

**Practising inclusive education in an  
Indian context:  
Taking the agenda forward**



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**Declaration of originality**

I hereby declare that:

- This thesis is the result of my own work and includes nothing which is the outcome of work done in collaboration except as declared in the Preface and specified in the text.
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Date: November 29, 2020



## Abstract

### Practising inclusive education in an Indian context: Taking the agenda forward

Seema Nath

Despite widespread interest in education for children with disabilities, research in India has predominantly been focussed on issues around access, attitudes of teachers towards students with disabilities and challenges to implementing inclusive education. However, there is a need to move away from focusing solely on issues of access and challenges towards a deeper understanding of *how* inclusive education systems are developed. My research addresses this crucial gap through a study that critically explores how inclusive education is perceived and practised in a set of government schools that have an explicit mandate to focus on inclusive education. These schools are operated by an NGO called Mukhtangan under a public-private partnership with the Municipal Corporation of Greater Mumbai (MCGM) in Mumbai, India.

Adopting a qualitative case study approach, I conducted 140 interviews and 21 classroom observations across three schools, over a period of 10 months. Through deep immersion in the field, I gathered perspectives and observed practices of various members in these schools, including teachers, students with and without disabilities, teacher trainers, and members of the school leadership team. I analysed the empirical data thematically and applied the 3E framework of Entry, Engagement and Empowerment by Singal (2004; 2013) to discuss the complexity in the development of inclusive education systems in these schools.

The empirical findings show that there has been a conscious effort to embed inclusive practices in their teacher training, the curriculum, and pedagogy, thereby developing and sustaining support for diverse learners, including children with disabilities through their whole school approach. They implement regular capacity-building, subject specific strategies and classroom management using flexible furniture, timetables etc., activity-based teaching and learning, individualised attention, peer learning as well as customised assessments aimed at including diverse learners in the classrooms.

The foremost enabler identified by members of the school for including children with disabilities and difficulties in learning is their special education department called the Learning Resource Group (LRG), which comprises two special education teachers in each school. Additionally, teachers listed that receiving structured support, and having access to socio-emotional support created a sense of community that enabled them to include diverse learners. Members of the schools reported time constraints, the need to expand the role of LRG, teaching students with 'behaviour problems', lack of training in Braille and sign language for supporting children with significant sensory disabilities and lack of physical access for some students due to the schools being located within inaccessible government school buildings as challenges to implementing inclusive education.

Students reported strong friendships with their peers and close relationships with their teachers that created a sense of belongingness, on the one hand, whilst also reporting incidents of 'teasing' due to their disabilities or personal circumstances, on the other. The data highlighted that the wider school culture embraces inclusive education in a holistic manner that takes into account the intersectional identities of the students, teachers, and other staff in these schools.

Finally, drawing on the findings, a roadmap for including diverse learners in teaching and learning within mainstream Indian schools and more widely at the Indian policy level under the ambit of the Right to Education Act, 2009 and National Education Policy, 2020, is presented.

**Keywords:** inclusive education, disabilities, mainstream schools, whole school approach

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Finally, I am humbled by those who have worked towards inclusion of children with disabilities in the education system and beyond and upheld equity and social justice through their words and actions. This one is for you.



**Inclusion does not mean that one waits for big changes to happen; one can practice it wherever one is through one's work and life. Inclusion needs each one of us to reach out to people who are different, to value, respect and celebrate diversity. It challenges our own value systems of tolerance. We need to change before we change others and, as Gandhiji said so aptly, "We must become the change we seek."**

**Mithu Alur, 2001**



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# **PART I**

## **BACKGROUND TO THE RESEARCH**

## CHAPTER I: INTRODUCTION

### 1.1. Prelude – Beginning my journey

In 2012, post completion of my MPhil in Social and Developmental Psychology, University of Cambridge, where the focus of my dissertation was autism and memory, I returned to work in my home state of Assam, in the north-east of India. My engagement with education research began with living and working in the villages of Morigaon<sup>1</sup> district in Assam, where I was employed by Columbia University, New York, as a District Program Co-ordinator for a year. Later, as my role expanded, I was transferred to their head office in Mumbai. My motivation for doctoral research on inclusive education emerged out of these four years' experience (2012-2016) within the Indian education system. This employment provided me with the opportunity to engage in the sustainability of government education programmes guided by research and with the support of local educational stakeholders.

Throughout this time, I visited several Indian states to study local innovations in education at the grassroots level and to examine how they were addressing the needs of the community. The premise for this was that, if local initiatives for quality education existed that addressed the needs of the community, scaling up these innovations to foster quality education in similar communities could be beneficial. Through this project I engaged in research aimed at understanding the aspects of teacher education, textbooks, classroom management, school health, multi-grade multi-level teaching etc. within government schools. Marginalisation due to gender, caste, religion, language etc. emerged as a major theme during this time. Whilst such marginalisation is widely reported in academic literature and the popular media, I became increasingly aware that for children with disabilities these challenges are exacerbated.

During the field visits and data collection, many teachers referred to students with disabilities in their classroom, who they wanted to teach alongside the other students, but did not know how to do so. Moreover, during classroom observations sometimes I saw students with significant physical disabilities in makeshift hammocks<sup>2</sup> in the side of the classroom as there

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<sup>1</sup> Morigaon is an administrative district in Assam with a literacy rate of 69.37%, according to the 2011 Census and a population facing significant poverty.

<sup>2</sup> Mostly made with an old saree and tied to two windows at the side of the class so that the student was able to view the blackboard.

was no accessible furniture for them. My graduate research working alongside children with autism in India (in both mainstream and special schools) highlighted similar experiences. These experiences brought to the fore that students with disabilities were accessing classrooms and whilst teachers aspired to include students with disabilities, they lacked information and expertise to do so, something I found across different states in India.

My mother has significant hearing loss and growing up I have seen closely how she navigates the world that is not disabled-friendly. However, she has been able to carve a successful path for herself with the help of a supportive community of people around her. Her journey along with what I have learned through my field research ignited a keen desire in me to move away from the deficit discourse and embark on doctoral research aimed at critically understanding the structures and practices required to support the learning of children with disabilities in mainstream schools. My intention is to unpack contextually relevant information about how inclusive education is practised in India through this thesis, such that I can add to the cumulative knowledge base on education for children with disabilities.

## **1.2 Rationale for this research**

In recent years, the education of children with disabilities has been gaining momentum and mainstream schools are admitting more children with disabilities. However, as a World Bank report (2017) asserts, “Schooling is not the same as learning” (p. 3). In India, whilst children face many challenges to education owing to gender, socio-economic circumstances, class, and caste etc, the barriers faced by children with disabilities are compounded by these intersectional identities. It is disability, rather than poverty or gender, that has been found to be the most significant reason for children being out of school (World Bank, 2007; UNESCO, 2019). In fact, children with disabilities are five times more likely to be out of school than other children who belong to Scheduled Castes or Scheduled Tribes (World Bank, 2009) in India. Thus, marginalisation of children with disabilities within the mainstream education system remains the least noticeable even though disabilities is a compelling reason for their exclusion (Mattingly and McInerney, 2010).

Findings from research that studied the experiences of children with disabilities and the inclusive practices in mainstream Indian schools (Das and Kuttumuri, 2011; Singal and Jain, 2012; Sawhney, 2015) have suggested that, whilst these were called inclusive (in that they

admitted children with disabilities), in reality, they were unable to meet the learning needs of children. My personal experience working in the public primary education sector in India and a review of the literature review have elicited that there has been minimal research and that there is a significant lacuna in understanding the practices adopted by mainstream schools aimed at including all learners as well as how these practices are implemented within the classroom teaching and learning processes.

This disconnect between access and learning for children with disabilities in the education system is because even though various policies and legal frameworks in India state what should be done to ensure education for children with disabilities within mainstream schools, there is no clarity on the practice of inclusive education and pedagogy. Thus, understanding ‘how to deliver the vision of inclusive education’ (Singal, 2019; pg. 837) can help in effective implementation of these policies. There is a need to engage with research on what constitutes inclusive education and how it is practised (Alfredo, 2019; Singal, Lynch and Johansson, 2019; Singal, 2019). In particular, there is a dearth of empirical evidence in this sphere, and my research falls squarely in this space by probing inclusive education within mainstream schools in the Indian context and how children with disabilities are part of this process.

UNICEF recommended inclusive education in 1970 as a cost-efficient way for the education of children with disabilities in developing countries (Kalyanpur, 2008) and this policy driven approach led to the establishment of inclusive education systems in schools around the world (Narain, 2016). But globally, policymakers found it difficult to consider inclusion and move beyond integration (Graham and Slee, 2008). Kalyanpur (2019) argues that we need to move past the deficit model and question the universal applicability of inclusive education based on international aid agencies assumptions that notions of individual rights, inclusion and equality are same around the world. Rather, there is a need consider less Western centric alternatives that takes into account the local context.

A literature review of research on inclusive schooling in India conducted by Rose (2017) identified a need to understand practices from ‘schools where there is a commitment to inclusion and where teachers are endeavouring to develop practices that are supportive of children from previously marginalised groups.’ (p 16). This highlights a need to investigate mainstream schools that are actively trying to promote inclusive teaching and learning and catering to students from diverse backgrounds and with different learning needs. In recent

years, despite enrolment in government schools having decreased from 19.9 crores<sup>3</sup> (2011-12) to 18.9 crores (2016-17)<sup>4</sup>, the majority of students in India still go to non-fee-paying schools. But due to COVID 19 pandemic, number of students in government schools is poised to grow again. As per the Annual Status of Education report (ASER) Wave 1 (October 2020), enrolment figures in government schools have increased in 2020 as compared to 2018<sup>5</sup>. For this thesis, the idea was to move away from the deficit discourse and seek public schools that were implementing inclusive education programmes. By so doing, I was able to ground this understanding in the contextual realities of non-fee-paying Indian schools.

Narain (2013), through research conducted in Chennai (India), also revealed that students with disabilities located within mainstream schools face a multitude of challenges. According to her, a rearticulation of the lived experiences of school personnel seeking to build inclusive practices would make the process of inclusive education more dialogic, while simultaneously affording a means to escape the so-called theory–practice divide. Such a rearticulation would state the current work of teachers and other school personnel as necessary for refining a concept of inclusive education, such that the metaphors of their experiences become the cornerstones of an agenda for change. This kind of empirical research has the potential to contribute not just to the policy discourse, but also, create knowledge for other schools making efforts to implement inclusive education. My thesis is a step in this direction, for it addresses the challenges and enablers to inclusive education, whilst also gathering students' perspectives about their teaching and learning as well as their social experiences.

### 1.3 Research aims and questions

The overall aim of this research is to critically understand how mainstream schools include students with disabilities in teaching and learning and their inclusive education practices. To identify the site of the research, I spoke with various education stakeholders, combed through the literature and made extensive internet searches. This led me to a set of government schools in Mumbai run by an NGO called Muktangan in a public-private partnership with the

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<sup>3</sup> Crore is a unit of measurement used in the Indian numbering system. It is equivalent to ten million.

<sup>4</sup> <https://theprint.in/india/sharp-rise-in-number-of-students-opting-for-private-schools-even-in-poor-states/264088/#:~:text=In%20government%20schools%2C%20the%20number,schools%2C%20according%20to%20the%20data.>

<sup>5</sup> <http://www.asercentre.org/Wave/p/373.html>

Municipal Corporation of Greater Mumbai (MCGM)<sup>6</sup> that had a clearly stated focus on inclusive education. Muktangan states on its website and in its annual reports that it promotes “quality, child centred, inclusive education within government schools”. The schools follow a constructivist approach to education and have had a special education needs department since 2006 (according to their annual report for 2015, called ‘the Muktangan Story’: commemorating 10 years of Muktangan).

They emphasise sustainable and replicable inclusive models of quality child centred teacher education and school programmes, with their vision statement reporting their aim to have schools that are “an inclusive, empowered world in which all live with harmony with freedom of expression, respect and with integrity” (Pg. 3). As Muktangan mentioned promoting inclusive education within the public education system, I decided that it would provide the best environment to pursue my research aim. The research was guided by a central research question and three sub-questions.

**RQ1. How do mainstream schools in Mumbai, India perceives and practise inclusive education?**

**RQ1a. What are the factors, as identified by different stakeholders, that shape the implementation of inclusive education in mainstream settings?**

**RQ1b. What are the challenges and enablers to the implementation of inclusive practices, with a particular focus on children with disabilities?**

**RQ1c. What are students’ perspectives of their teaching and learning experiences and social environment in these inclusive settings?**

The schools included in this research in many ways revealed the diversity and complexity that is present in government school systems across India. For example, the teachers and students shared demographic diversity just like students in other Indian schools, with similarities regarding their socio-economic status, diversity in caste, class, religion, language

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<sup>6</sup> The Municipal Corporation of Greater Mumbai or MCGM, formerly called the Bombay Municipal Corporation (BMC) is the governing civic body of Mumbai, the capital of Maharashtra state. The MCGM manages more than 1000 primary and secondary schools in Mumbai.

etc. The students were also provided with similar resources as other government school students in terms of attending a non-fee-paying school and receiving textbooks, uniforms, midday meals etc. from the government (MHRD, 2020). Given these similarities, I deemed these schools as being an ideal setting for conducting this research. That is, while being situated within a public private partnership with the MCGM, they were in receipt of similar base resources as other government schools. But what sets these schools apart is their unequivocal claim that they support inclusive education for children and that includes children with disabilities.

#### 1.4 Structure of the thesis

My research is descriptive, explanatory, and reflective. As an interpretivist, I have contextualised my research around the socio-cultural, political, economic, gender, caste and class narratives that exist within the site of my research and recognise it is reflective of the larger tapestry of the country. My thesis consists of ten chapters divided into four parts. **Part One (Chapters 1 to 4)** gives the background to my research. Here, I introduce my study (**Chapter 1**); providing an overview of the Indian policy landscape for children with disabilities in the elementary education sector (**Chapter 2**); conduct a literature review on inclusive education, with a special focus on classroom practice (**Chapter 3**); and then introduce the research context, i.e. the schools investigated (**Chapter 4**).

**Part Two (Chapter 5)** details my qualitative methodology that involves employing a case study, with an overview of the methods, ethical considerations, data collection etc. also being presented. **Part Three (Chapter 6 to 9)** covers the findings and discussion. It is based on a range of data collected from various sources within the school, including semi-structured interviews with teachers, students (with and without disabilities), and members of the school leadership team as well as classroom observations. I present the perceptions around disability and inclusive education among the teachers and members of the leadership team along with students' perspectives of their social environment to ascertain who faces exclusion within these schools (**Chapter 6**). Then, I unpack the structures and practices within the school that address the teaching and learning of all the students in the schools (**Chapter 7**). Next, I present the challenges and enablers for including diverse learners within the school (**Chapter 8**). Finally, the last chapter in this part consists of a detailed analysis of the findings to

address the central research questions posed at the beginning of the thesis (**Chapter 9**).

I conclude my thesis with **Part Four (Chapter 10 and Epilogue)**, where I present the scholarly contribution of this research in terms of its implications (methodological and theoretical). I also provide discussion on the strengths and limitations of this research along with fruitful avenues for future inquiry. The COVID-19 pandemic has delivered unprecedented shocks to the education system during peace time. The pandemic is impacting on educational outcomes especially in low resourced settings, with rates of dropouts being predicted to increase as the economic crisis deepens, which is leading to schools, parents, students, and teachers worldwide becoming concerned (World Bank, 2020). Moreover, this pandemic is disproportionately affecting those within marginalised communities in India and worldwide, including children with disabilities (Nath, 2020). Since the pandemic started, I have been in touch with the schools and have collected additional information on how they have addressed the needs of their students and documented it in a blogpost<sup>7</sup>. As I have written this thesis within the backdrop of this pandemic, I draw on the findings and discussion from this research to illustrate how the schools in the case study have functioned since the pandemic started<sup>8</sup> in the epilogue of this thesis.

### 1.5 Terminology used in this thesis

**Global North and South:** I use the terms global North/South instead of developing country. The word ‘developing country’ is problematic as it assumes a judgemental attitude towards the level of development of a country (Khokhar and Serajuddin, 2015) and does not account for diversity and systemic inequities. The terms global North/South are socio-economic and political classifications of the countries in the world, which were popularised in the Brandt Report (1980), although this demarcation has been in existence since the Cold War period. It highlights the complex inequities, poverty, dependency, and exploitation within the countries of the South, which have a legacy of control or oppression by colonial powers. However, I recognise that global North/South is not a binary and heterogeneity exists within both as there are rich and privileged in the South and underserved communities in the North.

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<sup>7</sup> <https://canderesearch.wordpress.com/2020/06/09/education-for-all-under-lockdown-the-path-ahead-for-inclusion-of-children-with-disabilities/>

<sup>8</sup> <https://canderesearch.wordpress.com/2020/06/09/education-for-all-under-lockdown-the-path-ahead-for-inclusion-of-children-with-disabilities/>

Historically, due to structural inequities, the international policy discourse has ignored the global South as a knowledge base. This has also influenced the current discourse around disability, which has been largely monolithic and dominated by research in the Northern context hitherto, which has thus failed to acknowledge the lived realities of the persons of the global South. This is because of the legacy left behind by colonialism in the South, which continues to affect those with disabilities in different spheres of their lives, including health care, education, economic independence etc. (Singal and Muthukrishna, 2014). Recent studies contextualised in and emerging from the South challenge the Northern hegemony, stressing how there is an increased need for scholarship in relation to disability and inclusive education that is rooted in the contextual realities of the South.

**Persons with disabilities:** I use the term ‘persons/children/students with disability’ throughout this thesis instead of disabled persons/children/students, to focus on the individual and not the disability by using person first language. However, I refer to students with autism as autistic students taking into consideration the recent assertion by autistic individuals that they prefer identity first language as it is an inherent part of their identity and something they are proud of (Churchman, 2019)<sup>9</sup>. The semantics of this term is especially important in countries of the South, where stigmatisation of disability is rampant (Singal, 2009). During one of his radio broadcasts in December 2015, the Indian Prime Minister coined the term ‘*Divyangjan*’, which means ‘the one with divine body’, in Hindi, to refer to persons with disabilities. While welcomed by many as it replaced the Hindi word ‘*Viklang*’ that translates to ‘non-functional body parts’, which has extremely negative connotations, many disability rights activists and researchers in India opposed this change (Khetarpal and Singh, 2016; Kumar, 2018; Singal, 2019). They argued that it strips away the humanity from the person by equating them with the divine and further perpetuating views about their disabilities being a result of their ‘*karma*’<sup>10</sup>, thus maintaining ongoing stigma for persons with disabilities.

Furthermore, in the Indian policy context, the terms disabilities, special educational needs, *divyangjan*, and differently abled are used synonymously. For example, the Samagra Shiksha Abhiyan (erstwhile Sarva Shiksha Abhiyan) uses the term CWSN (Child with Special Needs) to describe children with disabilities, while the NEP 2020 uses all the terms listed above in

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<sup>9</sup> <https://www.abc.net.au/life/autistic-or-has-autism-why-words-matter-and-how-to-get-it-right/10903768>

<sup>10</sup> According to Hindu writings, persons with disabilities are suffering due to crimes committed by them in their previous lives, which is their karma (Anees, 2014).

one single policy document. To avoid this incoherence that exists around disability inclusion in the Indian policy context I use ‘children with disabilities’ or ‘persons with disabilities’ throughout this thesis. In case of any quotations, I use the terminology used by the author of the original source.

## CHAPTER II. INCLUSIVE EDUCATION IN THE INDIAN POLICY DISCOURSE

This chapter provides an overview of inclusive education in the Indian policy discourse. It begins by articulating the significance for including children with disabilities based on rights, social justice, and economic grounds. Next, the historical background of policies and legislatures for inclusive education in India is presented. Subsequently, how the Right to Education Act (RTE), 2009, Rights of Persons with Disabilities Act (RPwD), 2016 and the National Education Policy (NEP), 2020 address the education for children with disabilities and the ways inclusive education has been defined in India are discussed. Finally, this chapter concludes by summarising the debates and critiques around why these policies and legislation continue to face challenges in implementing disability inclusive education at the school level.

### 2.1 Significance of including children with disabilities in the education system

India is home to 1.31 billion people<sup>11</sup> (World Bank, 2020) and the 2011 Census puts the number of persons with disabilities at 2.4 per cent of the population. However, according to different reports, the number of persons with disabilities is higher, with estimates ranging from 8 to 15 per cent of the population being considered reasonable (Mont, 2007; World Bank; 2009; Ramchandra et al., 2016). According to a UNICEF report (2019), there are currently 7.8 million children with disabilities living in India. Among them, one quarter are in the age group of 5-19 years and do not access any educational institutions, which makes them a sizeable proportion of the out of school children.

Hence, there is a need to address the significance of education for children with disabilities. Whilst, recently, global and national development agenda has picked up momentum and is actively advocating to include children with disabilities in the education system, the investment, preparedness of the structures to include children with disabilities as well as the employment opportunities for persons with disabilities do not reflect this development. In this thesis, I am presenting two perspectives for inclusion and participation of children with disabilities in the education system: one of rights, equity and social justice and the other from

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<sup>11</sup> <http://data.worldbank.org/country/india>

an economic perspective.

### **Rights, equity and social justice perspective**

A compelling argument for providing quality education to persons with disabilities is from the perspective of a person's fundamental rights and in the interest of equity and social justice every child is entitled to an education that caters to their needs. India is a signatory to international conventions for providing rights to persons with disabilities and quality education to all: the UN Convention on the Rights of the Child (UNCRC)<sup>12</sup> (1989) and UN Convention on Rights of Persons with Disabilities (UNCRPD)<sup>13</sup> (2006). As disability has become a global concern and the rights of persons with disabilities and children with disabilities have come into the forefront, the rights-based discourse in India has gained strength.

According to the WHO (2011), there is a 10 per cent difference in school attendance between children with disabilities and those without in India. The 2011 Census revealed that 45 per cent of people with disabilities were illiterate. Low attendance in schools despite high enrolment in education has resulted in low literacy rates among persons with disabilities. Moreover, disability is not the only barrier to education, for several intersecting factors, such as poverty, gender, caste, class, social status etc, serve to exacerbate the situation.

Children with disabilities face challenges in accessing quality education as schools are often seen as a means of socialisation and not as a place for learning, which further perpetuates the marginalisation they face in life (Nhlapo, Singh and Alghaib, 2019). This constitutes a denial of the right to education for children with disabilities and reinforces commonly held attitudes and societal norms that children with disabilities have a reduced capacity for learning. This, in turn, perpetuates their exclusion from the education system. In fact, the marginalisation of children with disabilities in the education system is well-documented in India (Ghai, 2001; Singal, 2010; Kohama, 2012). Prioritising learning rather than providing mere access to school is an important goal from the point of view of equity and social justice. Prioritising learning together with access rather than merely ensuring access to school is an important

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<sup>12</sup> Ratified by India on 11 December 1992

<sup>13</sup> Ratified by India on 1 October 2007

goal from the point of view of equity and social justice (Singal and Sabates, 2016).

### **Economic perspective**

Exclusion of children with disabilities from the education system also negatively affects national economic growth (Banks and Polack, 2014). The Department for International Development, UK (2000) has noted strong links between education and economic growth. In addition, there is evidence that in countries of the Global South, the return on investment for persons with disabilities is up to two or three times higher than for persons without (Lamichchane and Sawada, 2009). Thus, supporting education for children with disabilities improves educational outcomes, which in turn leads to better chances of employment, income, and inclusion in the community at adulthood (Bach, 2009; Crawford, 2008; Porter, 2001).

A person with disabilities is unable to experience the same standard of living as one earning the same without any disabilities (Zaidi and Burchardt, 2005). Sen (2004) called the difficulty that people with disabilities face in converting their income into better living conditions the 'conversion handicap'. According to the WHO Survey (2011), those with disabilities and households that have persons with disabilities are more prone to experience deprivations, including food insecurities, poor housing, decreased or complete lack of access to clean water and sanitation facilities as well as inadequate access to healthcare and education services.

Whilst poverty invariably coincides with exclusion for persons with disabilities, the relationship between the two should be considered as an association rather than a cause-and-effect relationship (Grech, 2008). The relationship between poverty and disability is acute, as shown by the low employment rates and social integration of persons with disabilities (Braithwaite and Mont, 2009; Hoogeveen, 2005; Yeo and Moore, 2003 and Elwan, 1999). Moreover, persons with disabilities face challenges in accessing education and especially quality education (Singal and Muthukrishna, 2014; Armstrong and Armstrong, 2009). Hence, it is not surprising that only 27 per cent of persons in India with disabilities are employed, of which manual jobs make up the majority rather than skilled ones (NSSO, 2003).

Education can form a bridge to escape from poverty (Braunholtz, 2007). As Singal (2011) has noted, gaining economic independence is especially challenging for persons with disabilities,

because of the heightened discrimination and stigmatisation they face in society. Thus, we should not underestimate the role of education in providing persons with disabilities a decent quality of life, which can ensure social justice and equity for them. A qualitative study of young people with disabilities found that parents value schooling as it increases the potential to get jobs, while young people also focus on the ‘enabling role’ of education (Singal et al., 2011, pg.159). Thus, it is critical to ensure that persons with disabilities are in the school system and learning. In the next section, I present how the policies and legislation in India have addressed the education of persons with disabilities.

## **2.2 Policies and legislation for inclusive education in India**

When India gained Independence in 1947, the Constitution of India provided education as a directive principle and not a fundamental right, which meant that, whilst the directive principles were considered essential for governance, it was not legally enforceable. Post-independence, the Kothari Commission Report (1964) was the first to reflect the government’s approach to the education of children with disabilities. It proposed a “dual approach” of an integrated method for children with disabilities, providing education in mainstream schools whilst at the same time allowing for special schools for children with disabilities, if the need arose. This “dual approach” was later reiterated by the National Policy of Education (MHRD, 1986) that stated that children with ‘motor and other mild handicaps’ (p 11) should be schooled in mainstream schools, while ‘severely handicapped children’ (p 11) were to be provided with special residential schools.

With the advent of the Education for All (EFA) movement internationally, India moved towards providing universal access to primary education for all children and put policies and laws in place to ensure that all children receive such education. In 2002, the Indian constitution recognised universal primary education as a Fundamental Right under Article 21A, thus guaranteeing the right to free, compulsory education for all children in the age group of 6-14 years. The central government passed the Right to Education (RTE) Act, 2009 (RTE Act), to operationalise this constitutional mandate. As reported in multiple government and international reports, children in India now have almost universal access to primary education and the RTE Act has been instrumental in this.

The Sarva Shiksha Abhiyan (2000-2019) was the government programme entrusted with implementation of ‘Education for All’ via the RTE Act in India. Recently, in 2018-19, the

Samagra Shiksha Abhiyan (SSA)<sup>14</sup> subsumed the existing schemes of the government (Sarva Shiksha Abhiyan, Rashtriya Madhyamik Shiksha Abhiyan and Teacher Education). It is now under the aegis of the Department of School Education and Literacy, Ministry of Human Resource Development (MHRD, 2020). Since the reorganisation, the SSA has made specific recommendations for inclusion of children with disabilities as the major focus of this scheme to provide universal access, equity and quality education. It was the Rights of Persons with Disability (RPwD) Act, 2016, that reinforced India's commitment to making education a fundamental right for every citizen and guaranteed all children with disabilities free access to quality education up to 18 years of age. Recently, the National Education Policy (2020) has made strides to address inclusive education further. It strives to increase the ambit of RTE to include Early Childhood Care and Education (ECCE) and beyond elementary schooling. Table 1 below summarises the different initiatives undertaken by the government of India for children with disabilities from independence up until now.

**Table 1:** Education policies and legislation for persons with disabilities in India alongside global measures for persons with disabilities (compiled by the researcher from various sources)

Timeline	Global	Education policies (India)	Legislative (India)
1947-1980	Universal Declaration of Human Rights, 1948	The Centrally Sponsored Scheme of Integrated Education for Disabled Children, 1974	None
1981-1989	UN General Assembly announces Year of the Disabled, 1981  The Convention on the Rights of the Child, 1989	National Policy for Education, 1986  Project Integrated Education for Disabled Children (PIED), 1987	None
1990-1999	Jomtein World Declaration of Education for All, 1990  Equalisation of Opportunities for Persons with Disabilities, 1993  UN declares 1993 - 2002 the Decade of the Disabled	District Primary Education Programme (DPEP), 1994	The Rehabilitation Council of India Act (RCI Act), 1992  The Persons with Disabilities (Equal Opportunities, protection of Rights and Full Participation) Act

<sup>14</sup> <http://samagra.mhrd.gov.in/about.html>

	The Salamanca Statement and Framework for Action on Special Needs Education, 1994		(PWD Act), 1995  The National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999
2000-2009	The Dakar Framework for Action - World Economic Forum, 2000	Sarva Shiksha Abhiyan, 2000	The Constitution of India (Article 14.15, 15(2))
	Biwako Millenium Framework, 2002	National Curriculum Framework, 2005	The Right of Children to Free and Compulsory Education Act (2009); Amendment 2012
	The UN Convention on the Rights of Persons with Disabilities, 2006	National Policy for Persons with Disabilities, 2006	
2010-Present	Sustainable Development Goals, 2015	National Education Policy (NEP), 2020	The Rights of Persons with Disability Act, 2016
	Incheon Declaration, World Economic Forum, 2015		Mental Health Care Act, 2017

Here, I briefly explore how the education of children with disabilities has been addressed within three contemporary policies and legislatures in India, these being the Right to Education (RTE) Act (2009); the Rights of Persons with Disabilities Act (RPwD) (2016); and the National Education Policy (NEP) (2020).

### **Inclusive education under the Right to Education Act (2009)**

When commenting on the difficulty of defining the term inclusive education, Eric Shyman (2015) opined, "... inclusive education is an exceptionally broad term encompassing all individuals to one degree or another, efforts to define it require both broad strokes and wide applications while still maintaining very specific verbiage" (p 351). This difficulty with defining inclusion has been reiterated many times (Singal, 2006, 2010; Armstrong and Armstrong, 2009). Armstrong, Armstrong and Spandagou (2011) contend that inclusive education has a complex history rooted in political, policy and practice discourse which makes defining the meaning of inclusive education of foremost interest.

Universal elementary education brought the need for *inclusive* (emphasis added) elementary education to the fore. In India, inclusive education policies refer not just to individuals with disabilities, but also, girls and children from the socially disadvantaged groups, like Scheduled Castes and Tribes. The RTE (2009) did not make references to the special educational needs of students neither did it address access to assistive technologies or reasonable accommodations (UNESCO, 2019). Within the Act, it just stated that the right to free and compulsory education extended to all children, including ‘children belonging to disadvantaged groups.’ It was the Amendment to the RTE Act in 2012 that brought all categories of children with disabilities, as defined by the Persons with Disabilities (PwD) Act, 1995, under the purview of the RTE Act and another separate category called ‘child with severe disabilities’ (MHRD<sup>15</sup>) was added later. The amendment expanded the meaning of disabilities to include autism, cerebral palsy, intellectual disabilities, and multiple disabilities<sup>16</sup>. However, the emphasis remained on Education for All (EFA) rather than making schools inclusive for all (Miles and Singal, 2010; UNESCO, 2011).

The RTE adopted human rights and social justice as the underlying themes, while defining the meaning of inclusive education (Naidu, 2018). The SSA, which was entrusted with implementing the RTE defines it as, “Inclusion means all children, young people and adults, who are disabled, non-disabled and disaffected (a learning problem arising due to social issues), being able to learn together in regular education setting from childhood to adulthood or in community education settings, with appropriate networks of support” (2006: p. 1). It aims to address inclusion of children with disabilities through physical involvement, social access, and quality education (MHRD, 2009). It calls for improving the quality of education through teacher training, barrier-free infrastructure, and improved pedagogical and curricular adaptations (Table 2).

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<sup>15</sup> Department of School Education and Literacy, Ministry of Human Resource Development, Government of India

<sup>16</sup> As per the National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999.

**Table 2:** Specific provisions for education of children with disabilities under Samagra Shiksha Abhiyan, 2018

Identification	Identification of children with disabilities at the school level and assessment of their educational needs.
Barrier free access	Provision of aids and appliances, and assistive devices, as required, to children with special needs. Removal of architectural barriers in schools so that CWDs have access to classrooms, laboratories, libraries, and toilets.
Quality education	Supplying, in convergence with line departments, teaching-learning materials, medical facilities, vocational training support, guidance, counselling and therapeutic services, as required, to children with disabilities. Sensitising general schoolteachers and training them to teach and involve children with disabilities in the general classroom. Undertaking capacity-building programmes for existing special educators. Ensuring access for CWDs to support services through special educators, establishment of resource rooms, vocational education, therapeutic services and counselling.

Taking an equity approach, the National Centre for Educational Research and Training (NCERT), which closely works with the SSA, defined inclusive education as "...education to all children, where all students are equal participants in the learning process" (2014; p 13) and has prepared several guidelines for schools to implement inclusive education. It stresses that children with disabilities should not have to depend on 'specialised services' alone, but rather, should be able to benefit from the educational services and activities available to all children in a regular school. It has also differentiated between 'integration', which means providing all students with disabilities education in regular classrooms to help them adapt and adjust to the regular classroom and 'inclusive education', where all students are equal participants in the learning process. The NCERT asserts the need for inclusive education over integration.

Building synergies with special schools is another component mentioned by RTE under access to education. It envisions special schools as resource centres for providing support to inclusive education through teacher training, the development of teaching/learning materials and imparting special training for children with disabilities for a limited amount of time to prepare them to join mainstream schools.

**Inclusive education and the Rights of Persons with Disabilities Act (RPwD) (2016)**

India ratified the United Nations Convention on Rights of Persons with Disabilities (UNCRPD) in 2007 and implemented it by enacting the RPwD Act, 2016. It increased the ambit of the Persons with Disabilities Act (PwD), 1995, where the number of recognised disabilities increased from seven to twenty-one. It also addressed school education for children with disabilities and mentioned specific provisions in respect to the responsibilities of teachers, special educators and the school administration.

Whilst not being a statute for the regulation and recognition of compulsory primary education in India, the RPwD Act has guided both the RTE Act and the NEP (2020) regarding education of children with disabilities and special educational needs by articulating the basic requirements and guidelines for implementing inclusive education. According to the RPwD Act “...inclusive education means a system of education wherein students with and without disability learn together and the system of teaching and learning is suitably adapted to meet the learning needs of different types of students with disabilities” (Pg. 3). This legislation is important as even the NEP (2020) has adopted this definition of inclusive education. It calls for inclusive education within mainstream schools by training staff and teachers in all schools to support students with disabilities, establishing adequate resource centres to support these educational institutes as well as promoting the use of appropriate augmentative and alternative modes, including means and formats of communication, such as Braille, sign language and assistive devices. Appendix 1 lists the key provisions for education of children with disabilities under the RPwD Act. This Act provides for access to inclusive education, vocational training, and self-employment for persons with disabilities, whilst also laying out legal protection against discrimination (Narayan and John, 2017).

**Inclusive education and the National Education Policy (NEP) (2020)**

The recent National Education Policy (NEP), 2020, asserts that children with disabilities will have equal status in education policy. Building on the RTE and RPwD Acts, it makes provision for textbooks in accessible formats (large fonts and Braille), presents guidelines to help teachers with the identification of children with learning disabilities, promotes awareness and knowledge on how to support children with specific disabilities, ensures inclusion and equal participation of children with disabilities in Early Childhood Care and

Education (ECCE), whilst also calling for the recruitment of special educators with cross-disability training (detailed policy recommendations are provided in Appendix 2). As discussed above, educationists in India have heralded the adoption of the RPwD Act's definition of inclusive education by the NEP 2020 as a step in the right direction.

The extant structure of school education followed by the central board of education and several state boards in India is 10+2. It means students up until now have been expected to have completed 10 years of schooling from ages 6-16 followed by 2 years of high school, up to 18 years, this being followed by vocational or bachelor's degrees. However, with the adoption of the NEP 2020 the structure of school education will be 5+3+3+4. It means that each child in school will undergo a foundational stage from age 3 to 8, followed by three years of primary education from age 8-11, then moving on to a secondary stage from age 11-14 and finally, completing the senior secondary stage from age 14-18.

This restructuring of the school education system has implications for inclusive education as the 5+3+3+4 system involves a multi-disciplinary approach, whilst also recommending reducing content by targeting core learning competencies, which can benefit students with disabilities when learning alongside their peers. This system also focuses on foundational literacy in early grades, which is a pressing issue, especially considering that nearly half of all rural school students in Grade 5 cannot read Grade 2 text and two-thirds cannot perform simple division (ASER, 2018). However, ASER<sup>17</sup> data, which has been a catalyst for these policies does not collect information on children with disabilities, special needs and working children<sup>18</sup> citing time, training and resource constraints and the inappropriateness of their existing tools for assessment of these children. Moreover, the emphasis on foundational literacy does not account for the fact that students who do not achieve it by Grade 3, as prescribed, may be viewed as being disabled. The guidelines to make assessments accessible are limited to students with learning disabilities and do not mention how they will be adapted for students with other types of disabilities.

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<sup>17</sup> ASER stands for Annual Status of Education Report which is an annual survey to estimate children's schooling status and basic learning levels in each state and rural district of India. It is a citizen led assessment and facilitated by the Pratham NGO.

<sup>18</sup> Refer to FAQ 27:

<http://img.acercentre.org/docs/ASER%202018/Release%20Material/English%20files/frequentlyaskedquestionsaboutaser.pdf>

The NEP 2020 mentions various teacher education and service provisions that address the needs of students with disabilities. It calls for the inclusion of modules on teaching children with disabilities within existing teacher training programmes and a step-up course for training current special educators by integrating pedagogical and content knowledge. It also mentions that teachers must be trained in recognising and identifying specific learning disabilities so that they can provide appropriate support.

As with the RTE and RPwD Acts, the NEP 2020 also makes some very progressive policy initiatives for the purpose of the education of children with disabilities. It recognises various challenges, to an extent, making recommendations about including children with disabilities in education through the provision of special educators, teacher training, modifying the curriculum and pedagogy, identification of children with special needs, amongst other things. However, whilst some clear goals and policies for inclusive education are articulated, clear guidelines for the implementation of the various interventions proposed for children with disabilities is still lacking (UNESCO, 2019). In the next section, I examine the challenges pertaining to this implementation.

### **2.3 Debates and critiques around implementing disability inclusive education in India**

As discussed in the previous section, in keeping with the global declarations, India has established policies and put legal frameworks in place for persons with disabilities. However, outside the disability community, implementing rights for persons with disabilities within the mainstream discourse is contested in different areas, including that of education. Among children with disabilities who access education, the number of dropouts continues to go up significantly as they move through the grades (Singal, 2010; DISE, 2016; UNICEF, 2019). A large-scale cross-sectional study comprising 39,723 households across 17 states in India found a negative relationship between education and children with disabilities (Grills et al., 2019).

In the Indian context, provision for ‘quality education’ for children with disabilities exists, but it is a somewhat abstract concept. For example, the RPwD Act, 2016, mentions that students with disabilities must be provided ‘reasonable accommodations’ as per requirement, but does not state how to ensure these accommodations or what they should be (Reddy, 2017). Similarly, the SSA calls for the “sensitisation of general schoolteachers and training

them to teach and involve children with disabilities in the general classrooms”<sup>19</sup>, but the current teacher education programmes do not address this. Even the NEP 2020 mentions that adequate attention must be paid to the “safety and security of children with disabilities”, (pg. 27) but does not expand upon how this can be achieved. This is indicative of the fact that there is a disconnect between the policy and practice of inclusive education in India (Naidu, 2018). However, policies and institutions are striving to adjust the classroom structure, teaching learning processes, train teachers for inclusive education, change attitudes to be more positive and be more inclusive towards persons with disabilities by giving access to aids and assistive devices (SSA, 2009). Nevertheless, little direction is available on how to accomplish these policies and implement them at the school level. Thus, many issues still exist and basic facilities within the general schools for children with disabilities are yet to be implemented (Kalyanpur, 2008; Singal, 2019).

Disability is not a static state, but rather, on a continuum - it is constantly changing and the understanding of it differs depending on the context (Singal, 2016). This presents challenges in obtaining data about the prevalence of persons with disabilities, which in turn, creates challenges in implementing policies for persons with disabilities. For example, the RTE Act and more recently NEP 2020 discuss the identification of children with disabilities and special education needs to detect such disabilities early and provide support. However, it is difficult to assess the numbers for children with disabilities in India, as noted by Mukhopadhyay and Mani (2002).

This difficulty occurs for several reasons. The RTE Act, 2009, mentions the need to have trained surveyors, enumerators, and government officials to overlook the process. However, the 2001 Census and National Sample Survey 58th Round (NSSO, 2003) both had different definitions of disability (Mitra and Sambamoorthi, 2006). The Ministry of Statistics and Programme Implementation also acknowledges this in its Manual on Disability Statistics (2012). Moreover, new definitions and categories of disabilities were included in the 2011 census. This raises concerns regarding the parameters used to identify children and persons with disabilities, with the lack of consistent definitions across data collection agencies leading to some children with disabilities not being identified correctly and thus, not receiving adequate support. Even the definition of inclusive education within the RTE Act

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<sup>19</sup> <http://samagra.mhrd.gov.in/inclusive.html>

and the RPwD Act has been different with the RTE defining it within education for all and RPwD Act defining it around inclusion of children with disabilities as mentioned in section 2.2. The NEP (2020) has tried to address this by accepting the RPwD Act and its various provisions for inclusive education to include children with and without disabilities in mainstream schools.

The RTE calls for a process to determine the severity, nature of the disability, and the developmental age of the child to assess the kind of assistance required, such as support services and assistive devices. Disability certification is often required to be eligible for government sponsored schemes and scholarships, with IQ scores and the nature of impairment being the two main criteria followed for certification, which is issued by the medical board from the local civil hospital (MHRD, 2013). Whilst the government stipulates that decision on whether a child is disabled should be based upon assessment from a team comprising a psychologist, a doctor and a special educator (Singal and Jain 2012), often such specialists are not available to diagnose and certify different kinds of disabilities (Rao, Srivastava and Sarkar, 2020) .

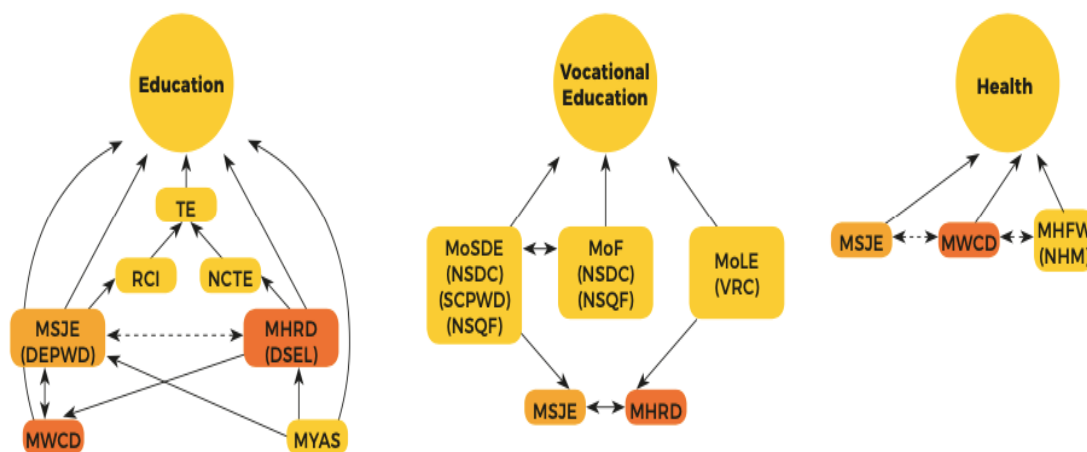
The above also pertains to a narrow and medicalised view of disability, which further alienates the child with disability within the mainstream classroom, where he or she is seen in isolation, due to his or her disabilities, and not as a part of the class as a whole (Singal, 2016). The opinions of the parents are not taken into account, and neither are those the regular teacher, who may be the only one available, as there is a shortage of special educators. Thus, this defeats the very purpose of inclusive education, going against the definitions listed by SSA, NCERT and the RPwD Act, 2016, in India regarding inclusive education that place an emphasis on human rights, social justice and equity.

Challenges for implementing inclusive education policies in India also arise because India has several types of educational delivery. Whilst the SSA paved the way for including children with disabilities in the mainstream schools (government schools, government aided private schools, private schools [unaided], national schools, international schools), they kept the option of special schools, education guarantee scheme (EGS)/ Alternative and Innovative Education (AIE) and home-based schooling (SSA, undated) for children with disabilities. Hence, there was a push towards inclusive education for children with disabilities by the RTE Act, yet it provides for home-based education for children with disabilities but does not

mention special schools. On the other hand, as the RPwD Act defines inclusion with a disability lens hence it provides for special schools but does not mention home-based education.

The NEP (2020) is addressing this challenge by giving children with the choice of enrolling in their neighbourhood schools, special schools or to opt for home-based education but there is ambiguity in how it will be implemented. Moreover, whilst the RTE specifies that private schools should include 25% students from ‘socially disadvantaged groups’, there is no clear mandate to admit a proportion of children with disabilities among them. Thus, providing private schools the flexibility to deny admission to children with disabilities. Many private schools state that they are unable to enrol children with disabilities as the government fails to reimburse the expenditure incurred by the private schools on time (Sarasvati, 2020).

The government of India, through the SSA, has been able to provide access in regular schools to children with disability by providing ramp access, aid, and appliances, but concerns regarding the upkeep of these aids and appliances have been regularly raised (Singal, 2010). In addition, adequate availability of disabled toilets for children with disabilities does not exist (Singal, 2014).



**Figure 1:** Linkages between the various ministries and departments responsible for the inclusion of children with disabilities in education (UNESCO, 2019 pg. 44)

Cooperation between different agencies, such as the Ministry of Social Justice and Empowerment (MSJE) or MHRD, State Welfare Departments (Ministry of Women and Child Development [MWCD]; Ministry of Youth Affairs and Sports [MYAS] etc.) national

institutions (Rehabilitation Council of India [RCI], National Council for Teacher Education [NCTE] etc.), NGOs, and voluntary organisations has been sought in order to implement inclusive education. However, the ground reality to date is that there has been a lack of co-ordination among them. For example, both MSJE and MHRD handle education of children with disabilities, and while special schools come under MSJE, MHRD is responsible for inclusive education of children with disabilities in mainstream schools. Both MSJE and MHRD are responsible for teacher education (TE), but regulation of special needs teacher education is with RCI while general teacher training is with NCTE. Figure 1 provides a brief overview of these linkages and indicate how the various departments work in silos. The NEP (2020) calls for the RCI and NCTE to work in tandem to ensure special educators have content and pedagogical knowledge, but it is yet to be seen how this will be implemented.

The dichotomy between the policy and implementation has led to the creation of multiple models of educating children with disabilities that raise questions regarding the quality and efficiency of measures for education of children with disabilities (Singal, 2012). Another major obstacle to implementing inclusive education is that while the central government prepares the policies, it is the education officials at the state and district levels who implement them. The Department of School Education and Literacy, created in 2020, has a more integrated focus. The NEP 2020 also recognises this issue and mentions steps to mitigate the challenges but there is still no clarity how the responsibilities of the various departments will be integrated to work together for the education of children with disabilities.

The recent Global Education Monitoring Report (GEM) 2020 recognised that poverty continues to affect attendance, completion and learning opportunities for children with disabilities and calls for funding disability inclusive education. This requires a consistent focus, with policymakers defining the standards of the services to be delivered and the costs that will be covered. As Singal (2016) noted, the National Centre for Promotion of Employment for the Disabled reported that the country is only spending 0.0009% of its GDP on disability across ministries such as health, education, labour, rural development, youth affairs and sports in India and this is miniscule investment in one of the largest minority groups in the country. The current allotment of INR 3500 (32 GBP) per child with disabilities for an entire year as per the SSA norms is far from adequate.

Teacher training also comes under the scope of access to quality education and an emphasis is placed on the sensitisation of teachers and the deployment of effective classroom management techniques for children with disabilities. While on one hand there is stress on recurring training for all teachers at the block and cluster level in districts and integration of such training with on-going teacher training provided by SSA, it is still lacking in practice. As discussed in section 2.2, whilst the NEP addresses training teachers and special educators for inclusive education, there is no indication as to whether the number of special educators will be increased and, if so, what their training will entail. The ratio of special educators to children with special educational needs is one teacher for every 182 students (Singal, 2012), which is significantly less than the recommended one teacher for every eight students stated in the RTE. Without adequate numbers of teachers, the relevant policies cannot be implemented.

#### **2.4 Summary and implications for research**

This chapter has laid out the policy landscape for inclusive education in India. Though various policy prescriptions for education of children with disabilities in mainstream schools exist, it is evident that tensions persist with their implementation. This is further complicated by the disconnect between policy makers and teachers, school administrators, and education officials at the local level who are entrusted with applying the many recommendations and guidelines to support children with disabilities in exercising their right to education. It is clear that inclusive education requires the central, state governments and implementing bodies at local levels to develop detailed plans to address the gaps in the education system by taking stock of the resources available to them and by considering the latest knowledge and evidence in this field (Johnson and Chattopadhyay, 2020). Hence, a key area of research would be to engage with notions around perceptions and practice of inclusive education within Indian schools. In the next chapter, I review the research on implementation of inclusive education policies in classroom practice. I examine what tangible gains have been made at the school level and assess the research evidence on inclusive education in Indian schools.

## CHAPTER III. LITERATURE REVIEW: EXAMINING INCLUSIVE EDUCATION IN PRACTISE

This chapter begins with a review of the empirical research on how inclusive education is practised in the Global South regarding children with disabilities. Next, it delves into the research literature within Indian schools around changing attitudes to being more positive and more inclusive towards persons with disabilities, examines teacher training for inclusive education, and considers how schools are striving to adjust the teaching learning processes. It also draws on the synergies and challenges that exist within research on the practice of inclusive education in India and worldwide. This chapter concludes with the proposal of the research questions and how addressing allows the research aims of this thesis being met. When discussing the research questions, I also draw on the literature to explain and justify why I incorporated children's opinions of their social environment at school as well as their experiences with inclusive teaching and learning into this research.

### 3.1 Practising inclusive education in the Global South: Reviewing the landscape

The conceptualisation of inclusive education is complex and often characterised by a lack of critical engagement with the reality of education systems and schools in the South and consequently, scholarship is developing that advocates inclusive education needing to be situated in the broader social context during its implementation (Armstrong, Armstrong, and Spandagou, 2011) Inclusive education for children with disabilities has been based on Northern disability models, which have often been critiqued by scholars engaged in research within the Global South. These models are, in the main, individualistic and concerned with the person with disabilities relationship with the state and does not acknowledge that societies are arranged differently in different contexts (Singal and Muthukrishna 2014; Grech, 2016). There is a need to understand what meaning is assigned 'to a life condition like disability' (pg. 88, Ghai, 2002) in these Southern contexts, especially in a country like India, where disability is often overlooked when theorising about and examining other forms of marginalisation, such as caste, gender, poverty etc.

Within the Indian context, education for children with disabilities should take into account the contextual reality of a person with disabilities (Alur, 2001) in order to truly understand

the complex notions of how disability, poverty and other intersecting factors, such as social status, socio-economic position, human and social capital are interrelated. Taking such a contextual view can help in identifying the different ways a child with disabilities can face exclusion to accessing education and thus, allow for devising ways to mitigate against these factors (Das and Addlakha, 2001; Ghai, 2002; Grech, 2008; Singh and Ghai, 2009; Singal and Muthukrishna, 2014; Soldactic and Grech, 2015). While some of the basic principles underlying education for all, such as access, quality, and equity, will be the same in terms of what inclusion means, how it is practised and its purpose may differ in different contexts, which needs to be acknowledged (Peters, 2003). Thus, the same template of education for all/inclusive education cannot be supplanted from one context to another. Accordingly, Singal, Lynch and Johansson (2019) question whether inclusive education set out in the global agendas of the North should continue to guide the principles for implementing it in the South.

When describing education of children with disability in mainstream schools in the Global South, Croft (2008) makes an important observation. She notes that, whilst providing educational access to children with disabilities in mainstream schools by surmounting various obstacles at the attitudinal, bureaucratic, and logistical level is important, their having access to a classroom is merely a prerequisite for inclusion in mainstream schools. In other words, having access to the classroom does not necessarily translate into inclusion of children with disabilities in the learning process. The teaching and learning processes within classrooms decide retention, social integration, and academic achievements. Westbrook et al. (2014) and Westbrook, Croft & Miles (2018) have highlighted the lack of empirical research on inclusive pedagogy in the Global South in their review of pedagogic practices. A thorough review of the literature shows that, whilst research on inclusive pedagogy, its development process and practice is important and a growing field, most of the research has been concentrated on the Northern context, in particular, the United States (Nind and Wearmouth, 2006) and the United Kingdom (Florian, 2015).

Three groups of factors were identified by Pijl and Meijer (1997) as essential for the implementation of inclusive education: 1) external factors, such as policies, legislation, regulations and funding; 2) school factors, such as the role of special education, the support system, special services in schools, decentralisation and cooperation among schools; and finally, 3) teacher factors, such as attitudes of teachers, their knowledge and skills and

teaching methods and teaching materials. The previous chapter clearly demonstrated that, whilst progressive policies are extremely important for the education of children with disabilities, the implementation of inclusive education depends on moving the discourse towards how it can be practised at the school and classroom level (Ainscow and Miles, 2008; Croft, 2010; Singal, 2014; Srivastava, Boer and Pijl, 2015; Schuelka, 2018). In India, owing to the growth of global and national policies calling for inclusive education, teachers accept inclusion at the institutional level, but continue to resist its implementation at the classroom level (Tiwari, Das & Sharma, 2015). In the next section, I examine the relevant research regarding the range of factors at the school and teacher levels that help or hinder the implementation of inclusive education, with a focus on the Indian context.

