involved in the research process.

A research report will be produced and will be made available in both paper and electronic format to the Heads of participating schools on completion of the project. This report will be the property of the University of Northampton.

Data collected during the course of the research project which names individuals or institutions will be available only to the researcher and will be made secure both during and after the term of the project.

The researcher is obliged to communicate the findings of the research to other members of the educational research community through research seminars, conference presentation and proceedings and publication taking account of all issues of confidentiality and protection of research participants.

The researcher asserts her right to participate in any publication of the research findings in academic journals or other media, which may ensue from the research.

Once agreed, no part of this ethical statement may be changed or modified without justification and recourse to discussion with all interested parties.

Appendix 3: Consent form for focus groups

**Focus Group Consent Form**

**Investigating the training needs of middle and secondary school teachers for the development of pedagogical practices to address the diverse learning needs of students in mainstream Indian schools**

Thank you for agreeing to participate in the focus group discussion as part of this research. The researcher working on this project is required to abide by an ethical code of practice informed by BERA (British Educational Research Association) and approved by the Research Ethics Committee of the University of Northampton, UK. It protects the rights of all individuals involved in the research process. Anonymity and confidentiality of the participants shall be duly maintained and no individual taking part in this interview shall be named anywhere.

If you are in agreement kindly provide your consent by filling in the form below.

I agree to participate in the focus group discussion for this research. The purpose of the research has been explained to me and I have been given a copy of the ethical statement for this project.

1. Name: \_\_\_\_\_ Signature \_\_\_\_\_
2. Name: \_\_\_\_\_ Signature \_\_\_\_\_
3. Name: \_\_\_\_\_ Signature \_\_\_\_\_
4. Name: \_\_\_\_\_ Signature \_\_\_\_\_
5. Name: \_\_\_\_\_ Signature \_\_\_\_\_
6. Name: \_\_\_\_\_ Signature \_\_\_\_\_
7. Name: \_\_\_\_\_ Signature \_\_\_\_\_

Date \_\_\_\_\_ Place \_\_\_\_\_

## Appendix 4: Consent form for interviews

### Interview Consent Form

#### **Investigating the training needs of middle and secondary school teachers for the development of pedagogical practices to address the diverse learning needs of students in mainstream Indian schools**

Thank you for agreeing to be interviewed as part of this research. The researcher working on this project is required to abide by an ethical code of practice informed by BERA (British Educational Research Association) and approved by the Research Ethics Committee of the University of Northampton, UK. It protects the rights of all individuals involved in the research process. Anonymity and confidentiality of the participants shall be duly maintained and no individual taking part in this interview shall be named anywhere.

Kindly provide your consent by filling in the form below .

I (Name) \_\_\_\_\_ agree to be interviewed for this research.

The purpose of the research has been explained to me and I have been given a copy of the ethical statement for this project.

Sign \_\_\_\_\_

Date \_\_\_\_\_

Place \_\_\_\_\_

## Appendix 5: Survey questions with multiple options

### SURVEY QUESTIONS WITH MULTIPLE OPTIONS

Q.11. How would you best describe your views on an inclusive classroom, that is, having different kinds of learners such as students with special needs, those from different cultural, economic backgrounds, first generation learners etc in a regular mainstream class in school? (Please select as many as are applicable)

- a. Inclusive classrooms make teaching very difficult
- b. Inclusive classrooms foster greater understanding, respect and co-operation between children
- c. Having all kinds of learners slows down/hampers/disturbs the learning of the other children in class
- d. All students' needs are better met as there are greater resources for everyone
- e. Inclusive classrooms require extra time and effort from the teacher
- f. Inclusion leads to cognitive development of all and provides opportunities for children to gain mastery by practicing and teaching others (peer tutoring)
- g. I'm not sure
- h. Any other (Please specify)

Q.12. What are the challenges faced by teachers in addressing the diverse needs of learners in a classroom?(Please select as many as applicable)

- a. Classroom size
- b. Pressure of syllabus completion
- c. Lack of knowledge/understanding of different kinds of learners
- d. Lack of skills of teachers to cater to the diverse learning needs of students
- e. Lack of training of teachers in inclusive teaching practices
- f. Lack of resources
- g. Negative/unfavourable attitudes of teachers towards handling a class of diverse learners
- h. School policies and systems not supportive
- i. Lack of time (both during class and for extra preparation of material/resources required to cater to all students)
- j. Other (please specify)

Q. 13. Apart from those mentioned in the previous question, are there any challenges particular to teaching the middle school and secondary section?

- a. Syllabus/curriculum demands
- b. Adolescent issues in children such as peer pressure, anxiety, behavioural issues
- c. Pressure of exams
- d. Greater parental expectations
- e. Other (please specify)

Q. 16. In which areas would you like to improve your skills?(Please select as many as applicable)

- a. Lesson planning
- b. Inclusive teaching techniques to reach out to diverse learners
- c. Use of technology in the classroom
- d. Knowledge about the kinds of disabilities/special needs/behavioural difficulties that can be found in students in a mainstream classroom
- e. Strategies and techniques to cater to these special needs and students from different backgrounds
- f. Classroom management techniques for an inclusive class
- g. Preparing differentiated assessments
- h. Modifications that may be required in order to cater to the different kinds of learners
- i. Other (please specify)

Q. 17. What would be your preferred method of acquiring this knowledge/skills? (Please select as many as applicable)

- a. Reading
- b. Attending an in-house workshop/training/seminar
- c. Attending a workshop/program conducted outside school
- d. Joining an online course
- e. Joining a correspondence course
- f. Joining a part-time course
- g. Through experience/ learning on the job
- h. Other (please specify)

Q. 20. If the workshop/ seminar/ training was taken up by you yourself, what were the reasons behind it? (Tick as many as applicable)

- a. To upgrade my knowledge and skills
- b. To better my employment opportunities
- c. To better my performance on the job
- d. Out of curiosity
- e. It was recommended by someone
- f. No particular intention
- g. Other (please specify)

Q. 21. What methods are being currently adopted by your school for the professional development of teachers to handle a class of diverse learners?

- a. Training/workshops/seminars conducted in house
- b. Sending a few teachers to attend programs outside of school
- c. Mentoring and guidance by seniors at school
- d. Support and guidance from special educators/counsellors
- e. Providing reading material
- f. None
- g. Other (please specify)

Q. 23. According to you, what are the salient of the features of an ideal professional development program for teachers? (Please tick as many as applicable)

- a. Easy to grasp
- b. In-depth
- c. Conducted within the school
- d. Having a lot of hands on activities/examples/practice
- e. Free of cost
- f. Compulsory for all teachers
- g. Regularly conducted at frequent intervals
- h. Focus on concrete strategies and techniques along with knowledge
- i. Tailor-made to each participant's learning style and pace
- j. Should allow back and forth movement, that is, possibility of revisiting a portion or module that one has not understood or wants to master
- k. Other (Please specify)

## Appendix 6: Survey

### Investigating the professional development needs of middle school and secondary teachers to meet the diverse learning needs of students in a classroom

⊕ PAGE TITLE

\* 1. Age 🗨 2

20-30 years  51-60 years  
 31-40 years  Above 60 years  
 41-50 years

\* 2. Gender 🗨 0

Male  Female

\* 3. Overall Teaching experience (any class/subject/level) 🗨 1

Less than 2 years  More than 5- less than 10 years  
 2-5 years  More than 10 years

\* 4. Teaching experience in Middle School/ Secondary section 🗨 1

Less than 2 years  More than 5-less than 10 years  
 2-5 years  More than 10 years

\* 5. Teaching Qualification 🗨 2

Montessori Teachers Training  Bachelor of Education (B.Ed)  
 Nursery Teachers Training  Master of Education (M.Ed)  
 Early Childhood Care Teachers Training  UGC NET Qualified  
 Diploma in Education  None  
 Other (please specify)

\* 6. Location of current school 🗨 0

Gurgaon  Mumbai-M 1  
 Noida-N 2  Mumbai-M 2  
 Noida-N 1  Mumbai- M 3  
 Bangalore-B 1  Kolkata- K 1

31%-40%  71%-80%  
 41%-50%  More than 80%

Help!  
Feedback!

Help!  
Feedback!



\* 7. Experience of teaching students with special needs 0

Yes

No

\* 8. Do you have any exposure to disability in yourself , your family or friends? 0

Yes

No

\* 9. What is the approximate student strength per class in the middle school /secondary section in your school? 3

Less than 20

41-50

20-30

More than 50

31-40

\* 10. Approximately what percentage of students in your class do you know well as individuals- their learning styles, strengths, areas of weakness, talents etc. ? 4

Less than 20%

51%-60%

21%-30%

61%-70%

31%-40%

71%-80%

41%-50%

More than 80%

\* 11. How would you best describe your views on an inclusive classroom, that is, having different kinds of learners such as students with special needs, those from different cultural, economic backgrounds, first generation learners etc in a regular mainstream class in school?

(Please select as many as are applicable)

4

Inclusive classrooms make teaching very difficult

Inclusive classrooms require extra time and effort from the teacher

Inclusive classrooms foster greater understanding, respect and co-operation between children

Inclusion leads to cognitive development of all and provides opportunities for children to gain mastery by practicing and teaching others (peer tutoring)

Having all kinds of learners slows down/hampers/disturbs the learning of the other children in class

I'm not sure

All students' needs are better met as there are greater resources for everyone

Other (please specify)

Help!

Help!

Feedback!

\* 12. What are the challenges faced by teachers in addressing the diverse needs of learners in a classroom?

(Please select as many as applicable) 2

- Classroom size
- Pressure of syllabus completion
- Lack of knowledge/understanding of different kinds of learners
- Lack of skills of teachers to cater to the diverse learning needs of students
- Lack of training of teachers in inclusive teaching practices
- Other (please specify)
- Lack of resources
- Negative/unfavourable attitudes of teachers towards handling a class of diverse learners
- School policies and systems not supportive
- Lack of time (both during class and for extra preparation of material/resources required to cater to all students)

\* 13. Apart from those mentioned in the previous question, are there any challenges particular to teaching the middle school and secondary section?

2

- Syllabus/curriculum demands
- Adolescent issues in children such as peer pressure, anxiety, behavioural issues
- Other (please specify)
- Pressure of exams
- Greater parental expectations

\* 14. Which of the following category of students do you find most difficult to cater to?

1

- First generation learners
- Students with special needs
- Students from a disadvantaged background
- Other (please specify)
- Students with behavioural difficulties
- Students who don't speak the language of instruction

\* 15. How equipped do you find yourself to handle a class of diverse learners?

0

Not at all equipped      Somewhat equipped      Fairly equipped      Well equipped      Very well equipped

\* 16. In which areas would you like to improve your skills?

(Please select as many as applicable) 0

- Lesson planning
- Inclusive teaching techniques to reach out to diverse learners
- Use of technology in the classroom
- Knowledge about the kinds of disabilities/special needs/behavioural difficulties that can be found in students in a mainstream classroom
- Other (please specify)
- Strategies and techniques to cater to these special needs and students from different backgrounds
- Classroom management techniques for an inclusive class
- Preparing differentiated assessments
- Modifications that may be required in order to cater to the different kinds of learners

\* 17. What would be your preferred method of acquiring this knowledge/skills? ( Please select as many as applicable) 0

Help!

back!

Help!

Feedback!

- Reading
- Attending an in-house workshop/training/seminar
- Attending a workshop/program conducted outside school
- Joining an online course
- Other (please specify)
- Joining a correspondence course
- Joining a part-time course
- Through experience/ learning on the job

\* 18. Have you attended any training programs, workshops, seminars etc. to improve your skills/knowledge/teaching practices? 0

- Yes  No

\* 19. Were these training programs conducted/sponsored by your educational institution (current or past)? 0

- Yes  No

↑ 20. If the workshop/ seminar/ training was taken up by you yourself, what were the reasons behind it? (Tick as many as applicable) 0

- To upgrade my knowledge and skills
- To better my employment opportunities
- To better my performance on the job
- Other (please specify)
- Out of curiosity
- It was recommended by someone
- No particular intention

\* 21. What methods are being currently adopted by your school for the professional development of teachers to handle a class of diverse learners? 0

- Training/workshops/seminars conducted inhouse
- Sending a few teachers to attend programs outside of school
- Mentoring and guidance by seniors at school
- Other (please specify)
- Support and guidance from special educators/counsellors
- Providing reading material
- None

\* 22. How effective in your opinion are these methods to help teachers gain the requisite knowledge, skills and expertise required ? 0

Not at all effective	Somewhat effective	Fairly effective	Very effective	Extremely effective
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Feedback! Help!

\* 23. According to you, what are the salient of the features of an ideal professional development program for teachers?

(Please tick as many as applicable) 0 1

- Easy to grasp
- In-depth
- Conducted within the school
- Having a lot of hands on activities/examples/practice
- Free of cost
- Compulsory for all teachers
- Regularly conducted at frequent intervals
- Focus on concrete strategies and techniques along with knowledge
- Tailor-made to each participant's learning style and pace
- Should allow back and forth movement, that is, possibility of revisiting a portion or module that one has not understood or wants to master

Other (please specify)

24. Any other suggestions/thoughts on how teachers can be equipped to handle the diverse learners in a class. 0 0

NEW QUESTION

or Copy and paste questions

DONE

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## Appendix 7: Sample mail sent to schools for participation in research

Dear Sir/Madam,

I am a research scholar, pursuing my PhD from the University of Northampton, UK. I am also a special educator and am currently working at Sri Sri Academy school in Kolkata.

My research looks at investigating the professional development needs of teachers in the middle and secondary sections to meet the diverse learning needs of students in classrooms. I have chosen mainstream co-educational English medium schools in the four metros of Delhi, Mumbai, Bangalore and Kolkata for the purposes of this data collection.

I shall be very thankful if you would kindly consent for your school to be a part of this research. I would be collecting data through questionnaires (online) and focus groups from teachers in the secondary and middle school and interviews with the Principal, Special education Head/Co-ordinator, Section Heads/Coordinators and School counsellor.

The questionnaires would be sent online and the teachers could fill them up at their convenience from any location, while I shall be travelling to the school and conducting the focus groups and interviews in person, over the course of a couple of days, at a mutually agreeable date and time.

I shall be happy to share the results of my research findings with the school that would also help in designing training programs for teachers to equip them to handle a class of diverse learners, ultimately benefitting all the stakeholders- the teachers, students, parents and the school itself.

In case you seek any further clarifications or confirmation of my status, you could contact my supervisor, Prof. Richard Rose at [Richard.rose@northampton.ac.uk](mailto:Richard.rose@northampton.ac.uk).

I would seek your consent for your school to be a part of this research and would appreciate an early response from your end.

I eagerly look forward to working with you in the near future.

Thanking You,  
Yours sincerely,  
Divya Dubey.  
9663358712

## Appendix 8: Interview Schedule-Head of School (Principal/Vice Principal)

### INTERVIEW SCHEDULE -Principal/Vice Principal

1. Do all your school's classes have learners with diverse abilities, interests and needs?
2. Do you believe that teachers are able to address the diverse learning needs in their classrooms?
3. What are the difficulties/challenges faced, especially by middle school and secondary teachers in addressing the diverse needs of learners in a classroom?
4. What could be done to assist teachers in addressing these challenges?
5. What are the professional development needs of middle school and secondary teachers in relation to inclusive education?
6. What methods are being currently adopted by the school to meet these needs?
7. How effective are they?
8. What would be some of the essential features of a module/manual/workshop that is designed to address the needs of these teachers?
9. What are the challenges the management/school faces in putting such a program in place?

## Appendix 9: Interview Schedule-SENCo/Counsellor

### INTERVIEW SCHEDULE (SEN Head and Counsellor)

1. Do all your school's classes have learners with diverse abilities, interests and needs?
2. Do you believe that teachers are able to address the diverse learning needs in their classrooms?
3. Based on your experiences, what are the difficulties/challenges faced, especially by middle school and secondary teachers in addressing the diverse needs of learners in a classroom?
4. In your observation and experience, which category of students (first generation learners, students with special needs, students with behavioural difficulties, students who come from disadvantaged backgrounds, those who don't speak the medium of instruction) do teachers find the most difficult to cater to?
5. What could be done to assist teachers in addressing these challenges?
6. What are the professional development needs of middle school and secondary teachers in relation to inclusive education?
7. What methods are being currently adopted by your school to meet these needs?
8. How effective are they?
9. What would be some of the essential features of a module/manual/workshop that is designed to address the needs of these teachers?

Appendix 10: Snapshot of initial data

DATA EXPORTED FROM SURVEY MONKEY- INITIAL DATA – STAGE 1 -Page 1

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Respond	Collector	Start Date	End Date	IP Address	Email Address	First Name	Last Name	Custom ID	Age	Gender	Overall Time	Teaching	Teaching	Qualification				
2										Responses	Responses	Responses	Responses	Montessori	Nursery T	Early Chi	Diploma	Bachelor	Master of UG
3	6.9E+09	1.7E+08	#####	#####	47.31.113.157					20-30 yea	Female	More than	More than 5-less than 10 years						Master of Educ
4	6.9E+09	1.7E+08	#####	#####	47.15.186.142					20-30 yea	Female	2-5 years	Less than 2 years						
5	6.9E+09	1.7E+08	#####	#####	202.142.71.141					41-50 yea	Female	More than	More than 10 years					Bachelor of Education (B.	
6	6.9E+09	1.7E+08	#####	#####	27.56.147.108					20-30 yea	Female	2-5 years	Less than 2 years						
7	6.9E+09	1.7E+08	#####	#####	182.69.231.226					41-50 yea	Female	More than	More than 10 years					Bachelor of Education (B.	
8	6.9E+09	1.7E+08	#####	#####	182.69.220.66					31-40 yea	Female	More than	More than 10 years					Bachelor of Education (B.	
9	6.9E+09	1.7E+08	#####	#####	182.69.220.66					31-40 yea	Female	More than	More than 10 years					Bachelor of Education (B.	
10	6.9E+09	1.7E+08	#####	#####	182.77.45.125					41-50 yea	Female	2-5 years	2-5 years				Early Childhood Care Teachers Training		
11	6.9E+09	1.7E+08	#####	#####	150.107.8.199					20-30 yea	Female	2-5 years	Less than 2 years						
12	6.9E+09	1.7E+08	#####	#####	182.68.240.240					31-40 yea	Female	More than	More than 10 years					Master of Educ	
13	6.9E+09	1.7E+08	#####	#####	182.68.240.240					31-40 yea	Female	More than	More than 10 years					Master of Educ	
14	6.9E+09	1.7E+08	#####	#####	182.68.240.240					31-40 yea	Female	More than	More than 10 years					Master of Educ	
15	6.9E+09	1.7E+08	#####	#####	59.91.224.21					20-30 yea	Female	2-5 years	Less than 2 years						
16	6.9E+09	1.7E+08	#####	#####	122.173.103.184					31-40 yea	Female	More than	More than 10 years					Bachelor of Education (B.	
17	6.9E+09	1.7E+08	#####	#####	120.56.92.6					20-30 yea	Female	2-5 years	2-5 years						
18	6.9E+09	1.7E+08	#####	#####	122.177.165.18					41-50 yea	Female	More than	Less than 2 years					Bachelor of Education (B.	
19	6.9E+09	1.7E+08	#####	#####	122.177.57.178					20-30 yea	Female	2-5 years	2-5 years						
20	6.9E+09	1.7E+08	#####	#####	59.177.192.195					31-40 yea	Female	More than	More than 10 years					Master of Educ	
21	6.9E+09	1.7E+08	#####	#####	150.242.60.221					51-60 yea	Female	More than	More than 10 years					Bachelor of Education (B.	
22	6.9E+09	1.7E+08	#####	#####	101.100.166.3					31-40 yea	Female	More than	Less than 2 years						
23	6.9E+09	1.7E+08	#####	#####	106.223.145.120					41-50 yea	Female	More than	More than 10 years					Bachelor of Educatio	UGC
24	6.9E+09	1.7E+08	#####	#####	42.107.143.89					41-50 yea	Female	More than	More than 10 years					Bachelor of Education (B.	