### **3.2 The role of attitudes towards inclusion in practising inclusive education**

In the previous chapter, the issue of overcoming the physical barriers to access schools for children with disabilities and the current status within the Indian context was discussed. Overcoming attitudinal barriers to education of children with disabilities, both within and outside schools, is another key condition for achieving quality inclusive education (UNESCO, 2019). Changing the attitudes of teachers to being more accepting of children with disabilities is essential for ensuring that they will take actions to accommodate the needs of students with disabilities in the classroom and without assigning labels (Kalyanpur, 2008a). Therefore, it is not surprising that most research on inclusive education in India focuses on teachers' attitudes to inclusive education and their perception of their preparedness to teach in inclusive classrooms (Parasuram, 2006; Sharma et al., 2009; Sharma, Loreman and Forlin, 2012; Das, Gichuru and Singh, 2013; Shah, Das and Tiwari, 2016; Srivastava, Boer and Pijl, 2017).

Teachers' concerns about including students with disabilities in their classroom teaching and learning processes are manifold. A review of research, identified factors, such as lack of training on inclusive education, under-resourced classrooms for teaching children with disabilities, lack of prior contact with persons with disabilities, lack of confidence in teaching children with disabilities, large class sizes, lack of administrative support and the fear of affecting the academic performance of the entire class by including children with disabilities in the classroom teaching and learning (Tiwari, Das and Sharma, 2015; Kumar, 2016; Bansal, 2016; Priyadarshini & Thangarajathi, 2017; Kalita, 2017) leading to teachers holding negative attitudes towards inclusion.

### 3.3 Teacher training and preparedness for inclusion of children with disabilities

In their research with young persons with disability, Singal et al. (2011) found that teachers were a strong motivating factor for students dealing with difficulties arising out of disability; and that most reported positive experiences with their teachers. However, teachers reported challenges relating to their competence to teach students with disabilities in mainstream classrooms. Many felt unprepared to include children with disabilities in their teaching and learning processes (Das, Kuyini, Desai, 2013; Singal, 2006) due to the lack of training, infrastructure or other means of support for ensuring the academic achievement of all students (Yadav, Das, Sharma and Tiwari, 2015). The literature highlights the importance of providing teachers with training, backing this up with the help of resource teachers, and adapting the curriculum as per the requirements (Alur and Bach, 2009; Alur et al., 2003; Peters 2003; Porter, 2001).

Teachers have expressed their frustration owing to the lack of resources when dealing with children with disabilities in their classrooms (Singal, 2006). This is consistent with international research showing that many teachers in countries of both the North and the South have been reporting declining support for inclusive education for children with disabilities. The reasons for this have been summarised as, “lack of investment in classroom supports, ineffective partnership, inadequate pre-service and in-service training and increasing demands on teachers with growing diversity of students in the classroom” (Bach, 2009; p. 33).

The provision of trained resource teachers to teach special skills to children with disabilities at the block and cluster level in each district is mentioned within the RTE (2012) and the NEP (2020). The role of the resource teacher is that he or she provides special assistance to the regular teacher aimed at addressing the needs of students with disability; teaches the students with disability in the resource room; as well as providing diagnostic assistance and functional assessment (Singal, 2010). In India, the government mostly relies on the resource teacher model, although in a very limited way, as the number of resource teachers available is far less than that needed to support those children with disabilities studying in mainstream schools (Singal, 2012). When available, the role of resource teachers should be clearly defined, or resource teachers can be seen to “deskill mainstream teachers by assuming that

the needs of CWSN<sup>20</sup> are not the primary concern of the general teacher” (p 52). Thus, the focus of inclusive education should be collaboration between mainstream and resource teachers for effective inclusion.

In an analysis of the content of training programmes offered to teachers for children with disabilities, Singal (2010) found that, in most instances, the number of training days that a teacher receives for teaching student with special education needs varies between one to five days over their entire teaching career. Moreover, these training programmes are generally focused on basic issues of identification and management of children with disabilities in the classroom. Consequently, most teachers struggle with translating inclusive education policies into classroom practice (Singal, 2019). However, in their research examining in-service training for regular teachers in Jaipur, India, Srivastava, Boer & Pijl (2015) found that in the short term, 30 hours of training over four days led teachers to developing better attitudes towards inclusive education. It also resulted in an increase in their understanding of the four disabilities included in the training and their knowledge of inclusive teaching methods. Florian and Linklater (2010) are of the view that, when preparing teachers for inclusive education, the most important factor does not involve assessing whether teachers have the necessary skills and knowledge, but rather, helping them build on their existing knowledge to help learners with disabilities.

### **3.4 Classroom practices for inclusive education – pedagogy and curricula**

The dominant discourse within the literature regarding classroom practices for inclusive education revolves around the ways that teachers engage with and respond to the diverse learning needs of the students in the classroom. Research has shown that implementing inclusive teaching and learning practices in the classroom requires teachers adapting their pedagogy and curricula to the learners’ needs (Florian & Spratt, 2013; Ainscow et al., 2006).

#### **Pedagogy**

Alexander’s (2009) discourse on pedagogy requires both that “we engage with culture, values and ideas at the levels of classroom, school and system, and that we have a viable and comprehensive framework for the empirical study of teaching and learning. (pg. 13)” There is no doubt that pedagogy is pivotal to inclusive education (Croft, 2008) and this definition by

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<sup>20</sup> CWSN refers to Children with Special Needs in the Indian policy context.

Alexander (2009) puts emphasis on the importance of engaging with pedagogy at a contextual level. That is, it is important to understand pedagogy, because it reflects the contextual framework a teacher uses when they convert the curriculum they have been provided with, into actual teaching and learning practices. Thus, within this research, this is the definition of pedagogy that I adopt in this thesis. Quality education for children with disabilities is only possible when accompanied by an emphasis on equity (Ainscow, 2016). Moreover, researchers argue that the pedagogy that includes children with disabilities in mainstream classrooms will help all children to learn (Schuelka and Engsig, 2020).

Based on her research in England, Kershner (2014) argued that the school acts as a place where teachers develop their teaching skills and create knowledge, whilst at the same time developing specialist expertise on inclusive pedagogy based on their practice. Thus, it matters how “teachers respond to individual differences, the pedagogical choices they make, and how they use specialist knowledge” when they practise inclusive education (Florian, 2020; pg. 702). The emphasis when teaching is on providing learning as a shared activity within the classroom. Even in individualised education plans, teachers most often come up with strategies that are for learning in small groups within the classroom and hence, they feel ‘unprepared’ to cater to students with special needs as they feel they are not qualified to teach them (Florian, 2015, p 15). This is supported by Booth et al. (2000), who found that the assumption that children with special needs require specialist interventions in terms of pedagogy can make mainstream teachers doubt their ability to teach such children (also discussed above in Section 3.3). Ainscow (1997) observed that individualised educational plans are being promoted in the classrooms for children with disabilities and that this is mostly carried out by untrained classroom assistants. As a consequence, when this support is unavailable for any particular reason, then teachers feel unable to teach children with disabilities in the classroom.

In an inclusive education set up, the role of a teacher moves from that of merely dispensing knowledge to becoming a facilitator of knowledge and turning the teaching learning process into being learner centred, rather than merely teacher led (Singh, 2009). Croft (2008) says that inclusive pedagogy can draw on the wisdom of support teachers, therapists, or rehabilitation workers where accessible, with the aim of moving towards greater inclusion, socially and academically. Accordingly, she speaks about the need to equip all teachers for dealing effectively with diversity in the classroom. Florian (2015) somewhat echoes this by

saying that “supporting class teachers to extend what is generally available to everybody rather than including all students by differentiating for some, is an important shift in thinking that can avoid the negative effects of treating some students as different” (pg. 252).

Drawing on research, inclusive teaching methods were categorised under differentiated instruction, co-operative learning, and classroom management by Florian (2006). Training on differentiated instruction has been found to have a significant impact in facilitating inclusive education at the school and classroom levels (Valiandes & Neophytou, 2018). However, in the Indian context, Singal, Samson and Sommerville (2008) found that teachers tend to homogenise and emphasise within group differences; and so, they raised the need for better training.

### **Curriculum**

According to the RTE Act (2009), curricular access is another component of access to quality education. It emphasises making the curriculum accessible to children with disabilities as envisioned by the National Curriculum Framework (2005). It mandates that the same curriculum is followed for children with and without disabilities, with the provision of textbooks and curricular formats suitable for children with disabilities. Recently, the NEP 2020 called for the standardisation of the Indian Sign Language (ISL), but how (or if) it will be applied in mainstream schools to facilitate inclusion is missing. Despite the national curriculum framework in India being designed to align with the objective of inclusive education, thus moving beyond the curriculum to teaching and learning, the onus of teaching and learning falls on the teacher and therefore, it is important to take into account their agency in striving towards successful implementation (Batra, 2005). Batra further emphasised the need to adopt a participatory approach to redesigning curriculum to suit the needs of all, saying that “... it is important that we enable school teachers to reshape the boundaries of curriculum, teaching and learning and redefine the professional concerns of their own community—providing a plural, inclusive and critical environment in which UEE can be realised.” (Batra 2009: pg. 150).

The SSA has included curricular adaptations in detail for different disabilities and considered contributions from experts, teachers, and teacher educators in the field in one of its issue of

Confluence (2016)<sup>21</sup>. Moreover, a detailed support manual for primary and upper primary teachers on how to identify children with disabilities and support children with different disabilities has been developed by Julka et al. (2014) for the NCERT. Additionally, a supplementary early reading series, called 'Barkha: A Reading series for All', has been developed by the Department of School Education and Literacy as an inclusive learning material (MHRD, 2015). The NCERT emphasises 'adaptation' in terms of adjusting the assessments, materials, curriculum and classroom environment to cater to the students' needs, thereby fostering their participation and achievement of the teaching learning goals. They also laid down recommendations for students' families, schools, education administrators, teachers and other professionals relating to enrolment and retention, quality education (through appropriate curricula, organisational arrangements, teaching strategies, resource use and partnerships with communities) and support for the higher and vocational education of students with disabilities and disability focused research (Julka, undated). These are the comprehensive guidelines that address inclusive education at the school level, but no evidence is available as to whether they have been used in any schools in India.

### **3.5 Addressing the lacuna in the current research and arriving at the research questions**

As is evident from the review of the research literature in India, while the deficits in the education system have been previously established, there is a significant lacuna in terms investigation into the inclusive education practices adopted by mainstream schools targeted at all learners (children with and without disabilities) as well as how these practices are implemented within classrooms in India (Das and Kattumuri, 2011; Singal, 2019). As discussed in Section 1.2, where I provided the rationale for this research, I sought out public schools with a clear mandate to pursue inclusive education such that I could engage critically with how they practise inclusive teaching and learning. I was guided by the scholarship of researchers who have worked extensively in the Indian context in identifying this research domain (Kalyanpur, 2019; Rose, 2017; Narain, 2013; Das and Kuttumuri, 2011; Singal 2005; 2006; 2016; 2019). This research allowed me to develop a comprehensive picture of how certain mainstream schools perceive and practise inclusive education. It also helped me to assess the implementation of inclusive education through the lens of lived experiences.

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<sup>21</sup> A magazine published by the SSA

For this study, I examined the perceptions of various stakeholders within the schools regarding disabilities and inclusive education to provide in depth understanding of the practices employed by them aimed at implementing inclusive education. In addition, I investigated how the perception of the various members of the school towards disabilities and inclusive education, the organisation of their school structures, pedagogy and practices, promoted and led them to implement inclusive education. I also sought to understand the challenges faced and enablers when striving to implement inclusive education in these schools. A form of marginalisation that students face within research into inclusive education is the lack of their own perspectives about their education within mainstream schools. Hence, it was important to include the perspectives of different students on what kind of marginalisation they faced in the inquiry (Messiou, 2017). Being mindful of this and to ensure that equity is underscored in the research, I included perspectives from students with and without disabilities about their social environment and their experiences with teaching and learning at school.

The literature also helped me to pin down the scope of this research. It was situated within the context of government schools, where students do not pay any fees to access education and includes diverse learners. I was motivated by the fact that 65.2% of students (113 million) in India access government schools (MHRD, 2017)<sup>22</sup> and hence, it was deemed that gaining understanding of inclusive education in such schools would benefit a large number of schools. This research is not an assessment of the inclusive education practices in the schools where I carried out the research, but rather, it is an exercise in understanding the various processes and practices involved so as to get a more nuanced understanding of what inclusive practices involve. I recognise that parents play a key role in the education of their child within this research and also, that the perspectives of policy makers' matter. However, to complete this research in a timely manner, I limited the investigation to stakeholders situated within the schools, including teachers, students, staff, and administrators. Next, I present the central research question and three sub-questions as well as how they guided the investigation.

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<sup>22</sup> <https://mhrd.gov.in/statist>

**Central research question:****RQ1. How do mainstream schools in Mumbai, India perceives and practise inclusive education?**

The overarching aim when addressing this research question is to reveal the connection between policy and practice. I also probe how inclusive education policies that have been enshrined within policy and legal frameworks are being implemented within a set of no-fee paying schools in Mumbai, India, that has a clear mandate for inclusive education. I seek to understand the perceptions of different stakeholders in the schools regarding disabilities and inclusive education. By addressing this research question, I contribute to reducing the gap between policy and practice. Drawing on the findings, I provide a roadmap with concrete steps on how to implement inclusive education in mainstream schools in the Indian context.

**Sub-question:****RQ1a. What are the factors, as identified by different stakeholders, that shape the implementation of inclusive education in mainstream settings?**

This is a multi-faceted question that requires consideration of both systems and practices at the school and classroom levels that shape the implementation of inclusive education. Drawing on the literature review, I unpack the classroom processes, teachers' pedagogical knowledge, teachers training on inclusive education, their use of the curriculum, the teaching strategies employed, assessments, school practices and support structures as well as student participation in the classroom. By so doing, I develop a nuanced understanding of how complex interacting factors underpin the implementation of inclusive education.

**Sub-question:****RQ1b. What are the challenges and enablers to the implementation of inclusive practices, with a particular focus on children with disabilities?**

Perusing the research on inclusive education in the Indian context further brought to the fore that, while a comprehensive list of barriers to inclusive education has been revealed

(Kalyanpur, 2008; Unnikrishnan, 2010; Slee, 2013; Shah et al., 2016; Singh, 2016; Kundu and Dey, 2018; Singal, 2019), there has been little empirical research on how to address these effectively. Moreover, much of the prior research has failed to take into account teachers' concerns around the practice of inclusive education (Singal, 2019). Tackling this research sub-question helps in shedding light on what challenges continue to exist when inclusive education is practised, the teachers concern regarding them and how some of these challenges can be mitigated. Thereby, this research question assists in understanding the salient factors that enable the implementation of pedagogy and practices in these schools and also the underlying tensions and challenges around including children with disabilities in their teaching and learning practices.

**Sub-question:**

**RQ1c. What are students' perspectives of their teaching and learning experiences and social environment in these inclusive settings?**

Various researchers have stressed the need to include the views of students when creating inclusive mainstream schools (e.g. Sandberg, 2017; Messiou and Ainscow, 2015; Tettler and Baltzer, 2011; Kiiveri and Maatta, 2011) and engaging with children and young people regarding the matter of inclusion (Messiou, 2012; Yang, 2016). For, examining the students' own experiences pertaining to inclusion is essential for developing a comprehensive picture of how inclusion plays out in the classroom, as held by Nilholm and Alm (2010). Adderly et al. (2014) argue that inclusion is a dynamic process that should consider the interface between students and teachers; students and their peers; as well as students and their school environment. This perspective acknowledges that "children are social actors" (p 109), who should be active participants in the research process. Similarly, Tetler and Baltzer (2011) suggest that to understand inclusion in mainstream education settings, we need to focus on "the pedagogical and didactic processes that constitute the learning conditions for pupils with disabilities included in mainstream classrooms" (p. 1).

A review of literature revealed that studies investigating students' experience of inclusion in mainstream schools have been primarily carried out in the Global Northern context. For instance, Nilholm and Alm (2010) included their perspectives when developing a methodology to study the inclusiveness of a classroom in Sweden, while another study by Cleere (2016) used narrative stories to explore the experiences and critical incidents that

parents and students with disabilities experienced in mainstream schools in the UK. Findings from research that examined the experiences of children with disabilities and the inclusive practices in mainstream Indian schools (Das and Kuttumuri, 2011; Singal and Jain, 2012; Sawhney, 2015) have suggested that, whilst many were called inclusive schools in that they admitted children with disabilities, in reality, they were unable to meet the learning needs of these children. All these studies concluded that student voice should be considered when probing inclusive education. By addressing this research sub-question, a holistic perspective of how inclusive education is practised in the focal schools is made a reality as the students' experience is embraced along with those of many of the other relevant stakeholders.

### **3.6 Summary**

As the literature review has revealed that whilst, there is sufficient information on 'what' ought to be done regarding inclusive education practices, there remains a need for research into 'how' it is practised in the field. Accordingly, I have situated my work as a real-world enquiry that has involved moving away from the deficit discourse, with the aim of illuminating the pedagogy and practices with respect to inclusive education in non-fee-paying schools in Mumbai, India, whilst also uncovering the attendant challenges and enablers to such inclusion. By providing empirical evidence of how inclusive education is implemented in mainstream classrooms, I narrow the gap in the extant research between policy and practice. Furthermore, as my study covers the perspectives of different stakeholders within the school, including students with and without disabilities, this allows for a comprehensive overview of inclusive education in practice to be captured. In the next chapter, I present the research context to create a shared understanding of the school settings within which this investigation has taken place.

## CHAPTER IV: SETTING UP THE CONTEXT

This chapter gives an overview of the schools' background and their organisational structure. Explaining this in the beginning is crucial to gain a contextual understanding regarding all the methodological decisions taken, the findings, the analysis of the findings in the discussion chapter and the conclusions drawn. Nilgiris, Vindhya and Aravalli are the pseudonyms I have assigned to the three schools that were part of the case study. This chapter begins with information about Mumbai and takes an in-depth look at the areas where these schools are situated. Then, the background of the Muktang schools, which is the site of this research, is presented, followed by a detailed look at their organisational structure. Next, the context of the three schools that formed part of the case study is covered and finally, the chapter concludes by describing the classroom layout and the daily school timetable.

### 4.1 Mumbai – City of Dreams

Mumbai is the capital of the state of Maharashtra in Western India, being the financial, commercial and the entertainment capital of the country. The country's two largest stock exchanges - the National Stock Exchange and Bombay Stock Exchange - the Reserve Bank of India along with several financial and non-financial multinational companies are all headquartered in Mumbai. The Mumbai Metropolitan Area has a population of 18.39 million, with 12.44 million living in Mumbai city (Census, 2011). Mumbai city is governed by the Municipal Corporation of Greater Mumbai (MCGM).

The city reports a major proportion of the country's revenue and expenditure, accounting for 7% of the GDP of India (Clark and Moonen, 2014). It is also home to the Bollywood movie and media industry. Despite all this wealth, the city experiences stark income disparity. On the one hand, it is home to 46,500 millionaires and 28 billionaires, with a combined wealth of \$950 billion, putting it in the top 15 wealthiest cities globally, ahead of Toronto and Paris (it ranks 12th)<sup>23</sup> and growing. On the other hand, an estimated 6.5 % of people in Mumbai live in slums that have poor amenities in terms of access to clean water, electricity, or transportation, and many experiencing extreme poverty<sup>24</sup>.

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<sup>23</sup> <https://timesofindia.indiatimes.com/city/mumbai/with-950bn-private-wealth-mumbai-is-12th-richest-city-in-world-home-to-28-billionaires/articleshow/62877395.cms>

<sup>24</sup> <https://qz.com/india/717519/the-worlds-biggest-survey-of-slums-is-underway-in-india/>

The schools in the study site are in an area that had textile mills since the nineteenth century. These textile mills led to the creation of *chawls*, which were houses built by the textile mill owners for the workers and their families to dwell in while they were employed in these mills. These *chawls* comprised small rooms usually measuring 100-200 square feet. Most of these textile mills shut down after the ‘Great Bombay Textile Strike’ called on 18th January 1982, leaving 150,000 workers unemployed and the mills moving to different states in India<sup>25</sup>.



Figure 2: Representational image of a *chawl* in Mumbai city

Many children who attend these municipal corporation schools operated by Mukangan live in these *chawls* (Figure 2). These *chawls* have a diverse population, which comes from various parts of Maharashtra and neighbouring states, with the people speaking several languages, such as Marathi, Telugu, Kannada, Tamil, Konkani, Hindi etc and belonging to different castes and religions. Most grandparents of the students attending these schools used to work in the textile mills and as the textile jobs disappeared their parents took up a variety of low-income jobs. Today, the fathers of many of the students are employed as drivers,

<sup>25</sup> <https://www.tribuneindia.com/2005/20050326/nation.htm#11>

vegetable vendors, shop assistants, clerical jobs, daily waged workers, etc. The mothers work in small industries, in clerical jobs and as house cleaners or are homemakers. Some mothers are also employed in the schools where I conducted the research as teachers, faculty members, or cleaning staff. Most teachers also live in the same area. Hence, both the students and teachers experience similar socio-economic marginalisation. This is unusual in the Indian context, where the socio-economic differences between teachers and students is often a major concern (Diwan, 2015; David and Kuyini, 2012; Reddy, 2004).

With the passage of time, many of these mills turned into commercial spaces, malls, and restaurants. Due to its proximity to the airport and it being centrally situated, this area rapidly developed both commercially and residentially. Today, it is full of high-end stores, expensive housing real estate, and office towers housing some of the biggest banks, industries, and multi-national corporations. The stark disparity in the income of the people living in Mumbai city is visible in these neighbourhoods. While on the one hand some students must depend on Mid-Day Meals<sup>26</sup> at school for their nourishment, on the other hand, some of the most expensive restaurants of the city are in the same vicinity. The schools themselves are within low-income neighbourhoods nestled within these wealthy localities.

Thus, within affluent communities in these areas there are huge pockets of people living in a setting that lacks basic amenities, such as access to clean drinking water, health care centres and hygienic living conditions etc., with many living below the poverty line. While many of the students live at home, whether it is within the *chawls*, independent housing or in the nearby slums, a few actually live on the streets (in makeshift tents by the roadside) and are constantly displaced.

## 4.2 Background of the Muktangans Schools

In 2003, the NGO Muktangans started a *balwadi*<sup>27</sup> (pre-school) within a MCGM school

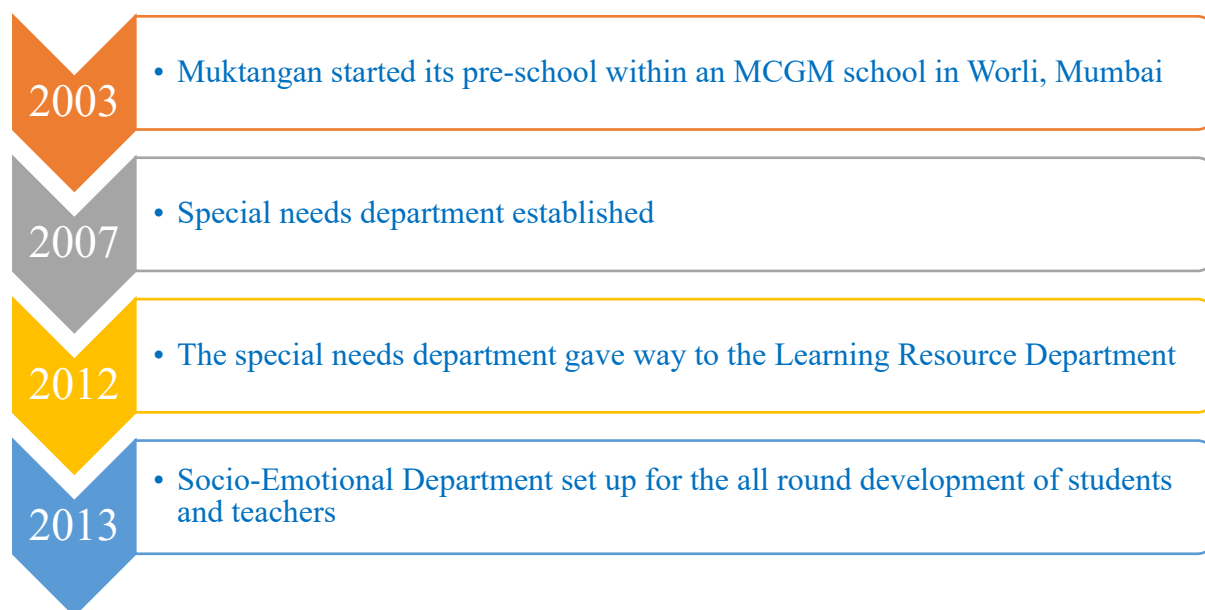
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<sup>26</sup> The Mid-Day Meal Scheme was started by the Government of India in 1995 with the aim of increasing enrolment, retention and attendance alongside providing cooked nutritious meals to all primary and upper primary students studying in government, government-aided, local body schools, under Education Guarantee Scheme (EGS) and Alternative and Innovative Education (AIE) Centres.

<sup>27</sup> Pre-schools for children from economically weaker sections of the society are known as *balwadis*. *Balwadis*, usually being run by a school and work during regular school hours. The other form of pre-school in India for these children is *anganwadis* found within the neighborhood of the child and the hours of the school are more flexible. Both form an essential part of India's early childhood education.

building in Worli, Mumbai. Initially, a group of seven women from the local community underwent a short training programme to become pre-school teachers and they started working in the first school. Over the next 15 years, with the partnership of the MCGM, Muktangam extended its operations to seven schools in total. Their special needs department was established in 2007 and subsequently, this became reorganised as the Learning Resource Department, with there also being a Socio-Emotional Department since 2013<sup>28</sup> (Figure 3).

The language of instruction in these schools is English in line with the advocacy of the community members, given many parents believe that an English education is a pathway to a better future for their children. A few respondents in the interviews attributed this to the initial growth in the enrolment numbers and said that gaining an English medium school education in a government school is an advantage according to most parents as they could not afford private schooling for their children. These schools follow the curricula of the Maharashtra State Board of Secondary and Higher Education.



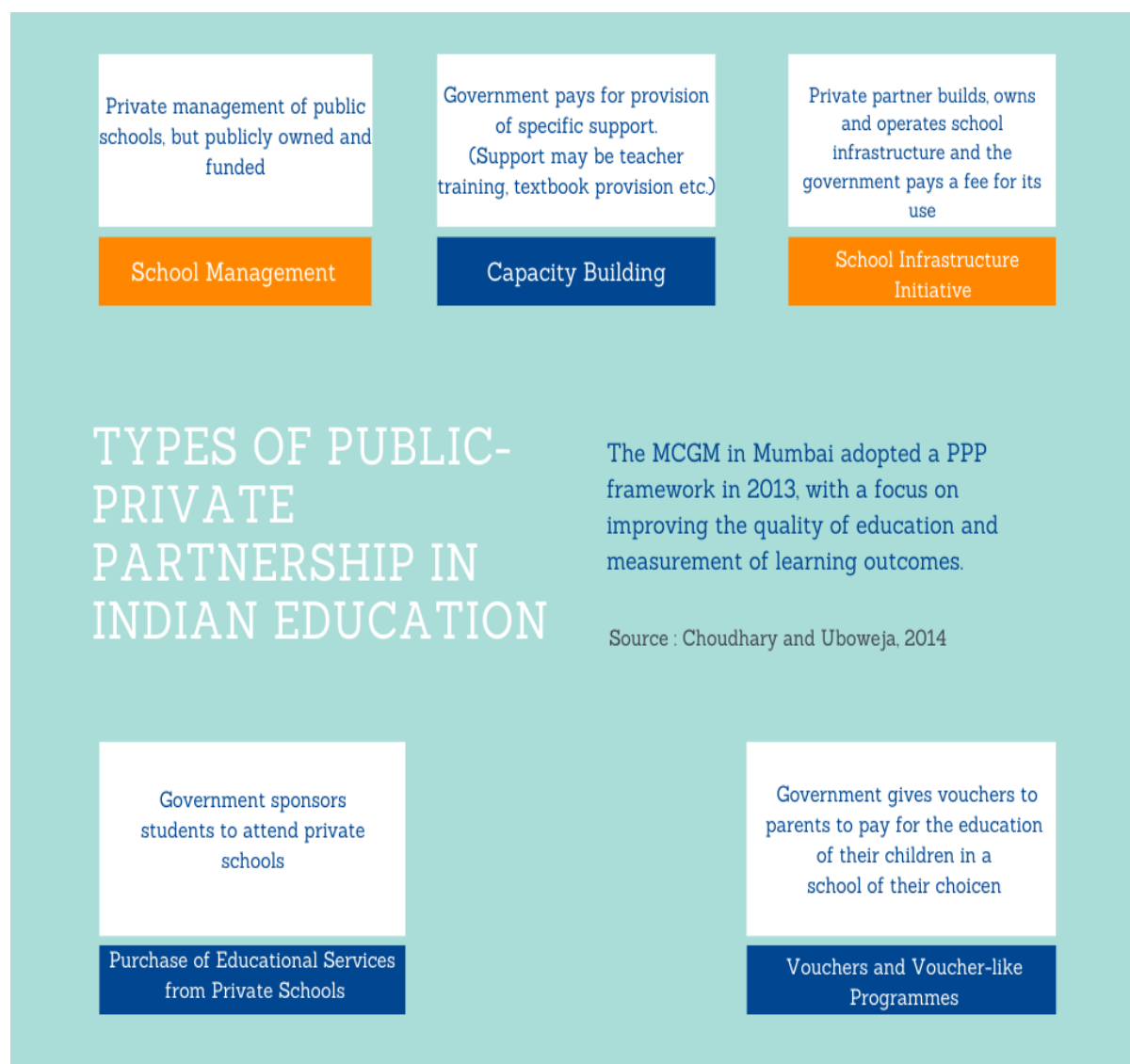
**Figure 3:** Brief timeline of important milestones of the Muktangam schools

### 4.3 Public-Private Partnership for School Education in Mumbai

In Mumbai, the Municipal Corporation of Greater Mumbai (MCGM) runs the public schools.

<sup>28</sup> One of the main reasons I chose these schools as the sites of my research is because they have had a history of supporting children with special needs and disabilities, as mentioned in the introduction (Chapter 1).

Owing to concerns about the quality of education, the government of India has, over time, experimented with a variety of public-private partnership (PPP) models to improve the quality of education. The 12th Five Year Plan in India put an emphasis on PPPs in school education (MHRD, 2011) for ‘enhanced access to inclusive quality school education’ (p 5) and laid the groundwork for private partners to work in collaboration with the public sector to improve the quality of education. The Ministry of Finance, Government of India, describes PPP as a private investment, wherein two parties form a partnership that includes both the government and the private sector (Parvathy, 2013). There are various PPP models in the education sector at present and a brief description is provided in Figure 4 below (Choudhry and Uboweja, 2014).



**Figure 4:** Description of various PPP models (Choudhary and Uboweja, 2014)

The MCGM in Mumbai adopted a PPP framework in 2013, with a focus on improving the quality of education and measurement of learning outcomes<sup>29</sup>. They have PPP for its schools under the school management and school adoption model. In the school management model, the private operator runs the municipality schools with government infrastructure and private teachers, gives full operational autonomy, receives government funding, and charges no fee to the students. Under the school adoption model, the private operator takes over government schools, keeps the government teachers and implements performance management initiatives, with the schools have limited operational autonomy and charging the students no fees.

Currently, there are six non-governmental organisations (NGOs) operating 20 MCGM schools and running a variety of programmes aimed at improving quality and learning outcomes in these schools. These NGOs are Akanksha, Muktangan, Aseema, Teach for India, Educo, The Scholars' Education Trust and Aishabai Haji Abdul Latif Charitable Trust. Among these, the schools run by Muktangan unequivocally mention inclusive education.

#### 4.4 Organisational Structure of the Schools with an Overview of the Various Roles

A Chief Executive Officer (CEO) heads the Muktangan schools, and she carries out the day-to-day programmatic responsibilities. The Chief Operating Officer (COO) oversees administrative and human resource management and liaisons with the MCGM<sup>30</sup>. In addition, there is a Leader of Strategic Development of Muktangan, as it continues to grow, a Vice President of Finance and Legal matters, and a Leader for Outreach to help in the dissemination of the Muktangan model. There is a board of management, which includes the founder of Muktangan, Ms Elizabeth Mehta (Liz) and her husband, Mr Sunil Mehta, who heads the Paragon Charitable Trust (recently changed to Muktangan Education Trust) that supports Muktangan schools. They are the Trustees along with four others and the board also includes four advisory members. Figure 4 below provides an overview of the organisational structure at Muktangan.

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<sup>29</sup> MCGM's Public-Private Partnership in education -

<https://portal.mcgm.gov.in/irj/go/km/docs/documents/MCGM%20Department%20List/Education%20Officer/Docs/MCGM%20PPP%20Policy/MCGM%20PPP%20Policy%20English%20page%20no.19%20to%2034.pdf>

<sup>30</sup> Since the completion of fieldwork, the CEO and COO positions have been merged and there are two joint CEOs.

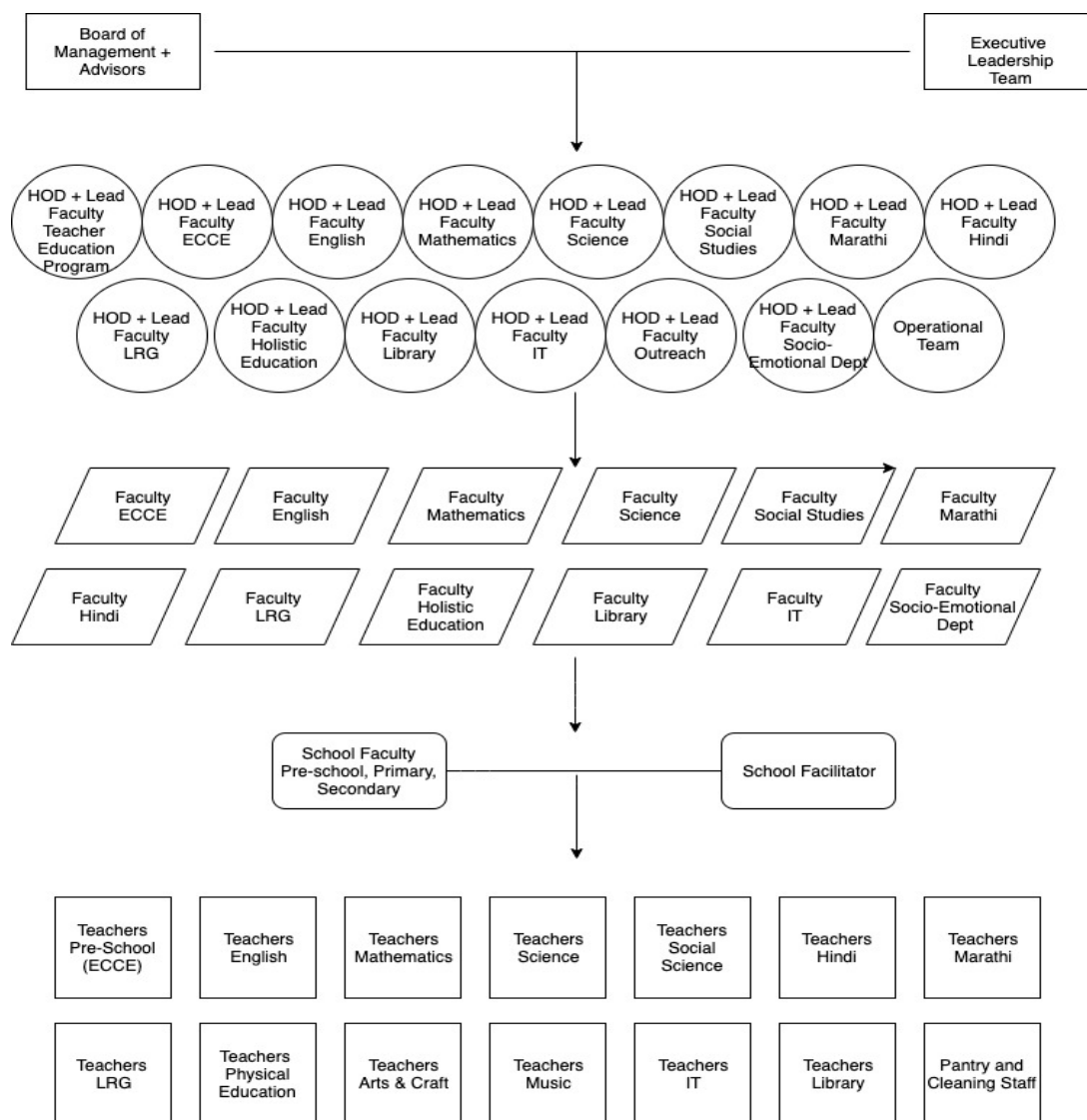


Figure 5: Organisational Structure of Muktangans schools

**Departmental Leader, Lead Faculty and Subject Faculty**

Muktangan is a multi-faceted organisation with 15 departments. It has an integrated teacher education and school education model, which means that many roles overlap, especially for those in the leadership teams as they are involved in both operational and programmatic roles. Most members of the senior leadership team develop curriculum and pedagogy for both teacher training and school education. The executive leadership team manages the overall administration of the schools and the day to day operations.

The head of each department (known as Leader in Muktangans) supports the executive team in

this task. Each Departmental Leader leads a team of Lead Faculty<sup>31</sup> (ranges from 2-3 members) and Subject Faculty (ranges from 7-10 members). The Departmental Leader and the Lead Faculty members are involved in pre-service teacher training, developing teacher education programmes and in-service teacher training, by supporting curriculum and lesson planning for the teachers in each school. Since the 2018-19 school year, each school has had a subject faculty for English, mathematics, science, and social studies based out of each of the schools.

### **School Faculty**

At the school level, there is a 'School Faculty' whose role is akin to a headteacher. The School Faculty members I interviewed had graduate degrees and BEd/DEd degrees and had undergone the Muktangam Teacher Education Programme. They had earlier experience as teachers within the schools run by Muktangam. As School Faculty, their role encompasses both academic and administrative responsibilities. Up until the academic year 2017-18, they supported the teachers in Grade 3 with lesson planning for English, mathematics, and environmental studies (consisting of science and social studies) in consultation with the Departmental Leader and Lead Faculty for those subjects. However, since the academic year 2018-19 the responsibility to provide lesson support to the teachers have moved to Subject Faculty members.

The School Faculty handles the academic needs of the teachers or provides support, if they require it in the classroom. Academic need in this regard means that, if at any point the class teachers feel that they need added support to teach a subject then the School Faculty liaises with the departmental heads to ensure they receive it. The School Faculty along with the Departmental Leader and Lead Faculty of each department conduct a needs assessment to determine the sessions that will be beneficial to the teachers during the professional development courses held at the end of every school year.

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<sup>31</sup> School faculty usually refers to a body of staff. However, in these schools the teachers and those members who are involved in teacher training and administrative roles are identified colloquially with the prefix 'Faculty'. Hence, even individual members are addressed in school as 'Lead Faculty'; 'Subject Faculty' etc. and I have adhered to the same in the descriptions.

In terms of addressing and supplying classroom support, the School Faculty intervenes as per the request of the class teachers. They help conduct feedback sessions for the teachers facing any challenges in the classroom with other teachers or faculty members. One instance shared in an interview was that the School Faculty regularly conducted oral circle time<sup>32</sup> with the Grade 8 students in her school when the behaviour of the students was overwhelming the teachers and they could not adequately conduct the lessons owing to frequent disruptions. Apart from conducting oral circle time with the students, she also held sessions with the teachers to come to understand their perspective. This exercise helped both the teachers and students to understand each other's challenges and to resume the classes. The School Faculty's role also required them to oversee and liaise with local MCGM officials to prepare and send reports on the enrolment and progress as requested and they received support from the School Facilitator for this.

### **School Facilitator**

Apart from the School Faculty, each school has a School Facilitator, who oversees all the administrative work within the school (akin to the role of an office manager). This person has responsibilities relating to record keeping, procurement and general administrative duties to ensure the smooth running of the school. They are recruited from among the teachers and have previously undergone teacher training at Mukangan. All the School Facilitators interviewed had prior teaching experience within these schools. This role has undergone changes over the years.

Presently their role involves many responsibilities, such the co-ordination and delivery of the Mid-Day meals and fruit<sup>33</sup> on time every day and quality checks. The School Facilitator supports the teachers by getting photocopies, teaching, and learning materials, such as charts, stationery, materials for the school's project day etc. as well as record keeping for the MCGM. This record keeping includes keeping enrolment records of the students up to date, keeping records of visitors to the school, recording of the school health check-ups of the

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<sup>32</sup> Circle time is viewed as a form of group counselling and a space for the students to share and receive support from someone outside their class teachers about any academic, emotional, or other issues that they may be facing.

<sup>33</sup> The Mid-Day Meal is provided by the government to each student in government schools. The Mukangan Trust supplements it and gives a daily portion of fruit to all its students and teachers.

students<sup>34</sup> and the distribution of iron tablets for female students<sup>35</sup>, all of which they do in coordination with the teachers. They support the teachers in Grade 1 and 2 in lesson planning for English, mathematics, environmental studies (consisting of science and social studies) in consultation with the Department Leader and Lead Faculties of those departments. Since the academic year 2018-19, the School Facilitator does not have these teaching support responsibilities and the Subject Faculty conducts the lesson planning with the teachers.

### **Teachers**

In each school, the pre-school teachers teach all the subjects. There are subject teachers for English, mathematics, science, social studies, Marathi, Hindi, information technology (IT), Learning Resource Group (LRG), and the holistic subjects (comprising arts and crafts, music, physical education, dance, drama etc.) from Grade 1 onwards. Each teacher manages teaching and learning of one subject either for the primary section (Grade 1 to 4), the upper primary section (Grade 5-8) or secondary section (Grade 9 and 10). The role of the subject teachers is primarily teaching and learning. They are involved in lesson planning on a weekly basis, pastoral care for the students, and preparing regular assessment reports for each student.

There were three teachers in each classroom to keep a student teacher ratio of 1:15 for each grade. A drawing of lots at the beginning of the academic year paired up the students and teachers into these three groups. At each grade level, the three teachers (amongst those teaching English, mathematics, science, and social studies) had the role of class teacher in addition to their role as subject teachers. For example, in Nilgiris School, the Grade 5 class teachers were the subject teachers for English (teaching it to Grades 5 - 8); the Grade 6 class teachers were subject teachers for mathematics (teaching it to Grades 5 - 8); the Grade 7 class teachers were subject teachers for science (teaching it to Grades 5 - 8); and the Grade 8 class teachers were subject teachers for social studies (teaching it to Grades 5 - 8).

In addition, each school had two arts & craft/music, physical education (PE), information technology (IT), library teachers and six language (Marathi and Hindi) teachers, who catered to all the grades. The teachers teaching these subjects did not have the responsibilities of class teachers. In contrast to the 1:15 student teacher ratio for the subjects English, mathematics,

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<sup>34</sup> The Education Department in coordination with the Health Department organises regular health check-ups.

<sup>35</sup> This is a government of India initiative in government schools throughout the country.

social studies, science, Hindi, and Marathi, the holistic subjects (arts and craft/music, physical education), library and IT had a student teacher ratio ranging from 22:1 to as high as 45:1 (in the case of timetable conflicts or teacher absences). The reason being each school had two teachers each for these subjects and they catered to all students from Grade 1 to 10. There were two Learning Resource Group (LRG) teachers in each school: one responsible for pre-school and Grades 1-4, whilst the other took Grades 5-8. In the two schools that had Grades 9-10, there was a third LRG teacher, but this was still at the pilot stage<sup>36</sup>.

### Support staff

Each school had two female support staff (referred to as *tai* or ‘auntie’ by the students and teachers), who worked in the pantry<sup>37</sup> and were involved in cleaning the communal areas, such as corridors etc. as well as undertaking other tasks around the school. As mentioned earlier, the school facilitator coordinated the delivery of the Mid-Day Meals and fruit. However, it was the *tais* who distributed the fruit and the Mid-Day Meals during the short break, subsequently cleaning the students’ dishes. I saw the female students coming to the *tai* when they required sanitary products. On probing, I found that the *tais* made these available to the female students as needed<sup>38</sup>. On another occasion, I saw one *tai* helping the pre-school teachers in Vindhya school with cleaning a child who had soiled their clothes and was helping them to go to the rest room. On enquiry, I found that they often supported the pre-school teachers in providing care for the young students. They were also involved in helping the parents or guardians who came to drop off pre-school children at school or to pick them up. Table 3 summarises the designations and the roles of the various members within the Muktang schools. Next, I delve into my observation data to present a narrative sketch of the schools where I carried out the case studies.

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<sup>36</sup> As mentioned earlier, my fieldwork spanned two academic years in the schools. In 2017-2018, the Aravalli school had a separate LRG teacher for Grades 9 and 10 but in the academic year 2018-2019, this position was removed, and the class teachers supported the students with disabilities. I will discuss this further in the next chapter.

<sup>37</sup> Most schools either had a small room or sometimes a small area at the end of the corridor which they called the ‘pantry’. The *tais* usually cut the fruits and prepared the Mid-Day meals for distribution in the pantry area.

<sup>38</sup> It was an initiative taken up by the school to provide menstrual hygiene products to the students.

**Table 3:** Role of different stakeholders within the school

<b>Designation</b>	<b>Role</b>
<b>Departmental Leaders</b>	<p>Heads of department</p> <p>Curricular and pedagogical support within the school</p> <p>Designing and implementing the pre-service and in-service teacher training programme at Mukhtangan schools</p> <p>Lesson design support to teachers teaching Grades 9 -10</p>
<b>Lead Faculty</b>	<p>Oversees curricular and pedagogical support within the school</p> <p>Supporting the pre-service and in-service teacher training programme at Mukhtangan schools</p> <p>Lesson design support to teachers teaching Grades 9 – 10</p>
<b>Subject Faculty</b>	<p>Supports Lead Faculty to give curricular and pedagogical support to the class teachers teaching Grade 4 – 8</p>
<b>Class Teachers</b>	<p>Teach a specific subject to different grades</p> <p>Conduct class teacher responsibilities for a grade (e.g. Oral Circle Time, morning assembly, taking attendance etc. for the students of that grade)</p> <p>The same teacher can hold the role of class teacher for Grade 5 and teach English and social science to Grade 5 and Grade 6 students.</p>
<b>Pre-School Faculty</b>	<p>Equivalent to the role of headteacher for pre-school students</p> <p>Designs and implements curricular and pedagogical support for the pre-school teachers.</p>
<b>School Faculty</b>	<p>Equivalent to the role of the headteacher for the school</p> <p>All the administrative duties within the school</p> <p>Curricular and pedagogical support for lesson planning to the teachers in Grade 3 for English, mathematics, and environmental science (EVS)</p>
<b>School Facilitator</b>	<p>Official record keeper</p> <p>Human resource management</p> <p>Gives teaching resource support to the teachers in the school by arranging teaching/learning materials etc.</p> <p>Curricular and pedagogical support for lesson planning to the teachers in Grade 1 and 2 for English, mathematics, and environmental science (EVS)</p>
<b>Additional teaching staff in each school</b>	<p>Teachers for Hindi, Marathi, arts and craft, music, physical education, and information technology</p> <p>Two Learning Resource Group (LRG) teachers to support children with difficulties owing to disabilities (one each for the lower primary and upper primary sections)</p> <p>Two library teachers</p>

#### 4.5 A Narrative Sketch of the Schools

As mentioned earlier, Mukangan operates seven English medium schools in a PPP framework with the MCGM and among them, three formed a part of my case study. At the time of my fieldwork, the schools had around 250 teaching staff and 3,700 students. I heard and noted great diversity in the mother-tongue of the teachers and students, which included languages such as Marathi, Gujarati, Hindi, Telugu, Kannada etc. The diversity of the population of Mumbai in these areas was reflected in the linguistic multiplicity of these schools.

Each school had differences in the amenities/facilities they had in terms of infrastructure. All the schools were within multi-storeyed buildings, so they had stairs to climb to go to the different classrooms and there were no lifts available in any of the schools or any other accessible features other than a ramp to enter the building. There were no separate toilets for persons with disabilities, although separate and clean toilets were available for boys and girls in each school and in some instances, there were separate ones for the teachers. The libraries in each school were vibrant and well stocked with books that mostly came through donations (Figure 6).



Figure 6: Library at Vindhya school

Here, I present a short narrative description of each of the three schools. Even though all the

schools followed the same curricular and pedagogical model, they had some differences in terms of the infrastructure and how space was utilised within them. To ensure privacy of the school level data collection sites, I assigned pseudonyms to all the schools described below.

### **Vindhya School**

This school is situated near a *chawl*, with a small food manufacturing plant next door and many commercial establishments a few metres away. While the school itself is in a somewhat quiet lane within a low-income neighbourhood, stepping a few metres off this lane gives a glimpse of the office buildings and the bustling city. The school is unique in that it is situated within a MCGM school building that houses a pre-school run by another NGO on the ground floor and another MCGM school is found on the first floor, whilst Mukhtangan runs the MCGM school on the second and third floors. Mukhtangan's Integrated Teacher Education Centre is also located on the third floor of this school building. Appendix 3, gives the layout of the school, illustrating how different rooms within the school building are utilised. The walls of Vindhya school are covered in art-work done by the students and teachers. The layout of the school is U shaped and opens into a courtyard on the ground floor that is shared between the students of all the schools housed within the MCGM school building.

### **Nilgiris School**

This school is in the middle of a busy street, flanked by small shops and high rises on either side, with a *chawl* right in front of it. It is close to many high-end shopping malls, high-rise office buildings and there is a huge industrial complex next to it. It is in a bustling neighbourhood, with vegetable push carts jostling for space next to Mercedes cars on the same roads outside the school.



**Figure 7:** Students' artwork displayed on the walls in Nilgiris school

Like Vindhya school, Nilgiris school is situated in a MCGM school building that accommodates three other schools within the same space. While the second-floor houses many of the classrooms of the Nilgiris school, they have a few rooms allotted on the ground and fourth floors as well. This school has a small courtyard that is shared as a playground by the students in all the schools housed in this MCGM school building. The walls of the Nilgiris school have mathematical formulas and equations, science phenomena and multiple notice boards that display the students' work throughout the corridors (Figure 7). Appendix 4 gives an overview of this school's layout and how the different rooms are utilised.

### Aravalli School

This school is situated in a low-income neighbourhood under a railway bridge in a narrow alley surrounded by tall buildings just a few metres away. The approach to the school is very narrow (Figure 8) and there is a cardboard box-making unit right next to it. There are low-income one room houses and many small shops jostling for space in the close vicinity. Often, the approach to this school was flooded with water reaching up to my knees during the monsoon season when conducting the fieldwork<sup>39</sup>. The teachers and students had to wade

<sup>39</sup> Video of visiting the school on one such flooded rainy day - <https://twitter.com/seemanath/status/1016565921941340160?>

through this dirty (often sewage filled) water to get to the school as it only had one approach.



**Figure 8:** The only road leading into Aravalli school (photo taken in June 2018)

Here, a MCGM office building and the school building have a shared wall. This school has Grades 5-10 and the entire MCGM building only houses the school run by Mukhtangan. It is the only school in my case study that has two sections (Section A and B) for each grade. This is because the students from two other schools run by Mukhtangan move to this school to continue upper primary (Grade 5 onwards) as those two schools only have lower primary classes. In sharp contrast to the exterior of the school, the interiors are clean and vibrant. The students' artwork and bright images cover all the walls on each floor (Example; Figure 9). Appendix 5 illustrates the layout of Aravalli school and gives details on how the various rooms are utilised. As this entire building only houses a Mukhtangan school, they have more rooms available than in Vindhya and Nilgiris schools.

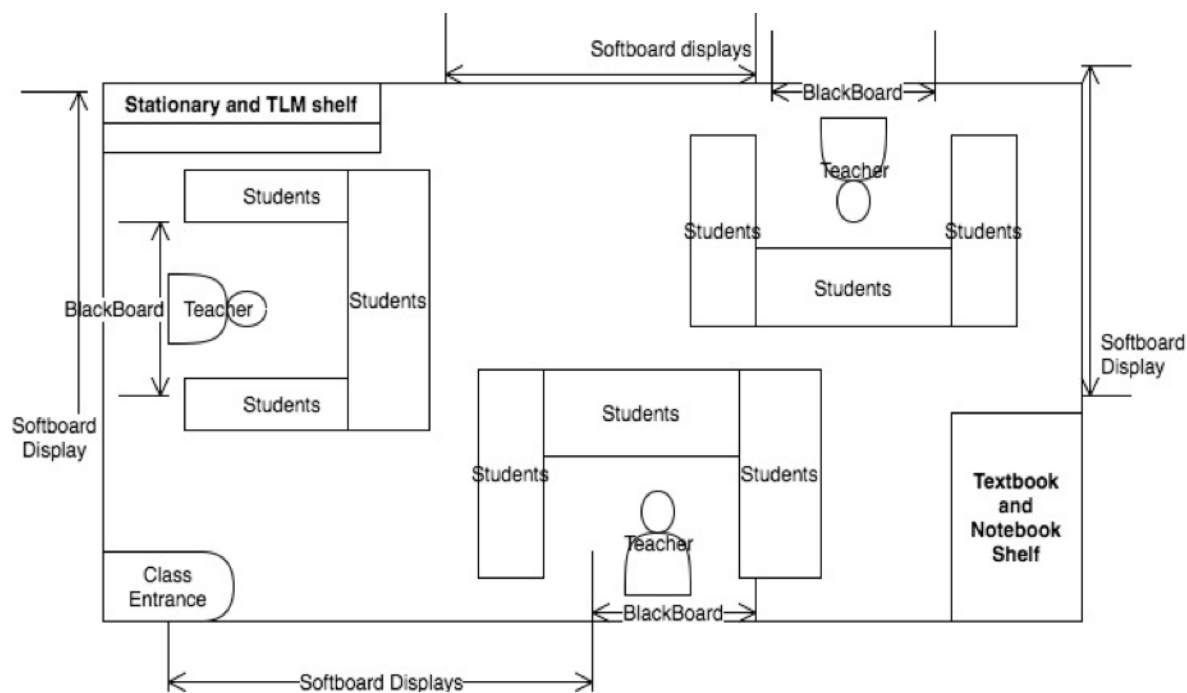


Figure 9: Artwork displayed on the walls in Aravalli school

All the schools were quite different in their layout though they had similarities in how the available rooms were utilised. The classroom structure and the furniture in these were also different from what is seen usually in government schools in India. Hence, it is important to include a description of the classroom, which I present next.

#### 4.6 Classroom Layout and Structure

Each classroom had stackable furniture in the corners of the classroom, which was arranged by the students and teachers at the start of the day into three groups and put away at the end of the school day. Figure 10 is a representational image of the classrooms inside the schools run by Muktangan. As aforementioned, the students were organised into three groups and the desks were in a U shape, with the teacher sitting in the middle surrounded by the students on three sides. Each teacher had between 12-15 students depending on the class size. The average class size varied between 40 and 45 students.



**Figure 10:** Classroom layout in schools run by Muktangam

The classrooms had steel frames used as shelves both inside and outside the classroom. As seen in Figure 11, the students kept their school bags and their shoes on the shelves outside the classroom to keep the classrooms clean (there was a strict no shoes policy inside the classrooms for everyone – teachers and students). Shelves inside the classrooms housed the students' textbooks and notebooks, including the stationery and teaching aids.



**Figure 11:** School bags and shoes arranged on shelves outside the classroom

#### 4.7 Organisation of Classrooms according to Subjects

The classrooms are organised by subjects rather than by grades, which is unique within Indian government schools that are organised by grades. There are classrooms for students belonging to pre-school and Grades 1 – 10. The classroom for Grades 1-10 function both as a classroom for a grade (for the class teachers to conduct Oral Circle Time [OCT]<sup>40</sup>, mark attendance and undertake whole class activities) and subject specific rooms (e.g. English classroom, mathematics classroom etc). For example, in Vindhya School, the Grade 5 classroom is utilised as the English room for students in Grades 5, 6, 7 and 8. This means that Grade 5 students come into this classroom after their morning assembly and keep their bags and shoes there. They return during the snack break, lunch break and at the end of the school day. Furthermore, students from Grades 5 to 8 come to this room for their English lessons as per their timetable. The Grade 6 classroom is utilised as the mathematics room for Grades 5, 6, 7 and 8, with the students from these grades coming to this room for their mathematics lessons when their timetable directs them to do so. Throughout the day the students move between different rooms as per the subject in their daily timetable. Next, I present the school timetable. The same structure of timetable was followed in all the schools.

#### 4.8 School Timetables

The school day is 9:00 am to 4:30 pm, Monday to Friday and 9:00 am to 1:30 pm on Saturdays. The school day usually starts with the morning assembly, which involves the recitation of the National Anthem and/or the National Song. As the schools had limited space, the students usually stood in the corridor outside their classrooms for the morning assembly and thereafter, went into the classrooms. Table 4 gives an overview of a typical timetable.

**Table 4:** Daily timetable/routine in the schools

Time	Activity	Notes
<b>8:45 am – 9:00 am</b>	Students & teachers start arriving	Those who do not arrive by 9am have to wait outside the gate until the morning assembly is over.
<b>9:00 am – 9:15 am</b>	Morning Assembly & Oral Circle Time (OCT)	Students stand in a circle with the teachers inside the classroom and start their day by choosing what songs or poems they want to

<sup>40</sup> Oral Circle Time is conducted by the teachers with the students to develop positive relationships with the students and among them. It is seen as a way of inclusion and used for promoting socio-emotional well-being.

		<p>sing. The students and teachers share with their class about their day or their feelings. This is led by the teacher and is known as Oral Circle Time (OCT). As soon as OCT is over, the students and teachers arrange the desks and stools into three groups.</p>
<b>9:15 am – 9:45 am</b>	Assessment	<p>Each day of the week written assessment on work sheets of different subjects is conducted, e.g. English on Monday, mathematics on Tuesday, science on Wednesday, social science on Thursday, Hindi on Friday and Marathi on Saturday. The goal of the assessment is to determine whether the students have learned the concepts taught in the previous week and to give help and support when the lessons are still fresh.</p>
<b>9:45 am – 10:30 am</b>	Core subject/Holistic subject	<p>The lessons for all the core subjects and holistic subjects last for a duration of 45 minutes. The day starts with the students moving into a classroom as determined by their timetable for the day.</p>
<b>10:30 am – 11:15 am</b>	Core subject/Holistic subject	
<b>11:15 am – 11:30 am</b>	Snack Break	<p>Usually the students receive their share of fruit and midday meal during this break.</p>
<b>11:30 am – 12:15 pm</b>	Core subject/Holistic subject	
<b>12:15 pm – 1:00 pm</b>	Core subject/Holistic subject	
<b>1:00 pm – 1:45 pm</b>	Core subject/Holistic subject	
<b>1:45 pm – 2:15 pm</b>	Lunch Break	<p>The students usually bring a packed lunch from home. Students who cannot get a packed lunch from home receive the Mid-Day Meal again. Students partake their lunch in their classroom.</p>

2:15 pm – 3:00 pm	Core subject/Holistic subject	
3:00 pm – 3:45 pm	Core subject/Holistic subject	
3:45 pm – 4:30 pm	Core subject/Holistic subject	
4:30 pm – 4:45 pm	Cleaning	At the end of each school day the teachers and students restack the classroom furniture away in the corners. After the students have left, the teachers clear out the classroom dustbin into the main bins and clean the classroom by sweeping and mopping the floor.

#### 4.9 Summary

This chapter has presented an overview of the school context, including the area in which each school focused on in this research is located, the structure of the schools and also, the roles of the different stakeholders within the schools run by Mukangan. It has also provided a narrative sketch of the schools, giving details about the classroom structure and the daily academic routine followed within the school. This will aid in understanding the next chapter, which provides an explanation and justification of the methodological decisions taken during this research, thus setting the scene for the subsequent empirical chapters.

**PART II**

**RESEARCH METHODOLOGY**

## CHAPTER V: RESEARCH METHODOLOGY

Part 1 introduced this thesis, presented an overview of inclusive education in the Indian policy discourse, and provided a review of literature on inclusive education, with a focus on classroom practices. Part 2 of this thesis presents the research methodology. This chapter outlines the philosophical assumptions, interpretive framework, analytical tools, and ethical considerations used to guide this research, including the methods and methodological choices made. It describes the case study research design used, for which I collected qualitative data from teachers, members of the leadership team and students in the three focal schools. The methods used for data collection - semi-structured interviews, classroom observations, and document sources along with the instruments of data collection are described. The research process during the fieldwork is explained, including negotiating access, the data collection and the ethical considerations applied throughout this research. Finally, the chapter concludes with an account of how trustworthiness of the data, data organisation and analysis were pursued.

### 5.1 Philosophical Assumptions and Interpretive Framework

To carry out in-depth research into inclusive education, practices and students' perspective of their teaching and learning, and social environment, I required an illustrative and rich data set, which was possible by using a qualitative approach. Miles, Huberman and Saldana (2014), describing the strengths of the qualitative data, explained that such data gives an idea of the ground reality and provides rich contextual information. This research addresses a major lacuna in current research, whereby there has no prior rigorous research into the practice of inclusive education in public mainstream schools that accommodate children with and without disabilities in the Indian context. Thus, a qualitative research undertaking was deemed the appropriate choice of method, for this can give a 'complex and detailed understanding' (Creswell & Poth, 2018; 45) of the phenomenon of interest, i.e., the practice of inclusive education in Indian mainstream schools.

Cresswell (2017) laid out some characteristics of qualitative research and examining these, I attest that my research comes under the purview of such research. Such research is usually carried out in settings where the participants experience the phenomenon under study and in

this research, I conducted the research in the Mukhtangan schools, where the teachers and students were in their everyday setting. In qualitative research, the researchers undertake all the investigative activities themselves and thus, they become the key instrument of the inquiry. I collected data from the schools through semi-structured interviews and classroom observations, later carrying out data analysis and reporting of the findings. Moreover, such research typically involves utilising multiple sources of data, such as interviews, observations etc. and in line with this I collected them from multiple stakeholders within the school (teachers, students, members of the leadership team) by employing semi-structured interviews, participant observations and examining documents.

According to Creswell (2017), qualitative research utilises both inductive and deductive data analysis, with patterns, categories, and themes being built from the bottom up into abstract units of information. Then, the data from each theme is examined deductively for evidence of how each theme is supported as the analysis moves ahead. I utilised both inductive and deductive data analysis to arrive at the themes and subsequently, the analysis further propelled my discussion of the findings. The researcher strives to keep focus on learning the meaning that the participant holds about the phenomenon under study and to this end, I endeavoured to ensure that we arrived at a shared understanding through member checks at the end of the interviews.

The initial research plan is an emergent design in qualitative research and not tightly prescribed, so the researcher can expect changes to the research plan (ibid.). My original research design was mixed methods, which was changed to qualitative research based on findings from the pilot study. The number of student participants increased during fieldwork as students voluntarily came forward to take part in the research. I engaged in reflexivity about my role within this research and how my personal background, previous experiences, and culture potentially shaped the research process. Creswell (2017) advocates reflexivity throughout the research process as an important part of qualitative research. After gathering the data, I compiled and analysed them thematically to arrive at the findings, which I then considered in the context of the current research in the field to arrive at the conclusions. The author says that developing a complex picture of the phenomenon under study by reporting multiple perspectives in the form of a holistic account is an important characteristic of qualitative research (ibid).

According to Creswell and Poth (2018), philosophical assumptions underline the entire research process from formulation of the problems to the outcomes achieved, whilst receiving reinforcement from the scholarly community within which the research is situated to form the basis for the ‘evaluative criteria for research-related decisions’ (pg. 19). This is true in my study as the scholarship available in the field especially relating to inclusive education has informed this research throughout. In the next section, I shall describe the ontological and epistemological stance I adopted, followed by how I used the framework of social constructivism and an interpretivist lens for this research.

### **Ontology**

Ontology refers to the nature of reality and its characteristics (Creswell & Poth, 2018; Allison & Pomeroy, 2000), with the presence of multiple realities being acknowledged (Lee, 2011; Denzin & Lincoln, 2005). In qualitative research, the meaning of concepts is often constructed through semantics by the presentation of attributes or characteristics that make up those of interest (Goertz & Mahoney, 2012). This ontological view fits my research questions, where I endeavoured to make sense of the attributes, characteristics, structures and processes of inclusive education, pedagogy and practices covering different learners within mainstream classrooms.

This also helped guide my research in approaching inclusive education not only from the teacher, faculty, and leadership team viewpoints, but also, those of the students, who are the users of the education system. Even though the teacher delivers the same lesson, the way the learner interprets and experiences the lesson is subjective. Thus, acknowledging the ontological assumption that multiple realities exist helped me carry out my fieldwork and gather the different perspectives of teachers, students, faculty, and members of the leadership team. That is, I was able to identify common themes in the analytical process and report these in the findings. The links between ontology and epistemology are intricate. So, I next discuss the links and how the epistemological stance furthers my research inquiry.

### **Epistemology**

Epistemology relates to theory of knowledge, being about ‘the nature of the relationship between the knower or the would-be knower and what can be known’ (Guba and Lincoln,

1998:201). According to Crotty (2012), epistemology is ‘how we know what we know’ (pg. 8). As a researcher, I engaged in gathering data to address the research questions through my interactions with the participants during the fieldwork.

I am an Indian national and specialised in developmental and social psychology for my master’s study and have previously worked within the Indian government primary education system for four years. During the present research, I spent an extended period (9 months) in the settings where the participants live and go to school. This helped in my reaching a contextual understanding and developing a shared meaning making process, which led to the emergence of the themes that later helped me analyse the findings. I elaborate upon my positionality in detail in sub-section 5.7.3. Even though the research is qualitative in nature and as such has a degree of subjectivity within it, I utilised both deductive and inductive reasoning to arrive at the findings. In view of the ontological and epistemological assumptions discussed above, I believe this explanatory study, through the adoption of a framework of social constructivism with an interpretivist lens, provides rich understanding of the implementation of inclusive education in mainstream classrooms in India covering diverse learners.

### **Social Constructivism**

I identified this qualitative research to be located within the social constructivism paradigm and interpretivist framework as within it ‘individuals seek understanding of the world in which they live and work’ (Creswell & Poth, 2018; 24). Crotty (2012) situates constructivism within the meanings construed by human beings through their interaction with the world to which they attribute meaning. In this research, I looked to attribute meaning to the processes of inclusive education that emerged through my interactions with the teachers, students, faculty as well as the management in the schools run by Mukhtangan through interviews and classroom observations.

Crotty (2012) states that since we are social beings, we must consider the social origin of meaning, citing Fish (1990) to explain that social institutions provide an interpretative framework to help us construct meaning and to explain social constructivism. Linking it to my research, the school is a social context (Clarke, 2005) and we can understand all meanings attributed to structures within the school system as those emerging out of the

interactions between the various individuals within this social structure. Reflecting on the definition of pedagogy by Alexander (2009) about the need to engage with the cultures and values within the classroom also implies the importance of social context. Thus, as pointed out above, the various classroom interactions between students and teachers, interviews and observations provided a context to understand the structures and processes contributing to inclusive education.

Constructivism has received criticism for not having a well-defined approach to gaining understanding of the process of interactions, which reduces the predictability and generalisability of the findings (Goertz & Mahoney, 2012; Crotty, 2012). However, this is a characteristic of most qualitative research. Bassey (2001) has touched upon this problem of generalisation in social science research, especially in educational research. Nevertheless, he has suggested that a researcher may make certain 'fuzzy generalization' (p 17), which means that they can deduce that there is a possibility of eliciting similar findings elsewhere based on their experience and the existing literature. I discuss this in detail in Section 5.2, when discussing the case study design.

I have relied on the existing scholarship on inclusive education globally, specifically in the Indian context, to identify the need for this study and hence, my research will contribute additional insights on the practice of inclusive education. It will add new knowledge that can be cumulative in nature but need not necessarily be generalisable. It can guide other mainstream schools to adopt similar strategies to include diverse learners and will provide contextual understanding. The findings will facilitate understanding of the underlying challenges and enablers, knowledge that can help guide the implications of adopting such an inclusive pedagogy and practices in mainstream classrooms in India. In particular, it will shed light on students' experience of the inclusive classroom environment, thereby informing others in the field, both practitioners and those in academia on best practice approaches to this school context.

### **Interpretivist lens**

Schwandt (1994) has asserted that constructionism is synonymous with an interpretivist approach and other researchers have similar views (Mertens, 2015; Denzin and Lincoln, 2011; Brown et al., 2006). The credit for developing the interpretivist approach often goes to

Max Weber (Crotty, 2012), who proposed this approach in opposition to the application of positivist approaches in social sciences. The actions of human beings are extraordinarily complex, and dependent on several factors that are difficult to understand (Holloway, 1997), so a positivist approach to understand human behaviour is considered to be inappropriate.

My research is situated in the social context of the school, and everyone who is in the school in that shared teaching learning and social environment will influence that. The interpretivist approach can pertain to interpreting the world as being derived from culture and from the perspective of the historic context. Such a view of the world encourages researchers to use different methods to engage with the social world in a naturalistic way. My background in psychology and experience within the Indian public education system helped me interpret the meanings that the teachers and students attributed to inclusive structures and processes.

In sum, the adopted ontological stance along with an epistemological perspective rooted in social constructivism and interpretivism helped me develop a cohesive qualitative research design that appreciates different realities. In the next section, I will explain how my research fits within the case study approach adopted for the inquiry. I consider the advantages of using this approach for conducting this research as well as how I navigated and mitigated for some of the critiques made regarding it.

## **5.2 Research Design – Case Study**

I considered the following questions that Miles, Huberman, and Saldana (2014) pose to decide on my research design: Which methodological framework will enable me to gather in-depth knowledge and subsequently allow for the analysis and interpretation to be trustworthy? What research methods will help collection of data that is relevant information to answer my research questions? Evaluation of all these elements reinforced the decision that the case study was the most suitable approach for this research.

Yin (2014) has described a case study as ‘an empirical inquiry that investigates a contemporary phenomenon (the “case”) in depth and within its real-world context especially when the boundaries between phenomenon and context may not be clearly evident.’ (pg, 13). Defining and bounding a case at the outset is essential for designing the case study (Yin, 2018). As the research was focused on inclusive education processes and practices in mainstream schools, the scope of my research was confined schools run by Mukangan where

these processes take place and the individuals involved within the schools, namely teachers, faculty and members of the leadership team as well as students.

Stake (2013) mentions multi-case study as a distinct methodology. However, Yin (2014) does not distinguish between single and multiple case studies as different methodologies, but rather, calls them variants of the case study approach. He does, nevertheless, emphasise that having multiple cases looking at broader phenomena can strengthen the case study as replicating the findings from each of the individual cases can add to the robustness of this method. I conducted my research in public schools in Mumbai, India, that promote inclusive education, which are managed by a non-governmental organisation (NGO), Muktangan, under a public private partnership model with the Municipal Corporation of Greater Mumbai (MCGM). These schools together form the cases for the study. I collected in-depth qualitative data from a subset of three schools out of the seven schools run through such an arrangement, which led to more robust findings than if only one of these schools had been the focus.

Yin (2013) mentions that a case study can be exploratory, descriptive, or explanatory in nature. My research falls under the purview of explanatory case study as it goes beyond asking questions on ‘what’ to answering questions of ‘how’ and ‘why’, which Yin (1989) says is the preferred strategy when such questions are posed. While ‘what’ identifies conditions associated with a phenomenon, ‘how’ and ‘why’ can highlight conditions and processes that support the phenomenon, thereby giving the research added depth and explanatory abilities. The questions in my research deal with both aspects: ‘what’ constitutes inclusive education, pedagogy, and practices, ‘how’ they are implemented and ‘why’ they practise inclusive education. Thus, applying a case study design was deemed most suitable for addressing the research questions.

Case studies can be an intensive study of a situation, event, or phenomenon, which allow for the capturing of as complete a picture as possible (Jacobsen, 2002) even within explanatory case studies (Yin, 1981). For explanatory qualitative research like mine, the case study enabled me to collect a range of comprehensive data from within the same contexts to enable robust responses to the research questions. Another major advantage of the case study was that it was grounded and applicable within real life situations, thus enabling the critical understanding of a complex phenomenon (Krusenvik, 2016), namely inclusive education. Case studies have explanatory and theory building capabilities (Bennett, 2004; Gerring,

2004), that is, they can provide explanation and allow for theoretical conceptualisations to be tested. This is true for case studies that use empirical data as this allows for researchers to draw descriptive inferences about the phenomenon under study within a clearly defined scope by examining the data in-depth.

However, the case study approach has also received several criticisms over the years. A few summarised by Best (2012) are:

- 1) Case studies are prone to subjectivity and bias, as people tend to provide personal accounts that can be interpreted in several ways by different researchers;
- 2) Case studies lack rigour as they lack focus and are limited in their analysis;
- 3) Generalisations from case studies are not possible;
- 4) The findings from case studies can be disorganised.

I tried to avoid these pitfalls while using the case study method. To minimise subjectivity and bias in my data I used triangulation (Best, 2012; Yin, 2014) of the data. Specifically, I collected data from different respondents, including teachers, head teachers, members of leadership teams, faculty members through interviews as well as classroom observations. I also included the students' perspectives of their teaching and learning and their social experiences to substantiate my findings and to add inclusivity and rigour to the research process. Triangulations of data 'offer an alternative to validation, [and] to militate against the impact of values on research, rendering it less subjective, more valid and reliable, and therefore more credible' (Brewer, 2000:75-6). Triangulation gave insights into the complex processes that underlie the practice of inclusive education and provided me the interpretative lens to acknowledge multiple views, rather than mere knowledge of how different information converged. According to Stake (2010), triangulation serves the dual purpose of either confirming whether our inferences are correct based on multiple data sources and methods or helps in checking whether there are additional inferences to be drawn. In other words, it verifies or refutes whether multiple sources and methods can provide robust insights about the phenomenon under study.

With regard to my research, whilst some of the information from the various sources provided corroboration, other aspects were contradictory, thereby provoking me to develop a more nuanced understanding of the inclusive processes and classroom experiences in terms of

exploring further why some of the information exhibited dissonance across the types of data collection. The interpretivist framework discussed earlier, utilising different methods, and having diverse informants during the process of data collection, provided me with a strong basis to arrive at shared meanings and to develop a holistic picture. I spent a sustained period in the field immersed in each school context and this helped me move beyond collecting snapshots of information to the collection of complex rich insights that enabled me to arrive at solid answers to the research questions.

Generalisations in the sense of positivistic research are not possible in case study research, but the approach does provide robust answers to my questions within the context of interest. In any case, the objective of my research was not to find generalisable conclusions, but rather, understanding of how a set of schools is executing its vision of providing inclusive education to all its learners and what can be learnt from them. Guba and Lincoln (1985), while discussing Stake's (1974) views on generalisation, postulated about the presence of two different kinds of generalisation: one that is derived from scientific discourse, which is 'rationalistic, propositional and law like' and that from case studies, where an 'intuitive, empirical' meaning is attached to findings derived 'based on personal direct and vicarious experience' (pg. 120).

My case study falls within the latter perspective, as I examined the practices within schools that enable the inclusion of children with and without disabilities, with its attendant challenges and enablers. Moreover, my research is situated within a context where I as a researcher interacted with the participants and through various research instruments gathered information and constructed shared meaning through our interaction within that setting. As mentioned earlier, Bassey (2001) contends that some generalisations from the findings can be arrived at based on the researcher's professional experience and the available literature, which I offer when discussing my findings.

Yin (2013) writes about analytic generalisations from case studies that can be applied to concrete situations and within new settings. Moreover, we need to practise utmost caution in ensuring that links to the findings in the existing literature are made and that any applied theory accords with the identified gaps and the research findings. In sum, when discussing my findings, I draw on the existing literature to analyse these and to arrive at some analytic generalisations regarding 'how' and 'why' inclusive education was practised within these

schools. My research is, thus, able to contribute to this field along with adding the knowledge in this regard. In the next section, I detail the sampling strategy I adopted during this research.

### 5.3 Sampling

I used non-probability purposive sampling to identify the study site and participants. Based on the inclusion criteria I mentioned in Chapter I, I identified the Muktakan schools as the site of research. The choice of the three schools for the case study was based on the recommendation of the Departmental Leader of the LRG. Out of the seven schools, these three had the most students with difficulties and disabilities, with the rationale being that this would maximise the opportunity to reach out to a large group of diverse students. The research participants comprised teachers, students (with and without disabilities), faculty, and members of the leadership team. In the next sub-sections, I detail the various participants in this research.

#### Teachers

Within the schools run by Muktakan teachers teach specific subjects. As mentioned in Chapter IV while describing the school setting, each classroom has three teachers teaching the class simultaneously for any subject. As my research was focussed on Grades 5, 6 and 7, I approached the class teachers in those three grades to take part in the research (Table 5). The class teachers I interviewed were engaged in teaching English, social studies, mathematics and science as my interest lay in researching the teaching and learning practised within these core subjects.

The number of teachers was higher in Nilgiris school, whereby each grade had two sections and hence, the number of teachers was doubled. In addition, one of the teachers had returned from her parental leave and wanted to take part in the research a few days after the interview with the substitute teacher was complete, so both were included. In Aravalli School, two more teachers volunteered to take part in the research, so I included them with the initial identified cohort. In addition, I interviewed the Departmental Leaders for Hindi, Marathi, holistic subjects (arts & crafts, physical exercise, music) and information technology (IT).

**Table 5:** Summary of teachers who took part in this research

Category	Vindhya School	Nilgiris School	Aravalli School	Total
Teacher	9	19	11	39
LRG Teacher	2	3	2	7
Total	11	22	13	46

The Learning Resource Group (LRG) members formed a crucial part of the research as their members supported students with diverse educational needs within these schools. Each school had at least two LRG teachers, one responsible for all the students in the primary sections (ECCE, Grades 1-4) and another responsible for all those in the upper primary ones (Grades 5-8). During my fieldwork, Nilgiris school had a third LRG teacher for Grades 9-10 on an experimental basis for a year to support students preparing for and taking their final exams for Grade 10. As this was a unique situation, I requested her to be a part of the research and she agreed.

### Leadership Team

To capture the diversity of individuals who contributed their views and knowledge to this research I categorised the leadership team under two distinct roles. Whilst some of the roles overlapped, I broadly categorised under these two headings as follows.

**Management related** - Individuals who handled the day-to-day operational management of the Mukhtangan schools, including finance, human resources, administration, government liaison etc., were interviewed. Whilst not all members of this team were directly involved in the teaching and learning processes in the schools, they were all in some way party to the allocation of inclusive opportunities. These individuals provided me with an overview of the history and the development/changes within the school processes over the years. The headteacher in each school, also referred to as ‘School Faculty’, is involved in the academic side of things within the school, whilst the ‘School Facilitator’ was responsible for providing support services to all the teaching staff and so they were interviewed from the three schools.

**Pedagogy related** – A ‘Departmental Leader’ within each department at Muktangam oversaw and guided their respective departments to contribute to the teacher training courses, whilst also helping in the development of the curriculum and pedagogy followed within the classrooms. This included the subject departments, for example, Departmental Leader for Mathematics, Departmental Leader for Holistic subjects etc. as well as other roles, such as Departmental Leader for Learning Resource Group, Departmental Leader for Early Childhood Education and Care etc.

Alongside the ‘Departmental Leader’ was a team of ‘Lead Faculty’ and ‘Subject Faculty’, who supported each department (discussed in Section 4.4). However, due to lack of time during fieldwork, I was only able to include the Subject Faculty within the Learning Resource Group and not the other subject groups in the interview process. Table 6 below gives an overview of the participants.

**Table 6:** Summary of Muktangam stakeholders who took part in this research

Category	Vindhya School	Nilgiris School	Aravalli School	Muktangan	Total
Administrators				3	3
School Faculty	1	0	1	-	2
School Facilitator	0	1	1	-	2
Departmental Leaders	-	-	-	15	15
LRG Subject Faculty	-	-	-	2	2
Total	1	1	2	20	24

### Students

In my original research design, I planned to include six students (with and without disabilities) from each of the grades and hence, a total of 54 students from Grades 5,6 and 7 in the three schools. However, once I started the fieldwork and spent extended time in the schools, during the snack and lunch breaks several students (with and without disabilities) spoke with me about the purpose of my research in greater detail. Hence, many students wanted to volunteer to take part and the list of the student participants (both with and without

disabilities) grew to 71 students. To have fair representation of the students in each grade, I tried to ensure that I had three students without difficulties or disabilities and three with difficulties or disabilities from each grade, whilst also ensuring equitable representation of students who identified as boys and girls within the research.

A drawing of lots was made to select the students without difficulties and disabilities to be part of the research from the student list for each grade. However, as I wanted to capture the experiences of children with difficulties and disabilities, any student identified as such in each grade took part in the research, if they wanted to. In sub-section 5.5.1, I discuss the participation of the students in greater detail. I identified and included those with difficulties and disabilities in the research through consultation with the LRG teachers. In the schools run by Mukangan, the students receive the support of LRG teachers and other resources (if required) without the pre-requisite of a formal medical diagnosis.

In many cases, students received formal medical diagnosis only in Grade 8 as they required it to be eligible for receiving reasonable accommodations from the Maharashtra State Board of Secondary and Higher Education during their final board examinations. All students with difficulties and disabilities who took part in this research were actively supported by LRG, except for one. She had hearing difficulties, but after she started using a hearing aid, she stopped requiring regular support from the LRG teachers and the class teachers were entrusted with ensuring her inclusion in the classroom processes.

My prior training in developmental psychology and work within Indian schools was helpful for interacting with different students and in being aware of their varied needs during this research. I relied on the information the LRG teachers provided me regarding students receiving their support and did not include any specific clinical parameters that classified them as having difficulties or disabilities. This is also in line with the Right to Education Act, 2009, in India, which states that all children must receive education irrespective of any differences. Whilst some of the students had a formal diagnosis, this was not a pre-requisite to being a part of the research.

The two tables below (Tables 7 and 8) summarise the details of the students who participated in the research. There is a need to have disability segregated data to make more informed decisions within policy making (Groce and Mont, 2017; Mont, 2007). It also provides an

educated framework to report and discuss the findings as well as providing an understanding of how students with diverse needs were accommodated by the teachers. However, this classification is in no way to be regarded as labelling the child according to their difficulties and disabilities.

The students with global development disability, autism, speech impediments and cerebral palsy had received formal medical diagnosis. However, only four students with learning disabilities had received a formal diagnosis. The rest of the classification is based on the LRG teachers' student reports that they develop based on their observations along with inputs from the parents and class teachers, which was then used to establish a plan of action to support the students.

**Table 7:** Summary of interviews with the students

Categories	Vindhya School	Nilgiris School	Aravalli School	Total
Children with difficulties and disabilities	11	11	14	36
Children without difficulties and disabilities	9	18	8	35
Total	20	29	22	71

**Table 8:** Summary of children with disabilities/difficulties interviewed

Disabilities/ Difficulties faced by the children	Vindhya School	Nilgiris School	Aravalli School	Total
Reading & writing difficulties	3	6	4	13
Learning difficulties	5	2	6	13
Attention related difficulties	0	1	2	3

Global development disability	0	1	0	1
Speech impediments	1	0	2	3
Autism	0	0	1	1
Behavioural difficulties	1	0	0	1
Cerebral palsy	1	0	0	1
Total	11	10	15	36

The students were in the age range of 9-12 years of age. The participants provided valuable insights that enabled this research and in the next section, I will provide an overview of my pilot study, which led me to changing from mixed methods to qualitative research as well as helped me to refine my research instruments.

#### 5.4 Notes from the pilot research

I carried out the pilot research towards the end of the first year of my doctoral research in July/August 2017 in one of the seven MCGM schools run by Muktangon, with the aim of refining my research instruments. At this stage, my research was a mixed-methods design, which evolved into a qualitative study based on the analysis of the findings from the pilot study. The pilot research participants included one head teacher, two members of the LRG and twelve class teachers from Grades 1,2, 3 and 4 (teaching age group 6-9 years).

At the pilot stage, I administered a quantitative attitude scale called the Sentiments, Attitudes and Concerns about Inclusive Education (SACIE R) (Forlin et al., 2010). After the SACIE R was administered to a small number of teachers, I came to realise that all the teachers in these schools scored positively in terms of the promotion of inclusive education. I surmised that teachers in the other schools run by Muktangon would have similar scores and as such, this scale would not provide any new insights. Hence, I decided not to include the SACIE R among the final research instruments. Similarly, I had a quantitative teacher survey questionnaire that I piloted with the teachers. However, it did not give me much functional

information and was very time consuming; the teachers found it cumbersome to fill in. In contrast, interviews yielded deep insights and detailed responses. Hence, even though I initially wanted to go for higher number of participants, based on the pilot study I decided to do away with the survey questionnaire in the main research and to go for depth of responses from interviews instead, along with observations.

The pilot study enabled me test out my interview and observation schedule. Moreover, through it I strengthened my research instruments and clearly defined the scope of the research. For example, during the pilot, most teachers found the Washington Group Questionnaire (2010), which asks questions about a child's functional limitations confusing. It is possible that this was due to certain cultural factors. Hence, I replaced these questions with, "Do you have any students in your group who have additional learning needs in the classroom?" and "Could you describe them?"

Another matter is that initially I had divided the teacher interview questions into Part 1 and Part 2 for two separate interviews. During the pilot, with one teacher, I conducted the interview in two parts and with another teacher; I conducted both parts in one sitting. This pilot experience showed that it was possible to combine both the parts and have the entire interview in one go, which in fact yielded more insights as continuity was maintained. I was also able to reduce the amount of time I had to request from the teacher for the interviews.

As aforementioned, initially I carried out the pilot research targeting lower primary education, i.e. Grade 1 to 4 (age 6-9 years). However, during my interviews with the teachers and the members of the LRG, they reported that the challenge to inclusion becomes critical when the child moves to the higher grades as the curriculum and pedagogy become more complex and the amount of work a student is required to do increases phenomenally. Hence, I decided to keep my research focus within the elementary schools but shifted focus to participants from the upper primary sections (Grades 5, 6 and 7)<sup>41</sup>. I piloted the observation schedule and it did not need any changes, but the pilot was helpful in figuring out how to use the observation tool and position myself inside the class for an entire day of participant

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<sup>41</sup> I did not include Grade 8, which is also a part of upper primary, as the teachers mentioned that they had started prepping for Grade 9 and 10 and hence, had a slightly more packed schedule that would hamper their participation in the research. Maintaining the wellbeing of the students was considered a priority, so I decided to include just Grade 5, 6 and 7 students in my research.

observations.

The pilot study aided my decision to move from a mixed methods approach to a qualitative study, which I deemed would enable me to capture a richer data set than with my quantitative research instruments. It provided me a better understanding of the context of the schools and helped in planning the data collection in an efficient manner. Quantitative methods are mostly utilised for determining causal relationships between variables (Creswell, 2013), but as my research was primarily focused on understanding the ‘black box’ that is the inclusive education in low resourced Indian schools, this qualitative approach proved to be far more valuable.

The pilot research also led to the reflection that I was missing a key stakeholder in the inclusive process, that being the students within the school (with and without disabilities). Hence, post the pilot I added additional research questions to include student perspectives of their teaching and learning as well as their social environment. I could not test the research instruments for the students during this pilot stage, but I did pilot them all at the beginning of my main fieldwork. I have discussed how my research methods and instruments were informed by the pilot research and in the next section, I will provide a detailed explanation of the research methods and instruments adopted as well as how they were utilised.

## **5.5 Methods**

I would like to preface the discussion of the methods of data collection by providing the rationale for using the same ones with adult and children within the schools. Involving students with and without disabilities perspectives of their teaching-learning and social experiences within the classroom was not just essential for gathering holistic views of the classroom processes, but also, for the research to be truly inclusive of all.

### **Research with children – consideration of methods**

In the past couple of decades there has been gradual momentum for research with children rather than research on children. Giving children the opportunity to contribute empirical evidence can help meet their needs (Prout & James, 1990, Qvortrup, 2017). However, researching with children leads to some methodological challenges. Reviewing the literature in this domain, Tisdall and Punch (2012) have identified that researchers have focussed on

four core challenges: similarities or differences in conducting research with children and young adults, ethical issues, innovation in the methods for research with children and determination of the degree to which children can be considered to be active participants in the research process. I have considered each of these methodological challenges throughout the research process and especially when deciding upon the research methods and instruments utilised for data collection.

Regarding the similarities or differences in conducting research with children and young adults, Punch (2002) states that the way we listen to children is affected by the way we see them and this, in turn, affects the methods that researchers choose to engage with children in their research. A researcher should engage in reflexivity about their roles and assumptions when deciding upon the methods to use with children (Davis, 1998). One of the key things to bear in mind, is that, whilst some methods, such as visual techniques and using child friendly procedures focused on the child's interests can elicit good responses, adults should not consider this the most appropriate pursuance in all situations, for, children can engage with the methods used with adults (Tisdall and Punch, 2012; Punch, 2002). In this research, I employed one-to-one semi-structured interviews with the students and adult stakeholders within the school.

The questions included in the semi-structured interviews with the students were aimed at obtaining an overview of their perspectives on teaching and learning as well as their social experiences in the classroom. These were everyday experiences that all the students were familiar with, and when asked to report them, they engaged in reflection<sup>42</sup> and provided detailed insights regarding their experiences within the school. Hence, these methods were not innovative in the sense that they were new ways of researching with children, but they did provide the child participants in this research the opportunity to offer their perspectives through the semi-structured interviews in the same way the adult participants were able to. The purpose of these interviews was to gain added views and insights through probing and without second guessing (interview schedules included in Appendix 6).

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<sup>42</sup> For example, when asked, 'Which is your favourite subject?', students would answer XY or Z. When followed up with why it is their favourite they reflected on the question and gave their perspectives.

I used the same interview questions for all students - with and without disabilities. The participation in this research was not limited to any degree or type of difficulties and disabilities<sup>43</sup>. After receiving the consent of the parents, I followed the same protocol of seeking voluntary informed assent from all the students, irrespective of the complexity of their disabilities and difficulties, to participate in the research and hence, the final decision to participate or not was with the student. All participants in my research used some degree of verbal communication, and no student participant was completely non-verbal in their communication. In one instance, as the participant had limited verbal communication, she requested the presence of her LRG teacher as an interpreter, and while responding to the interview questions, she provided written responses as well as verbal ones.

I will add the caveat here that there was one autistic student accompanied by intellectual disabilities, who, whilst her mother consented to her participation in the research, after spending an extended period of time with her, I arrived at the conclusion<sup>44</sup> that she may be unable to provide voluntary informed assent to participate in the research. I was also unsure whether, as a researcher, I could effectively communicate with her about voluntary informed consent and confidentiality etc. Hence, after consultation with her mother and the LRG teachers, I decided not to include her in this research due to ethical considerations.

I did not want to commence the research process with an inherent assumption that some participants would be more articulate than others. I wanted to ensure that, as a researcher, I did not contribute to the marginalisation that students with disabilities face in other aspects of their lives. During the interviews I made adaptations to ensure each student was comfortable (through physical adaptations to the environment we were in and rapport building) to ensure proper communication. It is important for the methods to be adapted to the needs of all children to avoid their exclusion from the research process (Aldridge, 2012).

In addition, such adaptations not only can benefit students with disabilities, but also, everyone else involved and thus, 'maximise everyone's participation' (Wickenden & Kembhavi-Tam, 2014: 414). For instance, I asked each student about their preferred language

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<sup>43</sup> I am of the belief that there is a need to go beyond 'visible disabilities' or 'manageable disabilities' and include everyone who wants to participate in the research process without presumptions about their competence.

<sup>44</sup> I have previous experience in Developmental Psychology, specifically working with children on the autism spectrum. I drew on my previous experience and knowledge as well as consultation with the parent and the LRG teachers to arrive at this conclusion.

of communication for the interview, and they chose to speak to me either in English or Hindi, as per their comfort level. The onus of providing clarity of questions within the semi-structured interviews was mine as a researcher and not on the students to gauge their meaning. Claveirole's (2003) research supports this view, contending that we should recognise young people's right to 'exert their competence' (pg. 254), while ensuring the protection of their best interests.

While most research with children has been in the global North and the whole childhood studies and children's voice movement is strong in Britain, researchers in the global South are also increasingly employing children's voice. Wickenden and Kembhavi-Tam (2014) emphasise the need for more research in the global South to employ the opinions of children in particular, those of children with disabilities in the research process. Many researchers in the global South have used interviews as a data collection instrument for such children (Brydges & Mkandawire, 2017; Don, Salami and Ghajarieh, 2015), including within the Indian context (Das and Kattumuri, 2011; Singal et al., 2011). They have contributed to the overall understanding of lived experiences of children and young persons with disabilities within the education system. Similarly, in this research, the children were active participants in generating empirical evidence about their experiences within inclusive education settings.

I chose multiple methods for data collection and the choice of these methods facilitated gathering of data from multiple sources, whilst at the same time also providing a foundation for reflexivity throughout the research process. Next, I discuss the methods I used during this research and the reasoning for their choice.

### **Semi-structured interviews**

Brinkman (2014) describes interviews as conversation technique, where knowledge production takes place through interaction between the interviewer and another person. Whilst there are several types of interviews, mostly, they are categorised as structured, semi-structured, and narrative interviews (Gill et al., 2008; Stuckley, 2013). Structured interviews follow a rigid script and usually stick to the given questions without much flexibility to ensure a dialogue. On the other hand, the semi-structured interview has probing questions and follows an open-ended approach that provides the interviewees with the space to express themselves without restriction. Keeping this distinction in mind, I engaged in semi-structured

interviews, employing probes and prompts to elicit responses. The tone of the interviews with all the stakeholders was very much conversational.

Cohen and Crabtree (2006) recommend the use of an interview guide during the interview that will contain a list of questions and topics to cover, generally in a set order. In addition, the interview guide should be flexible so that the interviewee has the freedom to say what they want to and how much to say (Drever, 1995). Thus, I designed the interview questions/probes guided by my research objective and questions and the semi-structured nature of the interviews provided the interviewee the flexibility to add information that they thought would enable a deeper understanding of the topic under discussion.

The participants in my research belonged to different age groups and had separate roles within the school, so I tailored my interview questions to each group based on their roles within the school (included in Appendix 6). I prepared separate interview schedules for class teachers, LRG teachers, members of the LRG department, the leadership team, and students. I provide the details concerning the content of the different interview schedules and how they helped in addressing the research questions in Table 7. Each interview was audio recorded. While the duration of interviews with the teachers and members of the leadership team and faculty was 40-60 minutes, the student interviews lasted between 20 and 30 minutes. Voluntary informed consent to participate was taken before each interview and the process is discussed in sub-section 5.7.1.

### **Classroom observations**

Observation as a method of data collection involves collecting visual data about the world in a discreet manner and the researcher should be able to make observations that are both 'specific and accurate' (Best, 2014; 140). I employed classroom observations to understand the teaching learning processes employed within the classroom by the teachers. This classroom observation data was useful in three specific ways. First, in some situations it helped corroborate the information received from the interviews, second, it helped provide a deeper understanding of the information gathered from the interviews and third, sometimes what was mentioned within the interviews was not aligned with what I actually observed within the classrooms, but I was able to develop a contextual/situational understanding of why this was so.

It is difficult to employ structured observation to understand the teaching learning process in the classroom. I followed a semi-structured observation schedule as it supported interaction within the natural setting and flexibility during the research process (Cohen et al., 2011). I was a participant observer in that the participants of my research knew about my research and were aware of my presence, but I tried to ensure minimum participation on my part in the actual classroom processes, thus maintaining my independence as an observer. Cresswell (2014) distinguishes this as ‘observer as participant’, where the role of the observer is known (pg. 191). Brewer (2000) notes that a participant observer following the social constructivist stance is not neutral, for her/his cultural background and identity affects her/his observations. The researcher co-creates the knowledge with the participants. The way to deal with this subjectivity is through the triangulation of methods and ongoing reflexive practice and I engaged in both these practices.

There are a few criticisms to observation as a method in research. One of the problems mentioned is bias, where the researcher can come with preconceived notions that derail the observations or s/he does not have enough knowledge about the context (Best, 2014). To counter the bias, I conducted my interviews with the teachers before the classroom observations and had a checklist of issues to include in the classroom observations. I have previously worked in the Indian primary education context in rural government schools and worked with children with disabilities in India during my master programme and hence, I had contextual knowledge that helped mitigate these biases.

Another criticism of observation as a method is that the presence of the researcher may change the behaviour of the participants (Best, 2012; Gray, 2009). To counter this, I ensured that I carried out classroom observations in each of the three schools for an extended period. In all the schools, I spent the entire school day in each grade to carry out my observations. I followed the same group of students from the time they started school until they left for the day. This way the students and teachers were both used to my presence and usually they did not pay much attention or speak to me, except during the snack and lunch breaks.

I adopted the TEACH (Teaching Effectively All Children)<sup>45</sup> observation schedule, which acted as a guide on the aspects to include in the classroom observation, such as pictorial representation of the classroom arrangement and listing down of observable strategies used by the teachers. At the end of each observation, the schedule called for a brief assessment of the quality of responses between the teacher and student by gauging the teachers' responsiveness and sensitivity to the learning needs of the students in the classroom. This research instrument has previously been utilised in India and Pakistan, being employed while researching teaching and learning for all students within the context of low-income schools in the global South context (Bari et. al, 2018). However, I diverged from the original administration process for this observation schedule. That is, the administration of the original instrument requires two observers, which is especially beneficial when assessing the quality of responses between the student and teacher, as this is a subjective exercise. However, as a doctoral researcher doing my fieldwork alone, I administered the classroom observation instrument on my own without a second observer and triangulated my data through the semi-structured interviews and document analysis.

To assess the teachers' responsiveness and sensitivity to the learning needs of the students I relied on the information the teachers reported regarding how they dealt with challenges within the classroom and the teaching strategies they reported using. I also took note of how closely my observations matched what the teachers reported in the interviews. In addition, I recorded the teaching practices adopted by the teachers and the teaching strategies employed during the class in a narrative format. Through this process I hoped to mitigate some degree of the subjectivity in the assessments.

### **Document sources**

In addition to semi-structured interviews and classroom observations, I relied on various documents to develop a better contextual understanding. I utilised two sources of documents – public and private documents of Mukangan. These consisted of reports prepared by various

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<sup>45</sup> TEACH (2015-2018) was a project undertaken by the Faculty of Education conducted in collaboration with their local partners in India and Pakistan to increase learning outcomes for children facing multiple disadvantages related to disability, poverty, gender, caste, religion, location etc. The research tools developed for the TEACH project are available under Creative Commons licence, which allows for reuse and adaptation based on acknowledging its creators.

<http://www.educ.cam.ac.uk/centres/real/researchthemes/teachingandlearning/effectiveteaching/>

teams within Mukhtangan and other external evaluations of their programmes (included in Appendix 7). I perused various reports and these resources provided me deeper insights into the organisation's inclusive practices and pedagogical processes. These provided me with clarity regarding their approach to education and helped in understanding the history and development of these schools. This documentary analysis extended to the perusal of private reports within the school, such as school records, teachers' records and the LRG members records of the students to comprehend how they support and accommodate students with diverse needs. The key information from these reports was summarised and synthesised to inform the findings and discussions. I summarise the various research instruments below (Table 9) and describe how they helped me to address the different research questions.

**Table 9:** Description of the content of the research instruments and how they help in addressing the research question

<b>RQ1: How do mainstream schools in Mumbai perceive and practise inclusive education?</b>  <b>RQ1a. What are the factors, as identified by different stakeholders, that shape the implementation of inclusive education in mainstream settings?</b> <b>RQ1b. What are the challenges and enablers to the implementation of inclusive practices, with a particular focus on children with disabilities?</b>		
<b>Research Instruments</b>	<b>Content of the research instrument</b>	<b>How it helped in addressing the RQ?</b>
<b>Teacher Interview</b>	<p><b>Subject teachers</b></p> <ul style="list-style-type: none"> <li>• Perspectives around the diversity of learners</li> <li>• How they teach a classroom of diverse learners</li> <li>• Perspectives of how students learn</li> <li>• Formal and informal support received to teach in a diverse classroom</li> <li>• Challenges and enablers for teaching diverse learners</li> </ul> <p><b>LRG Teachers (Special education teachers)</b></p> <ul style="list-style-type: none"> <li>• The role and functions of the special education teachers</li> <li>• How they support children with difficulties and disabilities</li> <li>• Process of identifying the children that need special education support in the classroom</li> <li>• Strategies, challenges and enabling factors in teaching children with special education needs and disabilities</li> <li>• Capturing their perspectives on how students learn</li> </ul>	<ul style="list-style-type: none"> <li>• Helped to identify the school and teacher factors for implementing inclusive education.</li> <li>• Gave a detailed look at how the teaching and learning processes for diverse learners was carried out within the classrooms.</li> <li>• Teachers identified what were the formal and informal support (available or lacking) to support children with diverse needs.</li> <li>• Helped understand the challenges and enablers to inclusive education in these schools</li> <li>• Provided an understanding of what inclusion means to the teachers in these schools and their perceptions regarding teaching children with various needs.</li> </ul>

LRG Faculty Member Interviews	<ul style="list-style-type: none"> <li>• The role and functions of the LRG and its core members</li> <li>• How they promote inclusion in the schools</li> <li>• How they structure the in-service training support</li> <li>• How they support training and the support of children with special needs</li> </ul>	<ul style="list-style-type: none"> <li>• Helped to identify the school and teacher factors for implementing inclusive education.</li> <li>• Gave a detailed insight into how the faculty members of the LRG support the teaching and learning processes for diverse learners</li> <li>• Helped in understanding the ways LRG members support class teachers and special education teachers in including diverse learners</li> </ul>
Departmental Leader Interviews	<ul style="list-style-type: none"> <li>• How do they strive to implement the inclusive education vision of Mukhtangan through the pedagogy, curriculum, and teacher training – both pre-service and in-service</li> <li>• How they understand inclusive education and how they promote inclusion</li> </ul>	<ul style="list-style-type: none"> <li>• Gave a holistic overview of the pedagogy and curriculum designed and practised at Mukhtangan to support diverse learners</li> <li>• An understanding of teacher training practices</li> <li>• The distinct roles of the faculty and teachers and how pedagogical dissemination occurred at various stages</li> </ul>
School Management Interviews	<ul style="list-style-type: none"> <li>• To understand the management structure of the seven schools</li> <li>• How the PPP model supports their schools</li> <li>• What the challenges and enablers to adopting inclusive practices within this framework are</li> </ul>	<ul style="list-style-type: none"> <li>• Gave a contextual understanding of the history and development of these schools</li> <li>• Provided understanding of the various administrative processes that underpin the promotion of inclusion within these schools</li> <li>• Presented institutional challenges and enablers in implementing inclusive practices</li> </ul>
Observation Schedule	<p>Focus of my observation was two-fold:</p> <ul style="list-style-type: none"> <li>• How the classroom itself was organised (Wrote classroom organisation in narrative format and with the use of diagrammatic representation)</li> <li>• The teacher student interactions within the classroom (I noted down the strategies the teachers used, such as revision of earlier lessons, fielding questions, classroom instructions, assessments used, use of teaching learning material etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Helped in understanding in greater detail the classroom teaching and learning processes that the teachers described in their interviews</li> <li>• Added contextual understanding of various details received from the interviews about teaching and learning processes or teacher's perspectives of their students with diverse needs, especially in context of the classroom organisation</li> <li>• Helped in identifying some of the challenges and enablers that were not easily discernible during the interviews</li> </ul>

<b>Documentary Analysis</b>	<ul style="list-style-type: none"> <li>Consisted of internal and external documents produced by/about the Mukhtangan schools</li> </ul>	<ul style="list-style-type: none"> <li>Helped in exploring the various concepts that teachers or faculty talked about during the interviews in greater detail</li> <li>Added to the contextual understanding</li> </ul>
<b>RQ1c. What are students' perspectives of their teaching and learning experiences and social environment in these inclusive settings?</b>		
<b>Research Instruments</b>	<b>Contents of the research instrument</b>	<b>How it helped in addressing the RQ?</b>
<b>Student Interviews</b>	Both students with and without difficulties and disabilities had the same interview. The interview was aimed at building a rapport with the students and included questions about their hobbies and aspirations. It sought to understand the students' teaching and learning experience in the class and their perspectives of the social environment in the classroom	<ul style="list-style-type: none"> <li>The student interviews helped in understanding the students' views of the teaching and learning experiences within the schools as end users of these services</li> <li>These interviews helped throw light on the social environment within the classrooms and what the students viewed as important reasons for attending their schools</li> </ul>

In sum, the various research instruments used in conjunction with each other helped in obtaining an in-depth understanding of inclusive education, pedagogy and practices within the schools run by Mukhtangan. It gave a basis for comparing notes and drawing on the various threads of information for a collective understanding. In the next section, I describe the processes involved during my fieldwork.

### **5.6 Research process during the fieldwork**

I conducted the fieldwork over a period of nine months from January 2018 to September 2018. During this time, I was able to cover two academic years within the schools – 2017-18 and 2018-19. This enabled me to see the transitions between academic years, the planning processes, and the development of their programmes. Whilst the case study involved three out of seven schools run by Mukhtangan, I also visited the other schools during my fieldwork to attend their Project Day, join in the Annual Day celebrations or to meet the ‘Departmental Leaders’ for interviews. Visiting the other schools further added to my contextual understanding of the structure of the schools and enabled me to observe different inclusive practices followed outside the classroom scenario during other activities across the Mukhtangan schools. The research process during the fieldwork involved negotiating access for data collection and I explain these processes in the next subsection.

#### **Negotiating access**

The process of negotiating access was straightforward albeit time intensive. I initially approached the school authorities through email, introducing myself with brief details and explaining the proposed scope of my research, the benefits it would deliver, what it entailed and how I planned to disseminate the findings. Based on this communication, I was granted an appointment with the ‘Departmental Leader’ for the LRG. After discussing my research aims and plans, she sent my research proposal to the school leadership team of Mukhtangan for consideration. After internal perusal of my request, they granted me permission to conduct the research within the Mukhtangan schools, first the pilot research and then, the main fieldwork.

When I started the fieldwork the CEO of Mukhtangan informed the ‘School Faculty’ (head teacher) in each of the schools selected for the case study that I would be visiting their school

to speak about my research and seek consent for their participation. The ‘School Faculty’ then passed on the information to the schoolteachers during their weekly meeting. I received an opportunity to speak to all the teachers and presented my research aims and research plan at the beginning of my data collection in each school. There, I explained that I would come around to their classrooms individually to seek appointment for the interviews and informed them about voluntary and informed consent. For the interviews with the students, the school management and schoolteachers acted as gatekeepers. Finally, I approached the students to request their assent to be a part of the research.

The school management did not put any restrictions or conditions for conducting the research, except that I had to adhere to their Child Protection Policy, which I followed. Every employee and volunteer working in Mukhtangan must abide by their Child Protection Policy. In fact, in Indian schools it is quite rare to come across schools with their own internal ethics framework and it was reassuring to know that they had such guidelines at Mukhtangan for working with students. I discuss my ethical considerations in detail in section 5.7. Whilst the messiness of fieldwork is documented (Naveed et al., 2017) and I explore my own tryst with it throughout this chapter on research methodology, here I would like to acknowledge that my fieldwork journey was meaningful, and processes took place smoothly. This was because of the tremendous amount of faith shown in the research by all the stakeholders in these schools from the school leadership team to teachers and the students who participated and contributed their knowledge.