DATA EXPORTED FROM SURVEY MONKEY- INITIAL DATA – STAGE 1 -Page 2

	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM
1				Location	Experien	Do you h	What is th	Approxim	How would you best describe your views on an inclusive classroom, that is, hav	What are	the challenges faced by									
2	UGC NET	None	Other (ple	Respons	Respons	Respons	Respons	Respons	Inclusive	Inclusive	Having a	All studen	Inclusive	Inclusion	I'm not su	Other (ple	Classroom	Pressure	Lack of k	Lack
3	Education (M.Ed)			Noida-N 2	Yes	No	20-30	Less than	20%	Inclusive classrooms	foster greater	under	Inclusion leads to cognitive dev	Classroom	Pressure	Classroom	Pressure	Lack of kn	Lack	
4		None		Noida-N 1	Yes	No	20-30	71%-80%		Inclusive classrooms	All studen	Inclusive	Inclusion leads to cognitive development	of all and provides opport						
5	n (B.Ed)			Noida-N 1	Yes	No	20-30	More than	80%	Inclusive classrooms	foster greater	understanding, respect and co-operation between	Pressure	Classroom	Pressure	Classroom	Pressure	Lack of kn	Lack	
6			Bachelors	Noida-N 2	Yes	No	20-30	71%-80%		Inclusive classrooms	foster gre	Inclusive	Inclusion leads to cognitive dev	Classroom	Pressure	Classroom	Pressure	Lack of knowle		
7	n (B.Ed)			Noida-N 2	Yes	Yes	20-30	More than	80%	Inclusive classrooms	All students' needs	Inclusion leads to co	In an inclusive classroom	students see th	Lack					
8	n (B.Ed)			Noida-N 1	Yes	Yes	20-30	More than	80%			All students' needs are better met as there are greater resourc	Pressure of syllabus com							
9	n (B.Ed)			Noida-N 1	Yes	Yes	20-30	More than	80%	Inclusive classrooms	foster greater	understanding, respect and co-operation between	Pressure of syllabus com							
10				Noida-N 2	No	No	20-30	More than	80%	Inclusive classrooms	foster gre	Inclusive	Inclusion leads to co	An inclusi	Classroom	Pressure	Classroom	Pressure	Lack of kn	Lack
11		None		Noida-N 2	Yes	No	20-30	Less than	20%	Inclusive classrooms	foster gre	Inclusive	Inclusion leads to cognitive development	Pressure	Classroom	Pressure	Classroom	Pressure	Lack of kn	Lack
12	Education (M.Ed)			Noida-N 2	Yes	No	20-30	More than	80%	Inclusive classrooms	All students' needs	Inclusion leads to cognitive dev	Classroom	Pressure of syllabus com						
13	Education (M.Ed)			Noida-N 1	Yes	No	20-30	More than		Inclusive classrooms	Having all kinds of le	Inclusive classrooms require extra time a	Classroom	Pressure of syllabus com						
14	Education (M.Ed)			Noida-N 1	Yes	No	20-30	More than	80%	Inclusive classrooms	All students' needs	Inclusion leads to cognitive dev	Classroom	Pressure of syllabus com						
15		None	I am the S	Noida-N 2	Yes	Yes	20-30	51%-60%		Inclusive classrooms	All studen	Inclusive	Inclusion leads to cognitive development	of all and	Lack of kn	Lack				
16	n (B.Ed)			Noida-N 2	Yes	No	20-30	61%-70%		Inclusive	Having all kinds of learners slows down/hampers/disturbs the	Classroom	Pressure	Classroom	Pressure	Classroom	Pressure	Lack of knowle		
17			B.Tech (IT	Noida-N 1	Yes	Yes	Less than	More than	80%	Inclusive classrooms	foster greater	under	Inclusion leads to cognitive dev	Classroom	Pressure	Classroom	Pressure	Lack of knowle		
18	n (B.Ed)			Noida-N 2	Yes	No	20-30	More than	80%	Inclusive classrooms	foster gre	Inclusive	Inclusion leads to cognitive dev	Classroom	Pressure	Classroom	Pressure	Lack of knowle		
19		None		Noida-N 2	Yes	No	20-30	71%-80%				All students' needs are better met as there are grea	Classroom	Pressure	Classroom	Pressure	Lack of kn	Lack		
20	Education (M.Ed)			Noida-N 1	Yes	Yes	20-30	71%-80%				All students' needs	Inclusion leads to cognitive dev	Classroom	Pressure	Classroom	Pressure	Lack of knowle		
21	n (B.Ed)		MSc Phys	Noida-N 1	No	No	20-30	61%-70%		Inclusive classrooms	foster greater	under	Inclusion leads to cognitive development	of all and provides opport						
22			PhD	Noida-N 1	Yes	Yes	Less than	More than	80%	Inclusive	Having all kinds of learners slows down/hampers/disturbs the learning of	Pressure	Classroom	Pressure	Classroom	Pressure	Lack of kn	Lack		
23	UGC NET Qualified			Noida-N 1	Yes	Yes	20-30	More than	80%			Inclusion leads to cognitive development	Pressure of syllabus	Lack						
24	n (B.Ed)		MSc	Mumbai-N	No	No	31-40	51%-60%		Inclusive	Having all kinds of learners slows down/h	I'm not sure	Pressure of syllabus	Lack						



## DATA AFTER FIRST ROUND OF ORGANISING – STAGE 2 -Page 1

	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL
1	Do you have	What is the	Approxim	How would you best describe your views on an inclusive classroom, that is, ha																	
2	Respons	Respons	Respons	Inclusive	Inclusive	Having all	All studer	Inclusive	Inclusion	I'm not su	Other (ple	Classroom	Pressure	Lack of kn	Lack of sk	Lack of tr	Lack of re	Negative/School p	Lack of ti	Other	
3	No	20-30	Less than 20%	Inclusive classrooms foster greater under				Inclusion leads to cognitive de	Classroom	Pressure	Lack of kn	Lack of sk	Lack of tra	Lack of re	Negative/unfavoura	Lack of time (bot					
4	No	20-30	71%-80%	Inclusive classrooms	All studer	Inclusive		Inclusion leads to cognitive development of all and provides opportunit					Lack of training of teachers in inclusive te			Lack of time (bot					
5	No	20-30	More than 80%	Inclusive classrooms foster greater understanding, respect and co-operation betwe					Pressure	Lack of kn	Lack of sk		Lack of training of teachers in inclusive te			Lack of time (bot					
6	No	20-30	71%-80%	Inclusive classrooms foster gre	Inclusive			Inclusion leads to cognitive de	Classroom	Pressure	Lack of knowledge/u		Lack of training of te	Negative/unfavoura		Lack of time (bot					
7	Yes	20-30	More than 80%	Inclusive classrooms	All students' needs			Inclusion leads to co	In an inclusive classroom	students see th	Lack of sk	Lack of tra	Lack of resources			Lack of time (bot					
8	Yes	20-30	More than 80%					All students' needs are better met as there are greater resour		Pressure of syllabus completion			Lack of resources			Lack of time (bot					
9	Yes	20-30	More than 80%	Inclusive classrooms foster greater understanding, respect and co-operation betwe					Pressure of syllabus completion				Lack of resources			Lack of time (bot					
10	No	20-30	More than 80%	Inclusive classrooms foster gre	Inclusive			Inclusion leads to co	An inclusi	Classroom	Pressure	Lack of kn	Lack of sk	Lack of tra	Lack of re	Lack of time (bot					
11	No	20-30	Less than 20%	Inclusive classrooms foster gre	Inclusive			Inclusion leads to cognitive development		Pressure	Lack of kn	Lack of sk	Lack of tra	Lack of resources		Lack of time (bot					
12	No	20-30	More than 80%	Inclusive classrooms	All students' needs			Inclusion leads to cognitive de	Classroom	Pressure of syllabus completion						Lack of time (bot					
13	No	20-30	More than 80%	Inclusive classrooms	Having all kinds of le			Inclusive classrooms require extra time a	Classroom	Pressure of syllabus completion						Lack of time (bot					
14	No	20-30	More than 80%	Inclusive classrooms	All students' needs			Inclusion leads to cognitive de	Classroom	Pressure of syllabus completion						Lack of time (bot					
15	Yes	20-30	51%-60%	Inclusive classrooms	All studer	Inclusive		Inclusion leads to cognitive development of all and		Lack of kn	Lack of sk		Lack of training of teachers in inclusive teaching practices								
16	No	20-30	61%-70%	Inclusive	Having all kinds of learners slows down/hampers/disturbs the				Classroom	Pressure	Lack of knowledge/u		Lack of training of teachers in inclusive te			Lack of time (bot					
17	Yes	Less than	More than 80%	Inclusive classrooms foster greater under				Inclusion leads to cognitive de	Classroom	Pressure	Lack of knowledge/understanding of different kinds of learne					Lack of time (bot					
18	No	20-30	More than 80%	Inclusive classrooms foster gre	Inclusive			Inclusion leads to cognitive de	Classroom	Pressure	Lack of knowledge/u		Lack of tra	Lack of resources		Lack of time (bot					
19	No	20-30	71%-80%					All students' needs are better met as there are grea	Classroom	Pressure	Lack of kn	Lack of sk	Lack of training of te	Negative/unfavoura		Lack of time (bot					
20	Yes	20-30	71%-80%					All students' needs	Inclusion leads to cognitive de	Classroom	Pressure	Lack of knowledge/u		Lack of training of teachers in inclusive teaching practices							
21	No	20-30	61%-70%	Inclusive classrooms foster greater under				Inclusion leads to cognitive development of all and provides opportunit					Lack of training of teachers in inclusive teaching practices								
22	Yes	Less than	More than 80%	Inclusive	Having all kinds of learners slows down/hampers/disturbs the learning				Pressure	Lack of kn	Lack of sk		Lack of training of teachers in inclusive te			Lack of time (bot					
23	Yes	20-30	More than 80%					Inclusion leads to cognitive development		Pressure of syllabus	Lack of skills of teachers to cater to the diverse lear					Lack of time (bot					
24	No	31-40	51%-60%	Inclusive	Having all kinds of learners slows down/h			I'm not sure		Pressure of syllabus	Lack of skills of teach	Lack of re	Negative/unfavoura		Lack of time (bot						
25	No	31-40	51%-60%	Inclusive classrooms foster gre	Inclusive			Inclusion leads to cognitive development		Pressure of syllabus	Lack of skills of teach	Lack of re	Negative/unfavoura		Lack of time (bot						