### **Process of data collection**

As aforementioned, the pilot research helped formulate my data collection strategy. I collected all the data in one school at a time. I obtained the timetables for each class and approached the teachers during their non-teaching time to request appointments and to discuss the research and seek voluntary informed consent individually. In each school, first, I spent time with the class teachers and LRG teachers. I conducted my interviews with them to gain understanding of the inclusive structures and practices in the school, pedagogical processes along with their attendant challenges and enablers. Next, I spoke with the School Faculty and the School Facilitator, and they further added to my contextual knowledge of

school level processes for including diverse learners.

I carried out the data collection with the teachers, students, LRG teachers, School Faculty, and School Facilitators within the premises of the three schools selected for the case study. However, the Departmental Leaders and Faculty members often had to travel from school to school supporting teachers in various schools and holding feedback meetings etc. So, I met them in whichever school they were at when they gave me time to conduct the interview. I held a few interviews with the members of the leadership team at their office, which were conducted throughout the months I was doing the fieldwork.

One of the challenges involved finding a quiet space to conduct the interviews as most areas had some level of noise. The schools utilised every available space for teaching and the teachers did not have a staff room. Hence, there was no fixed location, and we picked any place that was available. I discussed this with the teachers, and they assured me that they were satisfied with the semi-private location of the interviews. I was cognisant not to conduct any interviews during the class hours, so finding a time when the teacher was available for the interviews was challenging. However, the teachers were supportive and took time out of their lesson planning hours (non-teaching hours) to participate in the research.

During the days when I was conducting the teacher interviews, different teachers (class teachers, various members of the LRG, physical education teachers, arts, and craft teachers etc.) would invite me to share the lunch hour with them as a group and I partook the meal with them regularly. It gave me an opportunity to have informal conversations and to get to know more about the lives of the teachers. As these were informal conversations, I did not include them in my formal findings, but I did record them as reflections in my field-diary. This helped in gaining a more nuanced understanding of challenges and enablers to including diverse learners. Post the interviews, I spent time inside the classrooms carrying out the classroom observations.

The interviews with the teachers provided a basis for understanding the classroom practices and processes in action before I proceeded to carry out the classroom observations. At the start of each observation, I spoke with all the students about the purpose of my research and sought their permission to carry them out. As I was a participant observer, I followed the

same group of children in a grade for an entire day starting when they came into school and ending when the teachers left the school<sup>46</sup>.

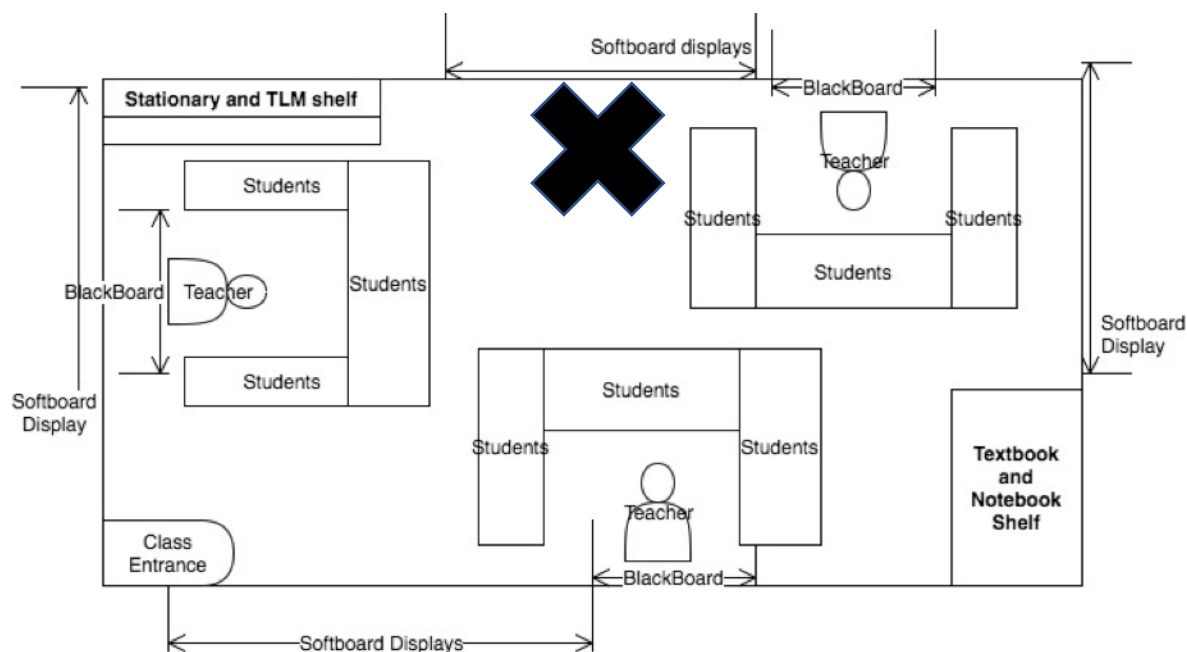
As I explained in Chapter IV, each classroom had three teachers with a group of 12-15 students, with the total class membership varying between 45-50. For my observations, I chose one student with disabilities as a focal point (through a draw of lots) and noted all my observation around her/him. However, as the teacher interacted with multiple students during the same class, I made note of these interactions. There were some classes when the teacher/s taught the entire class together in the beginning and divided into groups later. In such cases, I noted down observations about how the different teacher/s interacted with the students.

For each classroom observation, I placed myself in the middle of the three groups of students and made my observations usually seated next to the stationery, TLM shelves and the softboard displays, as illustrated in Figure 12. I stayed out of the way and usually no one spoke to me when the lessons were underway, except occasionally, if someone wanted me to move to get a book from the bookshelf behind me, or to access some TLM. The students, though curious at first, quickly settled in and hardly seemed to register my presence for most of the time when their class was in session<sup>47</sup>. For the duration that I carried out my classroom observations, during the lunch break I always had my lunch alongside the students, and we engaged in informal conversations. When they spoke with me, they asked me more questions about my research and what it is like carrying out a study about schools (or studying in school for so long). We also had conversations on a wide range of topics, including about: living abroad, what my home state of Assam is like, about Bollywood and their favourite actors etc. These classroom observations and the lunch sessions helped in building a rapport with the students, which I believe is one of the reasons more students wanted to be part of the research.

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<sup>46</sup> The school started at 9 am, with the students and teachers usually starting to arrive by 8:45 am onwards. The school day ended at 4:30 pm and the students left first, whilst the teachers usually left by 4:45 pm after clearing out the classrooms.

<sup>47</sup> One of the reasons for this is because the students were accustomed to having teacher trainees present and carrying out their observations when they were in the primary grades. Also, as the students had seen me at their school for a length of time before I carried out the classroom observations and knew the purpose of my presence in their classroom, they seemed more comfortable in carrying out their daily routine with me around without interruption.



**Figure 12:** The X marks my placement during classroom observations

In addition to the full day classroom observations, I also observed the student's sessions with the LRG teachers. I obtained the consent of both the students and the teachers to sit in during the sessions. I observed the group sessions that the LRG teachers undertook with the children who came for support, and I also observed a few one-to-one sessions between the LRG teacher and students with significant disabilities (Table 10). I recorded my observations in the narrative format, and I conducted the observations for the duration of the class, which each lasted approximately 45 minutes. The next step in my research process after the classroom and LRG session observations was carrying out the student interviews.

**Table 10:** Summary of classroom observations

	Vindhya School	Nilgiris School	Aravalli School	Total
Classroom Observations	3	3	6	12
LRG Session Observations	2	2	4	8
Total	5	5	10	20

Once the students for the interviews were identified through a drawing of lots (students without difficulties and disabilities) and through the help of the LRG teacher (children with difficulties and disabilities), during their break time I spoke with them about my research again and asked if they were interested to take part in an interview. For those students who provided consent to be interviewed, I scheduled the interviews during their library period. I ensured that I spoke to the parents of the students with disabilities and took their verbal consent before seeking permission from the student to conduct the interview.

I spent time with the students to explain my research in a straightforward way in the language of their choice (English or Hindi), and went through the consent form with them. I ensured that I went ahead with the interview only after they had understood their rights. Sometimes we spent more time discussing their rights than the actual interview. For the student interviews, I faced a similar challenge in terms of finding a space to carry them out. I wanted to ensure that the students had privacy when they were speaking to me. At times, we managed to find an empty classroom (identified in advance), but in most instances, we had to use whatever space was available.

Many times, we held the interview in the corridors that had a table and chair (usually used by teachers or administrators as a workspace), which was a semi-private space as it was partitioned by the cupboards placed around the table. A few times, we had to have the interview with others present in the room, but we carried it out in one corner of the room as far away from the others present as possible. I always checked multiple times with the students whether they were comfortable with the presence of the other people and only went ahead with the interview when I was assured of their satisfaction with the space identified for it. At times, we rescheduled the interview until we could find a quiet place without others being around.

There were two exceptions when I had someone else present during the interview with the students. For my interview with Ria who had been diagnosed with Global Development Disorder (GDD), the LRG teacher was present (with the student and her father's consent). The student had limited verbal communication and spoke in Marathi (which I partially understand but cannot speak fluently) so the LRG teacher helped with the interview. At times, she wrote down her answers for me in English (they were usually one-word replies or

a simple sentence). Before beginning the interview, I ensured she was comfortable and had given her informed assent to take part in the interview. The other instance was when I interviewed Atul, who was autistic, and his mother and shadow teacher<sup>48</sup> were present during the interview. With their help, I was able to ascertain whether he wanted to speak with me and in case, he felt agitated his mother and the shadow teacher were nearby to intervene. After the first few minutes when the interview was progressing satisfactorily the mother and the shadow teacher stepped out and I carried out the rest of the interview one-to-one.

The entire data collection process took between 2 and 3 months in each school and a total of 9 months. As there were various stakeholders from whom I collected data there were many ethical considerations that needed to be acknowledged throughout the research process and in the next section, I provide details about how I addressed these.

### 5.7 Ethical considerations

Even though my research was situated in India, I was undertaking this research as a doctoral student enrolled at the Faculty of Education, University of Cambridge. Hence, I adhered to the ethical code of practice outlined by the British Educational Research Association (BERA, 2018), which guides educational research in the UK. It acknowledges the diversity of educational settings that the researcher and participants are in as well as considering the researcher's wellbeing and development alongside that of the participants in the research. At the university level, I received approval from the Faculty of Education, University of Cambridge ethics committee prior to embarking on the fieldwork. At the local level, I gained clearance from the school authorities at Muktangan and abided by their Child Protection Policy for carrying out research in the run schools they run.

It is best practice to embed ethics in the entire research project (Cannella and Lincoln, 2013; Brookes, Riele & Maguire, 2014) and to engage in an ongoing conversation with the self (Christians, 2007; Clark and Sharf, 2007), which is reiterated in the BERA, 2018 ethical guidelines. Guba and Lincoln (1994) also note that conceptions of what is good and human action should interact with each other throughout the research process (cited in Christians,

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<sup>48</sup> This was a special situation and only this student had a shadow teacher. The shadow teacher was a former LRG teacher from Muktangan who was employed by Atul's parents to support him. At the time of the interview the shadow teacher had been with him for about a month. It was the shadow teacher's role to provide him one-to-one support during all the lessons in the classroom.

2013). I adhered to these ethical standards while conceptualising the research, selecting the methodology and methods, when engaging with the data collection, during the data analysis and later, during the writing up, discussion of the findings and drawing of conclusions. Last but not the least, I took account of these standards during the dissemination of the research. In addition, I was mindful that I was reporting on structural inequities that students and teachers may face due to their gender, religion, caste, disabilities etc. throughout the research process. During the writing up process, I set out to report about these intersectionalities in a sensitive and responsible manner. One of the fundamental aspects of research is to always respect the participants and to ensure to treat them with dignity, something that I upheld throughout the research process.

During the fieldwork, I diligently strove to make sure that my research in no way interfered with the day-to-day activities in the school and did not hamper the daily school schedule for any of the teachers or the students. I was mindful of the time allotted to me by the teachers and the students for the interviews and ensured that I was always ready with everything at my end at the appointed hour, thus not contributing to any delays. I ensured that my recording device was working properly, and I had identified a space for the interview in advance so as not to waste any of the time allotted to me in seeking one out.

I prioritised the time of the professionals in the school and the students over my own. I interviewed the students without difficulties and disabilities during their library hours to cause minimal disruption to their school schedule. However, with the students supported by the LRG teachers the only opportunity I had to interview them was during their session with these teachers. This was the case because usually these students had their sessions with the LRG teacher when the other students had their library classes. The students supported by the LRG teachers attended the library sessions sporadically when their session got cancelled or when the LRG teacher integrated their learning session into the library class. I discussed this dilemma with the LRG teachers in the school and we decided that even if I interviewed the students during their session with them as they used individual lesson plans (IEPs) for the students they would be able to make up the difference. I was able to conduct these interviews with due support of the LRG teachers and the students.

As ethics is an ongoing issue during the research process, I ensured that I adhered to ethical standards during the transcription and data analysis phase. I followed Creswell's (2014) ethical framework for data analysis and critically reflected on all the information gathered through the research. I strove to make sure that I did not give any piece of information more precedence over another. I always respected the privacy of the participants and did not disclose information that had the potential to harm them. I was attentive to the fact that I represent the voices of the participants of my research and gave equitable weighting to all as far as possible, not discriminating based on age, designation, etc.

My research involved working with children in the school setting. Alderson and Morrow (2011), writing about ethics, emphasise that an important thing to consider when doing so is to assess the risks and benefits associated with the research. They argue there is ambiguity in the meaning of the term risk, which may mean 'possible and definite harms', while benefits imply that there will be 'definite good' (p 26). In this research, I ensured that there was no definite harm to the students during classroom observation and the interviews, but some students did experience temporary distress while narrating some painful experiences they had had.

I had expected before going into the field that some questions may cause minor distress, e.g., if the students reported cases of bullying etc. However, I did not anticipate a few of my interview questions eliciting the responses that they did. Given the well-being and safeguarding of the child was my foremost responsibility during the research process, on the two occasions where students reported information that could potentially be distressing for them, I sought consultation with the Head Faculty. I ensured that these students received additional help from the socio-emotional department in the school and that the school took steps to address the matters of concern. I discuss these cases in detail in the subsection on ensuring the well-being of the participants (sub-section 5.7.4). In the following subsections, I present the process of obtaining voluntary informed consent and issues around confidentiality with the adult and the child participants in my research.

### **Voluntary informed consent**

I followed the four steps that Faden and Beauchamp (1986) propose form the basis of informed consent, these being: provide the respondent with any information that could influence their decision to participate in the research, that the respondents are able to understand the information provided by the researcher in its entirety, that the participation in the research is completely voluntary and finally, that the respondents are able to understand the consequences of their actions. Informed consent is based on ‘respect for persons’ (pg. 80) and supported by three principles of ensuring that participants are provided full knowledge about the research project. By so doing, they can make an informed decision about their participation. They can decline to participate, for their participation is voluntary and the decision should be taken by people who are competent to choose freely (Brooks, Riele and Maguire, 2014).

At the onset, I informed the teachers and the Faculty members about my research, what would be their role in the data collection process as providers of knowledge, why I want to engage with them, how I would utilise the information gained through data collection and the purpose and utility of this research. After giving all information and answering any follow up questions, I sought their consent to take part in the research. I informed them that their participation was voluntary and that they had the right to exit from the study at any time without citing any reason (Appendix 8). I explained that there were no direct benefits from taking part in the research, but I did tell them that the findings could contribute to designing inclusive teaching and learning processes for children in India and thus, their participation can prove valuable for future policies and practice of inclusive education.

I respect the need for gatekeepers and their intrinsic role and value while working with children. I knew that I would need to approach them first when seeking permission for the participation of the students in the interviews. In this case, the gatekeepers were the school leadership team and teachers at Mukangan. However, the students had the final say on their own participation in the research such that if a student did not wish to take part, then I respected her/his wishes. The role of gatekeeper has been discussed in terms potential limiting of access and/or deciding which participants a researcher can approach (Groundwater-Smith, Dockett and Bottrell, 2015), however, in this research I did not

encounter such challenges.

In addition to approaching the institutional gatekeepers, in the case of the students with medically diagnosed disabilities, I sought the consent of the parents. I did this to adhere to the ethical guidelines of ensuring that the well-being and safety of the child was of paramount importance throughout the research and that such research required parental consent. However, as abovementioned, the final decision on whether they wanted to take part remained with the students. Even if the parents gave consent, I respected the students' wishes, if s/he refused to take part. In the end, there was no situation where the parents refused consent and the student wanted to take part in the research. Nonetheless, I had prepared for such a scenario and had decided to honour the gatekeeper's consent over the child's, deeming that the decision would be taken by the gatekeeper in the best interests of the child.

As mentioned before, at the start of each classroom observation, I spoke with all the students about the purpose of my research and why I intended to observe them as well as why I was going to follow them through their school day as they moved from one class to another. In addition, I informed them that if they felt uncomfortable with my presence at any point then they could inform their teacher, who would ask me to withdraw from engaging in the observations any further. However, I did not come across any scenario where the students asked me to stop the classroom observations or expressed reservations about my presence amongst them. As mentioned before, this could have been due to the uneven power dynamics, but it is also possible that the students were alright with my presence, because in the past they had had student-teachers sit in on their classes and conduct classroom observations as part of their teacher education programme.

After the classroom observations, I proceeded to conduct the student interviews. I obtained written assent from the students before the interviews. I spent a considerable amount of time with the students before the interview to explain to them their rights during the research; their right to decide whether they wanted to participate in the interview; and their right to withdraw consent to continue at any time as well as stressing their right to refuse to answer any particular question. I also explained to them what to expect during the interview and what kinds of questions I would be asking.

I sought permission from the students to audio record the interviews and recorded their oral consent for doing so. I worded the assent form at the students' grade level of understanding (verified with the teachers and piloted with students). If the student was unable to provide written consent (due to difficulties in writing), then I requested it verbally. The verbal assent was always audio recorded.

Researching with students has its methodological challenges, as discussed earlier, and the ethical dilemmas appear due to the hierarchy of power between children and adults (Groundwater-Smith, Dockett and Bottrell, 2015). However, Foucault (2000) stated that power can be relational, whereby not just the researcher, but even the participants, hold power and this can be a positive phenomenon (Foucault, 1980), with both researchers and teachers working together to bring positive change for students. In my research, I was aware of the dynamics between myself as a researcher and the participants in my research, be it students or teachers and I engaged in continuous reflexivity to mitigate the effects of the power dynamics.

I was mindful that some of the students may have been hesitant in expressing their discomfort or reluctant to refuse assent to be interviewed. I was also somewhat wary of being able to explain and communicate the research rights clearly to the students. However, I became convinced that the students were able to give voluntary informed assent given the following occurrences.

1. Two students (one student without difficulties and disabilities and another student with a disability) declined the invitation to participate in the interview after I explained the information about the research and their rights to decide if they wanted to voluntarily take part.
2. One student told me to disregard the interview after its completion and hence, I did not use that information in my research.
3. A student decided against audio recording of the interview and instead, said he was comfortable with me taking written notes.
4. Eight students (with and without difficulties and disabilities) said they wanted to skip questions or did not want to answer a follow up question during the interview.

By declining to participate in the research or refusing audio-recording of the interview etc. the students were exercising their rights within the research process. They understood that their participation was voluntary and, that they had the right to withdraw from the research at any point.

### **Confidentiality and Anonymity**

Going into the research field I was conscious of the fact that, whilst the principles of confidentiality and anonymity are standard practices in the global North, thus being seen as important during educational research, the way this plays out varies in the global South (Hamid, 2010). BERA guidelines (2018) specify that ensuring the privacy and anonymity of the data is the norm in educational research. It does, however, consider the participants right to waive confidentiality and anonymity. Next, I discuss how I dealt with the challenge of confidentiality and anonymity of the data in this research.

The first challenge was that the site of the research - schools run by Muktangam is mentioned clearly. So, the site of the schools was not confidential. I discussed this issue of confidentiality and anonymity with the school leadership team at Muktangam when I first sought permission to conduct research amongst their schools. During this discussion they said that they viewed their role as contributing to knowledge production by taking part in my research and that it aligned with their school motto of 'Learning and Growing Together.' Hence, they said that they were not concerned by disclosure of the site of the study. However, the Muktangam school leadership team were concerned about the individual level privacy of the children in the schools, especially as some of the participants had difficulties and disabilities. During my own prior scholarship of working with children I always placed emphasis on ensuring the privacy and confidentiality of the data with child participants. I took steps to mask the identity of the three case study schools (Muktangan runs seven schools) and did so by giving them pseudonyms.

The second challenge I faced was about the confidentiality and anonymity of the individual level data of the different stakeholders who took part in the research. As the site of the research was known the stakeholder interviewees who were in leadership positions, such as heads of departments, were easily identifiable. Hence, when giving them information about

their rights and seeking out voluntary informed consent, I explained that their responses would not be confidential or anonymous and provided them with the choice to withdraw from participation. However, none of those who I approached decided to withdraw due to concerns about confidentiality and anonymity and they all consented to being named in my research.

The overarching sentiment amongst those stakeholders I spoke with, was that, if the research would help other students and teachers in the future, then they would waive their right to confidentiality and anonymity. However, I was able to keep the confidentiality and anonymity of the data gathered through interviews with teachers and students<sup>49</sup> as well as those gathered during classroom observations. To ensure this, I used pseudonyms for names of the students and teachers when reporting information from the interviews or observations in my findings.

I ensured that the ethical considerations were pursued throughout the research process from conceptualisation to dissemination. When designing the research, initially at the pilot stage, I did not include the students' perspectives of their teaching and learning. On reflection and after engaging more deeply with the literature, I realised that research undertaken to understand inclusive pedagogy was not truly inclusive, if I did not include the opinions of the end beneficiary of these teaching and learning process. Hence, I added an additional research question and included interviews with the students to captures their opinions of the classroom and their social environment.

Thus, these ethical considerations guided my entire research and will continue to guide me when I publish my work post submission of the doctoral thesis. Robinson-Pant and Singal (2019) mention that current doctoral programmes only stress on the ethics of field research and data collection and not during the dissemination hence, they lay out guidelines for doctoral researchers to disseminate research throughout the process and contribute to the knowledge economy. Dissemination of doctoral research is also governed by the BERA guidelines on ethical research. Keeping these guidelines in mind, I have disseminated part of my research findings through seminars, conferences, blogs and online presentations.

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<sup>49</sup> Except in two cases, when I had to break the confidentiality clause in order to take safeguarding measures. I elaborate on this towards the end of this chapter in the subsection: 'Ensuring the well-being of the student participants'

Moreover, I plan to publish different findings from the doctoral thesis in peer reviewed journals.

The entire research process was an exercise in reflexivity that involved reviewing the literature, the development and execution of the research design, compiling the findings and discussing them to arrive at the conclusions. In the next subsections, I consider the various aspects of my experience as a researcher and explore this in terms of reflexivity and positionality, the complexities encountered during the course of fieldwork, the reciprocal nature of research and my endeavour to give back to the schools where I conducted my research as well as how I established the trustworthiness of the research.

### **Reflexivity and positionality**

It is important to reflect on one's positionality during the research. Hopkins (2007) argues that by being considerate of both our similarities and differences with the research participants we can reach the position of 'betweenness' (Nast, 1994: 57) to navigate the research process in an ethical manner. In terms of my positionality, I had three distinct sets of individuals who formed a part of my research and there was uneven power distribution amongst us owing to factors such as age, socio-economic backgrounds, gender, years of experience etc. One was the students (with and without disabilities), the second was the teachers<sup>50</sup>, head teachers, facilitators and faculty members whilst the third was the departmental leaders and the administrators.

The individuals in the first and second groups (students and teachers) mostly came from a weaker socio-economic background, belonged to the same communities, and stayed within the same neighbourhood. However, many of the teachers through this job role had started earning a stable income and had steadily improved their socio-economic position within the community. The third group of individuals came from mixed backgrounds, with some coming from wealthier socio-economic backgrounds and there were some who had risen through the ranks over the years, thereby improving their socio-economic situation. I will reflect on my positionality with each of these three groups next.

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<sup>50</sup> When the schools were initially set up one of the aims was the empowerment and skilling of women from the same community as the students, which continues to this day and thus, most of the teachers are women.

In discussing my positionality, I would like to, first, provide a summary of my background. I am an Indian woman conducting research within an Indian context, originating from the north-eastern state of Assam and with a middle-class familial background. Both my parents are qualified to the doctoral level and are first generation learners from their respective families, in fact, being the only members in their families so highly qualified. As I mentioned in the introductory chapter, my motivation for this research emerged out of my four years of previous experience in the field of education in two states in India, Assam and Andhra Pradesh and later Telangana.

My journey in education research began with my stint living and working in a village in the Morigaon district of Assam, when employed by Columbia University, New York, US, as a District Program Co-ordinator for a year. It gave me the space to reflect on my positionality as a researcher educated in a Northern university and working for another university from the global North. All my primary education was undertaken in Assam, whilst my tertiary education (BA Hons in Psychology and MA in Psychology) was at reputed Indian universities, the credentials from a Northern university hold more credence than my Indian degrees. Post completion of my MPhil in Social and Developmental Psychology at Cambridge, I wanted to return to work in my home state, where I had the first experience staying in a rural setting and engaging in long term research, fostering the sustainability of government education programmes.

This experience enabled me to understand how my gender and caste identity affects how people view me in the field where I conduct my research. In terms of caste identity, I belong to the “Other Backward Class” (OBC) in India, which is a marginalised caste, but owing to my parents’ education background I have been afforded many privileges. However, when I worked within a rural community in Assam people constantly referred to the caste and gender identity (mine vis a vis theirs) and I had first-hand experience of caste and gender discrimination. This previous experience made me understand that I needed to be mindful of my positionality in terms of caste and gender with the participants in this current research. This also led to the realisation that this field of research is unlike others in terms of being aware of one’s positionality and I need to maintain constant reflexivity.

In my earlier job, I visited several Indian states to become cognisant of the local innovations taking place at the grassroots level and how they were addressing the needs to the community. This also led to the reflection that India is a vast country and after working within the context of elementary education in government schools, I became aware of how the reality changes region to region. As previously mentioned, I trained in psychology at the undergraduate and masters levels, with my MPhil research being on autism and memory, which I carried out in India. So, I had experience of working with students with disabilities and knew what it entails. In particular, I had become keenly aware and well-versed with the safeguarding measures required while working with persons with disabilities.

Reflecting on my positionality with the first group, namely students with disabilities and students with difficulties and disabilities, I was very aware of my position as an older adult. I wanted to ensure that the students understood what the interviews entailed, and they were free to participate of their own free will and not because an adult was directing them to do so. On reflection, I believe the fact that the school had an open culture that encouraged the students to ask questions of teachers if they did not understand something, aided me in this endeavour. Also, the teachers would sit at the level of the students in the classroom to break down hierarchical structures and whilst this subtle behavioural positioning that already existed within the schools, helped me in breaking some of the barriers, the students still identified me as an adult.

They usually addressed me as ‘Seema teacher’ even after I introduced myself by name. Embedded within the cultural psyche in India is to address adults by a pre-fix to show their acknowledgement of the age hierarchy (for e.g., some students also referred to me as Seema Didi, which means elder sister). I experienced this myself when I came to Cambridge, when I had difficulty addressing those who taught me here by their first name. It was only after I had received their firm reassurance that I started addressing them by their name without a pre-fix, such as Dr/Sir/Madam/Prof, to acknowledge the hierarchy.

My mother has significant hearing loss in both her ears, which developed when she was an adult, and I was in primary school, so I understand the struggles that comes with this. My experience with my mother’s disability has taught me to treat everyone with dignity, respect and patience while keeping their well-being a priority. I spent time building a rapport with

the students (with and without difficulties and disabilities) and was mindful not to cause any further marginalisation by my actions. They were knowledgeable about their own experiences, which I sought to capture through the interviews.

The second group (teachers, head teachers, school facilitators, faculty members) and the students mostly came from the same community and belonged to the poorer socio-economic strata of society. I was aware that disparities in our economic status could lead to the formation of unintended hierarchies, and I mitigated this by spending a lot of time with the teachers. As aforementioned, I took my lunch with them and engaged in informal conversations with them every day when I was in the schools. I ensured that I addressed everyone with respect and prefixed teacher or Ma'am to their names as a sign of this, whilst also reiterating my position as a knowledge seeker.

I sought to develop a collaborative environment and spent a considerable time building a rapport with the teachers. They shared that they had struggled through life to reach the position they were in now and were immensely proud of their accomplishments. From my earlier experience of working in the Indian educational system, I was expecting caste related conversations, but none of the teachers queried my caste identity. My positionality as a woman made me feel welcome and accepted as most of the teachers and members of the school leadership were women. Moreover, the organisation has a mandate for empowering women from the community, which is central to their mission.

The third group (head faculty members, founders, administrators) belonged to mixed socio-economic backgrounds. There were some members who were from wealthy ones, whereas some had started from poorer socio-economic backgrounds, but had risen through the ranks over the years to acquire a better socio-economic status. In this category, there were many individuals in a more privileged position than me in terms of the experience in education and their backgrounds, but I never felt that my voice was unheard or felt anyone using their privilege to their own advantage. However, I cannot discount the fact that being a researcher from the University of Cambridge had a hand in this. Another reason, I believe, was my positionality as a knowledge seeker, whilst the individuals saw their role as knowledge givers, which helped in maintaining a balance.

The founder of Mukhtangan, Mrs Elizabeth Mehta (Liz), is British born and moved to India when she married an Indian national, having since lived in India for more than 50 years. Liz was born shortly after WW2 in the United Kingdom and growing up had met families displaced by war, whose members with disabilities were some of the first individuals sent to concentration camps and killed during the Nazi occupation of Germany. Later, in a post war environment in Britain she took part in protests for Nuclear Disarmament and against Apartheid, experiences which shaped her thoughts on the need for ‘*all kinds of inclusion.*’

After her first degree in the UK, she undertook her bachelor’s in education in Mumbai and spent many years as a schoolteacher, later being vice-principal in Mumbai. She assumed a leadership role in the Aga Khan Foundation in India and spent time working on educational policy work in the Indian and African sub-continent. I reflected on her being British and working within the Indian context and spoke to her on her positionality within the Indian education system. After interviews and discussions with her, I realised that she was deeply rooted within the Indian education scene.

Her resolve for inclusion of persons with different abilities in the education system was further strengthened when she witnessed the progress made through education by her sister-in-law who was deaf and blind. Subsequently, she was involved in advocating her daughter’s mainstream school to support her dyslexia and once the school addressed her needs, she saw how it helped her progress later in life. She said that, whilst her sister-in-law and her daughter had the resources not to let their difficulties and disabilities limit their ability to receive education, despite the challenges, many students in India are bereft of similar privileges. Her career as an educationist and especially her role as a maths teacher and deputy head teacher in a school in Mumbai, shaped her ideas about what inclusive education entails and its accompanying challenges in the Indian context. Thus, when she started Mukhtangan schools after her retirement, she insisted that to enable quality education for children facing socio-economic marginalisation, they needed to imbibe the values of inclusion from the start.

Reflexivity underpinned my entire research experience even beyond my fieldwork, whereby I constantly reflected on my positionality, even during the course of the data analysis and writing up of the thesis, I will continue to engage with it as I disseminate my research. Next, I move on to discuss some complexities that arose during the fieldwork and how I ensured the

well-being of the students.

### **Ensuring well-being of the student participants**

In this subsection, I present two instances that arose in the field where I had to break the confidentiality agreements<sup>51</sup> with two students to ensure safeguarding. Both these instances occurred during the student interviews. When conducting the interviews, two questions I posed to the students were “Are you able to talk freely with your teachers? Are you able to share with them about any happy or sad moments of your life?”

In the first instance when I asked this question one of the students, Shikha, responded by saying that “Yes, I was able to talk to teacher when my uncle did bad touch with me.” She mentioned how her teacher spoke with her parents when she confided in her about the incident and her parents took action against the person who had abused her. She said that due to her teacher’s help and parents support the abuse stopped and her teachers continued to ask after her. Even though she reported that her parents had acted against the offender as she narrated a traumatic experience, I still had safeguarding concerns.

I consulted the class teacher, and she said the socio-emotional department had given counselling support after assessing the student’s need and that this could resume, if she needed it again. I was upset both as a researcher and at a personal level as the response was unexpected (to that interview question). I was worried about the well-being of Shikha owing to her having to revisit this painful memory. Initially I was conflicted about breaking the confidentiality agreement, but on reflection I realised the well-being of the child is of paramount importance and thus, breaking the confidentiality was in her best interests. As I mentioned in Section 5.3, multiple students came up to me and wanted to take part in the interviews. There was one such instance when a student who was not initially part of the research insisted that she wanted to take part. As Saloni expressed an ardent desire to be a part of the research, I interviewed her. We went through the first section of the interview as usual. When we reached the question about her friends in school, she narrated that her best

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<sup>51</sup> I assured every student I interviewed of confidentiality and that what they say was between us and that I would not disclose to their teacher about their individual responses neither could their identities be determined from these.

friend was another student in her class, Pallavi, who I had interviewed the day before (she had significant learning difficulties). Saloni mentioned that she was really concerned for Pallavi. Saloni went on to disclose that her best friend had a stepmother and had lost her mother when she was in kindergarten. She said that the stepmother physically abused Pallavi by beating her and denying food as a punishment. She told me that she was scared for the safety of her friend and that once, the stepmother had beaten Pallavi badly enough for her to get a laceration on her leg. I inquired if they had ever confided in their teachers, and she said that a couple of years ago she had complained to one teacher. The teachers had intervened and called on the parents for counselling. But this backfired when the stepmother hit her more at home for lodging a complaint and since then Pallavi had not reported any mistreatment again.

I asked if Pallavi's father knew and Saloni replied that he stayed away often, but it did not happen when he is around. She also mentioned that her brother (who went to the same school and was in a higher grade) was the one who protected her sometimes. Again, this put me in a dilemma, because I had interviewed Pallavi, who Saloni was concerned about, but the former herself did not report any abuse. However, keeping Pallavi's well-being in mind I disclosed the details to the LRG teacher. We decided to speak with the School Faculty and the members of the socio emotional department. They said that they were aware of the history, and they had a file on the incident, but as it had happened two years previously and the report from the few follow ups was that everything was normal, so they had stopped following this up.

After I reported, the socio-emotional department took the matter up again, but they approached it with caution as the last time when they intervened it caused additional harm to the child, and she felt unable to seek further help. They devised a way of approaching the parents without disclosing that they knew about the student's circumstance in the home. The socio-emotional department community workers planned workshops within the community on parenting without physical abuse and the emotional toll that physical abuse can have on a child, whilst also ensuring that Pallavi's parents attended. India does not have a formal foster care system and if reported to the police, they might have separated her from her parents, putting her in an orphanage or children's home, which could have been a worst fate than the one that she was currently in and thus this creates a moral dilemma. The socio-emotional

department and the LRG teacher in that school along with the class teachers and head teachers continued to work together to support this student and to monitor the home environment.

### **Giving back as a researcher**

From the commencement of the research, I was mindful that all the individuals in the school were generous in giving their time and support to the project. Despite no prior connection to any of the members of the school, they had responded to me and agreed to be a part of my research when I approached them via email<sup>52</sup>. Reading research reports and informal conversations with colleagues on gaining access to research sites I realise how rare such access is without prior connections. Research should be a reciprocal process, so I wanted to give back as a researcher for all the knowledge and time the participants had shared with me. I did not offer any compensation in the form of payment or reward etc. for participation in the research. However, I was keen to give back to them in some way. So, I asked the school stakeholders what they would like me to do, and they suggested that I help them with capacity-building, especially in inclusive education, as that was my area of research. In keeping with this suggestion, I held a workshop and led professional development sessions with members of the school.

At the start of the fieldwork, in January 2018 I led a workshop with the founder of Muktagan, the CEO and all the Departmental Leaders on “Inclusion Around the World”. The feedback was encouraging, and the Departmental Leaders were appreciative. They said that it had help them gain an international perspective on inclusive education practices, whilst the knowledge that teachers faced similar challenges to them in other countries helped them to appreciate and reflect how far they had come.

Next, I led two professional development sessions. The teachers have professional development sessions every year in May, when the students start their summer holidays. One was for the library department of all the seven schools on “How to make the libraries more accessible to all children” and another was for all the members of LRG on “How to support

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<sup>52</sup> Having a personal connection is often important in gaining access to the research setting, especially in the Indian context.

students without disabilities and class teachers to help their peers/students with disabilities and difficulties”. In addition, I shared my reflections from the fieldwork with all the faculty members and the lead faculty of all the departments along with the Founder of Mukhtangan, the CEO and a few teachers towards the end of my fieldwork in September 2018.

More recently, COVID 19 has disrupted these schools and caused a lot of hardships to students and teachers alike. I reached out to the school to ask whether I could support them in any way, and they asked, if I could document their efforts. Subsequently, I held focus group interviews and interviews with members of Mukhtangan on Zoom. I analysed and published all the findings in the form of a blog<sup>53</sup>.

### **5.8 Establishing trustworthiness**

The validity of a research study refers to the degree to which a study can answer the questions that it intended to (Gravetter and Forzano, 2012). Validity is of two types, namely external, which is concerned with the extent to which the findings from a particular research study hold true outside of that particular work and internal validity, which is determined, if a study is able to produce a ‘single, unambiguous explanation for the relationship between two variables’ (page 170). Reliability appears in conjunction with validity and pertains to the extent to which a research endeavour produces consistent and stable results. As is evident by the definitions of these terms, these concepts follow a very deterministic view of research and are mostly utilised in psychology within social science research. My research is a qualitative case study and hence, it is not possible to use these measures of reliability and validity to ascertain the quality of the research. Guba and Lincoln’s (1985) constructs for setting up the trustworthiness of data have emerged as the most oft repeated criteria to demonstrate the rigour of qualitative research. In this section, I discuss how I established the trustworthiness of my research by addressing the concerns of credibility, transferability, confirmability, and dependability to maintain academic rigour.

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<sup>53</sup> Nath, S (2020). Education for all under lockdown - the path ahead for children with disabilities. REAL Center Series on COVID 19 response. UKFIET blog

## Credibility

The confidence placed in the truth of the research data determines the credibility of the research (Holloway and Wheeler, 2002; Macnee & McCabe, 2008). Guba and Lincoln (1985) list strategies, such as prolonged engagement, persistent observations, peer debriefing, member checks, negative case analysis and triangulation, as means for achieving credibility of the research findings. I spent a period of nine months carrying out fieldwork, thereby establishing prolonged contact in the field. I immersed myself in the world of my research participants, which enabled me to gain a deep and broad understanding of the context (Guba, 1981; Bitsch, 2005). This also provided me with insights into issues that could affect the data and helped in building a rapport with the participants (Anney, 2015). In addition, my prolonged presence as a researcher in the field reduced the effects of my presence during the fieldwork (Miles and Huberman, 1994).

The other strategy I used was peer debriefing. According to Guba and Lincoln (1985), 'It is a process of exposing oneself to a disinterested peer in a manner paralleling an analytic session and for the purpose of exploring aspects of the inquiry that might otherwise remain implicit within the inquirers mind' (pg. 308). During the analysis process, I established regular exchanges of ideas regarding the research process with two peers in Cambridge. One of my colleagues has a background in education for persons with disabilities, whereas the other comes with a background in international development. Their combined feedback into various aspects of my research, such as the data collection methods, analysis, and organisation of the findings enabled me to gain valuable insights.

I engaged in member checks by giving an overview of the interview to the interviewees immediately after its completion to see whether my understanding of our conversation accorded with that of the interviewee. However, when I asked if they would like to read the transcripts to conduct member checks, all but two teachers declined. It is possible that they did so because they trusted my skills and were satisfied with the overview at the end of the interview, but it could also have been as a result of disinterest or paucity of time on their part. However, the member checks post the interviews gave me confidence that I had been able to mitigate researcher bias to a significant extent.

As discussed earlier, I achieved triangulation using different research methods, including semi-structured interviews, classroom observations and secondary data analysis. In addition, I engaged with different stakeholders within the schools – teachers, students, faculty members and administrators etc. This not only helped in finding corroborating evidence and acquiring a deeper understanding of the various processes, but also, in some cases, also provided contrasting evidence, which enhanced the analysis and reporting of the findings, thereby delivering robust findings.

### **Transferability**

Whilst transferability is not possible in the strict sense of naturalistic inquiry, by providing thick descriptions and engaging in purposive sampling the researcher can equip others interested in transferring the investigation to another context with the information on whether it is possible to draw similar conclusions in other contexts (Bitsch, 2005). I have provided thick description of the entire research process, including the context of the research, the data collection process, up to the analysis and organisation of the findings. I have also shared information concerning the key informants, both adults and children and the process of purposive sampling I adopted. This will enable other researchers to decide upon the extent to which they can transfer the research approach to their own contexts.

### **Dependability**

Another aspect of establishing trustworthiness is by demonstrating dependability, defined as ‘the stability of findings over time’ (Bitsch, 2005; pg.6). The strategies used to establish dependability include audit trails, stepwise replications and code-recode strategy and peer examination. To enable an audit trail, I stored the raw data, such as the interview transcripts, classroom observations and fieldnotes securely in case an auditor wanted to verify them. In addition, whilst stepwise replication of the data was impossible as it this was doctoral research, which is a solitary practice, I did receive feedback from my supervisor and two peer doctoral researchers regarding my analyses. I engaged in the code-recode strategy, and I have provided a detailed description of the processes I followed when I discuss my process of data analysis later.

## **Confirmability**

The confirmability of the qualitative research means that the ‘researcher did not simply find what he or she set out to find’ (Bowen, 2009; 307) but rather, the findings ‘were clearly derived from data’ (Tobin and Begley, 2004; 392). To do so, I established a clear audit trail by recording the process of data collection and analyses, keeping all of that from the research in a secure manner. Additionally, my field diary, which consisted of my field notes and reflexive diary, enabled me to document and reflect on the entire research process. Lastly, the strategy of triangulation that I have mentioned several times in this chapter was another way I established the confirmability of the data.

Thus, these multiple strategies enabled me to establish the trustworthiness of my data. Lastly, I present the process of data organisation and analysis that I undertook in the final section of this chapter.

## **5.9 Data analysis**

Substantial data was generated over the course of this research from various stakeholders using a variety of data collection tools. Creswell (2014) stresses the utilisation of both inductive and deductive reasoning in qualitative analysis. I employed both to process the data collected. At the onset, I employed inductive reasoning to make sense of the data from various sources and to arrive at patterns, categories, and themes from the bottom up, thereby processing the data into abstract units of information. Next, I examined the data from each theme deductively for evidence of how each received support from the data as the analysis moved forward. This aligns with Stake’s (2014) view that the analytical process involves both analysis of the distinct parts of the collected data and the synthesis of the information derived from multiple sources to arrive at common themes. I used the approach described by Miles, Huberman, and Saldana (2014) for my qualitative data analysis. I started by processing and preparing my data and then, I conducted a first cycle of codes and coding, followed by a second cycle coding. In this section, I describe how I organised and transcribed my data, processed my data during the data collection process and finally how the coding and re-coding led to the emergent themes. I conclude this section by reflecting on the summary of choices and decisions made during the data analysis and writing phase of this research.

## **Data organisation**

Given the qualitative and in-depth nature of my research, the data organisation and processing started alongside the data collection process. The data collection stage and the analytical phase were not discrete, but instead, these processes entwined and were complementary. Miles, Huberman, and Saldana (2014) state that concurrent analysis of data alongside data collection helps the researcher to ‘think about the existing data and generating strategies for collecting new, often better, data’ (pg. 70). I engaged in data organisation by maintaining a record of all the interviews and classroom observations, transcribing all the interviews, and maintaining a record of my reflections through the transcription process.

## **Transcribing**

Ezzy (2002) has suggested that the transcribing process should follow simultaneously as opposed to leaving everything until the end as it provides the researcher with room to relook at their interview technique and to ensure that the questions are eliciting enough information or the kind that the research demands. This was true during the research, whereby transcribing simultaneously helped me to ask follow-up or clarifying questions, if required based on the data gathered. Though I strived to complete the entire transcription process alongside the fieldwork, but the sheer volume of interviews made it difficult to complete this during the fieldwork. Hence, I started transcribing during my fieldwork and completed the transcription process once I returned. However, as I had already started the transcription process it was quite useful and helped me develop my initial reflections of the findings based on the data. I was able to share these reflections with the schools after the completion of fieldwork, rather than making them wait until I had completed the analysis and writing up part of my doctoral research to disseminate the findings.

There has been some criticism on the capability of transcripts to pick up on nuances and the subtilities of interactions during interviews (Mason, 2002). However, it should be acknowledged that the process of transcription requires reflexivity on the part of the researcher as it involves some level of interpretation in terms of the tonality and context within which the participants provided the responses (Holstein and Gubrium, 2003). I navigated the transcription process by drawing on my knowledge of colloquial English spoken in India and my

understanding of colloquial terminologies while assigning meaning to the transcribed texts. I ensured that I minimised dilatation of the responses by transcribing verbatim and not making any changes to the grammar or the sentence structures. For the interviews that were in a language other than English (e.g., Hindi) I transcribed directly into English.

### **Data processing**

I used computer-assisted qualitative data analysis software (CAQDAS) to aid the process of coding and analysis of data. The software I chose was NVivo 12 for Mac. It was extremely useful to have this software as it enabled me to organise and code the data in a way that would not have been possible to do manually. It also helped in keeping track of my interview and classroom observations in one place, thereby making it possible to make connections between similarly coded information across participants and data sets. It also assisted me in reviewing the coded material efficiently and quickly. However, it is important to remember that, whilst NVivo helps with handling the data to enable analysis, it does not do so automatically. I coded the information from the interviews and the classroom observations using NVivo to arrive at categories and I examined each of the emergent categories in terms of addressing the research questions. I used jottings, analytic memoing and assertions and propositions throughout the data processing stages to keep the data organised. I discuss these below and then describe the coding, re-coding process and how the themes emerged.

### **Jottings**

I frequently annotated my data throughout the data collection process, and this was immensely helpful for keeping track of information gathered from various sources as well as assigning meanings and reflections to the coding process. Miles, Huberman, and Saldana (2014) contend that this process is important as it can ‘strengthen coding by pointing to deeper and underlying issues that deserve analytic attention’ (Pg. 94).

### **Analytic Memoing**

Analytical memos can be narratives of any length that give an insight into the researcher’s thinking process about the data and her reflections. This leads to higher level synthesis of the

analytical information. I used NVivo extensively for this purpose and it was useful in giving clarity throughout the analytical process. Keeping track of the process of coding and memos from the field during data collection often helped in clarifying information from the interviews and classroom observations.

### **Assertions and propositions**

The synthesis of the researcher's analysis into a formal and systematic statement of findings is necessary to draw conclusions from the research. Miles, Huberman, and Saldana (2014) state that assertions and propositions are the ways to achieve this goal. It is the compilation and presentation of all the explanations derived from the research synthesised into a coherent way for the reader. I was able to draw on these to synthesise the various themes that arose during the data analysis.

### **Coding and re-coding**

Coding formed the building blocks to reflect on the data and in turn, provided a basis for its analysis and interpretation. "A code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (Saldana, 2015: p.g.3). Keeping this definition in mind, I took care to ensure that I used codes to summarise and condense the data, whilst in no way reducing it (ibid). I adopted an exploratory approach towards the data and familiarized myself by immersive reading of the transcripts and as I had conducted the interviews myself and transcribed all of them, I had a level of familiarity with the data. Coding is a 'cyclical act' (Saldana, 2015, pg. 8) and therefore, I re-read my transcripts and coded them multiple times until I was certain that I had exhausted all codes. The process of coding was not data analysis (Basit, 2013), but rather, the codes helped me to identify the emergent themes, which in turn, helped to analyse the data from the different instruments in a holistic manner. I coded the classroom observation data in an analogous manner.

At this stage I went through the coding for one group of stakeholders at a time. For example, I started by coding the student (with and without disabilities) interviews, followed by the teachers and then the administrators, departmental leaders, and faculty members and finally

the classroom observation data. The codes that emerged in the first cycle of coding were mostly descriptive codes such as inclusion meaning, examples of disabilities, peer-learning, 'problem child', 'good student', Dienes block, charts, pre-service training etc. A sample coded transcript is included in Appendix 9.

As I advanced through the process of analysis progressively, new codes appeared, which I added. Here I also underwent process of re-coding to refine the codes further. For example, Dienes block, charts etc got re-coded as teaching-learning materials. The first cycle of coding and re-coding helped me summarise the data into segments such as school related, teaching and learning related, training related, support structures etc. This helped to structure the data into meaningful groups. Miles, Huberman, and Saldana (2014) call the former deductive coding and the later inductive coding. While the deductive codes formed a good starting point for developing an analytical framework for the data, it was the inductive coding that enabled the empirical evidence to emerge from the data and afforded deeper analysis, where I was able to engage critically with the data.

### **Emergent themes**

The second cycle of coding led to the arrangement of the codes into categories and themes. These themes developed from the codes based on the research questions and the key concepts that were under study. 'Pattern codes are exploratory and inferential codes, ones that identify an emergent theme, configuration or explanation' (Miles, Huberman and Saldana, 2014; 86). I examined the codes and grouped various codes together to address the research questions and themes emerged. There were some codes that fit across multiple concepts. For example, teachers, students and members of the administration, departmental leaders and faculty members spoke about their understanding of inclusion and mentioned various support structures that made it possible. Thus, this process enabled the creation of a cognitive map that facilitated in making sense of the data from various participants in a holistic manner. As the themes emerged, I adopted a systematic approach to ensure that the themes were refined to maintain internal coherence (Braun and Clarke, 2006) and robustness of the data. This process also helped in condensing the enormous quantity of data from multiple sources into a small number of analytical units. Appendix 10 includes excerpts from the coding sheet including the codes, re-coded codes and the themes that emerged.

There is a need to be flexible in pattern formation to not let subjectivity enter the process of assigning patterns. The four kinds of patterns summarised by Miles, Huberman, and Saldana (2014) consist of: categories or themes; causes and explanations; relationships among people; and theoretical constructs. The various categories and themes that emerged from this research pertained to teaching and learning strategies, constructs of disabilities and meaning of inclusion, inclusive practices etc. The patterns coded to understand causes and explanations helped in comprehending the challenges and enablers for including all learners as well as how inclusive pedagogy and practices were developed and practised. The emergence of concepts, such as belongingness and peer learning coded from the student interviews helped in understanding the relationships between teachers and students, students, and their peers etc. The data led to the emergence of a theoretical understanding of inclusive education within these schools. Thus, the second cycle of coding led to a deeper understanding of the data. It enabled me to analyse the data and develop connections to view the information collectively, to assign meanings and arrive at findings.

### **Data analysis and writing up**

Though I took a very systematic approach, it was difficult not to be overwhelmed with the sheer magnitude of qualitative data that was generated through this research and needed to be organised, transcribed, processed and analysed within a set time. The process of making sense of the data was interwoven into this entire process. Every researcher brings in subjectivity due to their own background and understanding and earlier knowledge. Drawing on my positionality and reflecting on my experience of the Indian school context that I mentioned earlier helped me in maintaining reflexivity and transparency about my own subjectivity during the data analysis. As this was qualitative research, I bring in all these factors when presenting, analysing, and discussing my data. The entire process of data analysis required me to approach the process in a systematic manner to ensure that the rich data that emerged through this research was well-represented in presentation of the findings.

While it was a very rich data set, it was also very complex and necessitated me to constantly engage with it to connect the coding process to the analysis and finally interpretation of the data. Data analysis started right at the pilot stage when I collected data in the first school with the aim of refining my research instruments. Analysing the pilot data was the first stage of the process as it helped not just in refining the research instruments but also helped to decide that

a qualitative approach is better suited to get the depth of data needed to answer the research questions. During the data collection stage, though I was familiar with the Indian school system, yet many aspects within these schools that I encountered were different – the classroom layout, the administrative structure and roles etc (as described in the context chapter). Thus, the data collected required me to have a deep understanding of the context in order to analyse and interpret the findings. The analytical memos I referred to earlier was a great help in establishing connections and context as I navigated the data analysis process.

The coding and re-coding process involved assigning labels to small chunks of data (interviews and classroom observations) that captured its descriptive or analytical characteristics (Braun and Clarke, 2006; Saldana, 2009). The codes helped to develop a clearer picture of the common elements that characterised inclusion in these schools. For example; many teachers used the phrase ‘just as all five fingers are not the same, all children are not same’ as a starting point to discuss their understanding of inclusion, disabilities and also to share about the ways they ensured that children with diverse needs were included in the classroom. Through the analysis process this phrase started as a code and then its relevance as a theme became apparent and finally it emerged as a pivotal point for discussion of the findings.

As I progressed with the analytical process and started writing up the findings, I revisited the research questions and started grouping the themes in a way that addressed the various research questions. I used typologies to distinguish between various phenomenon (Hammersley and Atkinson, 1995) and engage in the process of analysing the data with respect to the research questions. For example, to explain teachers notion of disabilities, examining the emergent themes I identified three ways they constructed it; functional limitations and deficit, ‘unable to learn’ and the third to list the constructs that though were not very frequently mentioned in the interviews, yet were compelling reasons that I felt needs to be discussed. This was also useful as this notion of ‘unable to learn’ was also related to teacher’s reporting that one of the challenges to inclusive education is teaching children with ‘behaviour problem’ who are ‘unable to learn’. Thus, the analysis process afforded me the opportunity to see how the various threads of the findings were connected and thereby discuss these various concepts holistically when I discussed the findings.

As the findings started taking shape, I returned to reviewing the literature on inclusive

education to identify ways to interpret and discuss my findings. Singal's (2004 and 2013) 3E conceptual framework – 'Entry', 'Engagement' and 'Empowerment' drawing on research from both policy perspectives and school practices in India provided a framework to interpret and discuss the findings. I elaborate on the four-fold reason for utilising this conceptual framework in Chapter IX where I discuss the findings.

Thus, the analytical process was wide ranging and permeated through the data collection phase. It influenced the meaning making process that led to the presentation of the findings, discussion, and conclusions.

### **5.10 Summary**

Figure 13 below summarises the research design and research process. This chapter highlighted the research methodology in great detail. It reveals that the ethical considerations while researching with children with and without disabilities requires engaging deeply with the research context. It also highlights the various methodological considerations that underpin this entire research. In the next chapter I present the findings of this research. Each of the findings chapter address the different parts of the research question and the sub-research questions.



Figure 13: Summary of the research design

## **PART III**

# **FINDINGS AND DISCUSSION**

## CHAPTER VI: PATH TO INCLUSIVE EDUCATION

To comprehensively understand how inclusive education takes place, it is pertinent to understand what inclusion means within these schools. In this chapter, I present the findings relating to how inclusion of students with disabilities came to be integral to their ethos of inclusive education in the focal schools. I explore how the various stakeholders construct their understanding of disabilities and what inclusion means to them in these schools. I accompany this with the student's views of their social environment in school. At the end of this chapter, I identify which students are still facing exclusion from the education process in these schools as understanding this in a supposedly inclusive set up is essential, if effective strategies for mitigating these challenges are to be developed.

The next section addresses RQ1 around perceptions of different stakeholders within the schools regarding disabilities and inclusive education.

### 6.1 Including children with disabilities

Endorsed and motivated by their founder, Mrs. Elizabeth Mehta (Liz), the schools run by Mukangan have considered inclusive education as a cornerstone from their beginning, with children with disabilities enrolling alongside other students. Liz asserted that she believed that inclusion is the key to advancement in life. This echoes the vision statement for Mukangan schools - "An inclusive empowered world in which we can all live in harmony with freedom for expression, respect and integrity". At time of this research (2017-18), the student population across the seven schools run by Mukangan was 3,597 and the total number of teachers was 422, including subject teachers, teachers for holistic education and Learning Resource Group (LRG) teachers.

As mentioned previously in Section 4.2, in 2007, four years after their start as a pre-school, they added the Special Educational Needs Department. However, according to Liz, they felt a need to move away from being called a special needs department as this was creating a silo within the school for students with special needs and disabilities, thus continuing to marginalise them. The school leaders felt that to be truly inclusive they must be embedded within the entire school system. Hence, the Special Educational Needs Department gave way

to the Learning Resource Group (LRG) to support any student facing difficulties in learning along with students with disabilities, both inside and outside the classroom. Later, to promote the holistic well-being of students and teachers, the Socio-Emotional Department was established in 2013.

**Table 11:** Students with difficulties and disabilities supported by LRG 2017-18

<b>Difficulties and disabilities</b>	<b>Boys</b>	<b>Girls</b>	<b>Total</b>
Reading and writing difficulties	149	105	254
ADHD/ADD	6	1	7
Autism	4	4	8
Autism and Global development delay (GDD)	1	0	1
Cerebral palsy	4	4	8
Cleft palate	2	0	2
Global development delay	0	2	2
Hearing and speech impairment	3	0	3
Hearing impairment	1	1	2
Intellectual disabilities	5	6	11
Learning disabilities	7	2	9
Multiple disabilities	3	1	4
Undergoing certification process	17	8	25
<b>Total</b>	<b>202</b>	<b>134</b>	<b>336</b>

At the time of the research, the Learning Resource Group (LRG) was supporting 336 students, as shown in Table 11. The segregated disability data for the students who participated in the research is included in Table 7 and 8 of the methodology chapter. Chapter VIII ahead presents an in-depth look at the role of the LRGs and how they supported different students. Whilst the schools came to support a diversity of students with a range of difficulties in learning and myriad disabilities, it took them time to reach this stage.

Liz emphasised the inclusion of a student with hearing and physical disabilities in the early days of Mukangan, which was a pivotal moment for the teachers in accepting students with disabilities in their classroom processes. One of the pantry staff in the school brought her

attention to a boy in her neighbourhood who had never been to school and had no language. They enrolled him and Liz and the teachers started working with the student. She narrated the following incident that went a long way in changing perceptions among teachers about supporting students with disabilities.

“After a while, one day, while we were discussing the reports (student assessments), I said, “I do not see Akash’s report.” and the teacher said “You have.” I was not expecting to see what the report said. Sure enough he's reading according to that report. I said, “I don't believe this” and the teacher laughs and says “I will go and fetch him” and then, she wrote on a piece of paper ‘Close the door’ and he closed the door; ‘Put your hand up’ and he put his hand up; and she wrote ‘Sit down’ and he sat down. He was reading and understanding. He was with us until about the 6th standard<sup>54</sup> and he was learning. It was amazing. I mean he was severely affected, but he was learning. There have been wonderful experiences like this, and the teachers have been very happy when they've seen it. Over a period, I think they saw the benefits, but it was interesting that, you know, there was this change in attitude with the Muktangam teachers who have grown with the organisation.”

Such incidents led to an understanding that students’ ability to learn depends on the support they receive, and this, in turn, led to buy-in for inclusion among some of the teachers and faculty. At the time of the fieldwork, in these schools, the students received the support of LRG teachers and other resources (if required) without the pre-requisite of a formal medical diagnosis. They supported students with a range of physical, developmental, and cognitive disabilities.

## 6.2 What constitutes ‘disabilities’?

Various stakeholders within the schools run by Muktangam explained how they constructed their notion of ‘*disabilities*’ in a multitude of ways. While these interviews were conducted individually in the field, there are merits in presenting them together to gather a holistic impression. The perception of disabilities varied from socio-cultural interpretations to more medical and functional limitation stances. On closer examination of the data, I was able to group their responses into three distinctive themes and I have classified the responses within

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<sup>54</sup> He left school as his family migrated from that area.

these categories.

### 6.2.1 Functional limitations and deficit

The most common understanding of disabilities was in terms of physical disabilities. When asked about what they understood by disabilities teachers said this referred to those who had '*hearing problems*,' '*had difficulty seeing or low vision*,' '*has disabilities in physical but not mentally*,' '*speaking problem*' or '*handicapped*.' Thus, these teachers had a more functional limitation view of the disabilities. However, in general, teachers refrained from conflating physical disabilities and other disabilities with intellectual disabilities. The only students the teachers referred to with a medical diagnosis were those they called '*autistic child*' and '*ADHD child*.'

A couple of teachers, Alipt and Sonam, Grade 7 teachers in Vindhya and Nilgiris school, explained disability in terms of a deficit and said, '*Disability means something is less in the organs or sense*' and '*Disability means the children who can't understand the concept that the teacher is teaching. He has some problem of hearing, speaking or something like that*.' A few teachers attributed students as being different or having lower IQs than their peers as having a disability. However, IQ and intelligence were abstract concepts for the teachers, and most of them understood it within the deficit discourse. The understanding of intelligence was tied to their notion of '*smart child*'<sup>55</sup>, with these teachers viewing academic intelligence as inherent in the child - some had it and others did not.

### 6.2.2 "Unable to learn"

The interviews brought to the fore a group of students who the teachers characterised as '*behaviour children*' or '*hyper children*', who they said had difficulties with learning and a few labelled these children as disabled. When asked about what constituted '*behaviour problems*' teachers referred to disruptive behaviour, such as running out of the classroom, using bad language, being unruly and rude or being violent and fighting with the other students. When asked what they meant by '*hyper children*' the teachers referred to those students who frequently interrupted the class by moving around the classroom, talking or

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<sup>55</sup> In the interviews, I asked the teachers how they would characterise a 'good student' and a few said that a good student is a '*smart child*', who is '*intelligent*' and does well in the classroom academically.

fighting with their peers in the middle of a lesson, getting restless or frequently wanting to go out of the classroom on some pretext, such as going to the toilet or saying that some other teacher had called them.

On further probing, it came to the fore that some of these teachers interpreted disabilities as ‘unable to learn.’ The teachers spoke about these students as the most challenging to teach and I unpack these challenges in greater detail in Chapter VIII in sub-section 8.3.3. The teachers often characterised some students as ‘slow learners’ and as ‘having low grasping power’, thus highlighting the differences they perceived between the various students in their group. The teachers referred to some of their students by these terms, when explaining how they included different students in the classroom teaching and learning processes.

### 6.2.3 Myriad interpretations about what disabilities entail

The common sentiment among teachers was that it was not important to know what formal diagnosis the student had. They said it was the responsibility of the LRG members and their concern was also to accommodate the different students in the lesson plan. They mentioned receiving guidance from the LRG members on how to support the students, but never on the specifics of the disabilities. For example, they received guidance on how to include a student with global development delay (GDD) in the teaching and learning processes from the LRG teachers and faculty members, by being made aware about the difficulties the student faced. However, they did not know what characterises GDD, reasons for it or in some cases, that the disability that the student had was called GDD.

However, Vineeta, Departmental Leader for Social Studies, said that, ‘*If all the teachers themselves are not aware of what the problem of the child is, then these are serious lapses.*’ She said how not being able to give adequate support to students who needed it immediately was owing to having to wait to receive guidance from the LRG teachers given that they were preoccupied with other matters. She said there was a need to build capacity among the teachers by building awareness of these different disabilities. Ila, the Departmental Leader of LRG, agreed that this was a challenge and with this view in mind they had started training the faculty members the previous year. Now, the plan was to start training all the teachers in batches, but it was yet to materialise due to logistical challenges.

A couple of teachers said that they were reluctant to call a child as ‘*disabled*’, because ‘*all are equal, and they are unique.*’ The members of the faculty very often expressed a similar view. A few teachers acknowledged that, whilst they understood disabilities in a certain way, every year they had new students who faced different disabilities, so their understanding of disabilities was constantly changing. A few other teachers echoed similar views and said that before becoming teachers in Muktangang they had limited or no interaction with persons with disabilities and therefore, their understanding of disabilities was still evolving.

### 6.3 What does inclusion mean?

I asked the various stakeholders at the schools run by Muktangang about what inclusion meant to them and got a multitude of answers. While I have organised the responses thematically below, I start this section by presenting the responses of the founder Liz and a few teachers and faculty members, who had been part of Muktangang since the beginning and present their reflections on the early adoption of inclusive education within these schools.

Despite the schools run by Muktangang having had a focus on inclusion right from the start, getting teachers, faculty, and parents of students without difficulties and disabilities to support the inclusion of children was challenging at the beginning as various intersectionalities came to the fore. Stating one example of caste and disabilities intersecting, Liz said that a teacher belonging to an upper caste refused to clean up after a young child belonging to a lower caste had had an ‘*accident*’ (bowel movement) in the classroom in the initial days when they were still a ‘*balwadi*’<sup>56</sup>. Liz said that on finding out about the incident, she and another teacher went ahead and cleaned up the child and the soiled area in the classroom. She said that these were not isolated incidents, but rather, happened often in the beginning and achieving inclusion in terms of enrolment of children with difficulties and disabilities in the Muktangang schools had been an uphill climb. The practice of caste and class hierarchies, differences in opinion about the value of including diverse learners, absence of knowledge on how to include diverse learners and a lack of earlier engagement or interaction with persons with disabilities in everyday life among the members of faculty and teachers in Muktangang had amplified the resistance to enrolment of diverse learners in the beginning.

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<sup>56</sup> In Maharashtra, India, the early childhood education centres equivalent to a pre-school are known as *balwadi*.

Incidents such as these highlighted that it is challenging to introduce inclusion without educating and empowering the teachers to be inclusive of diverse learners. According to Jumana, Departmental Leader of Outreach:

“I was not an expert on inclusion, but I understood from Liz early on that inclusion is not just about including children with special needs, but all kinds of inclusion – gender, caste, race, religion, everything. It is part of our vision and mission that we want children to grow in an inclusive society.”

There was an acknowledgement and understanding that beliefs about inclusion were hard to change and that most teachers themselves faced similar marginalisation in their lives due to their gender, caste, religion etc. Moreover, they had not been given the opportunity to reflect on or practise these concepts. Hence, the school leaders started working on ensuring that they would ‘*empower the teachers to be inclusive*’.

### 6.3.1 Holistic inclusion of diverse individuals within the school system

Most teachers stressed a holistic view of inclusion, which they said meant including all children irrespective of their ability, gender, socio-economic background, family situation, caste, religion, or language and teaching them together. Many teachers mentioned how different students required diverse support within the school to enable them to learn and to ensure their wellbeing. Describing what inclusion meant to them, they said such things as, ‘*same as my own children,*’ ‘*whether slow learner or learning well, everyone is included*’, ‘*We can’t discriminate because all are smart in some way*’ etc.

“Like our fingers are not same and all fingers are different so this is also the same with children. Means we include all the children, those who are clever, those who are special children, those who are average and below average. We are teaching and we include them all during the explanation when teaching.”

Deepti, Grade 5, Vindhya school

“Inclusion means here children of all castes. We are not doing any discrimination. Children of all different castes and religions are all enrolled here, and, in every activity, we include all the children and we celebrate all the festivals.”

Shruti, Grade 6, Aravalli school

Multiple teachers gave the analogy that the five fingers in a hand are different and each has different functions, but all of them work together, so we can do things with our hand. They said how they were doing the same to help the students. The members of faculty further expanded the understanding of inclusion to include teachers and parents.

“Inclusion means taking care of the needs of every member, whatever the needs are, it is not just academic. So, if a teacher requires a little more emotional support because of whatever she is going through and we don't provide that support at that time, then we're not being inclusive. Inclusion is for everybody teachers, students, faculty, and parents also. We forget that parents need our help and support in understanding and dealing with their children. They have their own expectations and they have their own anxieties for their children and so just assuring them that we are there and that we are in this together. That is what is important.”

Dymphena, the CEO of Muktangam

“Our idea of inclusion at that time was taking the children with special needs aside and working with them, but later on we realised that is not inclusion, that is segregation as we were segregating the child. So, slowly we realised the meaning of inclusion and that we have to include every child. We also have to include the class teachers, parents, and if the class teacher needs our support then we have to give her our support and that is what we are doing right now”

Myra, Lead Faculty, LRG Lead Faculty

Their understanding of inclusion encapsulated more than just supporting the students with difficulties and disabilities, but also, all other students in the class as well as teachers, parents, faculty members and other school staff members.

### **6.3.2 Inclusion of students with disabilities**

Whilst many members of the school had a holistic view of inclusion, few described inclusion from the point of view of supporting and including students with '*special needs*.' As seen in section 6.2, the various members of the school conceptualised disabilities in a multitude of ways. They drew on their understanding and conceptualisation of disabilities to talk about what inclusion meant to them.

“One child is there, and he has speech problem, but his understanding is very good. When we teach, immediately he understands, and his grasping power is

more, and he gives the answer however he knows. When he gives the answer then we know that yes, he has clear concept. But he has speech problem and writing problem.”

Luna, Grade 7, Aravalli School

As discussed in sub-section 6.2.2, some teachers characterised the students who had behavioural difficulties as ‘*disabled*’ or referred to them as ‘*slow learners*’ and said that their inclusion in the classroom teaching and learning was the greatest challenge they faced. However, not all teachers who were interviewed characterised students with behavioural difficulties or disabilities as ‘*slow learners*’ and referred to their inclusion mostly in terms of the extra support that they gave to accommodate their needs. There was understanding among some teachers that behavioural difficulties can emerge due to extraneous situations and various socio-emotional difficulties.

Numerous teachers mentioned speaking with parents of the students about the challenges faced by the students, referring them to the socio-emotional department for counselling, or going on house visits to uncover the cause of the ‘*behaviour problems*’, where they would hold informal counselling sessions with the families. For example, a grade 6 teacher, Kiran, in Nilgiris school, said that one of her students had started exhibiting ‘*negative behaviour*’ in the classroom and had lost interest in academics. When she went on a home visit, she realised that it was due to family issues, whereby the parents were ‘*quarrelling everyday so the student was affected*’. Thereafter, she told the parents about the effect their family situation was having on their child and how to give support.

Teachers, faculty members and members of the leadership team gave rights-based reasons for valuing education for all students. Several teachers quoted the Right to Education Act, 2009 and said that, legally, every child had a right to education, so they would always try to include all students. The main reasons given for including children with disabilities was to enable them to have a career and live an independent life. For the students with significant disabilities, some teachers said that they hoped to provide them with education so that they could lead an ‘*independent life*’ in the future. Another reason teachers and faculty members said they valued inclusion was because it gave the students without disabilities an opportunity to grow up alongside those who have different needs than theirs. This would make them more

cognisant of differences in the world and help them to become more ‘*inclusive citizens*’ and thus, promote a culture of inclusion.

“My question is why should we make them separate first? If we make them separate, then they are fixing in their mind we are special children, we're not normal child. It also matters it also affects them, if we make them go to separate school. In this school staying with other children they learn how to be with everyone. Padhana toh chahiye (we should teach them). It is the need to make a new culture.”

Karuna, Grade 6, English teacher, Nilgiris school

### 6.3.3 Social and academic inclusion

Social inclusion of students in classroom processes to ensure their academic inclusion in the teaching and learning processes emerged as an important factor stressed by teachers. Social inclusion was pre-cursor to academic inclusion, according to many teachers and faculty members. Several teachers echoed this sentiment and stressed peer learning for helping both social and academic inclusion.

“Because when you say inclusion, it is not just sitting together and social inclusion, but they need to be doing something. You cannot say, ‘You draw this and then I am explaining to the other children.’ Again, that is not inclusion. ‘Oh. I gave him or her something to do’ that is not inclusion either, so you have to actively plan for inclusion.”

Vineeta, Departmental Leader for Social Studies

Thus, the school stakeholders actively planned for both academic and social inclusion.

Chapter VII delves into the details of how academic inclusion was practised by exploring their pedagogy and practices, whilst Chapter VIII considers the challenges and enablers for inclusive education in these schools.

The school members - faculty and teachers - devised many ways to promote social inclusion of students. The school had a variety of activities throughout the year, such as Sports Day (in the month of January; refer to Figure 15 below); Expressions (around December, where students showcased their learning from the holistic subjects); Project Day (usually around February, where the students demonstrated the various concepts they had learned throughout the year to their parents through an exhibition; refer to Figure 14 below); Annual Day (held

in April after the students had completed their final assessments and took part in various activities, such as dancing, singing, music and theatre); and local festival celebrations.

Besides these, once a week, the students had a Zero Hour period, during which they would take up various activities of their choice, such as dance, drama, arts and crafts and music that culminated in their Annual Day showcase. All these activities involved both students with and without disabilities. Commenting on this, Liz said, *“Every single child will get up on stage including the differently-abled. Now the benefit of all this has been with the other children as they understand diversity and they're supportive of one another”*.



**Figure 14:** Students show concepts they have learned in the year during Project Day



**Figure 15:** Students on Sports Day and practising dance during Zero Period

Thus, there were various nuances around the perception of disabilities and the practice of inclusion, which is at the very core of the teaching and learning processes at Mukangan. The students, teachers, faculty, and members of the leadership team placed immense value on education for all.

#### 6.4 Student perspectives of their social environment in school

This section addresses part of research question (RQ1c) about students' perspectives of the social environment in their schools. They reported valuing their school education for accomplishing their goals of becoming teachers, pilots, police personnel, fashion designers, doctors, engineers etc. The students said that being at school would provide them with better opportunities '*bhabhisya ke liye* (for our future)' as '*knowledge badhega* (knowledge will increase)', '*dreams will come true*', '*will have a career*' and '*can buy a car*', '*mummy papa ke liye kamana chahta hoon* (be able to earn for my mum and dad)' and '*We get educated then we get big job, like India Bulls<sup>57</sup> company jobs*'.

‘Har koi ek jaisa nahin hua to kya hua woh bhi aage jaa ke accha hi karega jab school jayenge. Bada hoke woh bhi kaabil ban jayega (It does not matter if everyone is not the same, everyone will do well in life when they will go to school. When we grow up, we will be capable individuals’

Jaya, Grade 7, Aravalli School

As abovementioned, when sharing about their aspirations for after school, the students reported a variety of professional and life goals, such as becoming a doctor, teacher, LRG teacher, fashion designer, engineer, army man, police officer, contractor, shop owner etc. Elaborating upon their motive for professional aspirations, some students talked about helping others in their community. For example, two said they wanted to become a doctor and fashion designer, respectively, as there was just a handful or none in their community who offered those services. Vibha, who had GDD mentioned that she wanted to become an LRG teacher to help and support other students in the same way she felt supported.

Some students reported some experiences of bullying, which they characterised as '*teasing*' and '*fighting*', but other than that, the majority of the students interviewed said that there was

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<sup>57</sup> India Bulls is a big high rise building next to that particular school, which houses many multinational companies.

a positive social environment in their schools. When talking about their social experiences in school, the students primarily talked about the enabling role of friendships, belongingness, their relationships with their teachers and respect from their peers and teachers, whilst a few talked about challenges owing to their experiences with teasing and fighting.

#### 6.4.1 Friendships

Friendships appeared as a strong indicator of how students perceived the social environment within the classroom. The primary reasons students said they valued their friendships were for social and emotional support, companionship, classroom support and having someone who defended them when faced with ‘teasing’ or ‘fighting’. Except for one student, who said that he did not have any friends in his class (he chose not to say why he did not), all the students mentioned at least one close friend in the class and in some cases, they reported that they had multiple friendships.

In terms of socio-emotional support, Rekha, Grade 6, at Nilgiris school, said that she relied on her friends to calm her down every time she felt anger for any reason. A few said that, if they were facing any personal challenges, then they would seek out their friends’ help and receive support from them. Sakshi, Grade 5, Vindhya school, said that she shared her lunch with her friend as she sometime did not have any to eat. Sameera, the student in question, said she felt supported in her friendship as her friends shared their lunch with her when she did not get it from home<sup>58</sup>. Three female students characterised their friendships as, ‘*We are like sisters*’, whilst several male and female students attributed their friendships to ‘*understanding each other*’. Five students said that their friends helped them stand up to those who ‘tease’ them or defended them, if there were ‘*fight*s’. In terms of companionship, students mentioned that they confided in their friends, liked spending time together during the snack and lunch breaks as well as playing sports and games together. They also said that they indulged in ‘*masti*’<sup>59</sup> with their friends.

The majority of the students mentioned that they gave and received academic support from

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<sup>58</sup> Her mother had recently had a boy child and she said that her mom was unable to provide enough food to her and her brother. Such gender discrimination in households in food allocation is well documented (Fledderjohann, 2014; Aurino, 2017; Jayachandran, 2011)

<sup>59</sup> ‘*Masti*’ translates to fun in Hindi. In this context, it is a colloquial reference to indulging in playful naughtiness, having fun, pulling someone’s leg, playing etc.

their friends. The ability to turn to their friends for help with lessons and concepts they were struggling with, or helping their friends academically, formed a strong basis for these friendships. They reported that their friends made them happy in school, specifically providing them with social and emotional support, companionship and defending them against bullies, became the principal reasons for these friendships.

#### **6.4.2 Belongingness**

The students at Mukhtangan mentioned feeling a sense of belongingness with their classmates. Ishani, Grade 6, said that all her classmates were like brothers and sisters and they gave each other respect and this made her feel like a part of the class. Dhruv, Grade 5, said that he felt like a part of the class as his classmates do not tease him and talked to him nicely. Having lunch together also made a lot of students feel that they belonged in their class. Similarly, studying together and learning from each other helped form strong feelings of belongingness among the students. Keerti, Grade 6, who had a learning difficulty said that she felt that she belonged to the class as her friends were, *'helping me when I have any problem and are kind to me.'* Nine students said that they felt that they belonged to the class as their teacher taught them well and that made them feel like they were accepted there.

Elaborating upon this Jonathan, Grade 6, said that when he did not understand something, he sought the help of his classmates who supported him, and this made him feel like he was a part of the group. In addition, students mentioned that their friends made them feel like they were a part of the class. Commenting on this Alok, Grade 7, said, *"When I come to school after going to the village, my friends ask me where I was and tell me that they missed me. It makes me feel good."*

#### **6.4.3 Relationship with teachers**

The students reported a range of relationships with their teachers, describing the degree of openness with which they could share with their teachers. More than half the students reported feeling comfortable sharing about their personal and classroom experiences with their teachers', while others reported that they were not able to do so. Those who responded that they felt that they could share freely with their teachers mentioned seeking advice from them when they had a fallout with their friends. Jayshree, Grade 6, said that she could not

distribute sweets to her classmates to celebrate her birthday which made her feel sad. However, one of her friends from class who was also her neighbour surprised her by gathering their friends from the neighbourhood and wishing her a happy birthday. She felt good sharing how her day turned around with her teacher the next day as the latter knew that she had been sad.

Another student, Tamanna, Grade 6, said that one of her aunts suffered severe burns in a dowry related incident<sup>60</sup> and it upset her immensely. She commented how she had found solace and support by sharing this with her teacher and it had helped her to cope with it. Two female students mentioned confiding in their teachers when they got their period, who helped them to understand what was happening and how to engage in hygiene practices.

Some students also mentioned confiding in their teacher when they experienced ‘teasing’ or had fights with other students. Vardhan, Grade 6, said, ‘*When my classmates tease me, I feel very bad and tell teacher. Then teacher makes solution (sic) for me.*’ However, the students seem divided on this. While six students said that they talked to their teachers about these instances and felt supported, four older students said that they preferred not to do so as this would worsen the situation with those who were teasing them. Three students also mentioned fear as the reason they felt they could not share openly with the teachers. They feared the teacher would get angry with what they told them or that sharing their experience or fighting may have resulted in their adversary mistreating them further. Overall, the female students reported feeling more comfortable sharing with the teachers than their male counterparts.

A few students mentioned that the reason they liked school was because of the respect they got from their teachers and peers “*maam is respecting and cooperate with us and I also cooperate with teacher*”, which made them feel that “*I am also important*”. One student mentioned that he felt like he only received respect in school and nowhere else and it added immense value as it gave him a sense of his self-worth.

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<sup>60</sup> Demanding a dowry is a criminal offence in India, but unfortunately, dowry related violence cases still abound in India.

#### 6.4.4 Experiences of ‘teasing’

Building on the earlier section, I present how the students described their experiences of ‘teasing’ and ‘fighting.’ Krishna, Grade 6, mentioned that another student had bitten him on his arm when he was in the third standard (age 8). Three male students also reported feeling bullied when their classmates used abusive language towards them. Two students revealed that they had been in fights where their clothes had become torn.

Both students with and without disabilities reported being ‘teased.’ Darshan, Grade 7, who had a speech impediment mentioned that was teased and made fun of because of his speech. He also shared that he, himself, engaged in teasing his classmates back in retaliation. Siddharth, Grade 7, who had dyslexia mentioned that he had faced bullying due to his dark skin.

“I am black in colour<sup>61</sup> and that is why everyone teases me. Caw caw caw caw (imitating a crow) that is how they tease me. I used to sit beside the teacher next to the blackboard and they would say, ‘Look the crow is sitting by the black-board...caw caw caw, go sit by the window’ and they would tease.”

On being asked whether he had reported this to his teachers, he said that he had done so, and the teacher had intervened on his behalf, but it had not stopped. In fact, he stated that the ‘teasing’ had followed him through the grades and caused him immense anger. Fights was a running theme, with about half the students mentioning them. The students talked about being in fights themselves or their friends or classmates being involved in them. Soham, Grade 7 said that he had seen other students beating up a fellow student and that their teacher had told them to report all such instances, so he had reported it following which the teachers intervened. During the classroom observations, I saw teachers conduct sensitivity training on bullying with the students, once in Aravalli school and another time at Vindhya school. The teachers were sensitising the students to what constitutes bullying, how to report and mitigate it and that explaining that the perpetrators can be both girls and boys.

#### 6.5 Who faces exclusion?

Whilst Mukangan promotes inclusive schooling, the teachers and faculty members did talk about the various instances of exclusion that took place. During the interviews, members of

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<sup>61</sup> Dark-skinned

faculty talked about several reasons that led to exclusion. A thorough analysis of the various interviews resulted in the emergence of three categories of students who faced exclusion and students with disabilities constituted the major proportion. The reasons for exclusion were complex and faculty members and teachers mentioned that they were still working on figuring out how to extend their realm of inclusion.

### **6.5.1 Students with sensory disabilities**

Ila, Naz and Myra from the LRG department and Liz said that the biggest challenge for inclusion of children with disabilities they faced was regarding students with sensory disabilities, especially those who were deaf or blind. The reasons for their exclusion, according to Ila, was that they lacked the capacity within the schools to support students, who were blind and deaf, as supporting students with blindness entailed training teachers in Braille, whilst supporting those with deafness required training teachers in sign language.

Initially, when it was just one or two students in the primary sections, they could provide support, but as the grades kept growing, they were unable to provide the same level of support. Another factor guiding the decision to not invest in Braille or sign language at this stage was that there were special schools that catered exclusively for students who were blind or deaf, so they felt that resources for their education were in existence and hence, those students were still able to get an education.

### **6.5.2 Students with significant intellectual disabilities**

Whilst Muktang schools did have students with intellectual disabilities, according to Myra, Lead Faculty, LRG, they were sometimes unable to enrol those who had significant intellectual disabilities or multiple disabilities combined with intellectual ones. She said the reason for this was that such students might need constant individual attention and care and that they found themselves ill-equipped to provide this in the school due to resource constraints.

### **6.5.3 Partial exclusion for some students**

There were two groups of students who faced partial exclusion from the school system. The first pertained to those with significant mobility challenges. The schools run by Muktang use the infrastructure provided to them by the MCGM as they operate out of government

school buildings. Most of these schools had a ramp to enter the school, but none of them had any lifts between floors. Hence, the students with mobility challenges had to have their classrooms on the ground floor. However, even so, there were always some classes that required movement between floors, so the inclusion of the students with mobility challenges was only possible, if someone could physically carry them and in most cases. In many cases, they stopped coming to school as they grew older as the challenges of accessing the school building became too difficult to overcome.

The second group constituted a few students with disabilities that the school considered significant, whose parents were advised to enrol them in a special school or a vocational training school post Grade 7. Explaining this further, Myra said that,

“These institutes work with the skills that the child is good at and teaches them things that will help them to be independent. So, that is our motive. We want the student to become independent and that is why we want them to get some vocational skills that will help them be independent later in life. We support them here first. This decision is taken keeping in mind what is best for the child in consultation with the parents. We have had cases where the parents want their child to do well academically even if they are unable to do the academics in the same way as others, because of their profound intellectual disabilities. Then, we counsel the parents that academics is not everything and that forcing them to do academics is not going to help the child.”

They provided the parents with information about the other schools that they could enrol their child in. In addition, Myra said that their job was not over when the child moved to a special school or a vocational training institute. She would talk to the parents once a month and ask how they felt about the progress of their child and how the child was feeling, whether they were happy and other such updates. For a year after they left, she would gather monthly updates and thereafter every three months. She said, *“If the parent is happy, the child is happy, and he is doing vocational training that they are both happy with, we stop the follow up after a couple of years.”*

## 6.6 Summary

This chapter captures the myriad ways in which the different stakeholders within the school perceive disabilities and inclusive education. The findings highlight that perceptions around disabilities and inclusive education are affected by the teachers own socio-economic and

cultural background and any interventions or training to change attitudes to be positive and inclusive of children with disabilities and difficulties need to account for it. The students' perspectives of their social environment in school included reports of strong friendships with their peers and a close trusting relationship with their teachers that led them to have a sense of belonging. However, both students with and without disabilities reported instances of '*teasing*' that affected them. Finally, the findings revealed which students continue to be excluded from accessing education. In some scenarios, students with significant sensory disabilities faced complete exclusion as the teachers felt ill-equipped due to their lack of knowledge about sign language, Braille etc. and felt that their needs were better addressed in special schools who had trained teachers. Lack of physical access was another reason students faced partial or complete exclusion. Thus, this chapter presented the complex picture that arises in terms of how the understanding of disabilities and inclusive education is evolving for the teachers. Broadening their understanding of what inclusion means seem to help teachers' identify the needs of their students better as they took intersectional factors into account; thereby getting the confidence and seeking out the means to address their students' needs (explained in greater detail in section 8.8 and 8.9 ahead).

## CHAPTER VII: UNPACKING FACTORS THAT SHAPE IMPLEMENTATION OF INCLUSIVE PRACTICES

In this chapter, an in-depth look is undertaken into at how the schools run by Muktangam design and implement their pedagogy to include diverse learners in classroom teaching and learning. The findings in this chapter are based on interviews with various stakeholders within the school and the classroom observations. I intersperse the findings in this chapter with students' opinions of their classroom teaching and learning experiences. This chapter responds to the sub- research question (RQ1a) about the factors that support the implementation of inclusive education within mainstream settings.

### 7.1 Muktangam's constructivist pedagogical approach

Muktangan's focus on a 'inclusive, child-centred and community-based education' (Muktangan, pg. 12) in mainstream schools drives their constructivist and active learning pedagogy. The Departmental Team leader for Social Studies, Vineeta, elaborated upon the constructivist approach and said that they follow a five-E framework of constructivism: Engage, Explore, Explain, Elaborate and Evaluate. They engage in these constructs with the students in the classrooms as well as with the teachers and faculty members during the pre-service and in-service training. Describing how they use the five E framework, she said:

“When I teach something are the children engaged or not? Is it that the teacher is just talking, and the children are saying yes/no? It has taken years to work on that. So, we teach the teachers that when you are doing an activity and children are seeing the activity, you will not talk, let the children see what you are doing and let them explore first. This is what we are doing with the Subject Faculty and teachers also and with each other. Are we getting the effect (understanding the concept) or are we just saying yes, because we know the goal that we are working towards? So, that takes a lot of time to show and do. When we pose a question, we go through the process of enquiry - you need to research it, analyse the data, reach a relevant conclusion, and communicate that. After you have communicated that you may produce another question because of that, but it is a process that you go through. We go through the complete process of enquiry for that and it also helps evaluate their learning.”

Illustrating this further she gave the example of teachers introducing the concept of economics to the students in Grade 7. To do so, the teachers set up a market with goods and

marked prices on the items. They gave the students a fixed amount each and asked them to buy different items. Then, the teachers posed various questions to the students about what they could buy for X amount of money. Through these questions and this activity, the teachers taught them the concepts of choice and the limitations in a market when the buyer has an X amount of money, thereby introducing the concept of consumer behaviour in economics.

The teachers spoke about their own experiences of consumption of goods and services to explain the concepts further before moving on to theoretical elements. After this, they led discussions with the students in smaller groups about the production and distribution of goods and services and the choices and behaviour that influence the markets. By so doing, as she said, they were integrating the five E's in the classroom teaching and learning of the particular concept and hence, engaging all the students.

Elaborating upon the pedagogical approach of constructivism and active learning, Liz discussed their foundational principles of active learning, collaboration, emergent literacy, and numeracy, a developmentally appropriate-curriculum and formative assessment, which they call Mukhtangan's Five Pillars, as the drivers for their pedagogical approach. Figure 16 below illustrates these aspects. Drawing on these tenets, Liz said that it helped Mukhtangan's '*self-evaluation of how inclusive we are*' and Ila, Departmental Leader for LRG reinforced this by saying that '*it enables Mukhtangan to embed and uphold the ethos of inclusion.*'

Thus, through a constructivist approach and by promoting active learning, Liz believed they could navigate the curriculum, which earlier excluded all learners, especially children with special needs and disabilities, by assuming that '*children were passive receivers of a pre-determined syllabus.*' She said that their constructivist pedagogical approach had shifted the onus of ensuring that each student learned in the classroom to the teacher rather than the student. Hence, they had given the teachers different support structures and autonomy to motivate them to include all students and support them in their learning. For the realisation of this goal, continuous collaboration between faculty members and teachers was emphasised for capacity building and was one of the cornerstones of this constructivist approach.

Muktangan's Five Pillars				
ACTIVE LEARNING	COLLABORATION	EMERGENT LITERACY AND NUMERACY	DEVELOPMENTALLY APPROPRIATE CURRICULUM	FORMATIVE ASSESSMENT
Children, trainees, and teachers learn through active exploration	Children, trainees, and teachers learn the contemporary skills of effective teamwork	Children, trainees, and teachers learn to read, write, and compute in personally meaningful ways	Offer learning experiences right for the learning level of each child, trainee, and teacher	Use it to reveal the developmental level of each child, trainee, and teacher in each curricular area

**Figure 16:** Muktangan's Five Pillars. Reprinted from 10 years of Muktangan, Page 12

Next, I present my findings on Muktangan's teacher education programme and aspects of collaboration that constitute continuous in-service training for all the teachers.

## 7.2 Muktangan Integrated Teacher Education Programme and School Education (MITEP)

A pivotal finding during this research was the close integration of teacher education with school education in Muktangan and its bearing on the inclusion of diverse learners.

Interviews with the leadership team and the Departmental Leaders highlighted an understanding that, like the diversity that exists in the learning needs of the students, the same diversity in learning needs exists among the teachers who teach them. Hence, the belief underpinning inclusion of diverse learners is that for the teachers to be able to identify and cater to the needs of the diverse learner, Muktangan's teacher education and structures must serve the needs of the teachers such that they are prepared to do so. Thus, both their teacher education and school education follow the same pedagogical approach.

They have defined the '*constructivist approach*' as pedagogy that assumes that "...knowledge is constructed by the individual; this is how we make sense of the world. We must construct our own understanding, opinions, and knowledge. This can only be done by empowering active learners, by encouraging children to question everything and by adopting reflective practices." (Muktangan Annual Report 2014, pg. 13). They believe that following a

constructivist approach will enable the teachers and the school students to become active learners, where they develop their thinking capabilities independently.

Jumana, who was the departmental leader for MITEP before her recent transfer as head of the outreach department, helped explain the teacher education programme in her interview. Emanating from their emphasis on active learning, classroom teaching and learning during teacher education take place through internship and case studies, individual reading time, role-plays, group discussions and debates. As discussed earlier in section 7.2, MITEP is an essential first step in the application and promotion of inclusion in these schools and through this training they empower teachers to understand and uphold the ethos of inclusion.

MITEP consists of a one-year foundational course and two years of in-service training, where the teacher trainees take full responsibilities as a teacher for a class after the first year of training. Its mission articulates their purpose as being to “evolve sustainable, replicable inclusive model of quality child-centred teacher education and school programmes in partnership with marginalised communities and to advocate them to the larger system.” (Rampurwala, Borges and Mehta, 2017, pg. 5). Throughout the foundational year all the teacher trainees undergo an internship, where they observe two students each in the classrooms (once a week) and then, write up their observations in the form of a case study. The case studies are meant to enable the teacher trainees to understand the ‘nature of learning’ (Sharma and Singh, 2018; Pg. 7) by a child and supplements their teacher education programme.

For both teacher and school education Muktangan works in partnership with the community such that the enrolment of trainee teachers takes place from the same community where the students come from. Over a period of three years, the trainee teachers are familiarised with various aspects of theoretical understanding of pedagogy, spoken English, lessons on teaching in English, domain specific content and pedagogical knowledge, development of a professional vision and the questioning of personal beliefs. Among these, the module on ‘Educational Beliefs and Understanding Self’ is especially noteworthy as it is the first module introduced to the teachers. It is aimed at evoking critical thinking about the teaching process amongst the trainees, their views on ‘educability’ and teacher student relationships. They included this module in teacher training to address some of the challenges to inclusion

mentioned in section 8.3 later. An internal report evaluating Mukhtangan's teacher training programme also mentioned how it sets the ground for the teaching experience ahead.

“A teacher's prior beliefs and cultural values are critical in defining her pedagogy in class. Here, teachers are guided to think deeply about their personal beliefs about knowledge, schooling, learning, parenting, educability, and beliefs about self and society. These reflections are important for enabling the student-teachers to observe their own beliefs and see how they may shape their practice and interaction with students. They develop a deeper understanding of self as a person and as a teacher, thus strengthening their inner self and professional identity.” (Sharma and Singh, 2018; pg. 6)

MITEP has a provision for individual reading time in the teacher education timetable to help the teachers develop their English skills and enhance their general knowledge. The role-plays, group discussions and debates promote active learning and independent thinking, which is at the core of the teacher and school education. During the teacher training, the trainee teachers experience the teaching and learning practices that they will later practice in the classrooms.

They have a module on inclusion<sup>62</sup> during the foundational years that deals with concepts such as ‘What is inclusion and disability? How/why these terms are used loosely and what it means? How can teachers include different children in their class? How do teachers sensitise other students in the class to differences? How to counsel parents and students about inclusion and why it is required?’. These sessions take the form of discussions aimed at developing the teacher trainees' reflective capability as well as sensitising them to inclusion, diversity in child development and terminology related to disabilities. After the foundational training they continue learning about the inclusion of diverse students through lesson planning, classroom teaching and learning and attendance of subject-specific training modules. All the teachers in the schools run by Mukhtangan receive regular support in classroom teaching and learning, which I discuss next.

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<sup>62</sup> Since the completion of this research the module on inclusion has been developed further and turned into a separate subject within the teacher education programme for training student teachers in all three years.

### 7.3 Capacity building

The collaborative learning integral to Muktangān's constructivist pedagogy is promoted through Curriculum Understanding and Design (CUD) meetings and Lesson Development Meetings (LDMs). These participatory forums are important from the point of view of including diverse learners in classroom teaching and learning processes as it provides teachers and faculty members with a platform to discuss these processes and exchange learning from their experience of including diverse learners in these sessions.

Once a week, different subject teachers gathered in one school<sup>63</sup> to discuss their conceptual knowledge with their respective faculty members and to design the lesson plans together, thus ensuring the concepts they would be teaching were clear to all. These in-service capacity building measures within the Muktangān schools have undergone changes, some of which I was able to capture during my fieldwork as it spanned two academic years (2018-19 and 2019-20). They have simplified the in-service training structure and since the academic year 2018-19, they have integrated the CUD meetings and LDMs into single sessions. According to Dymphena, the CEO of Muktangān, this was done for two reasons: first, was a logistical challenge, with the growth of Muktangān into seven schools with grades pre-primary to high school it became difficult to schedule separate CUD meeting and LDMs into the timetable and travelling to a different school every week was a challenge for the teachers. Second, after external evaluation of their teacher training modules and internal consultation between the leadership team and faculty members it became apparent that the CUD meetings and the LDMs, in particular were eroding teacher autonomy, to some extent. That is, this arrangement was creating dependency, whereby the teachers were carrying out classroom teaching and learning in a prescribed format and hence, pedagogical learning was taking a backseat. Hence to address this, they merged separate CUD meetings and LDMs into a single CUD session, which now they hold in all the schools and the Subject Faculty leads them. In addition to this, all the teachers receive annual professional development (PD) training sessions on a range of topics based on needs assessments carried out by the School Faculty in consultation with the teachers and faculty members.

The leadership team, including the Departmental Leaders and Lead Faculty, meet for a

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<sup>63</sup> Each of the subject teachers met in any one of the seven Muktangān schools and this was pre-decided based on the availability of rooms.

'Reading Circle' every week. Liz founded the 'Reading Circle' to exchange ideas and literature to help them take forward the different ideas for classroom practices and teaching and learning strategies so as to promote cross learning between various departments. Each department take turns presenting a pedagogical aspect of their subject, with a reading list of articles and books to increase understanding of how the different departments conduct classroom teaching and learning as well as to increase co-operation between them. Next, I present the structure of CUD meetings and LDMs before their merger to gain an understanding of these collaborative structures, which is followed by a description of their present form.

### **7.3.1 Curriculum Understanding and Design (CUD)**

The Departmental Leader along with the Lead and Subject Faculty held weekly participatory forums to discuss good practices and to design concept building plans for the teachers (both novice and experienced teachers). Post these forums, the Lead Faculty used to conduct a CUD meeting with the teachers and transact the conceptual knowledge of their specific subject and the pedagogical aspects of the concepts that they would teach in the classrooms the coming week.

Up until the 2017-18 academic year, the teachers, Subject Faculty, Lead Faculty, and the Departmental Leader for specific subjects got together once a week in one of the seven schools for the CUD meetings. For example, everyone from the Maths Department had their CUD meeting every Tuesday and everyone from the Science Department had their CUD meeting every Friday. The design of the timetable was such that students did not have that subject in school on the day those subject teachers had a CUD meeting. So, the students did not miss any lessons when the teachers teaching that subject were away for the day. These CUD meetings were a capacity-building measure aimed at increasing the teachers' knowledge and grasp of the subject matter through the understanding of the curriculum. Thereby it enabled the teachers to develop critical thinking about the subject matter and in turn, helping their students to become independent thinkers. The transaction of these sessions was underpinned by a constructivist approach and active learning, which included role-plays, discussions, various classroom activities etc. However, as discussed in section 7.2, over the years this set up started to be seen to have challenges, which led to an overhaul of the system.

### 7.3.2 Lesson Design Meetings (LDMs)

The LDMs followed the CUD meetings, where the teachers and the Subject Faculty sat together in the schools to develop lesson plans every week. While the CUD meetings catered to teachers' knowledge and capacity-building, the objective of the LDMs was lesson planning as well as discussion of TLM and activities for classroom teaching and learning. Usually, one Subject Faculty led the LDM with three subject teachers. They discussed individual learners in these meetings and how best to adapt the curriculum and pedagogy in their lesson plans so as to cover the different learning needs of all the students in their classroom. For each concept or lesson, they discussed the various activities along with the teaching and learning materials that would be most suitable for that lesson, such as flash cards, audio-visual aids, charts, experiments, physical models, etc.

Post integration of the CUD meetings and LDMs, Subject Faculties for the subjects - English, mathematics, science and social studies were assigned to each of the seven schools. Once a week the Subject Faculty meets with the Departmental Leaders and the Lead Faculty to discuss the curriculum and receive guidance, if they require it. On the other days of the week, the Subject Faculty members are based out in the schools, where they meet the teachers to discuss the curriculum and lesson planning for the week. Since the merger, the teachers receive content and pedagogical knowledge from the Subject Faculty on the concepts they are scheduled to teach that week. After that, they devise their own lesson plans for the classroom teaching and learning with guidance from the Subject Faculty. Whilst at present they are receiving lesson planning support, the expectation is that over time they will be able to do this independently.

According to Vineeta, the Departmental Leader for Social Studies, the advantage of having Subject Faculties in each school is that they have more time to observe the students and help the teachers provide support tailored to their needs. She said that as they are based in the schools, they are able to form a bond with the students and to receive feedback about the lessons directly and this will improve the way they support the teachers in their CUD.

From an inclusion perspective, Dymphena, stated that the advantage of having the CUD meetings in the schools is that this enables the LRG teachers to join in during the discussions and thus, enables the teachers to get direct input from them about their lesson plans.

Previously, owing to the structure of the CUD meetings and LDMs, the LRG teachers were unable to be a regular part of these discussions due to logistical and timetable related issues. The LRG teachers had mostly provided input for the teachers on how to support children with specific disabilities when the individualised education plans (IEPs) had been prepared and could not participate regularly in class-wide lesson planning.

However, since the merger, having the LRG teachers sit in more regularly on these curriculum and lesson planning sessions has meant the teachers can get immediate feedback on their lesson planning for students with difficulties and disabilities. It also provides the LRG teacher a closer insight into the process. However, as the process was in its first year of practice, it had been experiencing teething issues, such as finding a time for the LRG teacher to join the teachers from the different grades during their lesson planning sessions. Due to time- table related issues the attendance of the LRG teacher could not be ensured in all CUD meetings.

The merger of CUD meetings and LDMs happened for the teachers teaching English, mathematics, science and social studies, whereas the pre-school, Hindi, Marathi, LRG, IT, holistic education, and library teachers continue to have separate sessions as they felt that it was beneficial for them to maintain this arrangement. Also, as they had fewer faculty members and teachers, they did not face the same challenges as the other subjects and found it convenient to continue with the earlier practice of separate CUD and LDMs.

In the next section, I present how subject specific teaching and learning protocols were followed to address the needs of different learners within the overall constructivist approach of the schools.

#### **7.4 Classroom teaching and learning - English, mathematics, science, and social studies**

In Indian primary schools, the core common subjects taught in school are English, mathematics and environmental science or EVS (which encompasses science, history, geography and civics lessons) and hence, I decided to focus my research primarily on the teaching and learning of these subjects. Whilst the findings and analysis presented in this section is mainly focused on the interviews with the Departmental leaders and Lead faculty, interviews with teachers and students alongside classroom observations and documentary

analysis are also drawn upon to elaborate further upon these findings.

### **Prelude to understanding classroom teaching and learning of English**

Before presenting the findings and analysis of the classroom teaching and learning of English in these schools, it is important to present a brief background to the use of English in them. Muktangam is an English medium school, which means that English is the language of instruction. Yet, most of the teachers who teach here have English as a second language as they undertook their education in schools where the medium of instruction was Hindi, Marathi, Gujarati etc. As aforementioned, the enrolment of the trainee teachers takes place from within the community, and they should have studied English as a subject in school to gain acceptance onto MITEP. During the teacher education, in addition to training in the pedagogy of English language teaching (for those who go on to become English teachers), all the teachers receive English-proficiency lessons, both pre-service and continuous in-service, as the medium of instruction in school is English. So, it is interesting to note that these teachers learn English and then, how to teach in the English language.

A few teachers who taught subjects other than English language commented during the interviews that, initially, they were '*afraid and underconfident about teaching in English*'; '*lack confidence to speak in English even though I understood English*' and '*thought I will make mistakes while teaching in English*'. However, they also asserted that through their English-proficiency lessons they '*overcame my fear of speaking in English in time because of the English classes*', '*could teach Science in English without being afraid of mistakes*' and '*the faculty helped to become more able to speak and teach in English*'.

During my research, I gave both students and teachers the choice to speak with me in English or Hindi, depending on which language was comfortable for them. 100 per cent of the teachers, faculty members and the leadership team chose to be interviewed in English (though they sometimes interspersed the interview with Hindi/Marathi words and phrases). On the other hand, the split for student interviews was 60-40 between English and Hindi, respectively and one student chose to be interviewed in Marathi.

One of the reasons parents and community members were keen supporters for expansion of these schools from pre-school to higher grades is because the medium of instruction is English and there is a high demand for low cost or free English education in India. In informal discussions with teachers during the fieldwork that were recorded in my fieldnotes, they remarked that during the cultural programmes when parents are invited to watch their children perform they feel pride that their child can perform and speak in English, even though they themselves do not understand the language. Many students said English was their favourite subject and attributed this to ‘*teacher teach nicely*’, ‘*the lessons and stories are fun*’ and that it would ‘*help get good jobs*’ in the future.

One student Riya, Grade 7, at Nilgiris school, remarked about the widespread belief that government schools are of inferior quality as they could not provide an English education and hence, the students studying there do not have similar competencies as other students in private English medium schools. Narrating her experience, she said:

“It makes me angry that they are not understanding that my school is really too good. Like, I come by bus and they (people on the bus) ask me which school.... and when I say BMC<sup>64</sup> school, then everyone says that we are from a BMC school, so...so the school is not good and we are not good in studies. I don't like that and I don't like this uniform, because my school is really too good, but because of this uniform everyone thinks that we are not good in studying. So, for showing that we are not from the BMC school I and my sister we always talk in English. And we don't sing Hindi songs in the bus and we just sing English songs and we pretend like we are not from this school, but from a different school - English.”

She expressed her frustration at the identity her uniform bestowed on her as going to a poor government school and negated her experience of attending an English medium school. Similarly, some students and even teachers felt the need to assert their knowledge of English as they had worked hard to acquire English language skills as a first-generation learner and were not given enough credit due to going to a ‘*BMC school*’.

The medium of instruction being English, where first-generation English teachers teach first-generational English language students, transpired as being an important theme in relation to

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<sup>64</sup>The MCGM or Municipal Corporation of Greater Mumbai is also known as Brihanmumbai Municipal Corporation or BMC

inclusion in the Muktang schools. Many teachers and faculty referred to linguistic inclusion as a part of holistic inclusion in the school processes, as discussed in sub-section 6.3.1. In the grades where I carried out my classroom observations, I saw two student-teacher interactions where some students corrected their teacher's grammar and spelling when they made mistakes whilst teaching. In one instance, when writing on the blackboard during a Grade 7 (Vindhya School) lesson a student corrected the teacher's English grammar in a science class. In the other, multiple students pointed out the mistake when the teacher wrote down the wrong spelling of an English word in a social studies class for Grade 6 (Aravalli School). In both these instances, the interaction was respectful, and the teacher thanked the student/students for pointing out the error. This may be a common occurrence, as one teacher, Anju, who teaches English, touched on this topic during the interview, "*We are making mistakes sometimes and the children correct us and so we get to learn from them too.*" The students carried their knowledge of English into other subjects taught in English.

#### 7.4.1 Teaching and learning English

Describing the method for teaching and learning of English in these schools, Radhika, the Departmental Leader for English, said that they follow the LSRW protocol, namely Listening, Speaking, Reading, and Writing (Figure 17).



**Figure 17:** An illustration of the LSRW protocol used for classroom transaction of the subject English

As noted from the interview and documentary analysis, there is a focus on emergent literacy at Muktang, with an emphasis on encouraging children to engage in independent reading (during library sessions) and writing. During my classroom observations, I noted that there is dedicated time on the timetable for independent writing at least once in the week for the different grades. This emphasis on independent reading and writing is similarly present in regard to teacher education.

Drawing on a constructivist approach and active learning, Radhika explained that there was an increasing understanding that they needed to get away from traditional rote learning approaches and teach in a way that ensured the engagement of the child. Hence, they were trying to incorporate activities to ensure that the child spoke more than the teachers, thereby encouraging the emergence of literacy. Commenting on this she said, *'We always tell the teachers that you are a guide on the side, not a sage on the stage and so you scaffold for the child.'* Shedding light on the curriculum design and lesson planning for English, she said that during the CUD meetings they discussed various activities and planned the use of different teaching and learning materials (TLM) to explain different concepts to the teachers. Subsequently, the subject faculty would complete the lesson planning with the teachers.