## DATA AFER FIRST ROUND OF ORGANISING – STAGE 2 -Page 2

	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL
1	Do you have	What is the	Approxim	How would you best describe your views on an inclusive classroom, that is, ha																	
2	Respons	Respons	Respons	Inclusive	Inclusive	Having all	All studer	Inclusive	Inclusion	I'm not su	Other (ple	Classroom	Pressure	Lack of kn	Lack of sk	Lack of tr	Lack of re	Negative/School p	Lack of ti	Other	
3	No	20-30	Less than 20%	Inclusive classrooms foster greater under				Inclusion leads to cognitive de	Classroom	Pressure	Lack of kn	Lack of sk	Lack of tra	Lack of re	Negative/unfavoura	Lack of time (bot					
4	No	20-30	71%-80%	Inclusive classrooms	All studer	Inclusive		Inclusion leads to cognitive development of all and provides opportunit					Lack of training of teachers in inclusive te			Lack of time (bot					
5	No	20-30	More than 80%	Inclusive classrooms foster greater understanding, respect and co-operation betwe					Pressure	Lack of kn	Lack of sk		Lack of training of teachers in inclusive te			Lack of time (bot					
6	No	20-30	71%-80%	Inclusive classrooms foster gre	Inclusive			Inclusion leads to cognitive de	Classroom	Pressure	Lack of knowledge/u		Lack of training of te	Negative/unfavoura		Lack of time (bot					
7	Yes	20-30	More than 80%	Inclusive classrooms	All students' needs			Inclusion leads to co	In an inclusive classroom	students see th	Lack of sk	Lack of tra	Lack of resources			Lack of time (bot					
8	Yes	20-30	More than 80%					All students' needs are better met as there are greater resour		Pressure of syllabus completion			Lack of resources			Lack of time (bot					
9	Yes	20-30	More than 80%	Inclusive classrooms foster greater understanding, respect and co-operation betwe					Pressure of syllabus completion				Lack of resources			Lack of time (bot					
10	No	20-30	More than 80%	Inclusive classrooms foster gre	Inclusive			Inclusion leads to co	An inclusi	Classroom	Pressure	Lack of kn	Lack of sk	Lack of tra	Lack of re	Lack of time (bot					
11	No	20-30	Less than 20%	Inclusive classrooms foster gre	Inclusive			Inclusion leads to cognitive development		Pressure	Lack of kn	Lack of sk	Lack of tra	Lack of resources		Lack of time (bot					
12	No	20-30	More than 80%	Inclusive classrooms	All students' needs			Inclusion leads to cognitive de	Classroom	Pressure of syllabus completion						Lack of time (bot					
13	No	20-30	More than 80%	Inclusive classrooms	Having all kinds of le			Inclusive classrooms require extra time a	Classroom	Pressure of syllabus completion						Lack of time (bot					
14	No	20-30	More than 80%	Inclusive classrooms	All students' needs			Inclusion leads to cognitive de	Classroom	Pressure of syllabus completion						Lack of time (bot					
15	Yes	20-30	51%-60%	Inclusive classrooms	All studer	Inclusive		Inclusion leads to cognitive development of all and		Lack of kn	Lack of sk		Lack of training of teachers in inclusive teaching practices								
16	No	20-30	61%-70%	Inclusive	Having all kinds of learners slows down/hampers/disturbs the				Classroom	Pressure	Lack of knowledge/u		Lack of training of teachers in inclusive te			Lack of time (bot					
17	Yes	Less than	More than 80%	Inclusive classrooms foster greater under				Inclusion leads to cognitive de	Classroom	Pressure	Lack of knowledge/understanding of different kinds of learne					Lack of time (bot					
18	No	20-30	More than 80%	Inclusive classrooms foster gre	Inclusive			Inclusion leads to cognitive de	Classroom	Pressure	Lack of knowledge/u		Lack of tra	Lack of resources		Lack of time (bot					
19	No	20-30	71%-80%					All students' needs are better met as there are grea	Classroom	Pressure	Lack of kn	Lack of sk	Lack of training of te	Negative/unfavoura		Lack of time (bot					
20	Yes	20-30	71%-80%					All students' needs	Inclusion leads to cognitive de	Classroom	Pressure	Lack of knowledge/u		Lack of training of teachers in inclusive teaching practices							
21	No	20-30	61%-70%	Inclusive classrooms foster greater under				Inclusion leads to cognitive development of all and provides opportunit					Lack of training of teachers in inclusive teaching practices								
22	Yes	Less than	More than 80%	Inclusive	Having all kinds of learners slows down/hampers/disturbs the learning				Pressure	Lack of kn	Lack of sk		Lack of training of teachers in inclusive te			Lack of time (bot					
23	Yes	20-30	More than 80%					Inclusion leads to cognitive development		Pressure of syllabus	Lack of skills of teachers to cater to the diverse lear					Lack of time (bot					
24	No	31-40	51%-60%	Inclusive	Having all kinds of learners slows down/h			I'm not sure		Pressure of syllabus	Lack of skills of teach	Lack of re	Negative/unfavoura		Lack of time (bot						
25	No	31-40	51%-60%	Inclusive classrooms foster gre	Inclusive			Inclusion leads to cognitive development		Pressure of syllabus	Lack of skills of teach	Lack of re	Negative/unfavoura		Lack of time (bot						

Appendix 12: Snapshot of the final data that was ready for analysis.

**DATA AFER SECOND ROUND OF ORGANISING – STAGE 3 –FINAL DATA- Page 1**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Source	Q1 Age	Q2 Gend	Q3 Overall	Q4 Middle E	Q5 Qualifica	Q6 Location	Q7 Exp SEN	Q8 Exposur e to disability	Q9 Student/c	Q10 students known well	Q11 Views on an inclusive classroom	Q11 h Other (please specify)	Q12 Teacher challenges	Q12 j Other (please specify)	Q13 Challenges particular to middle/sec.	Q13 e Other (please specify)	Q14 Students most difficult to cater to	Q15 Level of equipment t handle a class of diverse learners
2																			
3	DS2P1	20-30 years	F	More than 5-less than 10 years	More than 5-less than 10 years	M.Ed	Noida-N2	Yes	No	20-30	Less than 20%	b,f		a,b,c,d,e,f,g,i		a,b,c,d		Students with behavioural difficulties	Fairly equipped
4	DS1P1	20-30 years	F	2-5 years	Less than 2 years		Noida-N1	Yes	No	20-30	71%-80%	b,d,e,f		e,i		a,b,c		Students with behavioural difficulties	Well equipped
5	DS1P2	41-50 years	F	More than 10 years	More than 10 years	B.Ed	Noida-N1	Yes	No	20-30	More than 80%	b		b,c,d,e,i		a,b,c,d		Students with behavioural difficulties	Fairly equipped
	DS2P2	20-30 years	F	2-5 years	Less than 2 years	Bachelor s in Political Science, Masters	Noida-N2	Yes	No	20-30	71%-80%	b,e,f		a,b,c,e,g,i		a,b		Students with behavioural difficulties	Fairly equipped