### **Including diverse learners in teaching and learning English**

Describing the process of making the English lessons accessible to and inclusive of all children, Radhika said that at the planning stage the overall lesson designs are aimed at *'children performing average in the class'*. Within the lesson plan, they have activities and extra work and more challenging tasks that they will give the students, who are *'performing at a higher level than the others.'* They also encourage those students to help and support other students, who are learning at a *'slow pace'*.

Several English teachers said that for students who face challenges with learning, the teacher often undertakes extra classes during the lunch breaks or sometimes during their Zero Period or any other available time. For students who have a diagnosed disability, depending on the level of their need, the LRG teachers provide in class support to the students. For students *'who face difficulties in English and falls behind their peers in class'* the LRG teachers give additional reading and writing support during the LRG session. Radhika attributed these difficulties with the language and classroom learning to the student being a first-generation English learner. She said that in the early days of Muktangon they often misconstrued these difficulties with the English language as a learning disability. The faculty members came to realise this error and since then, the LRG teachers have played a key role in supporting the English language teachers in providing additional support to the students facing difficulties with English.

The use of the local language and mother-tongue of the students to teach English was emphasised by the teachers as a necessary strategy so as to include them in the learning process. According to Radhika, they give respect to the local language and never stop the students from speaking their mother tongue, but rather use it to build English language skills. They follow a fixed strategy, where they use two languages for instruction, namely English and the student's mother tongue from pre-primary to Grade 1, whilst from Grade 2 onwards they encourage the student to increase their usage of English. They use a '*sandwich technique*', where they encourage the student to speak in their mother tongue, if they are more comfortable doing so during the teaching and learning process and then, the teacher repeats the information in the mother tongue followed by English.

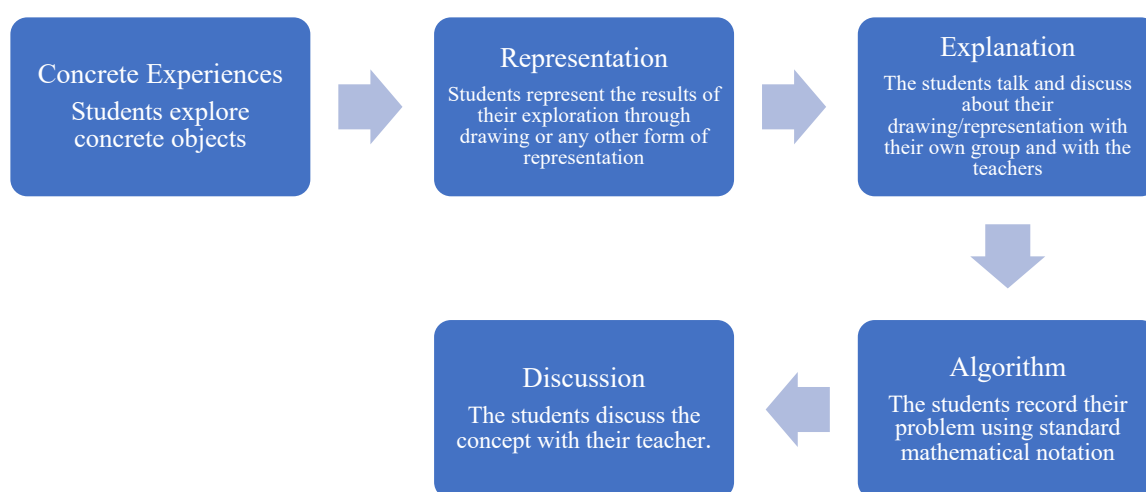
“Why we repeat it in the mother tongue is to show the child that we are accepting what you are saying, and we are giving respect to your mother tongue and then, repeating it in English. And we have seen it really working. And I feel that all children need to be respected. You cannot have that dictatorial attitude to teaching.”

Even teachers teaching the higher grades reported using the students' mother-tongue to introduce and build on certain concepts, especially for children with difficulties and disabilities, who may face challenges with the acquisition of a second language. As mentioned earlier, both the teachers and students come from multi-lingual backgrounds and as there are three teachers in each grade, usually there is one who can speak/understand the mother-tongue of the students. Thus, linguistic inclusion is strongly promoted within the schools.

This understanding that a student's struggle with learning often emerges from being a first generation English learner and consequently, also influences their performance in other subjects, was widely acknowledged by both members of the faculty, leadership team and the teachers during the interviews. Many teachers mentioned this and said that they supported children in developing their English language skills so that they could understand the concepts taught in other subjects.

### 7.4.2 Teaching and learning mathematics

According to Liz<sup>65</sup>, in Mukangan schools place emphasis on emergent numeracy skills in mathematics just as they stress emergent literacy skills in languages. Documentary analysis on the transaction of mathematics reveals the use of the ‘CREDA’ protocol to help students to visualise the mathematical concepts from simple to complex, concrete to abstract and known to unknown (Tewari, Saritha and Shrivastava, 2008). Figure 18 below illustrates the CREDA protocol.



**Figure 18:** An illustration of the CREDA protocol used for mathematics teaching and learning

Namita, the Departmental Leader for Mathematics, expanded upon this protocol to explain how it is operationalised. The teachers introduce the topic by creating concrete experiences for the students to explore the structures of the mathematical concept under study. Then, they encourage the students to produce a visual representation of what they have understood through a drawing or asking them to present it through role play. Post this, the students have a group discussion about their visual representations, what it means and how it relates to their experience of the concrete objects introduced at the beginning, using real life examples. Following this the, teacher leads a discussion with the students about the mathematical operation that they have presented through visual representation or role play and provides a

<sup>65</sup> Apart from being the founder, she has been the Departmental Leader for Mathematics at Mukangan since its establishment until recently when she retired. She was a mathematics teacher by profession.

detailed explanation of the concept. Thereafter, the teacher introduces the theoretical and algorithmic features of the concept with examples. Finally, the teacher gives the students written algorithmic problems to solve, utilising the blackboard for these last two steps. During the interviews, the teachers laid great emphasis on the use of various activities in the teaching and learning processes, which aligned with their goal of using concrete objects. They reported the use of playing cards, dominoes, interlocking cubes, counters, Dienes blocks and geoboards.

Namita spoke further about the mathematics syllabus and said that, whilst they follow the textbooks and the syllabus prescribed by the Maharashtra State Board of Education, they change the sequences and order in which they teach the textbook concepts in the classroom. This sets up connection between them and enables the students to discover these interrelationships. During the CUD meetings, the faculty members show linkages between the mathematics curriculum across the grades, working to ensure that the teachers understand these. As the teachers teach multiple grades, they can include these continuity concepts in their lesson plans for the students across them. She mentioned that they follow a '*spiral curriculum*' both for the teachers and the students. Explaining it further, she said that it means that the students get the opportunity to understand foundational concepts by revisiting and revising earlier concepts they have learned. This is based on their understanding that '*knowledge of mathematics is cumulative in nature*' and this teaching and learning of the mathematics curriculum aligns with their constructivist and active learning pedagogical approach.

### **Including diverse learners in teaching and learning mathematics**

Speaking about the inclusion of all learners in the teaching and learning of mathematics in the classroom, Namita stated how the Mathematics Department utilises ability grouping to support the needs of the different students. She stressed that this helps the department to be inclusive and address the individual needs of the students. The students are organised into three groups A, B and C, according to their ability level, with the '*above average performing*', '*very bright*' being allocated A group, whilst the '*average performing child*' is put in the B group and the '*below average and children with special needs*' are assigned to the C group. According to her, the students do not know their grouping as A, B and C, as instead, they

name the groups after flowers, fruits, or something similar. However, in the interviews I conducted with the students, many students referred to themselves or their classmates as ‘*A group*’ or ‘*C group*’ children etc., thus demonstrating that they were aware of this distinction and what it meant.

HINDI- “Sare activities ek saath hota hain. sab kuch hum log ka ek saath hi hota hain. Padhai bhi ek saath hota hain lekin maths mein na A,B aur C group hota hain. To main C group mein hoon na to teacher mujhe first term mein boli thi ki "Tu acchi hain". Ek ladki hain Grishma aur us ne try kiya aur woh B group mein gayi. Mujhe bhi jaana hain aur isiliya jo teacher bolti hain main karti hoon”

TRANSLATION - “All activities happen together and we do everything together. We study together, except in maths, where there are A, B, and C group. I am in C group, but teacher told me in the first term ‘You are good’. There is a girl Grishma and she tried and she moved to B group, I also want to go there, so I do what teacher says.”

Swati, Grade 6, Vindya school

Whilst students like Swati and a few others said they were motivated to move to a different group, there were others who referred to themselves as ‘*C group children*’ and stated that they would remain there, as they were ‘*bad in maths*’.

On probing about the decision to introduce ability grouping, Namita explained that they first developed this strategy for the mathematics teachers during the CUD meetings. She said that, just like the students, there was variation in the ‘*grasping power*’ of the teachers, where “*some teachers can grasp very well, and some are average learners, and some are slow in their approach towards any concept.*” So, when the faculty members placed the teachers with other similarly paced colleagues, they understood the concepts better.

“So, we saw that the teachers were taking interest and they could do what was given to them. And suddenly, there was this urge to know more. Gradually we made this shift from simple to complex for them; we used to give them simple problems to solve and then we took them to complex. So, this gave us an idea that why don’t we try this with the children, as there are some children who are scared of maths and thus, can’t do maths. So, why put them with the regular kids where they might feel a bit demoralised as a child next to them has completed fast and they are struggling. So, we thought why we don’t give it a try and see if this works and for us it has worked.”

Recounting how the students are assigned to the groups, she said that the teachers grouped them through observation. She did not mention any clearly defined criteria nor did the mathematics teachers supply any clarity when asked on what basis they assigned the children to the A, B and C groups. Some teachers explained that they relied on the assessments - formative and summative - for ability grouping.

Exchanges with mathematics teachers and LRG teachers revealed that, whilst most students supported by the LRG were also in Group C, there were a few<sup>66</sup> supported by them, who were in Group B. All those who talked about the ability grouping added that these groupings were not stagnant, but rather dynamic. That is, group allocation depended how the students were faring and the students knew about this (as Swati quoted above said).

Several students also mentioned that their aim was to get good enough to move from Group C to Group B. As abovementioned, the students move from one group to another depending on their progress. For example, a student in Group A may move down to Group B, if s/he is deemed to require extra support, whilst a student in Group C may move up to Group B, if s/he has started to catch with the curriculum.

During the classroom observation, I noticed that the teachers introduced the same concepts to the students in the three groups and the first few steps, as set out in the CREDA protocol, were the same for all. However, from the third step onwards, when the teacher provided an explanation of the concept, the teacher for the C group would take much longer and the way she proceeded with the lesson plan differed from the teachers of Groups A and B, which aligned more closely. Even the algorithmic problem solving that the students worked on in Group C was different even though the basic concepts under study were the same. On enquiring about this observation, Namita explained that they planned it this way as it catered to the needs of all the students, including supporting students with special needs. While the teacher would give Group A students' complex questions that require critical thinking, those in Group C were set simpler problems. They were given sufficient time to explore so as to arrive at the correct solution. If students in Group C could solve the problem sets and understand the concepts at a '*good speed*', then the complexity of those given to them would increase.

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<sup>66</sup> I was unable to get an exact figure.

When I asked the mathematics about this teachers during the interviews, I got varied responses – *‘the C group children receive easier problems to solve’*, *‘our aim is to assess if the student has understood the concept and sometimes they can show this through easier sums (problem sets)’*, *‘the C group children who can do these simple ones are given more difficult ones’* and *‘if we wait for them to complete all the problem sets as the Group A students then they will not be able to complete the syllabus’*. Completion of the syllabus for all the students seemed to be a persistent worry for the teachers, which many referred to during the interviews.

In the student interviews, I asked about their favourite subject and the reasons for their choice. Interestingly, the majority of the students assigned to Group C mentioned that mathematics was their favourite subject. They said that they enjoy doing maths in the classroom and they liked it because they could *‘solve the sums’* (problem sets) and that the teacher taught them *‘short cuts’* for solving them, with a few students saying maths was *‘easy’*. They also attributed their liking for maths to their teacher and the activities they did during the mathematics lessons. Apart from students in Group C, various students in Group A and B also reported maths as being their favourite subject. However, there were a few students placed in Group C who felt that it showed that they were *‘stupid’* and *‘can’t do good’*, They said that they felt that way as they were teased by their peers for being *‘C group children’*.

In terms of providing support to the children with certified disabilities, the Mathematics Department Leader and the Lead Faculty train the LRG teachers so that they can supplement the classroom sessions for the students. The LRG teachers give numeracy support to the students assessed as requiring it. The students in higher grades (Grades 9 and 10), who have a disability certificate from a medical professional at a recognised government hospital are allowed to obtain their high school leaving certificate examination based on the Grade 6 mathematics syllabus for students in Grade 9, the Grade 7 mathematics syllabus is granted for students in Grade 10<sup>67</sup>.

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<sup>67</sup> Reasonable accommodation according to the Maharashtra State Secondary Board for students with disabilities.

On a pilot basis, in the academic year 2017-2018, Muktangan had an LRG teacher for instructing those students who were going to sit the high school leaving certificate examination, as it was the first-year students from all seven Muktangan schools were going to do so. The following academic year, the mathematics class teacher in Grades 9 and 10 taught all the students to determine whether the regular mathematics teachers could include the students in the classroom with support from the LRG teachers. They felt that this would be more inclusive. The departmental team leader for mathematics along with the lead faculty for mathematics now oversee the CUDs with the mathematics teachers of Grades 9 and 10 for all students.

After the mathematics faculty and teachers grouped the children according to their abilities, they reported how they faced opposition from the leadership team, faculty members and teachers in the other departments. The reason for this opposition was as they believed that it went against the ethos of inclusion to group children by their abilities. They also believed that having children in mixed ability groups fosters peer learning and thus, this ability grouping detracted from this. However, according to Namita, the school community respect the beliefs of others, with the culture at Muktangan being such that it allows faculty members to make their own decisions according to what they perceive will help their children. In other words, departments have autonomy to decide on the teaching and learning strategies they adopt. She also added that when they analysed the progress of the students in the separate groups, they often found that children in Group C to had made the maximum progress. This finding encouraged the mathematics department to continue with ability grouping, according to her.

### 7.4.3 Teaching and learning Science

Calling constructivism and active learning the backbone of their department, Valentine (Val), Lead Faculty for Science at Muktangan, said the science teachers and the students undergo similar classroom transaction to help develop them into critical thinkers. He stressed four aspects that contributed towards the classroom teaching and learning of science: '*learner centred pedagogy*,' '*interactive classrooms*,' '*out of classroom experiences*' and the '*student tracking system*.' According to Val, the trainee teachers, teachers, and students undergo a learner centred pedagogy that turns them into change-makers. Explaining learning centred pedagogy, he said the science department draws on the work of Vygotsky, Piaget, and

Dewey. Accordingly, they engage teacher trainees and children in activities that contribute to the development of their own understanding of the world. He characterised this as,

“We follow the basic principles of constructivism, and we provide them with the experience by which they can think and answer, rather than being told the answers. If a child feels that a definition can be challenged, then we provide them with that opportunity. They come up with their own definitions, their own understanding and we, as Faculty, will direct the teachers and the students towards that thinking. We realise that teaching only through a textbook undermines the child or teacher’s ability to think for herself or himself.”

He further conveyed that the learner centred pedagogy encourages an interactive classroom, where students and teachers interact in a ‘*safe environment*’ and that the classroom transactions are discussion based, rather than teacher led. The science classroom has activity-based teaching and learning, where the students receive a set of instructions from the teachers that encourages them “*to explore and experiment with the materials provided, carry out their observations and analysis and derive their own inferences*”. The teacher’s role in this scenario is motivating them to think and then, to elaborate the concepts under study using experiments and activities.

The structure of the classroom (discussed in Chapter 4) helps the teacher to switch between traditional whole class teaching for certain sessions and to revert to small group teaching and learning by rearranging the furniture. During the classroom observations of Grade 7 in Vindhya school, I saw the students and teachers engage in an experiment, which the teachers initiated. However, they established a constant interaction with all the students in turn (inclusive of the children with difficulties and disabilities).

During the interviews, students made references to specific experiments and activities, such as ‘*labelling body parts on a skeleton*’, ‘*explanation of thermal conductivity using metal and plastic spoons*’, ‘*experiment to show electrical circuit and magnetism of a magnet*’ etc., that they had done during their science lessons, when explaining why science was their favourite subject. They mentioned that these experiments increased their understanding and helped them to remember the lessons.

Describing out of classroom experiences as an aspect of science teaching and learning, Val said that the members of science faculty acknowledged that learning does not stop in the classroom. So, they encourage students to build linkages of the concepts taught in the class to their daily life at home and after school. For example; if they have learned about the state of matter as solid, liquid or gaseous, then they are given tasks that encourage them to observe how matter changes into different states in everyday objects found at home, such as water turning into ice and into a gaseous state on boiling, or 'ghee' (clarified butter) being in both solid and liquid state under different conditions etc.

The schools organise various field trips to science centres, museums, and other places of interest for the students, where the teacher supports them in connecting their learning in their classroom to the wider world. During these trips, the students are involved '*in planning methods to gather, organise, analyse, and present their observations in the class.*'

He stressed the use of the student tracking system by the Science Faculty and teachers for the students in Grades 5-8<sup>68</sup>. He described it as primarily an assessment tool that measures skills, rather than knowledge of the child in science.

“So, when you have a system that is not purely knowledge based, but skill based, then it helps the teacher include everyone, because the teacher knows that there is a skill that needs to be taught. For example, take water, there are many ways to explore water. I tell the teacher to plan the lesson such that they have to include something that involves observation skills, working in a group, collaborative work. There should be some scientific reading, there should be some scientific writing, there should be dialogues based on water. Children should go collect data from the classroom, school, community or home. Children should be writing or recording data of what has been taught or what has been discussed. So, what has been transacted (in the class) is skills along with a concept.”

### **Including diverse learners when teaching and learning science**

Describing how they include diverse learners in the teaching and learning processes of the science classroom, Val said that the teaching and learning includes everyone – the students, the teachers and even the members of the faculty. The way they ensure everyone's inclusion is by making a lesson plan that includes everyone in the teaching and learning process. To do

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<sup>68</sup> They are rolling it out for all the grades gradually.

so, he said it is important to include some amount of experimenting, some instruction-based teaching and learning, and activity-based learning. The lesson plans include questions that would relate the classroom learning to real life examples and substantiate it through reading materials, such as magazines, newspapers, and books, available in the school library in addition to the textbooks. Sometimes in the science lesson plans they introduce higher order concepts not required by the students at that grade level to give them a flavour of things that they can explore further, if they so wish.

During my classroom observations, I noticed two times in Aravalli school when the library teacher specifically recommended a set of books to the students (once in Grade 5 and another time with Grade 7) and told them that their science teacher had asked them to read them. On probing, the library teacher mentioned that sometimes they co-ordinate with the subject teachers (not just for science, but other subjects too). They share the current lesson plan and find out books in the library that may supplement the classroom teaching and learning.

The science department also follows a '*spiral curriculum*', which means that they build linkages between various concepts across grades. Elaborating upon this further, Val said that each year as the students' progress through the grades they learn more of the same concept. The Science Faculty does this at the curriculum design stage so that teachers can refer to things taught earlier and are aware of these linkages, thereby being able to present the information in a sequential manner to the students. He believed that owing to following a spiral curriculum and lesson designs that incorporate various teaching and learning strategies, to an extent, they can include the children with difficulties and disabilities. For the students with significant disabilities, they get the help of the LRG teachers. However, he clarified that for them inclusion does not mean just children with learning difficulties or disabilities, but also, those who face difficulties due to their home environment, socio-economic conditions, language etc., which echoes the description of inclusion by various stakeholders within the schools, as discussed in the earlier in sub-section 6.3.1.

Another strategy for inclusion in the science classroom is the use of dual language to explain concepts and supply instructions by the teachers. The transaction of science lessons also involves giving one-to-one attention to students, where extra information is provided using

flash cards, word walls<sup>69</sup> etc. Teachers give this help to those that they feel need it so as to ensure all students get support in the learning process. Apart from this, he also credited the teachers with striving for inclusion and attributed this to the organisational ethos and the in-service training system of CUDs.

“When teachers are mentored and directed to transact a concept in class, automatically, they make room in the class for every kind of learner. All may not excel at all the domains of development, but at least we know that we are making an attempt to include all and there is an alternative for them. That really helps teachers to include all kinds of learners.”

He did acknowledge that, even though all teachers are dedicated to including all children in the teaching process, they have not managed to ensure 100 per cent inclusion in terms of getting all the students learn. At present they do not regularly prepare individual educational plans (IEPs) for students with difficulties and disabilities due to time constraints and they try to cater to the needs of diverse learners in their common lesson plans for everyone.

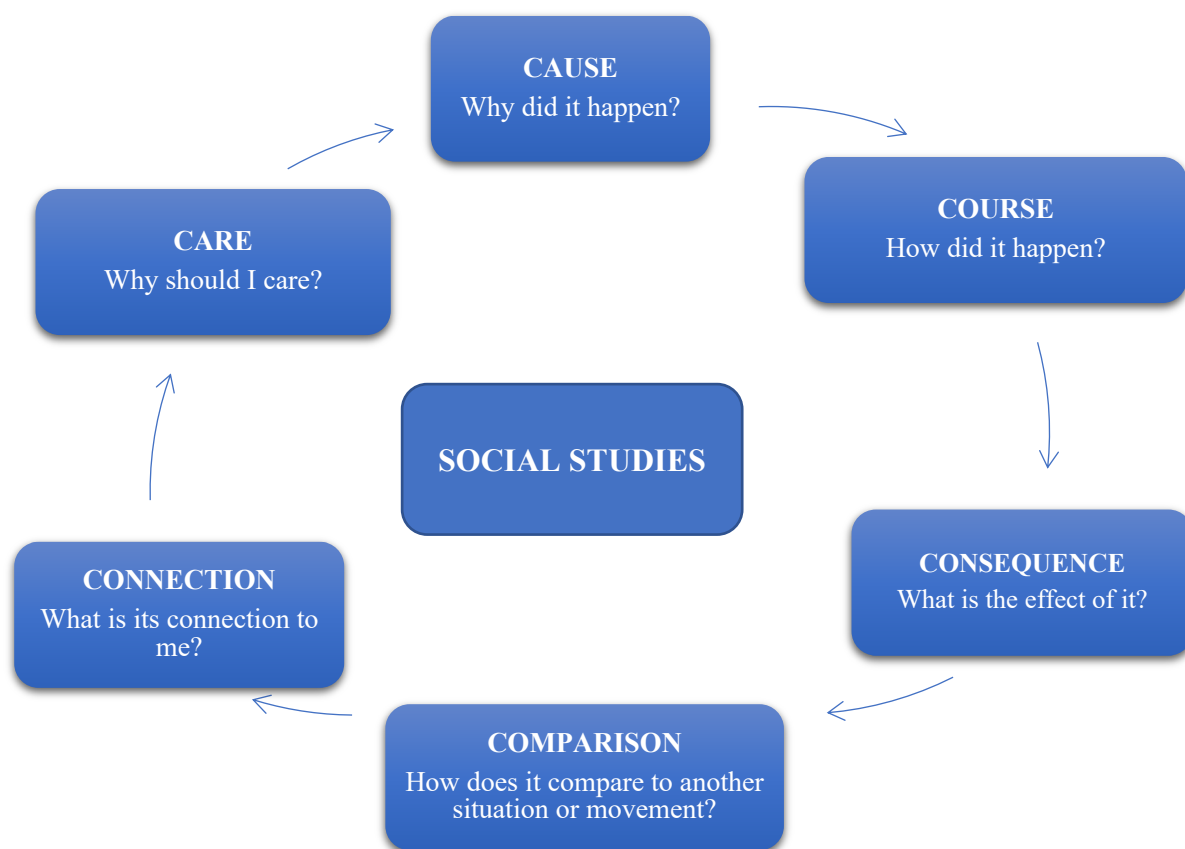
#### 7.4.4 Teaching and learning social science

There is one prescribed textbook for social science, with the teachers having divided the content into geography and history. Vineeta, who heads the Social Science Department, said that they follow the six C’s protocol for the transaction of social science. She described the six C’s as Cause, Course, Consequence, Comparison, Connection and Care that follow a sequential process of enquiry, as shown in Figure 19 below. Expanding on the protocol she said,

“We have a process of enquiry. We have the six C’s that we follow. Everything has a Cause - why did it happen, everything has a Course - how did it happen, everything has a Consequence and we discuss what is the effect of it. Then, we have something called Comparison, which is a comparison with another situation or comparison of two movements etc. Then we have Connection - what is its connection to me and why should I study about this. Finally, we have Care, and it is why should I care and how should I care about this topic. So, we deal with all these aspects, and we make sure that all is addressed, because the textbooks usually deal with cause and consequences and do not make the connection with these other aspects. It is not like we start with the cause. It is circular, so very often we start with a connection, and we move forward”

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<sup>69</sup> Specially to increase the scientific vocabulary among the students



**Figure 19:** An illustration of the 6 C's protocol for teaching and learning social studies

Referring to Mukhtangan's philosophy, Vineeta said that they practise experiential teaching and learning, which is clear through their 6C's protocol described above. She alluded to the spiral curriculum when she said that they break down the concepts at the curriculum planning and design stage. They ensure connectivity through the grades and builds on these concepts as the students move through the grades. For example, during the interviews, students in grades 5, 6 and 7 referred to their lesson on Chhatrapati Shivaji Maharaj<sup>70</sup> as one their most memorable. Mentioning the different ways, they learned about this topic in their class the students said that the '*teacher had made chart with all the times (lines) and the fights and put it on the Shivaji and how he was brave.*', '*I was Shivaji Maharaj when we did role-play*' and '*Teacher told us stories about Sambhaji and Shivaji*'. In some instances, the students recalled

<sup>70</sup> Chhatrapati Shivaji Maharaj (1630-1680) was the founder of the Maratha empire in Western India and is well known for his resistance against the Mughal army and later his conflict with the English in the 1670s. He is a much-revered historical figure in Maharashtra and the rest of India.

lessons on Chhatrapati Shivaji Maharaj from their lower primary grades<sup>71</sup>, referring to social studies as their favourite subject, which thus shows the continuity of the same topic through different grades.

Vineeta said that in their lesson designs across the grades the teachers support the students to ‘recall’ what they have learned earlier and thus, the teachers are ‘*scaffolding on it* (what was taught earlier).’ Giving an example, she said how in the lower grades the teachers will introduce the water cycle and as the students go through the grades, they will learn about cloud, rain, conservation and so on.

Thus, whilst each subject English, mathematics, science and social studies had the same pedagogical approach, the teachers utilise different mechanisms to design their teaching and learning for the students in the classroom, keeping in mind the requirements for teaching different subjects. This also ensured that the teachers received continuous subject specific pedagogical support, which strengthened their content knowledge, thereby enabling them effectively to support different students in the classroom.

### **Including diverse learners in teaching and learning social studies**

Commenting about making the classroom teaching and learning inclusive for diverse learners, Vineeta said that they primarily do so at the lesson design stage, where they include various activities that all students can take part in. They break down the learning outcomes for each lesson into smaller components, which enables the teachers to assess on an ongoing basis whether the students have understood the concepts, whilst at the same time allowing for the children to grasp the concepts one at a time. For students with special needs, they ensure that they include them in all the teaching and learning processes. Giving an example, she said how, if a child with special needs was unable to vocalise or articulate what they have understood from the lesson, then they ask her/him to demonstrate their learning through role-play, writing or by a means that they feel comfortable with. However, she included the caveat that, if a child does not wish to speak at that moment, then they do not force her/him and

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<sup>71</sup> One of the interview questions asked the students about their favourite subject and why this was so? If they referred to a lesson, then I probed what made that lesson memorable. I expected that students would refer to the lessons in their present academic year, but many referred to lessons that they had had 2-3 years previously that they still remembered and that made them like that subject.

instead resume the engagement at another time. Thus, constant formative assessment during the classroom transaction is a way for including diverse learners.

Another strategy that they employ in the classroom for the inclusion of diverse learners is peer learning. The lesson plan incorporates space to allow for such learning to reinforce the understanding among the students. Vineeta said that their challenge is mostly the inclusion of children who ‘*learn faster.*’ They have a bank of questions for these students to move forward, if they have learned the concept earlier than their peers, whilst teaching their peers also helps them revise what they have already learned. She said that the emphasis is always to go beyond social inclusion to academic inclusion of all the students in the teaching and learning process.

In the next section, I delve into the specific teaching and learning strategies within the classrooms that teachers reported enabled them to include diverse learners.

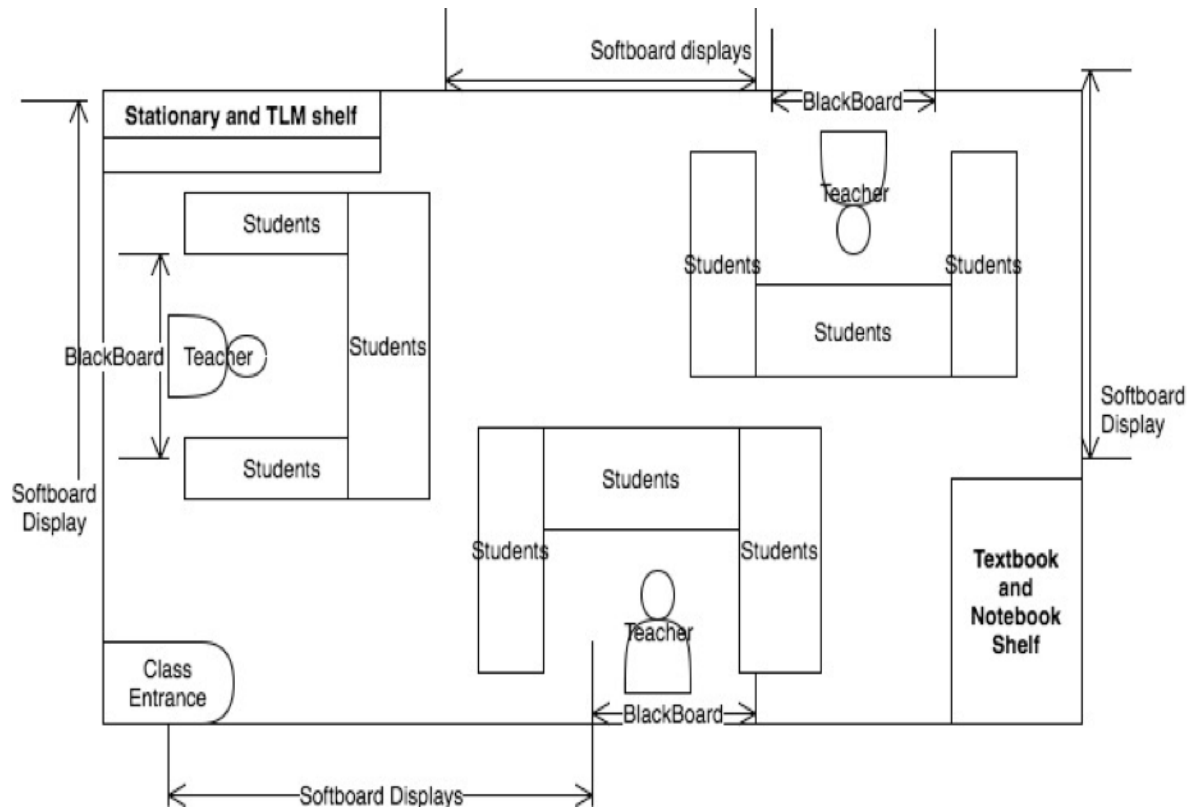
## **7.5 Teaching and learning strategies to include diverse learners**

This section addresses research sub-research questions RQ1a and RQ1c. Teachers in the interviews reported the teaching and learning strategies they used to include all learners, information that I supplement with the classroom observation data. I have also included perspectives from the students about their teaching and learning. I present these findings together although they come from separately conducted interviews as during the analysis common themes emerged. All names of teachers and students used to report the findings in this section are pseudonyms.

### **7.5.1 Seating arrangement and movable furniture**

During the interviews, many teachers reported that the seating arrangement enabled them to see each student in their group and to give them the required attention (Figure 20). Radhika, Departmental Leader for English attested to this, saying that “*The teachers sit in the middle with the students around them and that formation itself is very inclusive and the teachers have an idea as to what each one is doing.*” As aforementioned, each teacher had between 12-15 students depending on the class size, with this varying between 40 and 45 students. The students and the teachers sat at eye level on individual stools. This minimised the

distance between the students and teachers, both physically and metaphorically, according to Ila, the Departmental Leader for LRG, thus leading to inclusion in the classroom processes<sup>72</sup>.



**Figure 20:** Layout of the classroom

The students only took textbooks and notebooks home when they had any homework assignments for any subject. According to Liz, they introduced the shelves with a view to reducing the burden of students carrying backpacks with heavy books back and forth. Inside each classroom I saw various teaching aids on softboards. For example, the mathematics classrooms had formulae and equations, whilst the science classrooms had charts based on the current topic they were learning, like chemical equations, volcanoes etc. The English classroom had poems or phonetic words and the arts and crafts classrooms had the student's artwork adorning the softboards. The content of these softboards changed depending on the current lesson that the students were studying at the time. These also displayed the students own work at times. In addition, there was an individual blackboard behind each teacher.

<sup>72</sup> Mentioned in the field-notes when she was taking me for a walk through Aravalli school.

Two strategies often mentioned by teachers that enabled the inclusion of diverse learners in the teaching and learning processes were the seating arrangement of the students and the ability to move the classroom furniture for various activities. The teachers explained that having the students sit in a U shape around them helped them to connect with them while they were teaching. This enabled them to, '*see the children and give eye-contact while teaching,*' '*ask students if they are understanding,*' '*see and correct if they write wrong on the notebooks,*' '*do assessment easily*' etc.

One teacher, Jyotsna, Grade 5, at Nilgiris school, said that she had a student with hearing difficulties and so she made sure he sat next to her. If she felt his attention in the class was waning, then she would touch his forearm to bring his attention back to the lesson. Two teachers, Meghna and Shalini (teaching maths and English respectively), mentioned that they had students with low vision and so they seated them directly in front of them and thus, also closer to the blackboard. This way they could help them at once if '*they are noting down incorrect information from the black board*', '*show the concrete objects closer to them*' and '*help them if they are finding it difficult to read their books*' (the teachers said they provided them with large print books).

Other reasons why teachers found the seating arrangement useful was when supporting children with a '*behaviour problem*' and the ones they labelled as '*hyper child*' (as discussed in sub-section 7.5.1), who often ran out of class. Two teachers, Hema and Rashmi, who had autistic students in their class also mentioned utilising the U seating strategy. In this seating arrangement, the teacher would put one of the desks in the middle of the U directly in front of her and the student would sit there surrounded by her/his classmates. According to the teachers, this prevented them from running away in the middle of the class and the student '*pays more attention.*'

Referring to her autistic student, Hema said that they had had a scare a few times in the past, when the student had '*run away from the classroom suddenly and we didn't know where.*' She said that one of the reasons they made this arrangement was to ensure the safety of the students so that they do not run out of the school and wander into the street and another was to sustain their attention when they were teaching. Referring to the autistic student in her

class, Rashmi said that the student would always get ‘*hyper*’ in class, and she did not understand why initially. But after she seated him in front of her, she realised that he got ‘*hyper*’, because he was hungry and could not wait until the snack break or lunch break.

“So initially I was very in tension<sup>73</sup> on how to handle him, but I wanted to teach him, so I used to take time for him. Five, ten minutes in our 45 minutes class it used to take for him. I used to make him sit beside me and taught him. And he used to get hyper, at that time I used to not understand why he got hyper, but then I got to know that whenever he is hungry that time he gets hyper. So, I let him have his snacks in class and he was sitting and learning.”

A few teachers said that the movable furniture was important as they could arrange the classroom quickly when presenting different lessons. They sometimes presented the concept to all the students together and then, continued to teach the three groups separately. I saw this during my classroom observations. The science teachers in Grade 6 at Nilgiris school arranged the desks in the centre of the classroom and all the students stood around, while she used an anatomical skeleton model to show, name and explain the various parts. After around 15 minutes, the students and teachers rearranged the furniture into three groups in a U shape and the three teachers continued teaching in smaller groups. This allowed for them to share the resource, which was the anatomical skeleton model, to teach the entire class together and then, they continued teaching using diagrams and charts. According to the teachers, this was helpful for them as well as the students, as ‘*all students felt they are part of the same class even though they are in separate groups,*’ ‘*the special child is with everyone for schema activation and then teacher pay more attention in smaller group*’ and ‘*it is easier for us to introduce some concepts together*’.

### 7.5.2 Activity based teaching methods and use of concrete objects

Drawing on their constructivist and active learning pedagogy all the teachers interviewed emphasised the use of various activities to include diverse learners. The teacher and student interviews helped in providing understanding regarding how they used activities to include diverse learners. Teachers reported using songs, role-play, games etc. in all the subjects. Role-play and activities were the top two favourite ways to learn, with these being mentioned by the majority of the students during the interviews. The students reported these activities as

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<sup>73</sup> In the Indian context, people often characterise stress as tension.

being the reasons why they liked and remembered the lessons taught in different subjects. Several teachers said that using various activities helped them to connect better with the students and to increase their engagement in class. Despite none of the teachers mentioning ‘*popcorn reading*’ as a strategy for including diverse learners, it emerged as a favourite among the students. Karam, a student in Grade 6 at Aravalli, said that for this the teacher would assign one of them as the first reader. Then, they had to stop reading at a random point and nominate someone else in the group to carry on reading and so on, until they had finished the entire text.

On being probed about ‘*popcorn reading*’, some teachers have said how it enabled them to sustain the attention of different students at the same time and as the students nominated each other, it helped build ties amongst them. Priya, in Grade 5 at Vindhya school, said that she had difficulty speaking, but ‘*popcorn reading*’ was helping her to read slowly and all her friends in the group supported her in reading the ‘*difficult words*’ during this activity.

Students gave many examples of activities that they undertook in the classroom that helped them to learn and remember their lessons. In some instances, students recalled things they had learned in lower grades and in others, lessons they had completed in the current grade. Some of these were:

“Teacher made us into groups of 3 and 4 and then we used counters to learn multiplication tables.”

Gaurav, Grade 6, Vindhya school

“Teacher put hot spoon in ice-cold water to teach us about thermal conductivity.”

Ankit, Grade 6, Aravalli school

“We play a game about temperatures and pressures and learn about latitude and longitude using a balloon activity.”

Susmita, Grade 6, Nilgiris school

HINDI – “Humein role-play karna acha lagta hain. Hum ne role-play mein rotation or revolution sikha tha.”

TRANSLATION – “I like doing role-play. We did role-play where we learned about rotation and revolution.”

Akshiet, Grade 5, Aravalli school

“Teacher draws boxes on the floor and then, we do an activity to find out the perimeter of the box.”

Siddharth, Grade 7, Nilgiris school

HINDI- “Teacher mujhe draw and label karne deti hain plants ke parts aur main aise sikhti hoon.”

TRANSLATION – “Teacher asks me to draw and label the parts of the plant and that is how I learn.”

Geeta, Grade 5, Vindhya school

“In Hindi we are seeing a video about Maharastra and then singing songs and teacher is asking ‘kya dekha andar?’ (What did you see in the video?), so we’ll tell her.”

Sri, Grade 5, Nilgiris school

“I liked learning about adverbs. Teacher played games and she made us laugh, and I was getting the answers, so I liked, and it was a game about us children. So, it was my favourite session with my friends.”

Ankita, Grade 6, Aravalli school

Teachers used different teaching and learning materials (TLM) to substantiate the classroom teaching for various subjects. For example, they reported using audio-visual aids in all the subjects, and different teaching aids, such as, the aforementioned anatomical skeleton in science; counters and Dienes blocks in maths; word games for English lessons; models such as volcanoes and the solar system for geography in social studies; and an experiment and a model to show how the digestive system works in science, amongst others. During the interviews, various teachers gave reasons why these TLM helped them to include diverse learners as follows:

“When we use concrete objects and different teaching materials, we can move from concrete to abstract, and students understand.”

Mayuri, social studies teacher, Aravalli school

“We can include special child in the lessons and explain them when we use counters, blocks in maths concepts.”

Keya, mathematics teacher Vindhya school

“I use charts and models to teach and put them on the board and they can learn even when the class is over by seeing these charts.”

Huma, social science teacher, Vindhya school

“There are different kinds of learners, auditory, visual, kinaesthetic and so, when I use these different materials, then I can include different learning styles of the students.”

Shraddha, English teacher, Nilgiris school

The teachers made various charts and artwork, which they displayed inside and outside the classroom in the school corridors, thus turning the entire school building into a learning experience for the students (Sees Figures 21 and 22). The students also took part in preparing these charts and artwork with the teachers. During interviews, teachers mentioned that they changed the charts and tables inside the classroom depending on whatever concepts they were teaching at that time. I saw the charts and tables with various historical information (dates and major events) about the Maratha Empire and its expansion alongside mathematical properties of different angles in the Grade 7 classroom in Nilgiris school. Commenting on learning about angles this way, Raghu, Grade 6, at Nilgiris school, said:

HINDI – “Who cutting kar ke sikhaya tha, wo jo obtuse angle kaise rehta hain aise rehta hain na (demonstrates an obtuse angle with arms) aur aise phir aise to usko ishaar se bhi laga rehta hain bus.”

TRANSLATION – “They taught us about obtuse angles and what they are through cutting (demonstrates an obtuse angle with arms) and then, they put them up here.”

Including all the students in the class in some aspect of making the TLM also ensured that all the students were contributing to their learning, which made them feel included in the learning process, according to the teachers. During the interviews, the students mentioned

that learning through activities and role-play made it 'easy' for them to understand things as this made their classes 'fun' and 'interesting.'

"I like to learn like this, because it is so nice, and I understand by the videos or by any by seeing, but I does not understand by hearing what (unclear), but activities I understand immediately. So, when I see na (colloquial) so in exam time it come in my mind and what question is there, so I write quickly."

Dinesh, Grade 7, Vindhya school

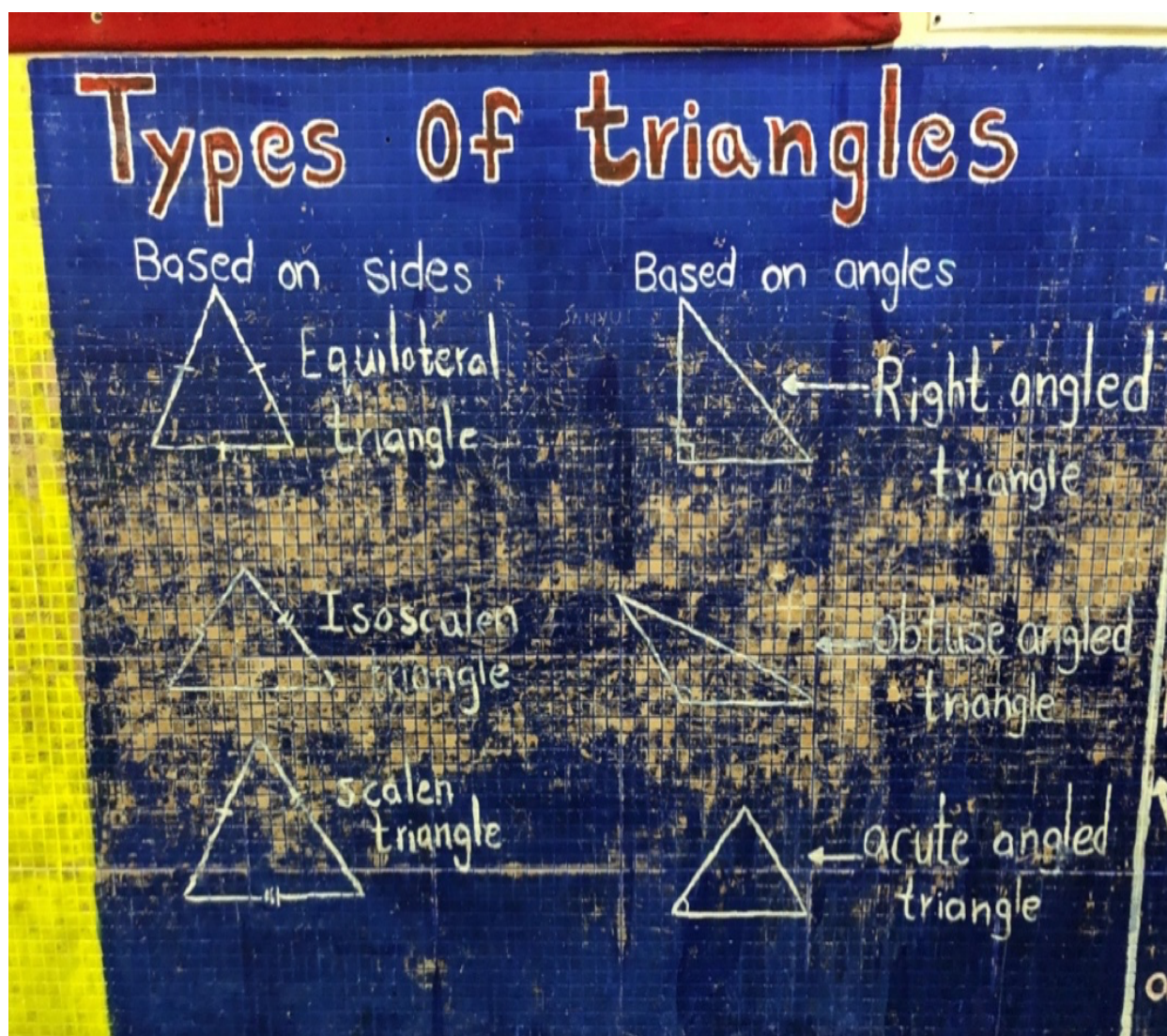


Figure 21: Walls outside a classroom in Nilgiris school



**Figure 22:** Angles drawn on the entrance to a classroom in Aravalli school

### 7.5.3 Individualised attention

Teachers mentioned that being able to give attention to each child, even if it was ‘3-5 minutes per child in a 45-minute period’, helped them to understand the needs of the students.

Sometimes during the class, they would give activities or assessments to the students who had ‘*grasped the concept*’ and then, would sit with those who said they did not understand to explain it to them again. Most teachers reported that they needed to give extra time and support to students at some point during the teaching and learning process.

“Because my speech is, means most properly I can’t speak. So, my teachers take my extra speech. So, English from that I can speak and my speech from that is improve. She tells breathe and speak slowly. From breathing she teaches to speak slowly, slowly, like that.”

Ketaki, Grade 6, Aravalli

Teachers cited several ways they tried to find time in the day to give extra support to the students. They mentioned setting aside time during the lunchtime or Zero Period and occasionally during library time. However, they said that their faculty requested them never to take students away during their holistic subjects for other subject teaching purposes.

The teachers explained how for students who were facing difficulties in understanding a concept they would try to give them individual attention and give extra examples or show more concrete objects or try to explain using dual language again. Teachers considered including students in the teaching and learning processes, irrespective of their linguistic background, as a feature of inclusion. Kripa, Grade 5, at Vindhya school, explained how the teacher had helped her using dual language in the primary grades.

HINDI – “First standard mein, mujhe Telugu aata tha aur Hindi nahin aata tha. Matlab main Telugu hoon na toh hamari Parvathy teacher Telugu hi thi. Aur mujhe thoda thoda Hindi sikhayi aur abhi mujhe Hindi thoda thoda aa raha hain aur English bhi aur Marathi bhi aa raha hain.”

TRANSLATION – “In the first standard I only understood Telugu and I did not even understand Hindi. Parvathy teacher was Telugu and so at first, she taught me Hindi little by little. Now I can understand Hindi and English and Marathi also. I am learning little by little.”

Describing the use of dual language and giving individualised support, Lotika, Grade 5 teacher at Vindhya school said:

“Suppose that child do not understand that concept and suppose I have one session free then I take that child beside me and explain in Hindi and if he understand in Hindi properly, then no problem, but if he don't understand in Hindi then I take my colleagues help and they are helping and we teach the concept to them.”

Throughout the classroom observations, I noticed interactions between the teacher and the students (identified by LRG teachers) having difficulties and disabilities. I saw the teachers speak to these students and respond to their questions or ask them questions alongside their peers to varying degrees. While some teachers checked on students with difficulties/disabilities at regular intervals, other only interacted them only once or twice during the lesson. Interestingly, the teachers had more interactions in the first half of the day than in the second half, post lunch break. Moreover, I did not see any instance where the teacher did not interact with these students at all.

During one of my classroom observations, I saw different subject teachers speaking to Krish in Grade 6 at Aravalli school at the beginning of the class and writing something in his notebook. Then, they would complete introducing the concept or continuing with their earlier

day's lesson for about 15-20 minutes with the rest of the students in the group. After that they gave the students some activities and alternated their attention between teaching Krish in his notebook and then, resuming their lesson with the rest of the students. I spoke to the maths teacher and the English teacher in that class about this observation. On probing, they mentioned that as he had intellectual disabilities<sup>74</sup> and was not at the same 'level' as his peers. For example, the maths teacher told me that she was teaching him addition and subtraction and giving him simple problem sets to solve. While the English teacher said she was teaching him three lettered words and phonetic sounds, with the rest of the class, who were Krish's same aged peers, the teacher was continuing covering the grade level concepts. Teachers also mentioned that they had students in their class, who were 'smart children' and would be sitting scholarship<sup>75</sup> exams that the state government offers to students of MCGM schools. So, to tutor these students the teachers came to school early on certain days and they had early morning sessions to teach them the syllabus for the scholarship exams.

#### 7.5.4 Peer Learning

The majority of teachers during the interviews explained how they promoted peer learning as a strategy in the classroom to make their teaching and learning processes inclusive. As discussed earlier, when the Maths Department introduced ability grouping, the main reason the faculty and teachers from language and science departments opposed it was because they said it would hamper peer learning. Teachers mentioned encouraging peer learning from an inclusion perspective and using it to 'promote group work,' 'encourage children to help each other' and to 'increase collaboration between all students.'

The analysis of the interviews with teachers and faculty members reveals that the reasons for encouraging peer learning varied but primarily it was for two purposes. The first was to promote inclusion of children with difficulties and disabilities in the learning processes with

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<sup>74</sup> The class teachers and LRG teachers suspected that he had intellectual disability, but he was yet to have a formal medical diagnosis

<sup>75</sup> The entire class appears were put up for the scholarship exam, which there are multiple rounds. A few students from each grade (upper primary), who performed at the top of the class received extra tutorials early in the morning to prepare them for the pan BMC schools' examinations. These students who had extra coaching would sit for the BMC school wide scholarship exam and those who performed well would receive a stipend from the BMC. These are merit based scholarships that are based on summative assessments and usually held once a year.

their peers.

“We make them learn from their friends also. In Muktangan, the normal kids are also support that child (with disabilities), because we are not discriminating. They all mingle with each other.”

Sana, science teache, Aravalli school

The second reason was that it was used as a classroom management technique to keep the students who were deemed ‘*fast learners*’ occupied in the class. Teachers reported using peer learning as a strategy to give the ‘*fast learners*’ an opportunity to ‘*revise*’ what they had just learned by teaching their fellow classmates. They said it also ensured that these ‘*fast learners*’ were not bored or distracted and ‘*disturbing*’ the other students as they ‘*were quicker at grasping a concept than the others.*’ Teachers said they would usually seat the students in a way that one facing difficulties or disabilities was next one who ‘*had more grasping powers*’ to facilitate interaction, inclusion and learning.

According to the teachers, peer learning fostered learning among the students, with those in need of extra help sometimes being more open to seeking help from their peers than the teachers. The student interviews also supported these findings, with some reporting giving or receiving peer support during the teaching and learning process.

“...when I have finished my work...means I tell those who doesn’t know the work how to do. I explain to them.”

Avni, Grade 5, Vindhya school

HINDI – “Mujhe samajh mein nahin aaya na toh main matlab mera friend hain na mein us ke ...woh mere baju mein baitha hain na us ko main puchta hoon aur woh mujhe bolta hain.”

TRANSLATION – “I do not understand, then I have a friend and I ask him. He sits beside me, and I ask him, and he explains to me.”

Tarun, Grade 5, Nilgiris school

Students reported giving and receiving peer support not just during the class, but also, at other times, like in the library period or during the lunch breaks. Students said that they often turned to their friends when they had doubts in their lessons and attributed peer learning

sessions as having led to the formation of these friendships. Many students referred to their peers, from whom they sought learning support, or they gave learning support to their friends or best friends. Two students mentioned that their friend who was a '*scholarship child*'<sup>76</sup> helped them learn in the classroom alongside their teacher. Another student, Ishani, Grade 6, Vindhya school, explained how the teacher paired her with a '*smart student*'. She said that, whilst she directed her queries to the teacher first, she often sought support from her classmate.

“So, we have one smart also and we have one low one also. I have partnered with Rohith, who helps me with everything. Teacher is also happy very, because he shares everything with me. We are like brother and sister. He looks at my book and says this will come here and this will go there. It makes teacher proud of him also and I also.”

Ishani, Grade 6, Vindhya school

Thus, the students mentioned forming various bonds with their classmates through the process of peer learning. All students who recalled such learning in the interviews were aware that they were paired with their peers, who were considered the '*smart one*,' '*intelligent boy/girl*' or '*scholarship child*' in the classroom. Students reported seeking help from their peers if they were either facing difficulties in learning and or unable to understand things taught in the classroom easily and receiving support from their peers. A few students also said that on some occasions they received support from their peers and on the others, gave learning support to others.

#### 7.5.5 Giving the opportunity to students to ask questions without reproach

The teachers reported that they encouraged all the students to ask questions so that they could '*clear doubts about the lessons I am teaching*.' Whilst they did not mention it as a specific teaching strategy to include diverse learners, the analysis of the students' interviews gave a distinct perspective. That is, it emerged that the ability of the student to ask questions repeatedly to the teacher without fearing reproach was an important aspect of the teaching and learning process for the students. In answer to the interview question, what they do if they face difficulties in understanding any concept taught in the classroom, the students

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<sup>76</sup> As mentioned in sub-section 7.5.3 earlier.

mentioned they asked their teachers for help. Several students mentioned that the teacher helped them by answering their doubts and queries relating to the lessons under study multiple times. They provided the following examples of this:

“...Because teacher teach us very nicely and teacher first teach us and if we don't understand then we are telling again and again.”

Shilpi, Grade 6, Aravalli School

“Teachers tell us that, if you don't understand, then tell us so we are telling. Because teachers is saying that, if you don't understand this, then teacher cannot go forward. I don't understand then I ask to teacher and teacher explains me deeply and I understand.”

Mehzabeen, Grade 7, Vindhya School

“In Maths when I didn't understand the sum. then she explain me two, three times and I understand. In maths...number work...because in number work there is problem sets and I did not understand that. Then, I ask to teacher and teacher tell to me and after that I understood.”

Thomas, Grade 6, Vindhya School

HINDI – “Kyunki jo big word mereko nahin aata hain na to main teacher se puchta hoon aur who sikhati hai., Teacher bolti hain ki... agar nahin samajh mein aaya toh bolo. Aur kaise pronounce karna chahiye yeh bhi sikhati hain. woh teacher sikhati hain magar mereko na English jyaada nahin aata hain. ...thoda sa aata hain ...Main English abhi sikha nahin hoon matlab mereko thoda sa aata hain.”

TRANSLATION – “Because I do not understand the big words, so I ask teacher and she tells me. Teacher tells me that, if I don't understand, then I should tell her. She teaches me how to pronounce these words. I do not know English much, just a little bit. I haven't learned English properly, but I am learning a little bit.”

Kabir, Grade 5, Nilgiris School

The students recalled that many times they did not understand the lessons in one go, but their teachers had encouraged them to ask questions and let them know, if they were facing difficulties. The students reported asking the teacher multiple times, if they did not understand any lesson or concept and this helped them in comprehending their lessons better.

Another related important aspect of the learning process for the students alongside the ability to ask teachers to teach something again was receiving feedback from their teachers.

## **7.6 Assessments**

Both formative and summative assessments take place regularly in these schools. According to Liz, they initially only had formative assessments, but as the schools grew to include higher grades, they started including summative ones. The summative assessments were started to abide by the school examination schedule in that they follow the Maharashtra State Secondary and Higher Secondary Education Board, and the students must sit annual examinations. As the schools expanded to include higher grades, they started to prepare the students to sit for these annual examinations. Next, I present my findings about the formative and summative assessments followed in these schools.

### **7.6.1 Formative Assessments**

Formative assessments are an integral part of the classroom teaching and learning, according to the faculty and teachers. The teachers assess the students' learning in class throughout the teaching process in all subjects. This allows for the teachers to gauge whether the students are able to follow what is being taught and thus, change/adapt their lesson plans, accordingly, during the class. This, in turn, ensures that the teachers can support diverse learners in the teaching processes through ongoing formative assessments. Vineeta, Departmental Leader for Social Studies, mentioned that constant formative assessment was a way to ensure inclusion in classroom teaching and learning and several other teachers attested to this.

While the most common way teachers conduct formative assessment is by asking the students' questions throughout the classroom transaction of the lessons, the teachers also reported adopting other strategies for such assessments, including games, role-play, and teaching and learning materials. During the classroom observations of Grade 5 at Aravalli school, I saw the use of role-play for assessment during the social studies class.

The teacher was teaching about the solar system, and to assess the students' learning she asked each in her group to assume the role of different planets. Then, each student had to state the characteristics of the planets and organise themselves in order of the planets in

space. In addition, the students had to show rotation and revolution as well as discussing the role of the sun and the moon. Every child in that teacher's group took part in this role-playing/assessment activity.

Dia, who teaches English in Aravalli school, explained how she and her colleagues prepare various board games with the subject faculty and use them to assess the students' learning. In addition, Lotika, an English teacher in Vindhya school, mentioned using various strategies for formative assessments to ensure that they were capturing the learning of all students in their group. They employed different strategies for assessment because sometimes, some students were shy and therefore, reluctant to respond in front of the group, whilst at other times they would answer in unison with the rest of their peers, even if they did not understand. Thus, playing games or engaging them in activities allowed the teachers to assess closely the learning of the students.

### 7.6.2 Summative Assessment

In addition to their regular formative assessments, every week, the students have a summative assessment for English, mathematics, science, social studies, Hindi, and Marathi based on the concepts that they have learned that week. For example, they have summative assessment for English on Mondays, mathematics on Tuesday and so on. Summative assessment lasting 30 minutes takes place after the morning assembly and Oral Circle Time (OCT), where the students' complete worksheets. As these summative assessments are supposed to prepare them for their annual examination conducted by the Maharashtra State Secondary Board, they sit as they would be expected to in these examinations, with desks and chairs arranged like a traditional classroom in India.

Puja, a mathematics teacher at Nilgiris school, commented how previously they had prepared separate assessment sheets for different students, whereby they made easier assessments for students who had difficulties in maths. However, they realised that they were assuming the student's *'level'* as too low and so students in the C group were almost getting full marks as their questions were not challenging them to higher order thinking. Teachers teaching other subjects also mentioned doing this in the past. The teachers and faculty had come to realise that they were assessing the students wrongly as the assessment sheets were not appropriate.

So, they started including three types of questions in the assessment worksheet. Those that tested the basic conceptual knowledge, those that tested the application of the concepts they had learned and a few complex questions that encouraged higher order thinking. The expectation was that all the students would be able to tackle the basic questions, whilst regarding the application based and higher order thinking questions, they expected all students to attempt to answer these.

If majority of the students were unable to answer the application-based questions, then the teachers would revise the concepts again in the following week's lesson plans. In the case that only a few students were unable to answer the basic and/or application-based questions, then the teachers would take a few extra classes for them to help them through those concepts. According to Puja, this enabled the teachers in accessing "*what the students had understood and support them without assuming how much they learned in a class.*" Teachers used the assessment data to give support to the students in the class.

Thus, both formative and summative assessments form an integral part of the teaching and learning processes within the schools. Even though there are various teaching and learning strategies in place to support diverse learners in the classroom, teachers mentioned during the interviews that they had had to abandon teaching some concepts in the interest of completing the syllabus within the school year. However, the formative and summative assessments helped them keep track of the students who faced difficulties. To make up for not being able to complete certain concepts with the students during the academic year, the teachers and faculty hold extra sessions with the students in April, after the completion of their annual examination. During this period, the students have '*make-up*' sessions for various subjects for a few hours each day and for the rest of the time, they take part in various rehearsals for their annual day programme. Thus, the teachers strive to ensure that all students acquire the skills and competencies that their subject/course demands throughout the academic year to the greatest extent possible.

## 7.7 Summary

Members of the leadership team, faculty and teachers who responded to questions about pedagogy and classroom teaching and learning attributed the development of their pedagogical structures to the prevalent best practices in the field of education and child

development. They often quoted Mukhtangan's tagline 'Learning and growing together' to reference the changes to their education processes and the learning over the years. They explained how everyone at Mukhtangan, faculty members, teachers, and students, are all considered a part of the teaching and learning process and that they learn from each other.

The classroom teaching and learning investigation has revealed several common practices aimed at including diverse learners, these being:

- i. following a spiral curriculum.
- ii. experiential teaching and learning.
- iii. reliance on multi-modal delivery of lessons in the classroom through activities, such as role-play, experiments etc.
- iv. teacher led instruction combined with discussions.
- v. use of dual language in the classroom.
- vi. reliance on teaching and learning materials (TLM) to supplement the teaching and learning; and
- vii. subject specific lesson design protocols.

In addition to these, teachers and students reported a variety of teaching and learning strategies that supported inclusion of diverse learners, including: the use of seating arrangements and movable furniture, usage of activity-based teaching and methods, use of concrete objects, giving individualised attention to the students, fostering peer learning and giving opportunities to all students to ask questions during the classroom teaching and learning process without reproach. Moreover, it emerged that these schools rely on both formative and summative assessments to gauge all students' progress. Another salient revelation was that the LRG teachers provide extra literacy and numeracy support for the students with difficulties and disabilities. However, for the other subjects, such as science and social studies etc., the support to the teachers from the LRG is limited to IEPs for students with significant disabilities. Whilst the faculty and teachers for other subjects consulted the LRG about what kind of support they could provide for various students, the curriculum design and lesson planning rested with the faculty and teachers of those specific subjects. I will expand more on this when I discuss the role of the LRG along with the challenges and enablers to inclusive education in the next chapter.

## CHAPTER VIII: EDUCATION FOR ALL: ENABLERS AND CHALLENGES

In this chapter, I present the findings regarding the enablers and challengers reported by various stakeholders in relation to the inclusion of diverse learners in the classroom teaching and learning and thus it addresses sub-research question RQ1b. The findings in the previous chapter highlighted the reliance on the Learning Resource Group (LRG) for supporting diverse learners in the classroom, especially for students with disabilities. Hence, this chapter begins with an overview of the LRG and its different strategies for supporting teachers to include diverse learners in the classroom processes.

### 8.1 Learning Resource Group (LRG)

As established so far, the schools run by Muktangam unequivocally claim that they have striven to provide inclusive education since their inauguration in 2003. Both Liz and Ila, founder of Muktangam and the Departmental Leader of the LRG, respectively, talked about why the special needs department was reorganised into the Learning Resource Group (LRG). First, it was because of their evolving understanding of inclusion. In the beginning, the Special Needs Department was supporting the students with disabilities enrolled in the school, but increasingly it came to be working in a silo. That is, the purpose of inclusion of students with and without disabilities in the same classroom remained unmet as students with disabilities were pulled out of their classrooms for their sessions.

The second factor that led to the creation of the LRG, according to Ila, was the understanding that it was not just students with disabilities who needed extra support, for other students also faced learning difficulties and challenges due to reasons, such as English being a second language, their socio-economic background or personal challenges in their home environment, affecting their studies. This led them to re-evaluating what inclusion means to them and to work towards supporting all students facing difficulties in learning, irrespective of the cause.

“I would say it is essentially a support system within this organisation that really tries to cater to the needs of the children who are struggling with learning.”

Ila, Departmental Leader, LRG

The LRG is composed of a Departmental Leader, four Lead Faculty members<sup>77</sup> and two special education teachers in each school, one catering for the lower primary section (Kindergarden, Grade 1-4) and another for the upper primary section (Grade 5-10).

According to Myra, one of the Lead Faculty of the LRG, the recruitment process for all Mukhtangan teachers is the same. Almost none of the teachers have had any earlier experience of teaching students with disabilities, although two teachers had siblings and family members with disabilities.

The special education teachers receive the same foundational teacher training as the other teachers in Mukhtangan and post recruitment into the LRG; they start working in the primary section and receive two years in-service training. The LRG Departmental Head and Lead Faculty lead these training sessions for the LRG teachers. Once a week they receive theoretical knowledge via specific modules on supporting children with special needs, supporting children with difficulties in mathematics and English, developing and planning IEPs, providing social support, counselling parents and speaking to them about their children's progress and challenges as well as in providing support to class teachers.

For the rest of the time, they learn on the job, receive close support from the Lead Faculty. In addition, the LRG teachers get together once a week for their CUD sessions, where they receive ongoing training on different strategies for supporting children with diverse abilities. These weekly participatory sessions provide them with a platform to share challenges or successes with their students and to learn from each other. Talking about this, one of the LRG teachers, Ratna, said that feedback from their colleagues helps them to address the challenges faced by their students in a timely manner. During these CUD sessions the LRG teachers receive knowledge about various disabilities, as students enrolled in these schools have physical, developmental, and cognitive disabilities and sometimes students with similar disabilities have different needs and therefore require separate kinds of support. Also, across the seven schools, students with different disabilities are enrolled. Hence, giving this training becomes necessary such that they are prepared to support students with different types of disabilities enrolled in the school.

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<sup>77</sup> One of the LRG teachers who I had interviewed was promoted to Lead Faculty and another new Lead Faculty was recruited when I was doing my fieldwork. I did not interview the new Lead Faculty as she had just joined towards the end of my fieldwork and was still undergoing her orientation.

These LRG teachers support the students with difficulties and disabilities in the classroom (irrespective of a medical diagnosis). They provide support with literacy (reading and writing in English) and numeracy support to all students who require it. However, they do face barriers in including students with sensory disabilities, such as blindness and deafness, who require braille or sign language, as discussed earlier in section 6.5.1. Hence, at present the school is not intending to enrol these students until they have built the requisite capacity within the team to support students with these disabilities.

According to Ila, the school strives to ensure that all students spend 75-80 per cent of their time learning together and so they limit the amount of one-to-one support outside of the classroom to just a few times a week. They do this keeping in view that pulling the child out of the classroom for majority of the school day defeats the purpose of inclusion. All students receive instruction in the core subjects English, maths, Hindi, Marathi, social studies, science, and other holistic subjects together in the same classroom. The LRG teachers work with the class teachers to develop individual education plans (IEPs) and help them to develop assessment tools for students with diverse needs. These teachers are available as a resource for the class teachers when any challenges arise in teaching children with different ability levels in the same classroom and they provide in class support as per the need.

Usually, the LRG teachers divide the 45 minutes of LRG sessions into three 10-minute learning periods, with each having a learning goal and a 15-minute session for discussions, questions and answers as well as any summative assessments, if required. Depending on the difficulties or disabilities, they adopt different approaches. For example, the LRG teacher might provide differentiated help to a student with dyslexia to support their learning needs, whilst for a child with significant disabilities they could give Activities of Daily Living (ADL) training. In 2017-18, the LRG was supporting about 70-80 students with certified disabilities and about another 200 students through its literacy and numeracy programme across the seven schools, according to Myra, Lead Faculty of the LRG. In the next section, I present how the students are screened within the school to determine what kind of support to provide them.

## 8.2 Screening of children with difficulties and disabilities

There is a clear process for the screening of students who face difficulties in learning to ascertain whether they should be recommended for added support in school, as Myra explained. The first is when the child already has a medical diagnosis of a disability/ies at the time of enrolment. Then, the LRG team along with the class and subject teachers carry out their own observations and come up with a strategy for supporting the student. Usually this happens in the primary section, but on a few occasions students with disabilities have enrolled in the school in higher grades.

The second screening process can take place any time after the enrolment of student in the school. If any teacher feels that a student is facing difficulties with the teaching and learning process in the classroom, then they bring this to the notice of the class teacher. That person consults with the other subject teachers, and they carry out observations for a week to see if the student is facing difficulties in one subject or more. The teachers keep the School Faculty, the LRG teacher and LRG Lead Faculty informed during this time. At the end of the week, the teachers share their observations with the LRG teacher and then the latter carries out classroom observations for another week. If the teacher perceives the students as requiring support for just one subject, then the subject faculty and the subject teachers bring in changes in the lesson plan to support the student. If the student is deemed to require support that cannot be provided just by the regular teachers, then s/he starts attending an LRG class twice or thrice a week for 45 minutes depending on the amount of support s/he needs.

After spending few months receiving extra support from the LRG, the student's progress is assessed again to see whether s/he has overcome the difficulties s/he has been experiencing or whether there is a need to continue giving support. Depending on the outcome, the LRG teacher consults the Lead Faculty, and they devise a plan to investigate the challenges faced by the student further as well as discussing whether the student requires professional assessment from medical personnel.

All members of the LRG team who were interviewed categorically mentioned that their aim of the screening was not to identify whether a student had any disabilities, but rather, to provide the support they may need and to establish if there was a need for further medical or professional assessment that could help the student receive better support in the classroom

and outside of it. If the LRG teacher finds that a student requires further professional assessment, then, post consultation with the Lead Faculty, the parents or guardian of the student are called to a meeting, where the challenges their child is facing in the classroom are explained to them.

“When you have to talk to the parents it should not hurt their emotions. So, we tell the teachers how you take care of that while providing them (the parents) with the facts. Many times, we need to send the children for formal assessment and the parents are not ready, so we take the help of the Social and Emotional Department. So, they come in and help us and then, the school Faculty comes and helps us.”

Myra, Lead Faculty, LRG

In addition, they give the parents information about the various government hospitals that carry out these assessments for free, whilst also explaining the process and documentation involved. They counsel parents on how the teachers and parents can better support the student both at home and in school, if they receive a professional assessment. They also go with parents to the hospitals for support (especially paperwork in cases where the parents are not literate) on a case-by-case basis. For primary school students, they usually refer them to the Ummeed Child Development Centre, which is a not-for-profit organisation in Mumbai that works with children with disabilities, where they are assessed, and a plan is devised on how to provide the best support.

All the members of the LRG were clear that a professional diagnosis is not required before they support a student who has demonstrated challenges with learning. However, according to Myra, medical certification<sup>78</sup> is essential, if the student wishes to apply for accommodation in Grade 10, when they sit their Maharashtra State Board of Secondary and Higher Education certificate examination. In this case, they must have a professional diagnosis before they reach Grade 9.

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<sup>78</sup> Disability certificates are important as they provide students with disabilities access to transportation costs, aids, appliances and scholarships from the government and reasonable accommodation during assessments. The responsibility for starting the certification process rests with the school, according to the guidelines provided by the Department of Education for Persons with Disabilities in India. However, often this does not happen, as parents are intimidated by doctors and the process. They are unable to go through the process due to the various challenges of poverty, literacy, transportation, duration etc. (Rao, Shrivastava and Sarkar, 2020)

As the entire process for receiving professional certification is long and often delayed by bureaucracy, the LRG teachers recommend the parents to go through the process as early as possible. In addition, having a professional diagnosis also makes the students eligible for aids and appliances, such as hearing aids, spectacles etc. or occupational therapies and medication at minimal cost from the government, which can help the student. Ila explained that in the past there have been instances when teachers and LRG members tended to overestimate the number of students as having disabilities. Hence, in their current screening protocols they ensure that they investigate whether the challenges a student is facing arise from disabilities, owing to English being a second language or other socio-emotional challenges that the student may be facing.

Myra mentioned that, if for any reason the parents are reluctant to go for a medical diagnosis, then they still inform them on ways that they can support their child at home. They also tell them what kind of extra support they are giving in school. In addition, Kiran, the Departmental Leader for the Socio-Emotional Department explained that their team is involved in counselling the parents and the students with the support of the School Faculty, if the challenges faced by the student are as a result of the home environment.

The presence of the LRG supports the class teachers in being inclusive in their teaching and learning processes, whilst at the same time giving specialised help to students that need it. Interviews with the LRG members provided an insight into the different services that they provide to the students with difficulties and disabilities, which I described in the next section.

### **8.3 Support for children with difficulties and disabilities**

The LRG teachers described various kinds of support that they provide for the students and teachers. According to Ila, the goal of the LRG teachers is primarily “*to support the students attain literacy and numeracy skills that enables them to access the curriculum.*” Hence, they focus on literacy and numeracy skills of the students, as they believe this can be beneficial. In addition, for students with significant intellectual disabilities, the LRG teachers teach them Activities of Daily Living (ADL) skills. Next, I present the diverse ways the LRG teachers support the teachers and students in the school.

### 8.3.1 Individual Education Plans

LRG teachers, Sukanya and Esha, said that they kept a record of weekly, quarterly, and yearly goals for the students they supported (some of this goal planning had inputs from the students about shared goals they may want to achieve, but not every LRG teacher incorporated students' opinions). This exercise helped them map out areas where they need to give support and enabled to track when the students crossed certain milestones (Figure 23). The teachers in each class also kept records for all students, which included the information provided by the LRG teachers as well as what the teachers had done to address the students' needs so the new teachers every year can learn from this and incorporate it into their lesson plans. That is, as the students move through the grades, their new teachers can prepare support in advance of the new academic year, thereby ensuring that it is ongoing.

Describing the process of making IEPs, Ila said that the LRG teachers share these goals with the subject teachers at the beginning of the academic year. Based on these, the teachers prepare Individual Education Plans (IEPs) for all the students supported by the LRG. The subject teacher also gives input to the LRG teacher on what they should include in their IEPs for the students during their LRG class. Thus, both the class teacher and the LRG teacher each have an IEP for students with difficulties and disabilities, which they develop in partnership with each other. The IEP guides the lesson planning for the subject teachers and the LRG teachers.

However, according to Ila, they do face challenges due to the demands on their time and sometimes after the first planning at the beginning of the academic year, there is no further interaction between the subject teachers and LRG teachers. They hope that with the subject faculty based in each school and the CUDs taking place in them, they will be able to include the LRG teacher more often in the lesson planning process.

Student Name:		Grade:		
School Name:		Diagnosis:		
Teacher Name:		Group:		
	1st Long term goal	2nd Long Term Goal	3rd Long Term Goal	4th Long Term Goal
Monthly Progress				
Goal 1				
Goal 2				
Goal 3				
	Date	Learning Objective	Outcome	Remarks

**Figure 23:** Illustrative representation of the format for recording long term and short-term goals and learning outcomes for students with disabilities

### 8.3.2 Classroom support

The LRG teachers give classroom support to the teachers of English and mathematics.

According to Ila and other departmental leaders, as mentioned earlier, they understand that English is a challenge for the students and the source of many difficulties with learning. As discussed in section 7.4.2, for mathematics classes, there is ability grouping, with students being divided into A, B and C groups. The LRG teachers support the teacher of the C group by giving one-to-one attention to the students. However, during the classroom observations, I saw only two instances of in-class support, both during mathematics classes. When I probed as to why the instances of classroom support are low, Neha, LRG teacher responded that they provide in-class support more often in the lower primary and this is gradually reduced in upper primary due to time constraints.

The LRG teachers give classroom support in subjects other than English and mathematics, if the students in these classes display disruptive behaviour. During my classroom observation in Aravalli school, the LRG teacher was called into class once to calm down a student with autism, Shashank, who was being disruptive. He had pushed the desks inadvertently in the direction of another student and it had caused a minor injury to her hand. The class teacher responded by getting Shashank to sit with her in one corner of the classroom, whilst asking the rest of the students to settle down at their desks and continue with popcorn reading. In the meantime, she sent for the LRG teacher while she sat with him. The LRG teacher arrived promptly and spoke to the student for about fifteen minutes in the corner and the teacher

resumed her lessons with the other students. Before leaving, the LRG teacher told the other students that he was upset over something that happened earlier in the morning, but now he was fine and told them that he is sorry about his behaviour (the student himself did not say it and I did not overhear what the LRG teacher spoke with him about in the corner).

Afterwards, Shashank carried on with the rest of the classes. After this incident, I saw the other students lead him by the hand to go to the other classrooms and they interacted with him.

### 8.3.3 Literacy and numeracy support

As mentioned earlier, the LRG teachers provide English literacy support in terms of helping students with reading and writing in English, both for those with and without disabilities.

Myra and Naz, Lead Faculty of the LRG, explained that they give literacy support using the Sondag System. Initially, the LRG Lead Faculty and a group of LRG teachers received training on Sondag System from Maharashtra Dyslexia Association personnel. Subsequently, the LRG Lead Faculty started training their teachers on the use of the Sondag System.

Explaining the Sondag System, they said that it is a phonemic awareness programme that usually supports students with dyslexia, but they found it useful for supporting any student who has difficulties with the English language. It is a structured programme, where the LRG teacher follows a set of systematic reading interventions with students in groups of five. The students are taught phonetics, syllables, vocabulary, and comprehension etc.

“That is a very structured programme and that is why it helps my teachers also because they like to have a structured programme. It tells you step by step on the progress of the child and what you should do to move ahead so that has been helping and working very well. So, along with children with learning disabilities, there are the students who aren’t with learning disabilities, but who are benefitting with sessions with the LRG.”

Ila, Departmental Leader, LRG

Seven students referred to the Sondag System, saying that they liked their LRG classes, because of it and described it as ‘*bahut accha* (very good)’, ‘*teach in fun way with Sondag System*’, and ‘*I learn phonetics and tough words*’.

The LRG teachers get support from the Mathematics Subject Faculty to design the lesson plans through which they give numeracy support to the students during the LRG class. The LRG teachers co-ordinates with the maths teachers so that they can reinforce the same concepts that they are doing in the class during the LRG sessions. Specifically, as explained in sub-section 7.4.2, the LRG teachers provide in-class support to the mathematics teacher for the students assigned to the '*C Group*.' Ila said that, when providing in-class support, ideally the LRG teacher should go into the class knowing what assistance they are expected to give the student/s. However, as she explained, sometimes the LRG teacher was only told what was expected of her once she was already in the class. She said that they hoped to overcome this in the coming years through the streamlining of CUD meeting.

#### **8.3.4 Activities of Daily Living (ADL) support**

Apart from literacy and numeracy skills, the LRG teachers impart ADL skills to those students with disabilities who require this training. During my classroom observations, I saw ADL skills training being delivered during the morning assessment time, but teachers reported that this varies according to students' needs. These daily living skills consists of personal hygiene components, such as washing hands, taking regular showers, and using the toilet. For girls, there is training in using sanitary napkins and menstrual hygiene. Other components covered such matters as grooming, taking care of themselves as well as putting on their clothes and shoes, etc.

Myra, Naz and Ila from the LRG elaborated upon this and said that, whilst students start learning ADL skills from their parents, the LRG teachers support them by giving a more structured approach. They give the parents a home plan and then, they continue with the same plan in school to reinforce the learning for the child, which is geared towards ensuring that s/he can pick up the skills faster. There is close collaboration between the parents of the students with disabilities and the LRG teachers, with there being frequent feedback sessions to learn from each other, if any new strategy is found to be effective at home or in school. In fact, during my classroom observations, I saw two parents/guardians of autistic students regularly come to the school and speak to the LRG teacher at the start of the class.

The ADL skills training also includes functional academic skills, such as reading the time, understanding the calendar and how to go shopping. They are instructed in the identification

of monetary notes and basic maths, such as counting change and taught the stages involved in travelling from one place to another etc. For the autistic students, they use the concept of ‘*social story*’ to help the parents take them to a social gathering, whereby they prepare a plan and share the information with the student in the form of a story. For example, if the child receives an invitation to attend a birthday party, they will start preparing him or her for it two days in advance. They will give information about the date and what to expect at the party, such as there will be many people - some known and some unknown -, there may be lights and sound etc. Then, they tell them about the expected behaviour, such as reciprocating a hello or informing their parents, if they felt uneasy or upset or want to leave and not to throw a ‘*tantrum*.’

“So, we tell the parents to take the child out socially and prepare them for social interactions as they will need to socialise later also and they cannot be kept hidden. Some time ago, we had a parent and she said that she cannot go for any weddings, because her son starts screaming, shouting, and throwing things and it is so embarrassing for her when her child starts misbehaving and everyone looks. Then I spoke to her, “But don’t you think he has the right to go to a social gathering and enjoy himself?” And so I made a schedule for her and told her to not wait till the party's over or go right at the beginning, but go in the middle so that he is not spending five or six hours, but spend a little time. Later she came and said that he sat and enjoyed for a short time and did not show any negative behaviour and even the guests were surprised that he did not throw any tantrums. So, she was happy.”

Myra, Lead Faculty, LRG

### 8.3.5 Support for assessments of children with difficulties and disabilities

As discussed earlier in section 7.6, the students undergo both formative and summative assessments in school. The formative assessments follow a similar process for all the students, with or without disabilities. The LRG teachers guide the subject teachers on how to change the assessments to accommodate the needs of students with specific disabilities. The LRG teachers receive guidance on this process from their Lead Faculty, Naz. As mentioned earlier, summative assessments take place weekly. The LRG teachers provide some guidance on how the basic questions should be structured that will enable the inclusion of all the students in the assessment process.

For the formative assessments of students with significant intellectual disabilities, separate assessment sheets are prepared and according to Naz, the LRG teacher takes the lead in the preparation of such assessment sheets. In addition, during the annual examinations, they provide the students with disabilities facilities and accommodations similar to those given by the Maharashtra State Secondary and Higher Secondary Board of Education, such as having a writer, extra time, using a typewriter to write exams, no deduction of marks for spelling or grammatical mistakes, etc. The subject teachers work in conjunction with the LRG to prepare the summative assessments for the annual examinations. Naz explained that they have to be careful not to assume the '*performance levels*' of the students while preparing the assessment sheets and that is why they give the same assessment sheets to all the students. Towards the end of the academic year 2017-18, I was able to see the annual examinations taking place. Shashank, who had autism, was allowed to sit in the LRG room and write his examination. His mother was sitting behind him and gently patting the back of his neck. When I probed about this with the LRG teacher, she said that he had become agitated on the first day of the exams and only his mother could calm him down, so since that day they had permitted her to sit beside him.

Later during her interview, Ila referred to this instance and said that having his mother sit beside him not only calmed Shashank, for he performed very well in the examinations and exceeded all their expectations. Hence, she said that this case made them realise that they should not have pre-determined expectations about how students with disabilities would perform. It had made them introspect and look at their own teaching and assessment processes. She said that, even if Shashank's mother whispered the answers to him and that is why he performed well, it means that he can recreate on paper what is told to him which they had previously pegged him as being unable to do. In addition, she said these types of incidents led to them realising that they needed to work closely with the parents as many times they have strategies for calming their child such that this enabled them to perform. On the other hand, as she explained, the LRG teachers should be encouraged to share the strategies they use in school with the parents more often.

#### **8.4 Overview of some teaching and learning practices employed by the LRG**

The LRG teachers described using various teaching and learning strategies for the students with difficulties and disabilities, which they shared with the other teachers as well. Farzana,

an LRG teacher, said that for students with hearing disabilities they ask the teachers to sit the student next to them and gently touch their shoulder to bring their attention to something, rather than raising their voice to do so. Another instance that Rupali, LRG teacher talked about was how they use a similar strategy of gently tapping on the shoulder of a child who has ADHD. Commenting on why this is necessary she said:

“If the teacher says his or her name loudly to pay attention everyone comes to know that the teacher has said something to the child, and it can be disturbing for him. So, instead of doing that just tapping or touching him and pointing to come back to work makes the child pay attention again.”

She added further that they also recommend that for a child with ADHD, the subject teacher should set up in consultation with him or her how long he or she can sit without feeling ‘restless.’ Depending on the set time, the teacher gives activities to the child that would allow them to move around during the class. The teacher may engage the child in small activities, such as fetching notebooks or TLM from the shelves, or getting out of his or her seat to get a drink of water, taking one round of the classroom, performing a reading aloud activity or doing five jumps in the classroom, if they feel comfortable engaging in these. These activities should not take too much time, but sufficiently engage the student so they are able to continue concentrating on the lesson.

Ila said how they are now sensitising the subject teachers and LRG teachers to look for ADD symptoms in the ‘quiet child’, who usually does not show any ‘hyper behaviour’ and yet struggles with their learning, seeming distracted in class. She said that those students who do not speak out or cause disruption often go unnoticed if they have any difficulties. So, now during the in-classroom support the LRG teachers look out for such students and offer help, if they seem to require it.

Another LRG teacher, Alka, mentioned about sharing strategies with the subject teachers on supporting students with poor vision. In addition to giving them books with large text, she said that they tell the teachers to monitor the notes the student is taking in class closely to ensure that he or she is following the lessons correctly as well as spending time with them to carry out formative assessment. For students with physical disabilities, the LRG teacher shares with the subject teachers how they can make the classroom environment comfortable

for them, such as what seating arrangement will work best, whilst for autistic students they tell the teacher how to use visual cues to share information.

Meghali added that they also share with the teachers' specific strategies that work with certain students, whilst the subject teachers are also encouraged to disclose any new strategies, they are applying in the classroom with any student with disabilities that are yielding positive outcomes such that the LRG teacher can use them during the LRG sessions. For their LRG sessions, the teachers utilise concrete objects as well as various teaching and learning materials to support the students. The figures below from 24 to 33 show various teaching and learning strategies and materials that I saw the LRG teachers using for the students with difficulties and disabilities, while observing the LRG sessions. These teachers elaborated upon the usage of these during the interviews. Most of these teaching aids were prepared by the LRG teachers using low-cost materials.

## Teaching Aids for children with reading and writing difficulties

**Game to learn diagraphs using chart and dice**



**Rubber grip to help hold pencil/pen**



**Figure 24:** Teaching aids used for students with reading and writing difficulties

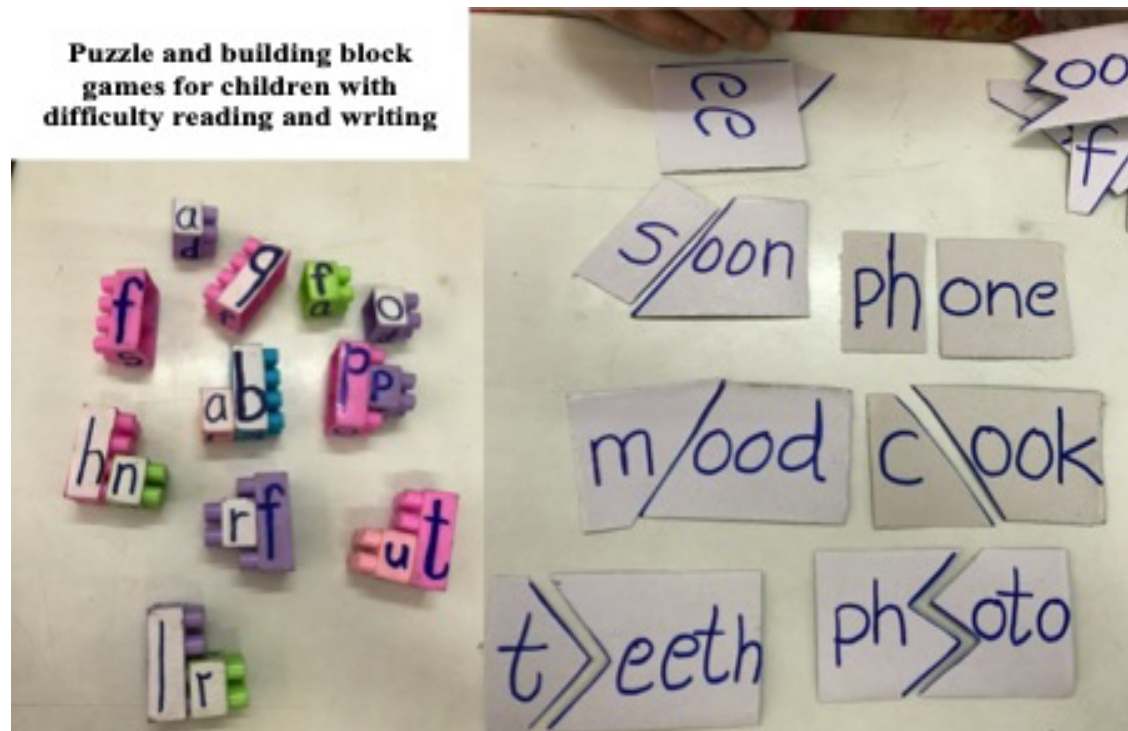


Figure 25: Puzzle and building blocks used for games to help in reading and writing

## Dienes blocks to teach mathematics

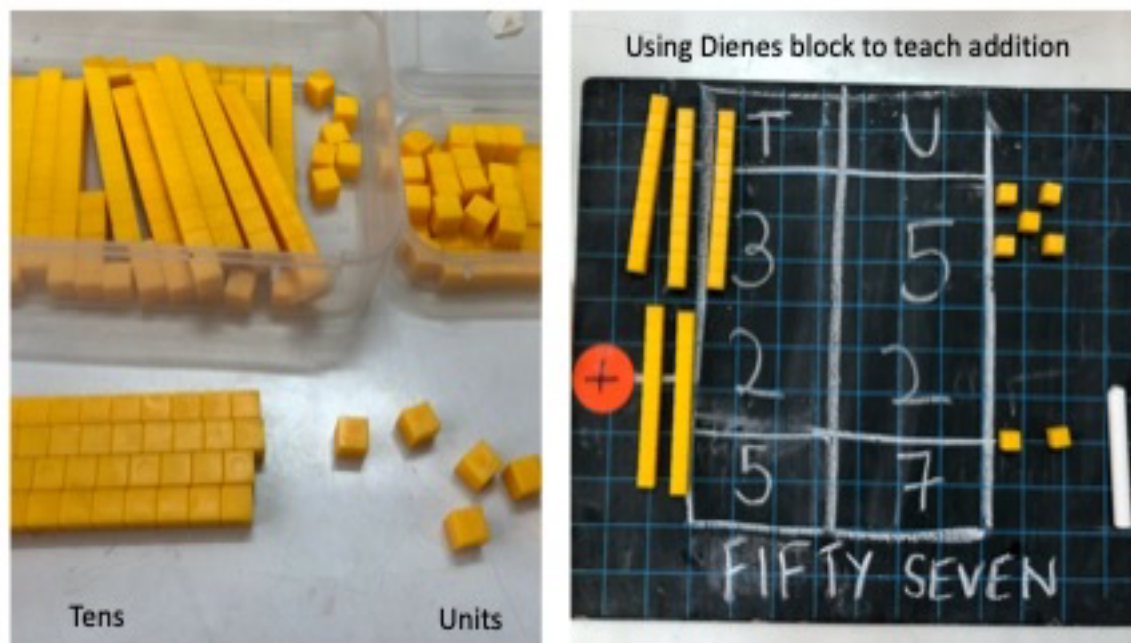
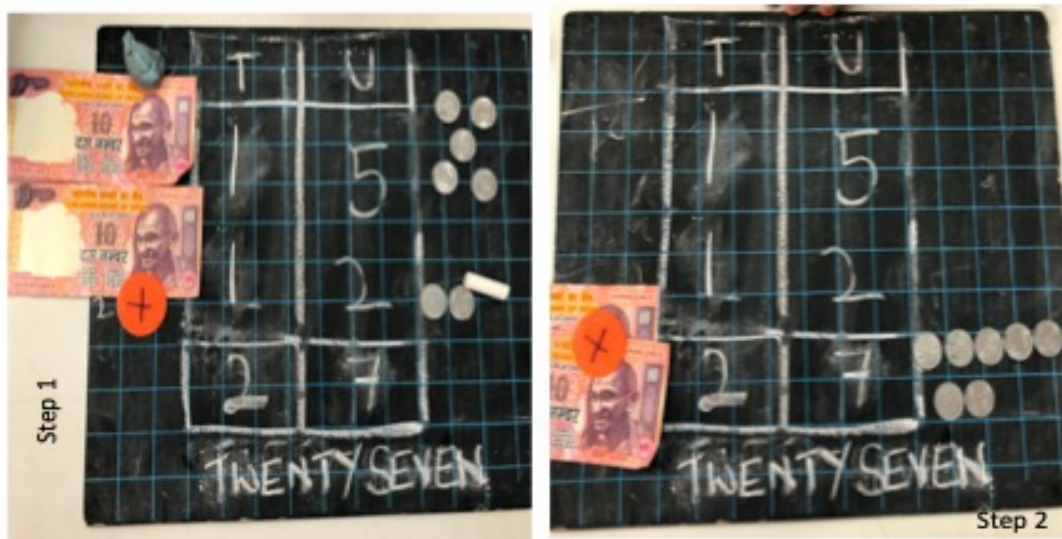


Figure 26: Illustration of using Dienes blocks to teach numeracy skills

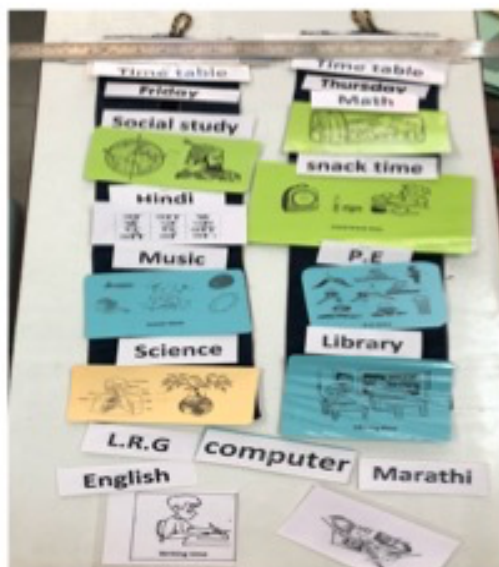
## Concrete objects to teach mathematics



Using concrete object to teach addition – Step 1 and Step 2 instructions

**Figure 27:** Illustration of using concrete objects to teach numeracy skills

## Visual Timetable



Made for two students with autism

- The teacher arranges these subjects & its corresponding icons in the morning and hangs this in the classroom of the student
- The teacher puts the same icons outside the classrooms, so the student knows which classroom to go for what
- It is changed every day

**Figure 28:** A visual timetable made for two students with autism

## Choice – board for student with autism

- Teacher makes the lesson plan for the student in advance, but she takes the students opinion regarding what order they want to learn the subjects. They are provided with a choice of which concept they want to learn.
- They are also allowed to choose what reward they will choose (e.g. Playing with a ball or a colouring activity ) for completing a certain task (e.g. addition or spellings )
- Assessments are done throughout the lesson

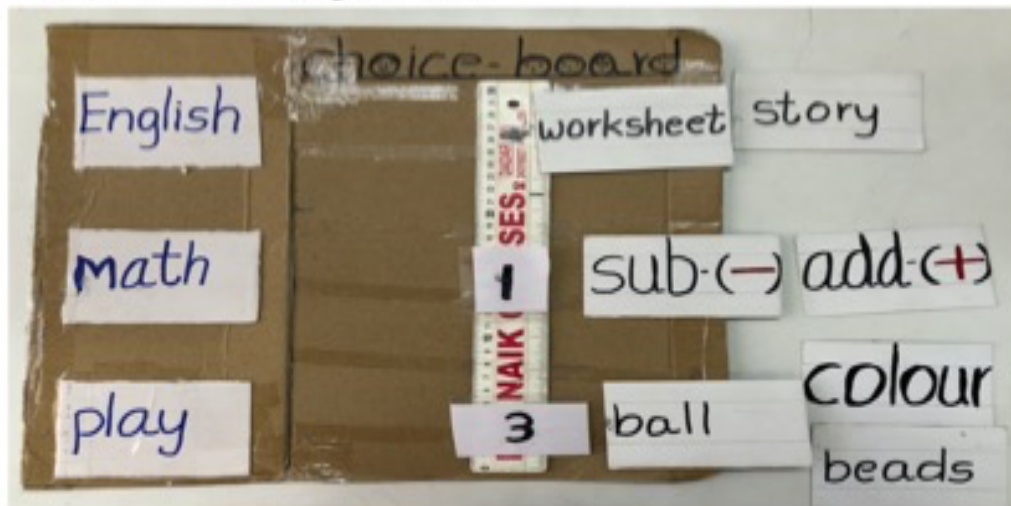


Figure 29: A choice board prepared for an autistic student

### Choice card for students with autism

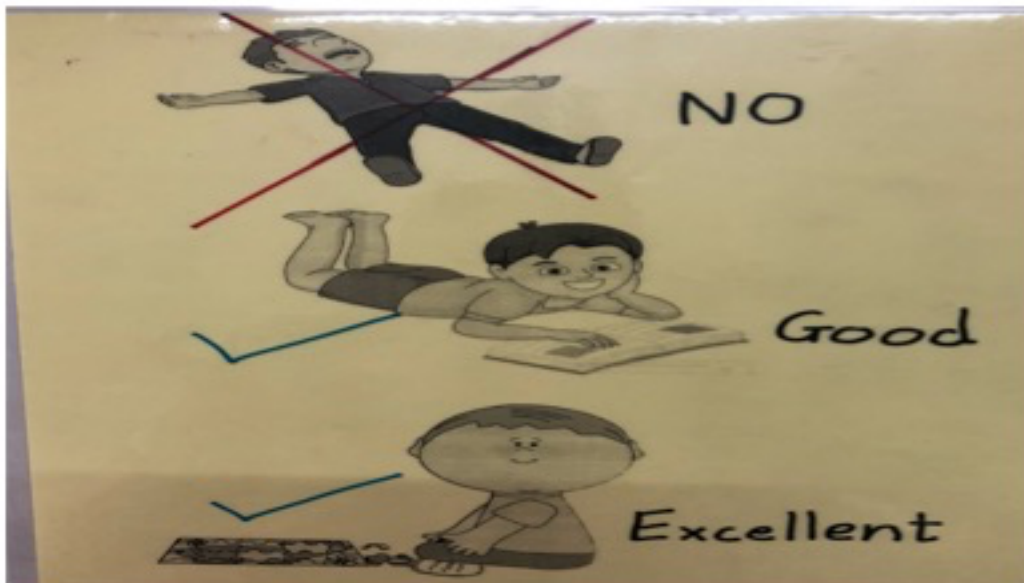
- When the student gets upset or restless, the students sometimes do not respond verbally so the teacher uses this chart to ask the student what he or she would like to do
- The teacher enquires verbally but she mentioned that the students seem to prefer to point to the chart in their answers, so she always keeps it close during their sessions
- The class teachers and the student's classmate also refer to the chart to communicate with the student with autism during class



Figure 30: A choice card for an autistic student

### Behavior chart for students with ADHD and autism

- The LRG teacher made these charts based on the behavior she observed. These are made for different students based on the specific behavior that needs to be addressed.
- These behavior charts are used for children with autism, ADHD, children with 'behavior issues'



**Figure 31:** A behaviour guide prepared for students with ADHD and autism

### Booklet made by teacher for a student to help with her behavior

- The teacher made this specifically for one student who was difficulty in the tasks depicted in these pictures and was throwing things she found in the classroom
- The teacher takes her through this booklet periodically
- The teacher also uses this booklet with her to tell her the correct usage of various objects



**Figure 32:** A booklet made by the teacher to help an autistic student to follow certain protocols in the classroom

## Post lesson daily assessment sheet

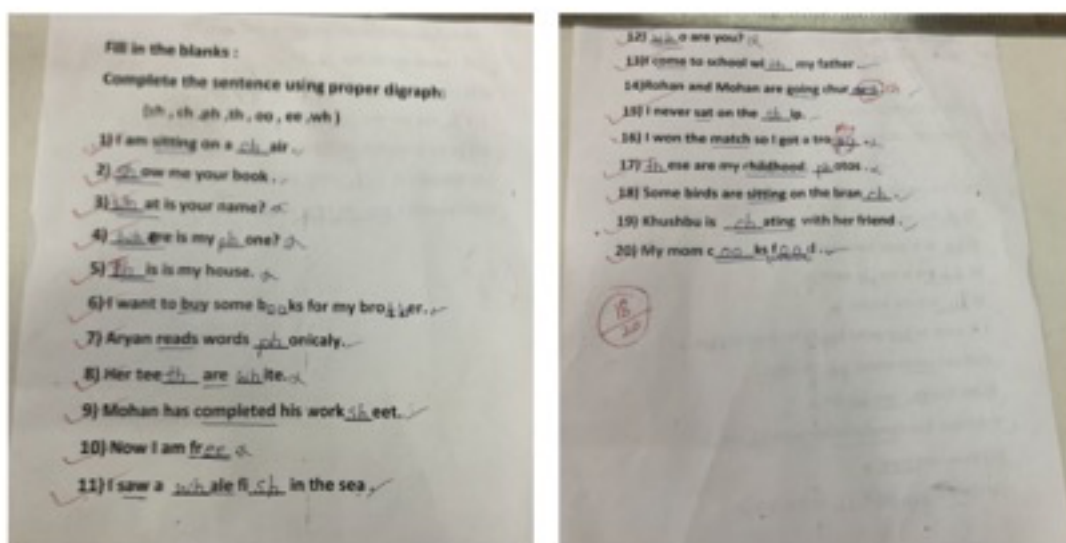


Figure 33: An example of a post lesson summative assessment sheet

### 8.5 Challenges to including all learners

Including diverse learners was not without its challenges and an analysis of the responses from the teachers and faculty members led to grouping those they mentioned into four categories. For the findings presented here, I primarily draw on the responses of the teachers and faculty members.

#### 8.5.1 Time constraints

Time management and ensuring the completion of the syllabus for each grade within a set period of a year appeared a big challenge in terms of including diverse learners. The teachers felt the pressure to complete the syllabus as the students had to sit an annual examination at the end of the academic year. When probed about why it was so important to complete the syllabus within the year the teachers gave two key reasons. First, if they were unable to ensure that the students completed the syllabus within the year, then this would impact negatively on their ability to build on it the following year. Secondly, whilst in the lower grades it did not matter that much as they made up by taking extra classes at the end of the academic year and the curriculum was more malleable, in the higher grades, if a student started lagging behind it was difficult for the teacher to support them to catch up with the

curriculum.

A few teachers mentioned that whilst they tried to give individual attention to the students, in a 45-minute class each could only get a few minutes to pay one-on-one attention to each student. They felt that, especially for children with disabilities, they were unable to give them enough time for exploring and understanding a concept.

### **8.5.2 LRG support for students being limited to literacy and numeracy support**

In terms of academic support, the LRG teachers give literacy and numeracy support primarily to the English and mathematics departments. Hence, the teachers and faculty from other departments such as science, social studies, Hindi, and Marathi, felt that they needed more directed support in regard to how to include children with disabilities. Despite designing their lesson plan in a way that could cover diverse students' needs and receiving some specific input for the students with disabilities from the LRG teacher, a significant number of teachers said that they felt that they needed more information regarding the inclusion of students with disabilities.

According to Vineeta, Departmental Leader for Social Studies, there was a lack of co-ordination with the LRG teachers for support on lesson planning and providing classroom assistance for students with disabilities beyond English and mathematics. The recent change, whereby the CUDs are now taking place in the school and there is a subject faculty in each school is a way to address this, according to Ila. Regarding the need for more training, the LRG faculty has been co-ordinating with external trainers from the Ummeed Child Development Centre, which has been providing short term training on supporting children with disabilities.

To date, the Departmental Leaders, Lead and Subject Faculty members of various departments have received this training and Ila mentioned that they are planning to extend the same to the teachers. However, they plan to continue their present structure of providing literacy and numeracy support and will increase the help they extend to teachers for lesson planning, but they do not want to take over the lesson planning of students with disabilities in the other subjects. The reason for this is to avoid creating a separate education system for

students with disabilities within Mukangan and ensuring that, instead, they build capacity among the subject teachers to include students with different needs.

### 8.5.3 Teaching students with ‘behaviour problems’

Almost half of the teachers mentioned that they find including children with ‘*behaviour problems*’ and ‘*hyper children*’ in the classroom teaching and learning processes particularly challenging. As discussed in sub-section 6.2.2, the teachers found it very challenging to include these students even though they had an understanding that the students had these behavioural challenges due to a variety of intersectional reasons. The reasons given for these challenges varied. Three teachers said their other students and they themselves were sometimes ‘*afraid*’ and ‘*did not know how to control*’ students who showed violent behaviour in the classroom, such as flinging desks or throwing things. Two of these teachers mentioned that they have had complaints from parents after their children received injuries during these incidents. However, they also added that, at present, with the support of the School Faculty or the School Facilitator, they were able to explain to the parents that the students who indulged in this behaviour were unaware of the repercussions due to their disabilities and they asked for more time to resolve these issues.

A few teachers also said that they found it ‘*frustrating*’ as they already had limited time and the students with ‘*behaviour problems*’ led them to ‘*waste teaching time*’ trying to ‘*control them.*’ Another often repeated challenge for inclusion of children who were ‘*hyper*’ or had ‘*behaviour problems*’, according to the teachers, was that they felt they paid so much attention in trying to include them that in the process they were excluding other students in their group. The LRG, Socio-Emotional Department, the School Faculty and Facilitators are working with the subject teachers and Departmental Leaders and Lead Faculty to help them to address these challenges. During the interviews, the Departmental Leaders and Lead Faculty from these departments explained that it is a complex issue and that they are providing ongoing support to the students concerned.

### 8.5.4 Specific challenges

There were some specific challenges mentioned by a few teachers and faculty member and even though they mention them just once or twice during the interviews I felt it is worthwhile

to include them here. Liz and Jumana both held that ‘*changing mindsets*’ to ensure that teachers and faculty would include diverse learners in their teaching processes is still an ongoing challenge and therefore, they needed to reflect on their training and other processes constantly to ensure they keep up the ethos of inclusion. Val explained how they faced challenges in teaching ‘*scientific vocabulary*’ to students with learning disabilities and the ‘*slow learners*’ and that they are still researching how to overcome this challenge. Radhika felt that they need more workforce to support their teachers to include students with disabilities, for even though they have two LRG teachers in each school, they are over-worked and hence, there should be an increase in their number.

Many teachers and Faculty members mentioned that they face many challenges in including diverse learners, but they have been overcoming them. This requires training, support and help in doing so. The following quote by a teacher summarises these struggles.

“As a teacher we are also human beings, sometimes we are also getting angry because of the child behaviour. We also get angry, but through training we also learn patience; how to behave with them. If at that moment we thought while thinking of giving any tough words, we are thinking the child will feel bad. That is why we are not giving tough words to child and we are treating all child equally. And while giving any word or sentence, we think first and then we use that word. Like if I say this word to that child what will the child think? And his self-esteem may be down. When his self-esteem is down, he will think of that matter only teacher said like this and like this. He cannot able to give interest on studies. It happens actually and we took child psychology and child education also, we took that in training centre - what happens, if we say certain words, means how it affects on child's brain. We learn that.”

Meera, Grade 7 teacher, Nilgiris school

In the next section, I will present the factors that the teachers and faculty members identified that enabled them to include diverse learners.

## **8.6 Factors that enable the inclusion of diverse learners**

Teachers and Faculty members mentioned many reasons as to why they can include diverse learners in their teaching and learning processes. Through detailed analysis of these, I was

able to group them under three categories, which I present them below. These findings provided here primarily draw on the responses of the teachers and faculty members.