**DATA AFER SECOND ROUND OF ORGANISING – STAGE 3 –FINAL DATA- Page 2**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Source	Q1 Age	Q2 Gend	Q3 Overall	Q4 Middle E	Q5 Qualifica	Q6 Location	Q7 Exp SEN	Q8 Exposur e to disability	Q9 Student/c	Q10 students known well	Q11 Views on an inclusive classroom	Q11 h Other (please specify)	Q12 Teacher challenges	Q12 j Other (please specify)	Q13 Challenges particular to middle/sec.	Q13 e Other (please specify)	Q14 Students most difficult to cater to	Q15 Level of equipment t handle a class of diverse learners
2																			
3	DS2P1	20-30 years	F	More than 5-less than 10 years	More than 5-less than 10 years	M.Ed	Noida-N2	Yes	No	20-30	Less than 20%	b,f		a,b,c,d,e,f,g,i		a,b,c,d		Students with behavioural difficulties	Fairly equipped
4	DS1P1	20-30 years	F	2-5 years	Less than 2 years		Noida-N1	Yes	No	20-30	71%-80%	b,d,e,f		e,i		a,b,c		Students with behavioural difficulties	Well equipped
5	DS1P2	41-50 years	F	More than 10 years	More than 10 years	B.Ed	Noida-N1	Yes	No	20-30	More than 80%	b		b,c,d,e,i		a,b,c,d		Students with behavioural difficulties	Fairly equipped
	DS2P2	20-30 years	F	2-5 years	Less than 2 years	Bachelor s in Political Science, Masters	Noida-N2	Yes	No	20-30	71%-80%	b,e,f		a,b,c,e,g,i		a,b		Students with behavioural difficulties	Fairly equipped

Appendix 13: Transcription format used

**FOCUS GROUP 1 TRANSCRIPT- DELHI (TSMS)**

UTTER ANCE NO.	PARTICUL ARS		CODES
1	R	Do all your school's classes have learners with diverse abilities, interests and needs?	
2	P 5	Yes	
3	P 6	Yes	
4	All others	Yes	
5	R	Do you believe that teachers able to address the diverse learning needs in their classrooms?	
6	P 1	To some extent...	
7	P 3	Not always	
8	P 5	Not always	
9	P 6, P2	Sometimes...	
10	R	OK, so what are the difficulties/challenges faced and here I am talking especially about middle school and secondary teachers, in addressing the diverse needs of learners in a classroom?	
11	P 6	First of all time constraints teachers are having and second, it is the demand of the curriculum you know.....the	
		curriculum is so much, that we are not able to configure our teaching as per the requirements of all the different children that are there in a class. It is the curriculum pressure, the pressure of completing the curriculum on time is the biggest hindrance I would say...	
12	P 4	Also, wavering attention spans. Some children can't sit for more than five minutes and that makes their learning difficult...	
13	P 7	I think I second what Kanchan is saying, it's basically to do with time...and we are already under pressure to complete the curriculum on time you know, dealing with different children differently, even though we want to do it,	

## Appendix 14: Example of segmentation of transcript

### FOCUS GROUP 2 TRANSCRIPT- BLR

#### Colour Code Scheme as per Research questions

1. What are the difficulties/challenges faced by middle school and secondary teachers working in mainstream Indian schools in addressing the diverse needs of learners in a classroom?
2. What are the professional development needs of middle school and secondary teachers in mainstream Indian schools in urban locations in relation to inclusive education?
3. What methods such as teacher training, workshops etc. are being currently adopted to meet these needs and how effective are they?
4. How should a module/manual/workshop be designed such that these needs can be addressed for these teachers?

UTTER ANCE NO.	PARTICULARS		CODES
1	R	Do all your school's classes have learners with diverse abilities, interests and needs?	
2	P 2	Yes, we do have but percentage varies.	
3	R	Do you believe that teachers are able to address the diverse learning needs in their classrooms?	
4	P 5	I think teachers need some kind of a special training for that, not all teachers would be capable to do that because it depends a lot on the emotional quotient or emotional back up of the teacher also. So those teachers need special kind of a training if they want to handle them in a more technical manner or in a more professional manner.	
5	R	OK	

6	P 1	Sometimes we are not able to deal with problems related to children with learning disabilities, those gaps keep on building from primary to middle school to high school and at high school where we are teaching the core content, I think we are not able to bridge that gap at all. So I think we are not able to cater to the needs of every child.	
7	P 4 (In Hindi)	As she just mentioned, if they don't know even the basics, how will we teach them further? By the time they come to high school, at least the basics should be clear. After that we can take them ahead. If we teach them basics in higher classes, then how do we do it...Because We can't leave the other children and sit with them. We have to take the entire class along.	
8	P 6	More than academics, behavioural issues have to be addressed. We need to be trained properly in that.	
9	P 2	Half of the time is wasted on correcting their behaviour.	
10	P 6	I believe if behaviour falls in place then everything will fall in place.	
11	R	Is it more in this section due to age or whatever?	
12	P 5	Probably adolescence is something that makes them even more aggressive or hyperactive or so impulsive.	
13	R	So what are the difficulties or challenges faced, especially by middle school or senior teachers in addressing the diverse learning needs in a classroom?	
14	P 2	Behaviour and under that so many issues. Not bringing the textbook or class work or whatever is required for the class	

		to the classroom. Starting with that, we have so many or <b>not completing the home work given to them.</b>	
15	P 1	<b>They don't tolerate each other. They are intolerant towards each other.</b>	
16	P 6	<b>It's like they are doing a kind of service to us by being attentive.</b>	
17	P 4 (in Hindi)	<b>They don't even bother if they haven't brought something. They even take out their diaries and keep them out, OK, you want to write a note, please write.</b> If they get the class work then we can take the responsibility of getting it completed but if they don't even get it then how can we do it...	
18	P 3	<b>One more is the health issues, some students have got health problems.</b> Like that day I had faced in the class, in front of me he had fits so that made me like, <b>I am really very scared to handle him now actually. I didn't know anything about his health issues.</b>	
19	R	Was it not informed to you or the school?	
20	P 3	No, it is informed there actually , they know that actually but <b>I didn't come to know. Class teacher knew. I didn't know what to do.</b> Quickly the people came from the Address Health (medical department) , that was done but from next day my attitude towards him changed, now <b>I am very scared to ask him anything. I feel like am I pressurising him or something like that, so I'm scared.</b> Later we came to know that this happens often but first time I was seeing this, so many years I have worked , 13 years of experience I have	

		<p>but first experience of this I handled. So now I'm very scared and that he's taking an advantage of. The child has understood and quickly and now I'm not able to come out. Because I fell if I tell him anything, if it happens. Many are there like that, health issues know...</p>	
21	P 2	Yes..	
22	P 1	<p>Sometimes we are not able to handle children because of problems they face at home. Like parents are not together or parents have quarrelled or some other disturbances at home are reflected in the child when he or she comes to school and that time that indifferent behaviour we are not able to manage at all. Even after counselling many times, talking to the child many times, very rarely we have seen some change.</p>	
23	P 5	<p>Ya, they seem to have reached a saturation point and they feel that whatever the teachers say or how much ever angry they are they speak , if they speak nicely also, they don't bother about it. They have reached that level where they feel that everything that is happening in the school is casual, so that callousness is there in the students which we find a little difficult to handle and we don't know how to react, what to do.</p>	
24	P 1	<p>And sometimes I feel as teachers we are not at all respected by the students even if we try to give them some work, they don't bother to take it. For those students who are appearing</p>	

		for Board exams, the result depends on the teacher, more so all that becomes an issue.	
25	R	Why do you think it is like that?	
26	P 2	Indifferent attitude.	
27	P 1	I told isn't it...maybe with regard to the disturbances at home.	
28	P 5	It could be peer pressure also.	
29	P 6/ P 3	Adolescence , age	
30	P 5	They have to show that they are cool in front of the peer group.	
31	R	What could be done to assist teachers in addressing these challenges?	
32	P 6	One thing, whatever we have noted so far, it pertains to a small number or percentage of students, not 100 %, say around 15-20% of students are like that but it's enough to destroy the classroom atmosphere sometimes.	
33	P 2	We want training.	
34	R	OK, in which particular aspect?	
35	P 6	Handling adolescent children, helping slow learners to achieve at least bare minimum marks, that we do but still	
36	P 5	And how to be more inclusive in the classroom because we have children with learning disability, how to include them in the activities that we conduct in the class and how to help them more in performing better and make them feel comfortable in the class.	
37	R	Hmm...	



38	P 5	So maybe to differentiate the content when we are teaching..	
39	P 1	<b>Resident counsellors</b>	SugI
40	P 2	Without letting down the other children who are there. Taking care of all the children at the same time.	
41	P 5	<b>I think we don't allot time for slow learners and all</b>	
42	Others murmur	<b>It is not possible , how can we...</b>	TrAt
43	P 3	<b>Classroom learning it is not there but we have a separate session, remedial class</b>	SS
44	R	That is a separate session, but I want to know in the class..	
45	P 5	Teaching in 9 <sup>th</sup> and 10 <sup>th</sup> , we find it difficult to incorporate those aspects into our lesson	
46	R	Why? Because of...	
47	P 5	Lack of time, we have to finish the portions, we have to rush and its very difficult because 10 <sup>th</sup> exam means we have to finish the portions, give them thorough revision so in between we won't be able to look into those aspects.	
48	P 3	It should be from two ways, isn't it? <b>I believe only the teacher being equipped will not help, it will not happen. The child should also have responsibility.</b> The child should also, like they said, <b>should have some counsellors there, talking to them, they should be made to understand what we are trying to do for them.</b> Only we being equipped, we doing when they are not responsible for that, then nothing is	SugI

		going to happen, no change will take place. <b>It should be two ways, then you can find some changes.</b>	
49	R	So for children as well as teachers?	
50	P 2 /P 1	<b>Children and Parents also...</b>	SugI
51	P 3	Certain things are not in our hands, their personal problems and all we can't do anything, right? We cannot address	
52	P 4 (In Hindi)	<b>When the children, parents and teachers work together, only then is the triangle completed. If you leave even one end loose, it goes out of hand.</b>	SugI
53	Others	<b>Yes, yes...Parents also</b>	SugI
54	P 3	<b>Parents also should be involved, their cooperation should be there.</b>	SugI
55	R	What are the professional development needs of teachers, especially in middle and senior sections, in relation to inclusive education?	
56	P 5	Special kind of a training and probably some kind of a training to help the teachers themselves to have the patience to teach such students, probably counselling or some kind of a support system to help the teachers maintain that kind of a balance because sometimes what happens we also lose our temper. We don't know how to handle the situation, whether we should take a situation seriously or take it as a trivial matter and leave it. So some kind of a scaffolding should be done for the teacher also.	
57	P 5	<b>Maybe lesser number of students also. The teacher student ratio if it is 1:30, it would be perfect.</b>	SugI

58	P 1	And also lesser number of teaching periods. We are running around period to period and so in that gap where we are late sometimes, maybe 5 minutes or 7 minutes, at that time definitely the indiscipline is already there in the class. By the time we come they will have their own problems, they will be shouting at each other, screaming at each other.	
59	P 4	It's very relaxed when there are lesser number of students.	
60	R	So what methods are being currently adopted by the school to meet these needs?	
61	P 6	Training by TTF	
62	P 4	Programs keep happening in school from TTF	
63	P 6	Training is being given by Teachers' Training Foundation- 8 full day sessions for one year	
64	R	OK, is it all together or spread through the year?	
65	P 6	Throughout the year	
66	P 6	8-10 sessions	
67	P 5	Its not a regular thing, it's like a course	
68	P 3	All those who join here are a part of the course so every year there will be a new set of teachers who would be undergoing that training as well as sometimes there will be guest lectures which will help us relax ourselves	
69	P 5	We have these regular guest lectures, workshops for professional development, probably something to attend to these special needs, I think we need some kind of training because we handle children with learning disabilities, of course there are counsellors in our school, whom we refer	

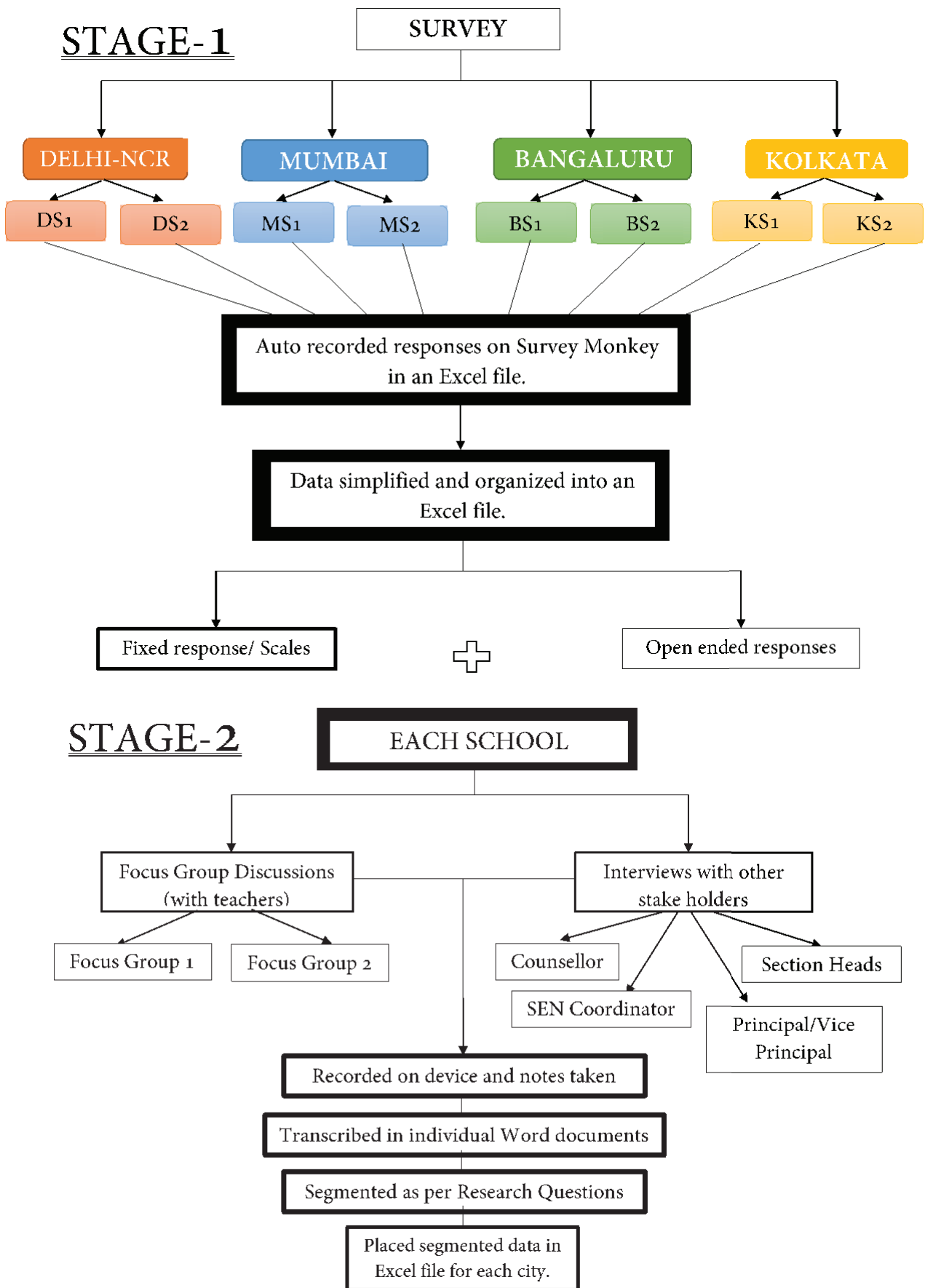
		<b>to, for example if we find that they have some problems we speak to the parents and then refer them to the resource room. There the counsellors speak to them.</b>	SS
70	R	So how effective are the methods that are being currently adopted by the school to meet these needs?	
71	P 4	Whatever strategies we are given by TTF, teachers follow them on a regular basis. It definitely helps as the underperforming students are able to achieve a little bit because in group work they are not given hard tasks and when they are given support they are able to move ahead a little bit, their confidence increases a little bit.	
72	R	OK, so you are able to apply the strategies given. What if they don't work, is there an option of going back and asking them?	
73	P 5	Most of the times we make sure that everyone does it.	
74	R	I mean, strategies may or may not work with certain children, right..so is there an option of going back and asking them?	
75	P 4	<b>In the lesson plan we have a space for feedback wherein we write whether it has gone well or not. The ones which are good are carried forward and we think about how to make the ones which have not been very successful better.</b>	SS
76	R	Do you discuss amongst yourself or the TTF?	
77	P 4	Amongst ourselves, with the parallel teachers.	
78	P 1	<b>Every Friday we have the department meetings, so in that we discuss what all are the issues we face subject wise so</b>	SS

		there any special problem any teacher has faced we try to sort it out.	
79	P 1	And one meeting is there where all the high school teachers will sit together and teachers are given a chance to tell what are the different issues they face throughout the month.	SS
80	R	So we come to the last question, what would be some of the essential features of professional development program designed to meet the needs of the teachers so that they are able to effectively teach a class of diverse learners?	
81	P 1	We should be able to interact with the training personnel frequently because everyday we may face a different issue, so if we are able to make a note of those issues and report on a regular basis and if we get some personalised problems addressed, then it would be of help I believe. So that we can carry it over to many other similar problems we may face later.	
82	P 5	Probably a kind of an e-mail or WhatsApp communication, if that can be addressed by a trained person	
83	R	What else?	
84	P 5	Some kind of a counselling session for the students. If it can be done on a regular basis, not just people coming and talking to them about Science, Math or languages, but something to help them in understanding themselves and to behave in an appropriate manner	SugI

85	P 1	<b>And it should be done in smaller groups, rather than having all class level students. If it is done in smaller groups I think they will get the benefits of it.</b>	SugI
86	R	OK. I was actually asking for teachers...	
87	P 5	Maybe something related to how to handle children with learning disability in the regular classes, something that could help us in our regular classes	
88	R	What could that something be?	
89	P 5	Some strategies because learning difficulties could also be of different types and identification	
90	P 3	We are able to identify very fast	
91	R	OK, so you would know for sure whether the child has some genuine difficulty...	
92	P 5	No, for that we need some kind of a training	
93	P 4	We aren't able to identify all, maybe 1 or 2	
94	P 1	But till the first test is over we can't get the hold of what the child is academically, once the first test is over, we will try to relate that pattern henceforth, oh this is because he is doing like this, then we can	
95	P 5	Behavioural issues we can catch faster but not academic	
96	P 2	<b>Only thing is curriculum itself should be different, they will not be able to come into mainstream, isn't it? How much ever you try, they'll not be</b>	SugI/ TrAt
97	R	Do you have a system of handover?	
98	P 1	We don't get any formal format, only verbally we know...	

99	P 5	Not about each and every child but children who have problems	
100	P 2	<b>Final promotional exam we write all the behavioural issues and why they are being promoted to the next level. There class teachers will mention exactly what the real issue is, so it will come to me, so we have that as a written document also, though it is not recorded on a regular basis, term wise it is recorded. Only for problematic students, not for everyone</b>	SS
101	R	One more time I would request you to think, reflect and answer ....where is it that you need to learn or need support..	
102	P 6	There was a child who didn't fit into our system in the first place. He just didn't concentrate , he used to go under the benches..	
103	P 5	In 9 <sup>th</sup> and 10 <sup>th</sup> also, he used to go to the back of the class and lie down or hide somewhere, even when the teacher is teaching the class	
104	P 6	He would fall asleep..He has passed 10 <sup>th</sup> and is now in 2 <sup>nd</sup> PUC.	
105	R	So what was his difficulty?	
106	P 5	ADHD maybe...he was an introvert, complete... he would just go into his shell and wouldn't talk to anyone	
107	P 4	He was going to the Counsellor regularly	
108	R	So with extreme cases you find it difficult.	
109	All	Yes	

Appendix 15 : Visual representation of the data organisation





Appendix 16 : Table of the initial codes, research question wise

**RQ1: TEACHER CHALLENGES**

**RQ 1**

S.No.	Code	Description
1.	Div	Wide range of diversity in level of students in a classroom, including gifted children
2.	Time	Time constraints during and outside class in reaching out to different kinds of learners and addressing their needs
3.	Curr	Pressure of curriculum/ demands of completion of syllabus
4.	LoRS	Lack of resources and support structure such as adapted material, equipment, physical environment, worksheets and an additional teacher/spl ed in the classroom
5.	Att	Maintaining students' attention, low and wavering attention span of students
6.	Disc	Discipline issues in school
7.	WWRI	Students' work and writing related issues
8.	PS	Parent understanding, support and cooperation, ineffective parenting strategies, too harsh or too pampering, home environment not conducive
9.	LoK/A	Lack of knowledge and awareness about the kinds of disabilities/special needs/emotional and behavioural difficulties that can be found in students in a mainstream classroom
10.	LoS/T	Lack of skills/ training in inclusive teaching practices, identification of needs, addressing emotional and behavioural difficulties
11.	AI	Adolescent issues in children such as peer pressure, anxiety, distractions, gadgets, addictions, attitudes
12.	WP	Work Pressure (substitutions, corrections, burdened with other responsibilities)
13.	BI	Understanding student behaviour and appropriately responding to behaviour issues
14.	TrAt	Negative/unfavourable attitudes and mindset towards inclusion
15.	LoA/I/D	Lack of awareness/interest/drive in the teachers
16.	LoSS	Lack of maturity/patience and other soft skills in teachers
17.	GG	Generation gap/ lack of understanding of present day children-their lives, language, lingo, motivations
18.	SSC	Subject specific challenges
19.	E/A/B	Too many events/activities/breaks in a school year
20.	FoM	Parent's/Child's only focus on marks
21.	LoEI	Lack of early intervention/ ineffective, children come to higher grades with poor skills that are difficult to cater to then, especially CWSN
22.	SS	School systems and policies related to teacher's authority, discipline policy, number of assessments conducted, inclusion policy etc
23.	CS	Number of students in a class is a hindrance in catering to individual needs

24.	UEC	Lack of understanding, empathy and cooperation of students towards peers, especially those who are different from them
25.	SAEK	Children of these times being smarter, more aware, having more exposure and knowledge testing teachers' knowledge, patience
26.	TC	Tuition classes used for studying and school considered as place for fun/ teaching different strategies

## **RQ 2: PROFESSIONAL DEVELOPMENT NEEDS**

### **RQ 2**

<b>S.No.</b>	<b>Code</b>	<b>Description</b>
1.	LP	Lesson planning for a class of diverse learners
2.	Knw	Knowledge about the kinds of disabilities/special needs/emotional and behavioural difficulties that can be found in students in a mainstream classroom
3.	ITTS	Inclusive teaching techniques and strategies to reach out to diverse learners
4.	CM	Classroom management techniques for an inclusive class
5.	DI	Differentiated instruction*
6.	SST	Soft skills training including sensitivity training
7.	S/AST	Subject/ Age-specific training
8.	IdNS	Identification of student's needs and kind of support required
9.	USP	Understanding and effectively supporting parents of students with spl needs
10.	TrAt	Teacher attitudes and mindset towards inclusion
11.	BRAC	Board related assessments and concessions
12.	BI	Understanding student behaviour and appropriately responding to behaviour issues

\* Tailoring instruction to meet individual needs (content, process, products or the learning environment)

-Carol Ann Tomlinson

## **RQ 3: METHODS CURRENTLY ADOPTED**

### **RQ 3**

<b>S. o.</b>	<b>Code</b>	<b>Description</b>
1.	IHDS	In house department support (Spl. Ed/Counselor/Sec. Head/ Coordinator )
2.	IHWS	In-house workshops
3.	EW	External workshops for select few
4.	OS	Professional Development Program outsourced
5.	<b><u>Effectiveness</u></b>	
6.	NE	Not at all effective
7.	SE	Somewhat effective
8.	FE	Fairly effective
9.	VE	Very effective
10.	EE	Extremely effective

**RQ 4: FEATURES OF PDP****RQ 4**

<b>S. No.</b>	<b>Code</b>	<b>Description</b>
1.	A/E/P	Having a lot of hands on activities/examples/practice/case studies
2.	R/F	Regularly conducted at frequent intervals
3.	TM	Tailor-made to each participant's learning style and pace
4.	Rev	Should allow back and forth movement, that is, possibility of revisiting a portion or module that one has not understood or wants to master
5.	FU	Follow-up/ Review workshops
6.	SG	Conducted in small groups
7.	RM	Provide resource material such as handbook, booklet, videos, websites etc.
8.	ARP	Access to resource person/expert/training personnel
9.	Int	Interactive
10.	ISE	Involve intra-school and inter-school exchange of ideas and best practices
11.	CT	Convenient Time -Conducted at the time of year which suits the teachers and when they are relatively unburdened
12.	Tech	Use of technology
13.	ETG	Easy to grasp, simple
14.	Exp	Involve interaction with stalwarts and experienced people in the field
15.	TWB	Teachers' well-being including stress management, motivation and inspiration
16.	SAC	Simulation of an actual class/ classroom situations
17.	UCT	Updated to the current times in terms of methodologies, knowledge about how learning happens, children of the new generation
18.	RL	Relevant laws related to education of children
19.	IHWS	Conducted within the school/ In-house training
20.	BI	Understanding student behaviour and appropriately responding to behaviour issues
21.	TrAt	Teacher attitudes and mindset towards inclusion
22.	SST	Soft skills training including sensitivity training
23.	Knw	Knowledge about the kinds of disabilities/special needs/emotional and behavioural difficulties that can be found in students in a mainstream classroom
24.	IHDS	In house department support
25.	LP	Lesson planning for a class of diverse learners
26.	ITTS	Inclusive teaching techniques and strategies to reach out to diverse learners
27.	CM	Classroom management techniques for an inclusive class
28.	S/AST	Subject/ Age-specific training
29.	IdNS	Identification of student's needs and kind of support required
30.	BRAC	Board related assessments and concessions
31.	DI	Differentiated instruction*
32.	USP	Understanding and effectively supporting parents of students with spl needs

OTHER CODES

<b>S. No.</b>	<b>Code</b>	<b>Description</b>	
1.	SugI	Suggestions for making inclusion more effective	
2.	CTP	Challenges of organizing such a training program	
3.	SCU	Strategies currently used by teachers/school to support students	
4.	TrAt	Teacher attitudes and mindset towards inclusion	

Appendix 17 : Table related to the merging of codes and the rationale behind them

**MERGING OF CODES**

**RO 1 (TEACHER CHALLENGES)**

<b>INITIAL CODE</b>	<b>RATIONALE</b>	<b>FINAL CODE</b>
<p><b>LoK/A</b> (Lack of knowledge and awareness about the kinds of diverse needs that can be found in students in a mainstream classroom)</p> <p><b>LoS/T</b> (Lack of skills/ training in inclusive teaching practices, identification of needs, addressing emotional and behavioural difficulties)</p> <p><b>LoA/I/D</b> (Lack of awareness/interest/drive in the teachers)</p> <p><b>LoSS</b> (Lack of maturity/patience and other soft skills in teachers)</p> <p><b>TrAt</b> (Negative/unfavourable attitudes and mindset towards inclusion )</p> <p><b>GG</b> (Generation gap/ lack of understanding of present day children-their lives, language, lingo, motivations)</p>	<p>Since all the codes related to different aspects of the teacher’s personality, such as attitudes, knowledge, skills and training in various areas, they have been combined to form one compact code.</p>	<p><b>TACT</b> (Teacher Attitudes, Competencies and Training)</p>
<p><b>Div</b> (Wide range of diversity in level of students in a classroom, including gifted children)</p> <p><b>Att</b> (Low and wavering attention span of students)</p> <p><b>WWRI</b> (Students’ work and writing related issues)</p> <p><b>AI</b> (Adolescent issues in children such as peer pressure, anxiety, distractions, gadgets, addictions, attitudes)</p> <p><b>BI</b> (Understanding student behaviour and appropriately responding to behaviour issues)</p> <p><b>UEC</b> (Lack of understanding, empathy and cooperation of students towards peers, especially those who are different from them)</p>	<p>There were several codes related to different issues with children such as those pertaining to their behavior or work or due to their adolescence or being gifted, their intolerance or smartness. Hence all these were clubbed into one umbrella term- SCI (Student centered issues).</p>	<p><b>SCI</b> (Student Centered Issues)</p>

<b>SAEK</b> (Children of these times being smarter, more aware, having more exposure and knowledge testing teachers' knowledge, patience)		
<b>SS</b> (School systems and policies) <b>CS</b> (Number of students in a class is a hindrance in catering to individual needs) <b>E/A/B</b> (Too many events/activities/breaks in a school year) <b>LoRS</b> (Lack of resources and support structure) <b>WP</b> (Work Pressure) <b>Disc</b> (Discipline issues in school) <b>LoEI</b> (Lack of early intervention/ ineffective)	A number of factors were mentioned as challenges by teachers. All of these are related to school policies and systems and therefore they have been merged into the already existing code of School systems as it encompasses all of the separate categories.	<b>SSP</b> (School systems and policies)
<b>Time</b> (Time constraints) <b>Curr</b> (Pressure of curriculum/ demands of completion of syllabus) <b>SSC</b> (Subject specific challenges)	As these three codes are related to the curriculum followed in school, they have been merged into one category.	<b>CB</b> (Curriculum based )
<b>PS</b> (Parent understanding, support and cooperation, ineffective parenting strategies, too harsh or too pampering, home environment not conducive). <b>FoM</b> (Parent's/Child's only focus on marks)	This is a distinct and huge category in itself and only one code has been merged into it as it again relates to parents' perceptions and expectations from their children.	<b>PS</b> (Parent understanding, support and cooperation)
<b>TC</b> (Tuition classes)	This challenge was mentioned by one a very few teachers and was limited to a couple of locations. Hence it is being dropped as a code and would be mentioned in the findings.	Code dropped

### **RQ 2 (PROFESSIONAL DEVELOPMENT NEEDS)**

<b>INITIAL CODE</b>	<b>RATIONALE</b>	<b>FINAL CODE</b>
<b>Knw</b> (Knowledge about the kinds of disabilities/special needs/emotional and behavioural difficulties that can be found in students in a mainstream classroom) <b>IdNS</b> (Identification of student's needs and kind of support required)	Both these codes are closely related as knowledge of the difficulties and variances in students would automatically lead to identification of their needs and support required. Hence they have been merged into a new code which combines both aspects.	<b>KINS</b> (Knowledge and Identification of Needs and Support)

<p><b>ITTS</b> (Inclusive teaching techniques and strategies to reach out to diverse learners)  <b>DI</b> (Differentiated instruction)  <b>Tech</b> (Use of technology)</p>	<p>Differentiated Instruction is a larger concept which encompasses delivery of instruction or strategies along with other components such as assessment, process and learning environment. Hence the code ITTS forms a part of DI. In present times, technology is an integral part of the teaching learning process and its use in the classroom would naturally be included in the above.</p>	<p><b>DI</b> (Differentiated instruction)</p>
<p><b>All other codes spell out different areas in which professional development or training of teachers is required, hence they have been retained as it is.</b></p>		

**RQ 3 pertains to the methods currently adopted by school to meet the Professional devp needs and all four codes therein cannot be clubbed, hence they are retained as such.**

**RQ 4 (FEATURES OF PDP)**

INITIAL CODE	RATIONALE	FINAL CODE
<p><b>A/E/P</b> (Having a lot of hands on activities/examples/practice/case studies)  <b>Int</b> (Interactive)  <b>SAC</b> (Simulation of an actual class/ classroom situations)</p>	<p>Since all the codes relate to the workshop being practical, involving examples, case studies, simulation of actual situations an umbrella code of HoP (Hands on Practical) has been given. Also, they would naturally be interactive.</p>	<p><b>HoP</b> (Hands on/Practical)</p>
<p><b>FU</b> (Follow-up/ Review workshops)  <b>ARP</b> (Access to resource person/expert/training personnel)</p>	<p>Many of the participants mentioned that the workshops or training programs should be an on going process and it was important that they could refer back to either the same trainer or some other resource person in case of any doubts. So regular review and feedback needs to be present. Since both these points are inter dependent, they have been merged into one.</p>	<p><b>OGP</b> (On Going Process)</p>
<p><b>CT</b> (Convenient Time -Conducted at the time of year which suits the teachers and when they are relatively unburdened)  <b>TWB</b> (Teachers' well-being including stress management, motivation and inspiration)</p>	<p>Conducting the trainings at a convenient time and in small or large groups are all factors which are related to the administration of the school and would vary from one to the other. Also, I feel that taking care of the well being of teachers, reducing their stress and motivating them, cannot be left to one or two</p>	<p><b>IF</b> (Institutional factors)</p>

<p><b>SG</b> (Conducted in small groups)</p> <p><b>ISE</b> (Involve intra-school and inter-school exchange of ideas and best practices)</p> <p><b>Exp</b> (Involve interaction with stalwarts and experienced people in the field)</p>	<p>workshops. It is an important factor that needs to be taken care of by schools during the course of the year. Similarly, facilitating intra school and inter school exchange of ideas and inviting experts from the field from time to time are initiatives to be taken by the respective school administrations and form a larger part of the PDP of an institution. Hence all these cannot be considered as general features of a PDP. They shall be discussed as Institutional Factors.</p>	
<p><b>TM</b> (Tailor-made to each participant's learning style and pace)</p> <p><b>Rev</b> (Should allow back and forth movement, that is, possibility of revisiting a portion or module that one has not understood or wants to master)</p>	<p>Both these codes are similar and could have been merged. However, although these were kept based on the options for a similar question in the survey, they did not find mention in the focus groups or interviews. Hence they are being dropped.</p>	<p>Code dropped</p>
<p><b>UCT</b> (Updated to the current times in terms of methodologies, knowledge about how learning happens, children of the new generation).</p> <p><b>RL</b> (Relevant laws related to education of children)</p>	<p>The code RL, being updated about the relevant and latest laws that are in place with regard to education of children has been merged into the existing code <b>UCT</b> as by expanding the definition a little bit, it forms a part of it.</p>	<p><b>UCT</b> (Updated to the current times in terms of methodologies, knowledge about how learning happens, relevant laws, children of the new generation)</p>
<p><b>Knw</b> (Knowledge)</p> <p><b>IdNS</b> (Identification of student's needs and kind of support required)</p>	<p>As explained before, these codes have been combined.</p>	<p><b>KINS</b> (Knowledge and Identification of Needs and Support)</p>
<p><b>All other codes remain as such.</b></p>		

**At the end of this exercise the codes have been reduced from 53 distinct codes to 29 distinct codes.**



Appendix 18: Table of Final Codes and definitions

**FINAL CODES**

<b>S.No.</b>	<b>RQ 1</b>	<b>RQ 2</b>	<b>RQ 3</b>	<b>RQ 4</b>	<b>OTHERS</b>
1.	<b>TACT</b> (Teacher Attitudes, Competencies and Training)	<b>KINS</b> (Knowledge and Identification of Needs and Support)	<b>IHDS</b> (In house department support)	<b>OGP</b> (On Going Process)	<b>Sugl</b> (Suggestions for making inclusion more effective)
2.	<b>SCI</b> (Student Centered Issues)	<b>DI</b> (Differentiated instruction)	<b>IHWS</b> (Conducted within the school/ In house training)	<b>IF</b> (Institutional factors)	<b>SCU</b> (Strategies currently used by teachers/school to support students)
3.	<b>SSP</b> (School systems and policies)	<b>TrAt</b> (Teacher attitudes and mindset towards inclusion)	<b>Ext.</b> (External workshops for select few)	<b>HoP</b> (Hands on/Practical)	<b>CTP</b> (Challenges of organizing such a training program)
4.	<b>CB</b> (Curriculum based)	<b>BRAC</b> (Board related assessments and concessions)	<b>OS</b> (Professional Development Program outsourced)	<b>UCT</b> (Updated to the current times in terms of methodologies, knowledge about how learning happens, relevant laws, children of the new generation)	<b>TrAt</b> (Teacher attitudes and mindset towards inclusion)
5.	<b>PS</b> (Parent understanding, support and cooperation)	<b>S/AST</b> (Subject/ Age-specific training)		<b>R/F</b> (Regularly conducted at frequent intervals)	
		<b>LP</b> (Lesson planning for a class of diverse learners)		<b>RM</b> (Provide resource material such as handbook, booklet, videos, websites etc.)	
		<b>CM</b> (Classroom management techniques for an inclusive class)		<b>ETG</b> (Easy to grasp, simple)	
		<b>SST</b> (Soft skills training including sensitivity training)		<b>LP</b> (Lesson planning for a class of diverse learners)	
		<b>BI</b> (Understanding student behaviour and appropriately)		<b>CM</b> (Classroom management)	

		responding to behaviour issues)		techniques for an inclusive class)	
		<b>USP</b> (Understanding and effectively supporting parents of students with spl needs)		<b>SST</b> (Soft skills training including sensitivity training)	
				<b>BI</b> (Understanding student behaviour and appropriately responding to behaviour issues)	
				<b>USP</b> (Understanding and effectively supporting parents of students with spl needs)	