### 8.6.1 Structured support

Several teachers said that joining Muktangan's Integrated Teacher Education Programme (MITEP) was the first time they had been introduced to the reality that they would have students with disabilities in the classroom. Three teachers, Meghna and Meera from Vindhya school and Shalini from Nilgiris school said that, whilst they were aware of persons with disabilities, they had never interacted with them in a personal capacity. They said that the training at Muktangan opened them up to the concept that persons with and without disabilities have the same rights to access the education system. Reflecting on this, Shalini from Nilgiris school said:

“When I joined Muktangan in the first year, I saw the children and I did not understand why they are behaving like this and why they are not sitting and studying and doing misbehaviour. Then, they teach us and we understand the problems that these children are facing and we learn and I understand that *‘Aisa bhi hota hain children ke saath’* (This also happens with the children) and now I have completed 11 years, so I know how to help.”

When asked what enabled them to include different children the teachers attributed their ability to include diverse learners in their classroom to the pre-service training, CUD meetings, LDMs, Professional Development (PD) sessions and the LRG.

Teachers reported relying on these support structures *‘to prepare lesson plan to teach all children’*, *‘they (CUD meetings and LDMs) give us the information on why we have to teach to disabled children and how we have to teach, how we can handle’*, *‘they tell us in PD, which happens in May, about different problems that children have and what we have to do’*, *‘they are showing us movie in PD session like Taare Zameen Par<sup>79</sup> and YouTube (videos) about these children and how they are feeling’* etc. According to a few teachers, the lesson plans that they prepare with the support of the subject faculty helped them to be cognisant of the needs of diverse learners and thus be able to include them.

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<sup>79</sup> It is a Bollywood movie that raised the subject of dyslexia and in many ways raised awareness of inclusion into the popular consciousness.

Every teacher interviewed mentioned the LRG as a major enabler to their ability to include children with disabilities, saying such as, *'The LRG is supporting and we do not even have to say anything'*, *'The LRG teacher comes to the class and helps me when I am having problem and I cannot handle'*, *'The LRG is there for us and understand us to help disabled child'*, *'The LRG teacher ..they tell us everything about the child as from beginning they are doing the same thing. In the beginning of the school year, they tell us about all the students in the class'*. The teachers said the LRG teacher helped them understand the *'problems'* that their students are facing and how to support them effectively by *'giving us strategies'*, *'tell me what modification to do (to the lesson plan)'* and *'helping during assessments'*.

### 8.6.2 Access to social and emotional support

Teachers mentioned that they viewed the Oral Circle Time (OCT) as a symbol of inclusion within Muktangam. According to Liz, it includes both students and teachers, with many of the latter reporting said that it helped them in addressing the well-being of their students and maintaining their own. During OCT, the students and the class teachers sit together to discuss their feelings as well as consensually deciding upon rules for their classroom. It is also used as an opportunity to consider how to handle disciplinary issues.

While explaining how they tackle disciplinary issues, Rukmini, who teaches science to Grade 5 students in Vindhya school said that they follow the A, B, C process. Here A stands for Antecedent, where if a student/s misbehaves or causes disruption in the class then they will have to sit with the student/s during OCT to find out what triggered it, i.e. the antecedent. Then, they discuss the Behaviour that the student/s exhibited and have a dialogue about why it was wrong and what they could have done differently in that scenario. Finally, the C stands for Consequences, where the teacher tells the student/s about the consequence they will face because of their behaviour.

Usually, the consequences are withdrawal of computer privileges, attendance of the physical education class or Zero Period depending on which activities are their favourite. If they are unable to resolve these disciplinary issues through this A, B, C process, then they seek the help of the School Faculty, who may recommend getting support from the members of the Socio-Emotional Department.

The majority of the students mentioned that they had a close relationship with their teachers, whereby they were able to *'share about my day'*, *'tell teacher what is happening at home'*, *'tell teacher what is disturb me'*, *'tell to teacher about the boys who are teasing me and then teacher take action'*, and *'teacher tell us about her life and we like to know her birthday and all these things'* during the OCT. The OCT was reported by the students as the space where they could share their *'feelings'* and *'if someone is disturbing them in class'*. One of the teachers referred to the OCT as a forum for all students to discuss their emotions and feelings without fearing any negative consequences. Several teachers reported relying on the School Faculty, their peers, the LRG, and the Socio-Emotional Department members to access social and emotional support for students with difficulties and disabilities.

### 8.6.3 Sense of community

Alongside support structures to include different students, the other crucial element mentioned by teachers and Faculty members that enabled them to be inclusive of diverse learners was the sense of community they felt. Numerous teachers referred to Muktangana as a *'family'* and said the students were like their own children. Teachers said that when faced with challenges regarding the inclusion of children with diverse needs, they were able to rely on their colleagues to support them. Several teachers commented that they felt that they could share their successes and challenges with their fellow teachers, faculty members and School Faculty. They said that this made them feel that they were not *'alone'*, especially when they felt *'frustrated'*, *'unable to teach'* or *'facing a difficult time in the classroom'*. In sum, they were able to depend on their fellow teachers, faculty members, School Faculty or Facilitator to support the students.

Speaking on this, Deepti, Grade 5 teacher in Vindhya school explained how many students have grown up alongside their peers with disabilities and they do not see differences and thus, *'if they are including everyone then who are we to exclude?'*. Teachers mentioned that they could see how the students with and without disabilities supported each other in their academic and social lives by forming friendships, helping each other with their work etc. Moreover, students helped their peers with disabilities to use the toilets, move from one classroom to the other or with other support during the class. These were seen as acts of camaraderie, which daily *'inspires us to do more'*, according to Deepti. In addition, one

teacher, Rekha, Grade 5 teacher at Nilgiris school, said that one of her students had a speech impediment, so she could not understand his speech in the beginning and his friend acted as a translator in the initial months until she started understanding his speech. Similarly, Jayshree, Grade 6 at Nilgiris school, reported that when she had an autistic student who used to get ‘*hyper*’, his friend often spoke to him and always knew how to calm him down. The teachers said the students helped them in several ways to be inclusive with the students with disabilities as they knew their peers and how to help them.

The faculty members credited the teachers and their colleagues for being able to hold inclusive views and practice inclusive education. According to Radhika, they have the autonomy to decide what would be the best course of action to support diverse learners. Vineeta attributed their success in inclusive practices to ‘*the teachers don’t let it go*’, whilst Myra said it was about their entire community, which includes the teachers, students, parents, and members of the faculty. Ila summed it up by saying:

“I think it has to be the fact that right from the beginning they have been children with special needs and it has been ingrained in everyone that this is what we do and we have accepted that we will always have all children in our school. There has never been a question of why we have these children in our school. I think that is quite amazing. I think all the teachers want to support them. It is just that time constraints sometimes do not allow them to do that as efficiently as they would like. I would say that it is the ethos that allows for inclusion. That is probably what makes it work.”

## 8.7 Summary

To summarise, the presence of the LRG is a significant enabler for the inclusion of students with difficulties and disabilities in the teaching and learning processes. However, they also reported challenges to inclusive education due to time and resource constraints, their support being primarily for literacy and numeracy, teaching students with ‘behaviour problems’, amongst other. Alongside the LRG various school practices support the inclusive education of diverse learners in these schools run by Mukangan. In particular, the presence of structured support, access to socio-emotional support and a sense of community among all the members of the schools were emphasised. In the next chapter, I shall synthesise the findings from these three chapters by drawing on the 3E conceptual framework of Entry,

Engagement and Empowerment put forth by Singal (2004/2013) based on her research in Indian primary schools.

## CHAPTER IX: ALL FIVE FINGERS ARE DIFFERENT<sup>80</sup> – ACCOMMODATING AND INCLUDING DIVERSE LEARNERS

The findings in the previous chapters brought forth the intricacies and contextual realities that require consideration to implement inclusive education within mainstream schools, with its associated challenges and enablers. In this chapter, I draw on the 3E conceptual framework—Entry, Engagement and Empowerment developed by Singal (2004 and 2013) to use it as an analytical framework to organise, analyse and discuss the empirical findings from this case study. Subsequently, I utilise it to address my central research question on how mainstream schools implement inclusive education, pedagogy and practices that encompasses diverse learners, including children with disabilities, in the concluding chapter.

In the next section, I give the rationale for applying this conceptual framework and how it helps in analysing the empirical findings from this case study.

### 9.1 Conceptualising and discussing findings using the 3E framework

As mentioned in the introductory chapter, most research in India held a deficit approach of inclusive education and as stated in the literature review chapter most research on inclusive education does not go beyond the discussion of the challenges to inclusion in Indian schools. So, as I progressed through the process of data organisation and analysis and the findings started taking shape, I reflected on the best way to interpret these findings within the Indian context. As the findings took shape, Singal's (2004 and 2013) 3E conceptual framework – 'Entry', 'Engagement' and 'Empowerment' drawing on research from both policy perspectives and school practices in India provided a conceptual framework to interpret and discuss the findings. While Singal has used the framework to 'provide a nuanced analysis of developments' (Singal, 2019; pg. 2) about what inclusive education should entail at the macro level, i.e., Indian policy context, I use it to focus the lens at the micro level, i.e., how inclusive education is practised in the Indian school context. Critically examining inclusive education at the macro and micro level gives added coherence to the conclusions drawn from the discussion of the findings, by tying the two levels together and thus, revealing any gaps in

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<sup>80</sup> The title refers to the most commonly used metaphor by the teachers at Mukangan to explain inclusive education.

provision. I expand on the rationale for utilising this framework to discuss the findings from this case study below.

First, Singal conceptualised this framework based on her research within Indian schools in 2004 and have later built on it (Singal, 2008; Singal, 2013; Singal, Ware, & Khanna-Bhutani, 2017) by drawing on her continuing work in the area of education for children with disabilities in the Global South. The scholarship on inclusion of children with disabilities in India should take account of the diversity of India in terms of socio-economic status, caste, class, religion, languages, culture, politics, and heritage (Narain, 2019; Rose, 2017; Singal, 2006). As this conceptual framework has emerged out of research in the Indian context, it is rooted in the realities of the education system in India and provides a foundation to undertake this analysis in that context.

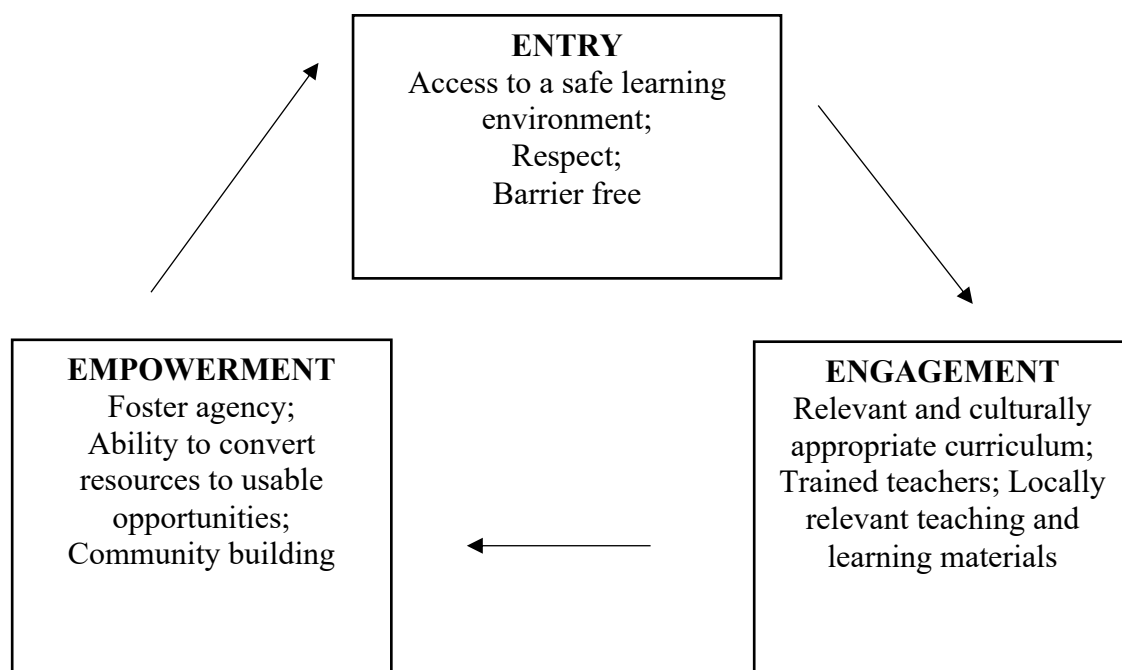
Second, Singal (2013) has specified an outline for the framework and used it to examine critically the policy discourse for education of children with disabilities in the Indian context. Based on her research she explains what the three inter-related constructs of ‘Entry’, ‘Engagement’, and ‘Empowerment’ entails. She contends that all children should receive the opportunity to ‘access and participate’ in the education system and have an ‘engaging and joyful’ experience in school, which will ‘foster agency’ through this empowering experience. (Singal, 2013; pg. 205). She does not simply stop at issues of access, but rather, goes beyond to address quality, and very importantly- the purpose of it all. This makes 3E a strong analytical framework for interpreting the findings from my research and helps to push forward the discussion on inclusive education.

Third, the rationale underpinning this framework is to move the discussion from being purely rights-based towards addressing the issues surrounding the effectiveness of school systems in providing education for children with disabilities (Singal, Ware & Bhutani, 2017). Hence, this framework is pragmatic in regard to how it identifies the key essentials to inclusion.

Lastly, Singal did not operationalise the components that she lists under the constructs ‘Entry’, ‘Engagement’ and ‘Empowerment’ (Figure 34). My research falls squarely in that space, whereby it operationalises these constructs and thus, expands the framework.

As policy decrees practice, Singal’s 3E framework gives me the opportunity to analyse my

findings within the scope of these three inter-linked constructs, hence bringing these dimensions together within the mainstream school context. At the school level, based on the findings, I envision the 3E conceptual framework of ‘Entry’, ‘Engagement’ and ‘Empowerment’ as inter-related constructs that inform each other and move together towards the goal of inclusive education. Analysing the findings further helped in identifying what enables or hampers students from accessing the education system, thereby ensuring or hindering their ‘Entry’ in the mainstream school. Next the findings helped in ascertaining how the various stakeholders within the mainstream schools’ support classroom teaching and learning, thereby creating ‘Engagement’. Finally, I analysed the findings to capture how it creates ‘Empowerment’. These constructs were informed by the challenges and enablers within the schools in the case study, as reported by the various stakeholders and observed during the research process.



**Figure 34:** The 3E framework (Singal, 2013: pg. 204)

My thesis goes beyond examining education policies for inclusive education in the Indian context by addressing how the implementation of inclusive education and practices within mainstream schools takes place. This analytical framework has helped in synthesising the empirical data gathered from different stakeholders within the schools and presenting a

sophisticated and detailed representation of how they include diverse students, including children with disabilities. In the next section, I discuss each of these constructs in detail and illustrate how my findings from this research build on this framework.

## 9.2 Entry into the education system

At the policy level, in pursuance of India's commitment to the global goals of providing equitable and accessible education for all, significant gains have been made in developing legal and structural frameworks for the education of children with disabilities (section 2.2). Correspondingly, there is a huge impetus to include children with disabilities in mainstream schools. However, despite being stated at the policy level, mere access is no guarantee for inclusion in the teaching and learning processes in the school nor continuation or grade completion. Drawing on her research, Singal (2013) postulates that 'Entry' into education for children with disabilities can be facilitated by giving barrier free access, creating a respectful environment for students, and giving access to one that is a safe. The findings from this research reveal how these key factors ensure 'Entry' for students with difficulties and disabilities within these mainstream schools and what it means for the various members of the school.

- *barrier-free access* means minimising attitudinal and architectural barriers to enable all students (with and without difficulties and disabilities) to access education. It involves ensuring that the school is prepared to support students with diverse needs.
- *both school and classroom level processes and practices* were in place to ensure a *safe environment* for the students in the form of carefully articulated child protection policy, embedding inclusion in school processes, promotion of socio-emotional well-being, special educational support as well as the creation of open and trusting relationships between students and teachers.
- *mutual respect* among the various members of the school.

### 9.2.1 Barrier free access

Positive attitudes of teachers towards inclusion of children with difficulties and disabilities were seen during the pilot research (section 5.4), with such attitudes often being considered a decisive factor in including children with disabilities in mainstream schools (Hegarty and

Alur, 2002). Moreover, as observed (sub-section 6.3.1), the discourse among teachers encouraged a holistic view of inclusion that encompassed all children irrespective of their ability, gender, socio-economic background, family situation, caste, religion, or language. As noted in the findings, in terms of attitudinal change, teacher education programmes were the key, both pre-service and in-service, at the schools run by Mukangan.

Most policy and legal frameworks in India underscore the importance of training teachers to cultivate positive attitudes towards the inclusion of children with disabilities (NEP, 2020; RTE Act, 2009). The pre-service teacher education at Mukangan has a strong emphasis on attitudinal shifts to include diverse learners and nurture inclusion. This not only encompassed students with difficulties and disabilities, but also, underscored the differences that teachers will encounter in terms of gender, caste, class, religion, language, family backgrounds etc. and how to navigate these differences to ensure inclusion.

When incorporating inclusion in the teacher education programmes, there was an awareness that mindsets can be strong and therefore, require sustained efforts to engender inclusion. Those running the programmes recognised the need to address this topic with respect and patience. Accordingly, their teacher education programme utilises debates aimed at: facilitating reflections on diversity in development, understanding the appropriate use of terminology, engaging different children in the classroom and sensitising their peers to catering for their needs. Rose and Rajanahally (2019) contend that in order to change teachers attitudes towards children with disabilities teachers should be provided the ‘confidence, skills and knowledge’ (pg. 177) to support diverse learners and the current findings corroborate this.

The continuous in-service training in the form of CUDs provides curricular and pedagogical support for the teachers to include different students and contributes towards shifting attitudes, thereby preparing and supporting teachers for teaching in inclusive classrooms. Such training is necessary to equip teachers in supporting different learners (Bhatnagar and Das, 2013) by continuously upgrading their skills (Das, Sharma and Singh, 2012). Moreover, the annual professional development (PD) sessions serve to reinforce the need for providing support to include diverse learners. It was not just the teachers, but also, members of the leadership team and the faculty that participate in workshops and training sessions on

inclusion from time to time. Such long term and systematic staff development programmes have been reported as being more beneficial by teachers in India compared to one off training programmes (Das, Kuyini and Desai, 2013; David and Kuyini, 2012).

The research findings have also shown that counselling parents of students *without disabilities* (emphasis added) is sometimes necessary for including children with disabilities in mainstream schools. Parents of students without disabilities often hold negative attitude towards inclusion (Julka and Bharti, 2014). As mentioned during the interviews, teachers, school faculty and the school facilitator engaged in counselling some parents of students without disabilities about the value of inclusive education when they contested children with disabilities studying alongside their wards. Despite increasing numbers of parents seeing value in education; children with and without disabilities, studying together in mainstream schools is a relatively recent development. The parents of students with disabilities have been key in taking the inclusive education agenda forward, even in low-income settings (Singal, 2016). Similarly, in the focal schools I often observed parents (especially mothers and grandparents) accompanying students with significant disabilities and staying for the duration of the school day.

Even though the school made numerous efforts to increase access, tensions remained. Many teachers in the schools where I conducted the case study held a deficit view when conceptualising disabilities, with only a few not seeing them as a disadvantage. Language used to describe children with disabilities in these schools varied but it was labelling all the way except in few instances. In the early days, the members of the school had fallen prey to deterministic labelling, but they realised it on reflection and took active steps to unlearn and re-learn what it means to be inclusive which prompted them to hold a more holistic view of inclusion. Hart and Drummond (2014) remark that ‘broadening understanding of inclusion’ (pg. 443) can prompt changes in the practice of inclusive education.

Several members of the leadership team and faculty members at the LRG remarked that this was work in progress and that the rather unhelpful perspectives could be attributed to the socio-cultural conditioning that the teachers had had thus far. There was acknowledgement that inclusive education for students with disabilities required inclusion to be understood and practised by encompassing the intersectional identities of the students, parents, teachers etc.

Furthermore, the research findings revealed that achieving these attitudinal shifts was not a one-time effort, but rather, would require a detailed action plan aimed at embedding inclusion in the entire schooling system. This reflects the recommendations of Ainscow (2005), who argued that inclusion should be viewed as a process that requires ongoing engagement to respond to diversity and learning ‘how to live with difference and learning how to learn from difference’ (pg. 118).

In order to ensure physical inclusion of all students in the classroom teaching and learning processes Mukangan had movable furniture (sub-section 7.5.1). The arrangement of the classroom furniture provided flexibility for small group teaching in each class and enabled the teachers to address the diverse needs of the students in their group effectively. Moreover, the movable furniture ensured that they could rearrange the classroom for whole class teaching when required or they could also put away the furniture to the sides of the room and perform activities on the open floor space. The LRG teachers also mentioned employing signage and visual timetables (Figure 28) outside the classrooms to enable the students with disabilities to navigate from one room to the other with ease.

However, only the ground floor classrooms were navigable for students with mobility challenges within these multi-storeyed school buildings. With regard to giving physical access, the RTE Act calls for the removal of architectural barriers through the provision of ramps and disability-friendly toilets as well as appropriate aids. A ramp to enter the building was observed in each school building, but there was no way to navigate the numerous steps to reach the classrooms on different levels by students with movement related difficulties and disabilities, i.e., there was no lift. Whilst there were no disability-friendly toilets available, there were separate and clean toilets for boys and girls with the provision of running water. Singal (2010) reported similar findings about the lack of accessibility and issues around the upkeep of these facilities.

These architectural barriers have led to partial or complete exclusion of some students with disabilities from accessing these schools, in particular, students using wheelchairs are excluded. When queried about the lack of barrier-free access, members of the leadership team mentioned that as the school was within a government owned building, they could not carry out any construction work on their own. They acknowledged that they were aware of the

limited access and had discussed it internally, but due to other more pressing concerns this issue had taken a backseat and they had never followed it up formally with the MCGM. While physical barriers to accessing the schools remained, for those students who did manage to do so the classroom furniture and layout enabled their inclusion.

### **9.2.2 Access to a safe environment for all the students**

The efforts of the schools in the case study to provide a safe environment for all the students are embedded in the school's structures and upheld through school practices. Firstly, there is a clearly articulated child protection policy, with guidelines and a mechanism to support its implementation. Secondly, teacher training and embedding inclusive practices in all the school processes were aimed at mitigating attitudinal and pedagogical barriers to inclusion. Thirdly, support for the emotional well-being of the students through the oral circle time (OCT) and the socio-emotional department ensured a safe environment. The NEP 2020 clearly states that it will ensure that children with disabilities have access to safe and secure environment, although it does not elaborate how. The findings from this research present a clear picture of how a safe environment can be created for all students in the schools.

The findings reveal that Mukhtangan's child protection policy (Appendix 11) calls for safeguarding all the students against neglect and any kind child abuse – physical, emotional, or sexual. This code of conduct extends to all staff, trainees, and associates in the schools as well as visitors to the schools, laying down guidelines for preventive and protective measures. As mentioned in the research methodology (section 5.7), as a researcher in these schools these guidelines were drawn upon throughout my investigation. Whilst child safety guidelines and preventive measures are prescribed at the policy level, clearly defined measures for implementation at the school level are extremely rare in India.

Embedding inclusion in all school processes and along with the presence of integrated teacher and school education resulted in teachers, faculty and members of the leadership team adopting a holistic view of inclusion. It takes great effort to create and sustain such a culture of inclusion as this needs to be rooted within core beliefs and assumptions (Gruenberg and Miller, 2011). At Mukhtangan this has emerged out of their vision to create 'an inclusive empowered world in which we can all live in harmony with freedom for expression, respect

and integrity'. Students did face challenges and marginalisation from peers, as reported in the findings and some mentioned feeling excluded in the classroom. Some reported being provoked by their peers for various reasons (section 6.4.4). For example, Siddharth who had a diagnosis for dyslexia, reported how he had been bullied for his skin colour, where his classmates often singled him out and '*teased*' him. Such actions can lead to exclusion from the classroom processes. Despite observing sessions given by teachers on students identifying, reporting and refraining from bullying behaviour, some still reported such instances during the interviews.

Kiran<sup>81</sup> mentioned that they had held one-to-one counselling for some students, with addressing this issue often being an ongoing process as the children who were bullying or being bullied were going through rough times in their home environments as well. The Socio-Emotional department consisting of two psychologists and two social workers also undertook workshops dealing with topics, such as bullying, sexual health, examination pressure and handling academic stress with the students. Limaye (2020) underscores the need for including social workers for practicing inclusive education as the social worker can form a link between the students and the community. However, as only a small team had to cater to all teachers and students in the seven schools they had limited capacity for one-to-one interventions, except when there were serious incidents that required direct intervention.

The Oral Circle Time (OCT) also aided the socio-emotional support of the students and ensured that they were active participants in the classroom practices. Similar findings were observed by Corbett (2001) in schools in London. The teachers and faculty considered OCT as a symbol of inclusion in the school, with both students and teachers reporting feeling this practice addressed their emotional wellbeing and created trust amongst them (sub-section 8.6.2 and 9.2.2). The OCT was also utilised by teachers to address disciplinary issues amongst students in a constructive manner. In the two instances mentioned in the research methodology where students opened up about the abuse in their homes (section 5.7), the schools' actions were governed by the child protection policy and the Socio-Emotional Department took a lead in addressing this with the support of class teachers, School Faculty and the LRG teacher. Thus, surmounting attitudinal and physical barriers ensured that the students had a safe environment as many students with disabilities face discrimination,

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<sup>81</sup> Departmental Leader – Socio-Emotional Department

violence, and marginalisation due to other's attitudes towards their disabilities and remain unable to access teaching and learning in their mainstream classrooms.

### 9.2.3 Mutual respect among different stakeholders

Singal (2013) raises respect as a one of the components that promotes the 'Entry' of students with disabilities into the education system. As she has not elaborated on this further, I analysed the findings from this case study to ascertain how respect promotes inclusion in the focal schools. The presence of mutual respect between the various stakeholders associated with the schools - teachers, students, parents and members of faculty and leadership team – was clear. Schools need to reflect on their values and beliefs in order to develop such inclusive cultures (Corbett, 1999; Carrington, 1999) and this was articulated through the vision<sup>82</sup> and mission<sup>83</sup> of Mukhtangan.

Many students reported that they helped their peers, because they had respect for each other (sub-section 9.2.3), which promoted an inclusive environment. An open and trusting relationship also existed between teachers and students, as reflected through the data. Many students valued their relationship with their teachers and felt that they could share personal and classroom experiences with them (sub-section 6.4.3). Students reported being able to speak to the teachers about instances of 'teasing' and fighting, whilst also narrating situations where the teacher had resolved them. Many students said that they valued their relationship with their teachers and feel that they respected them, with a few students reporting that it encouraged them to attend school. This reflects a school culture that values open co-operation and reasoned dialogue rather than confrontation, with such an environment facilitating the different members of the school in feeling safe, comfortable and confident (Corbett, 2001).

As one student, Chetan, commented that, "*Teacher respect me here and I liking here. No one giving respect – ghar pe bhi nahin aur bahar bhi nahin (neither at home, nor outside)*". He said that having his teachers' respect brought him a sense of self-worth. Their respect for the

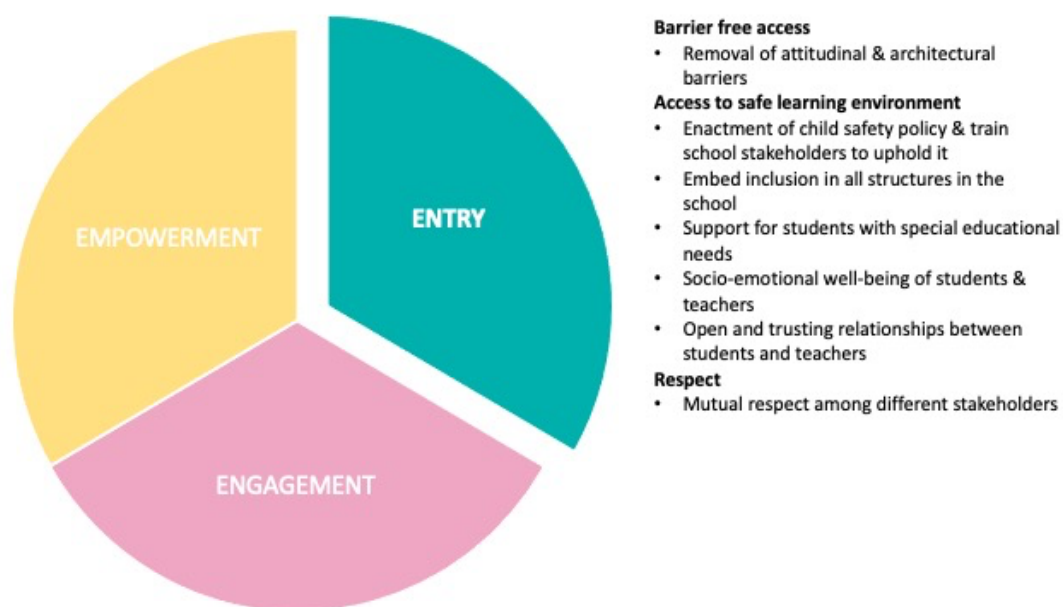
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<sup>82</sup> An inclusive empowered world in which we can all live in harmony with freedom for expression, respect and integrity.

<sup>83</sup> The creation of sustainable, inclusive, integrated models of student-friendly teachers and school education, in partnership with under-served communities, demonstrating ways of overcoming identified disconnects in the mainstream system.

students was reflected in their understanding of inclusion (sub-section 6.3.1), which was broad and encompassed a multitude of differences, going beyond disabilities and acknowledging intersectional identities. This was also illustrated (section 7.4) where students were observed correcting the teachers' grammar and spelling during class on two occasions while the teacher was writing on the blackboard. In both instances, the teacher thanked and acknowledged the students for noticing this, corrected the error and continued teaching. In these schools the parents mostly belonged to underserved communities and the teachers and school faculty became key resources, if they required support for their child with disabilities, thus it was imperative that their relationship was based on mutual respect. The teachers showed respect for the parents by giving counselling support and being sensitive towards the emotions of those whose children had difficulties or disabilities. In addition, the LRG teachers supported the parents in navigating hospital paperwork, accessing occupational therapy where available in public hospitals and recommending ways that the parents could support their child at home, thus building a partnership that fore fronted the needs of the child. Recent empirical research in India found that many parents of children with disabilities and special education needs were intimidated by the process of obtaining certificates for their children (Rao, Shrivastava and Sarkar, 2020).

Additionally, mutual respect amongst teachers appeared as another crucial finding. The subject teachers, with the help of their departmental leaders and subject faculty, were the drivers of inclusion within these schools, whereby they worked towards imparting inclusive education to all the students in their classrooms irrespective of difficulties or disabilities. The subject teachers and the faculty members acknowledged the members of the LRG as significant enablers, who supported them in including different learners in the classroom teaching and learning processes (section 8.6). Figure 35 below summarises the various aspects that ensure the 'Entry' of diverse learners within these mainstream schools.



**Figure 35:** Ensuring ‘Entry’ and creating access within mainstream schools for children with disabilities drawing on the 3E conceptual framework

### 9.3 Engagement in the education system

In recent years, the emphasis within the education policy and practice discourse worldwide, including in India, has shifted from mere access to ensuring everyone has access to quality education. However, there is an urgent need to unpack the ‘black box’ of how students with disabilities are included in the classroom processes (Singal, 2014), thereby addressing the lacuna in research on what constitutes inclusive pedagogy and practices. Based on her research, Singal (2013) postulates that providing quality education to students with disabilities within mainstream education systems can be achieved through ‘Engagement’ in teacher training, a relevant and culturally appropriate curriculum as well as locally relevant teaching and learning material. Taking into consideration other research on inclusive education in India (Singal, Ware and Bhutani 2017; Sawhney, 2015; Shah, Das, Desai and Tiwari, 2013; Das and Kuttumuri, 2010) and the articulation of quality education for children with disabilities by the RTE, Julka et al. (2014) for NCERT and National Educational Policy (2020) led me to broaden the scope of Singal’s (2013) constructs.

The analysis of the empirical data from this research identified the following processes as

crucial to how these schools facilitate 'Engagement' of the students with disabilities in the teaching and learning processes.

- *through teacher education* that incorporates training for inclusion of children with special educational needs and disabilities
- *through curriculum and continuous curricular access* for all students, including children with disabilities, which encompasses a relevant and culturally appropriate curriculum as well as locally relevant teaching and learning materials (TLMs)
- *through pedagogical processes* geared towards supporting students with disabilities

### **9.3.1 Teacher education programme to support the education of children with disabilities**

Several researchers have underscored the need to train and prepare teachers for inclusion of children with disabilities within mainstream classrooms, arguing that receiving such training can help in reducing teachers' concerns (Sharma, Forlin and Loreman, 2008). The literature review shed light on the status of teacher training in India and that information related to inclusion of children with disabilities within the pre-service teacher training are very miniscule (Das, Kuyini & Desai, 2013). The present research has shed light on how variables, such as knowledge about inclusion and support for students with and without special educational needs and disabilities through teacher education, facilitate inclusive education.

Singal (2006) reported that even when teacher training in India included components on inclusion the emphasis was limited to child development and identification, with little pedagogical training regarding inclusion. The RTE Act, RPWD Act and NEP 2020 fail to elaborate upon facets of training that cater to students with disabilities, although all of them mandate that such training should be provided. Hence, it is the need of the hour to rethink both pre-service and in-service teacher education for inclusion of children with disabilities. UNESCO (2017) conceptualises the practice of teacher education as one of the aspects for success of inclusive education. Within pre-service training, it emphasises the need to prepare teachers to respond to learner diversity initially and later, to provide teachers and staff the opportunity to take part in continuous professional development that addresses inclusive and equitable practices. The training process at Mukangan acknowledges this.

Muktangan provides an interesting example of how they leverage pre-service teacher education, in-service continuous teaching support and annual professional development (PD)

sessions to promote inclusive education. MITEP requires student-teachers in the first year to engage in two in-depth case studies throughout their training, one of which involving a student identified as needing extra support and one without such a need. They have to develop lesson plans for both in consultation with the teacher trainers. In addition, after completion of the first year the teachers continue their teacher education in the classrooms alongside more experienced teachers, thus receiving an opportunity to apply their knowledge under guidance (section 7.2). Based on their research in southern India, Rose and Rajanahally (2019) state that teachers should receive such opportunities to implement their learning in the school scenario to prepare them to include children with disabilities.

The topic of inclusion within the pre-service teacher education was mostly concerned with creating an attitudinal shift towards inclusion of children with disabilities in the first year and subject specific pedagogy in the subsequent years. However, recently they have created a more detailed module of inclusion with basic pedagogical training on inclusion of children with different learning needs thus being embedded within the entire pre-service teacher education programme. Some of the pre-service teachers recruited to the LRG receive further training on special education after completion of the first year. Hence, all teachers undergo the same teacher training programme in the first year and from the second year onwards receive specific pedagogical knowledge and support for the subjects they will be delivering in the schools. In addition, the teachers take part in annual PD sessions where inclusion is one of the topics they engage with. I was involved in conducting two PD sessions at the school through workshops as discussed in the methodology chapter. The PD sessions also involve watching films and reading books on inclusion, followed by discussion and reflection on how they can challenge themselves to create an inclusive environment.

One of the main reasons' teachers attributed to their ability to support the needs of different students was the training they received, especially the in-service training on curriculum and lesson design support from the faculty members in the form of CUDs. Several teachers reported that these weekly CUDs were helpful for receiving feedback and support, planning their lessons, and exchanging ideas about the strategies that the different teachers were applying to include students with special educational needs. However, some teachers mentioned their inability to include children with significant disabilities. Blindness, physical difficulties, and complete auditory impairment were some of the situations where teachers

reported feeling unprepared/unable to teach owing to their having had no previous training, the school was not physically accessible for the students and they had not been trained to use braille or sign language.

A feature of the continuous in-service training support was the collaboration between experts. For example, Ummeed Child Development Centre in Mumbai provided the LRG faculty and teachers initial training on the inclusion of students with different learning needs (primarily pedagogical and ADL support). They received similar support from the Maharashtra Dyslexia Association<sup>84</sup> Mumbai for inclusion of children with learning difficulties (Sub-section 9.3.1). This collaboration and training with external subject-area experts helped with capacity-building among the faculty members, subsequently helping the school develop and continue these trainings in-house and thus ensuring sustainability of the training programs. These practices echo the NEP 2020 guidelines, which stress the need for collaboration with experts, peers, and parents to realise the goal of inclusive education and to facilitate cross-learning.

### 9.3.2 Curriculum design and access for different learners

Within the context of supporting diverse learners, following a spiral curriculum emerged as a critical feature for supporting diverse learners. Across the subjects, the common theme that the faculty members mentioned was designing a *spiral curriculum* to support the continuity of learning through the grades for the students. The concept of a spiral curriculum was developed by Bruner (1960), who envisaged it as an accessible way of learning through enquiry, where the educator guides the child's thinking and helps them in learning the principles of the subject under study, rather than just the mastery of the knowledge. It provided continuous engagement with various concepts under study and built on the students' learning. During the interviews, students reported enjoying their classes and remembered lessons from when they were in different grades when sharing about their favourite learning experiences, meaning they had carried their learning through the years. This aligns with Mukhtangan's constructivist pedagogy, especially around active learning, collaboration and delivering a developmentally appropriate curriculum.

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<sup>84</sup> An NGO that provides integrated support for students with Specific Learning Disabilities (Dyslexia).

The teachers and faculty members explained that usually there was a lack of inclusive imagery within the prescribed textbooks and hence, they *included some aspects of inclusion while designing the curriculum* for classroom teaching and learning. On one occasion, I observed a history teacher relating her personal journey of empowerment as a woman by becoming a teacher, thus explaining to the students the importance of learning from the past. On another, I saw charts hanging in the classroom that depicted various Indian sportsperson who were female. I also observed the LRG teachers using imagery that closely resembled the students (Figure 29-31). In addition, departmental leaders and faculty members reported designing the curriculum in a way that *encouraged building skills*, such as through group work, co-operation, critical thinking, and observation skills (sub-section 7.4.3). Development of skills is an important underlying part of the curriculum (Ware, 2014).

Muktangan lists *developmentally appropriate and activity-based curriculum* as two of its five pillars based on which teaching and learning is designed throughout its seven schools in line with their constructivist pedagogical approach (section 7.1). They include different modalities for delivery of teaching and learning to the students, such as role play, experiments, games, use of audio-visual aids, songs, and field trips etc., which they have incorporated into the curriculum. Students supported by the LRG recounted that they found the ‘Sunday System’ useful to learn English and called it ‘fun’ as it involved learning through puzzles, word games, stories etc. Even LRG teachers reported that they found it useful for teaching students as it involves a structured programme (section 8.3.3).

While the subject teachers along with their subject faculty members were in charge of ensuring their curriculum design and lesson plans catered to all the students in the class, the LRG teachers provided inputs on assessments design and information about the different learning needs of the students. The *LRG teachers supported the subject teachers to prepare the individual education plans (IEPs)* and adapt the curriculum to address the students’ needs. According to Ila<sup>85</sup>, the motivation behind this system was to ensure the inclusion of the students continued within the mainstream teaching and learning and that the LRG remained a support service, thus not becoming a separate means of service delivery for children with difficulties and disabilities. The NCERT provides some guidance for teachers in modifying curriculum and pedagogy to support children with disabilities in primary and

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<sup>85</sup> Departmental Leader of the Learning Resource Group (LRG)

upper primary through a handbook containing information for when working students with visual, auditory, physical, cognitive, developmental and/or intellectual disabilities (Julka et al., 2014), which the schools in this case study were utilising.

The RTE stipulates that students with disabilities who are entering mainstream schools should undergo school readiness programmes and that both schoolteachers and resource teachers should support the student. In the interviews, the school stakeholders recognised that designing an inclusive curriculum and *giving continuous curricular access to all students* has been a constant endeavour for them and they considered it an essential pre-requisite for including learners with diverse needs. The LRG teachers give literacy and numeracy support to all students assessed as having difficulties in engaging with classroom teaching and learning so that they could continuously access to the curriculum taught in the classroom. The RTE Act 2009, RPwD 2016 and NEP 2020 emphasise the need to provide continuous curricular access and the findings reveal how this can be realised.

The Samagra Shiksha Abhiyan (SSA) also highlights the need for identification and mapping of students with disabilities in mainstream schools in providing them support, but a major challenge to this is the absence of a comprehensive methodology for doing so (Rao, Srivastava and Sarkar, 2020). The schools run by Mukangan follow a detailed screening process for students to identify those who require additional learning support (section 8.2). Post screening learning support is extended to all students identified as having additional learning needs immediately without awaiting a formal medical diagnosis as this can take time and sometimes learning difficulties can arise due to reasons other than disabilities. Thus, practices in these schools align with the recommendations of the RPWD Act.

The *screening process to determine if any student has difficulties in accessing the classroom teaching and learning* is not a one-off process at the time of enrolment, but rather, an ongoing activity to make sure that all students are supported. The screening helps the LRG teachers (section 8.2) to give extra support to the students who have different learning needs and such support is available from the time students enrol in school. They keep the parents informed and, in some cases, recommend them to go for further assessments at a government facility, but refrain from carrying out any diagnostic assessments themselves. Both the RTE Act and the NEP 2020 refer to the need for screening and assessment of disabilities, but do

not articulate the steps to be taken at the school level.

Having trained resource teachers like the LRG teachers to help students with literacy, numeracy, and Activities of Daily Living (ADL) skills was helpful in providing continuous school readiness support. The teaching and learning strategies practised by the LRG teachers (section 8.3) provide detailed insights into the pedagogy adopted to provide school readiness so that students with difficulties and disabilities can access the curriculum in mainstream classrooms. These findings underscore that school readiness should not be viewed as a one-time action or time bound (as envisioned in the NEP 2020), but rather, as a continuum on which students with difficulties and disabilities are supported throughout their schooling.

### 9.3.3 Pedagogical processes to include students with disabilities

Croft (2008), while articulating what inclusive pedagogy should look like, has argued that “inclusive pedagogy on the other hand accepts that learners have individual differences but sees pedagogically significant differences as located in the interaction between the learner and the school and therefore within the teacher’s influence and responsibility” (p 18). This was evident in the range of pedagogical tools used by the faculty members and teachers with a view to including different learners in their classrooms. The principal inclusive teaching methods categorised by Florian (2006) under differentiated instruction (e.g., using different modalities and pace for different students), co-operative learning (such as peer learning etc.) and classroom management (such as using modified seating plans) were evident in these schools. The Muktang schools’ constructivist philosophy that follows the five E’s of Engage, Explore, Explain, Elaborate and Evaluate guided their pedagogical model (section 7.1).

Teachers practised *small group teaching* and all the *students with and without difficulties and disabilities were taught together*, although those with difficulties and disabilities received some additional support from the LRG. The classroom teachers worked closely with the LRG teachers or their own subject faculty to ensure that all students assessed as needing support were provided pedagogical and any other support they required and the lesson planning took this into account.

It is interesting to note that while members of faculty and the leadership team attributed the low student teacher ratio of 1:15 students as a facilitator for teaching those with diverse needs none of the teachers mentioned it as an enabler. This could be because these teachers had only taught within this low student teacher ratio environment and did not have experience of teaching large class sizes. The challenge of large class size in the inclusion of diverse learners is well documented (Ainscow and Sandil, 2010; Ahsan, Sharma and Deppeler, 2012; Mukhopadhyay, Nenty and Abosi, 2012; Sharma and Das, 2015; Tiwari, Das and Sharma, 2015; Singh, 2016)

The *LRG teachers supplemented the classroom teaching and learning for the students with difficulties and disabilities* (section 8.3). According to Ila, Muktangan's constructivist pedagogical approach shifts the onus of learning in the classroom onto the teacher rather than the student. As mentioned earlier, they gave literacy and numeracy support to the students to enable them to access the curriculum. The NEP 2020 places significant focus on the attainment of functional literacy and numeracy skills for all learners, especially in the early years. The LRG teachers contributed classroom support when requested by the subject teachers. However, the LRG and subject teachers ensured that students spent 70-80% of the time learning in the mainstream classroom as otherwise inclusion goals would remain unmet, according to the former. For the students with significant disabilities, the LRG teachers also gave ADL (Activities of Daily Living) support.

These schools had *subject specific lesson design protocols*. As emerged in the findings, while the fundamental pedagogical approach for all the subjects of English, mathematics, science and social studies was the same, depending on the subject, each department adopted different protocols to operationalise the classroom teaching and learning. These strengthened the teachers' content knowledge and helped them to include diverse learners in their classroom teaching and learning effectively.

The teachers *used teaching and learning materials (TLM) to accommodate the needs of the different students*. For example, for students with low vision teachers used books and reading materials with increased font size and magnifying glasses, for students who had difficulties with writing, they gave them a rubber grip for their pens and pencils that supported their writing and they used Dienes blocks to explain mathematical concepts. Both the subject and

LRG teachers made their own TLMs to supplement the classroom teaching. Their common goal was to ensure that the students could engage deeply with the topic taught, thereby reinforcing their classroom learning.

I saw various TLMs prominently displayed on boards throughout the school and in classrooms. I also observed that these were changed to reflect the content the teachers were teaching within the classroom from time to time during the research. The use of these TLMs generated engagement for the students and teachers in the classroom; they often referred to them during the teaching and learning process. Teachers explained that the use of different TLMs provided a sensory experience for students with learning difficulties and certain other disabilities, thereby helping them to grasp concepts better through use of concrete objects as TLM. It is notable that teachers used everyday objects that students had access to at home and school, thus *relying on locally and culturally relevant teaching and learning materials to supplement their learning*.

Children who had difficulties with English have often been considered as having learning disabilities in India (Kalyanpur, 2020; Jhingran, 2017; Kalyanpur, 2015; Mukhopadhyay and Sriprakash, 2011). However, in these schools there was an acknowledgement among teachers and members of faculty that students could face difficulties owing to English being a second language and therefore, there needed to be a concerted effort to understand the cause of students' difficulties with learning before categorising them as having learning disabilities. They reported and were often observed *using dual language in the classroom* to explain concepts during the classroom teaching and learning process. These practices created continuous engagement between students, teachers, faculty members and LRG teachers in the teaching and learning process. It also militated against misdiagnosis and mislabelling of the students as disabled, whilst also ensuring that they provided them the requisite learning support.

As discussed in the finding's chapters, in the beginning, the teachers at Mukangan did fall into this trap of classifying students with difficulties in English as having learning disabilities, but introspection and reflection by the LRG faculty as well as the management helped in understanding that this was not the case. Owing to this new understanding, the LRG faculty and teachers started providing all students with literacy and numeracy support to

enable them to participate better in the classroom teaching and learning. This also helped the teachers in the class to progress through the curriculum at a more consistent pace with all the students. Acknowledging that students face difficulties in the classroom owing to English being a second language and not categorising these students as having learning disabilities has helped these schools identify various ways to support the students. As English is the medium of instruction, particular emphasis is placed on helping students acquire English reading and writing skills. Many students reported enjoying these LRG sessions, saying that it enhanced their classroom teaching and learning experience.

Teachers used *different modalities for delivering the lessons* in the classroom. They primarily relied on teacher led instruction and followed it up with discussions interspersed with various activities. Describing it within their active constructivist philosophy, teachers mentioned that delivering the classroom content through a mix of activities, games, experiments, songs, poems, dances etc. had enabled them to include different learners and helped in assessments. The students described *peer learning* as a way that they engaged with each other and supported each other in the classroom teaching and learning processes (section 7.5.4). Peer support has been found as a mediating factor in promoting a positive academic self-concept among students with disabilities and special education needs in Jakarta, Indonesia (Pratiwi and Mangunsong, 2020).

Faculty members acknowledged that in order to give curricular access to the different learners, the teachers needed to have an in-depth understanding of the learning needs of their students. For this they used continuous *formative and summative assessments* (section 7.6). These enabled the teachers and faculty to keep track of areas where students might require support and thus, adapt the curriculum to address them. Formative assessments were conducted continuously during the teaching and learning process, while regular summative assessments were also enacted. Both kinds of assessments were used to inform the teachers' classroom teaching and learning, with the lesson planning taking the outcomes of these assessments into account. Moreover, these assessments were adapted so as meet the needs of the students. This aligns with NCERT's (2014) mandate on assessments, "Assessment procedures focus on learning, teaching and results of the teaching-learning process. Assessment process involves students and teachers in gathering information, which helps the teacher, know whether their student is learning, and how effective the teaching-learning in

the classroom is.” (Pg. 52)

The students reported that their teachers encouraged them to *ask questions about their lessons without reproach*. Both students with and without disabilities mentioned that this way of learning gave them the confidence to approach their teachers when they did not understand a concept and that their teachers would not hesitate to explain it multiple times (sub-section 7.5.5). These findings reflect the conclusions drawn by Westbrook and Croft (2015) from research involving newly qualified teachers in Tanzania. They found that teaching strategies became inclusive when teachers gave feedback, ensured that they provided their students with sustained inclusive attention, created a safe classroom environment as well as utilising their knowledge of their students’ backgrounds and experiences when developing their teaching strategies.

During classroom observations, I often reflected on the fact that, whilst at any given point three teachers were teaching three groups of up to 15 students in the same classroom, rarely did they seem distracted by what was going on in the other groups. Research by Massonnié et. al (2020) in six elementary schools in France has shown that noise interference and noise annoyance specially affected students who reported difficulties with hearing, switching skills and min-wandering propensity. However, I observed that even when noise levels inside the classroom were high as simultaneous discussions were in progress in the three groups, the students remained focussed within their own groups. When enquired about this, students and teachers said that they were used to it since they had been in the same setting since they started school and as such, they rarely found it distracting.

Drawing on the literature, I explored the notion of ‘cocktail party effect<sup>86</sup>’ in classrooms. Research on this phenomenon in the classroom has raised concerns about students’ ability to concentrate (Ghinst et al., 2019; Leibold et al., 2019). I saw that, whilst these schools did not have the resources to accommodate the students in separate classrooms, it was possible that the classroom management techniques used by the teachers to include the students in small

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<sup>86</sup> The **cocktail party effect** was coined by Colin Cherry in 1953, where he used it to describe the brain’s ability to focus on a particular stimulus and filter out other stimuli, which he observed in parties, where the party attendee was able to filter out other noises in a busy room and selectively listen to one conversation.

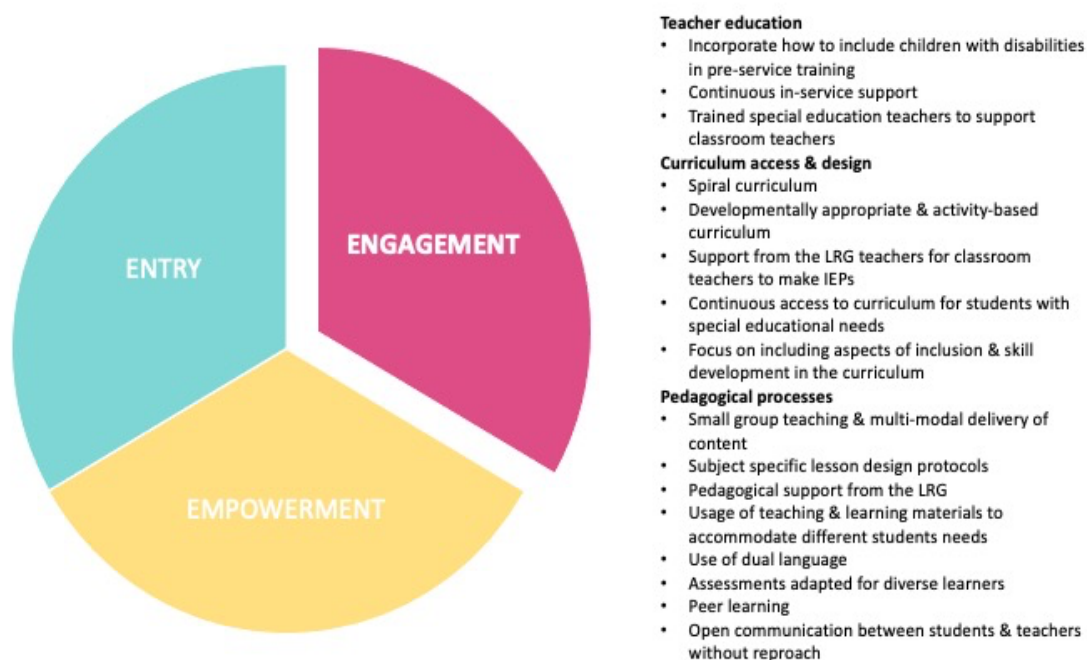
group teaching, through the seating arrangements, providing individual attention where they could, and utilising activity-based teaching methods to sustain attention along with providing different ways to learn contributed to their ability to continue teaching and learning in that environment (Section 7.5).

Within the Indian schooling system, children with disabilities are provided certain accommodations owing to their disability (Section 8.2), but to be eligible for these ‘reasonable adjustments’ a certificate from government hospital is required. The LRG teachers and faculty in these schools co-ordinated with and supported the parents in navigating the government system so that their child could receive certification<sup>87</sup>. They helped the parents with all the necessary paperwork and any follow up required at the governmental level to ensure that these accommodations were in place for the students, especially when they sat the school leaving examinations. Through these accommodations students with disabilities were able to navigate the education system, sit examinations and follow further educational and vocational activities as per their wishes. The year I was conducting this research (2017-2018) was the first-time students from all seven schools had been entered for the Secondary School Certificate (SSC) Examinations and out of 222 students, 23 students had special educational needs. The school provides career counselling services in partnership with an external NGO to all the students to enable them to explore different career opportunities beyond their academics.

Figure 36 below summarises how these schools created ‘Engagement’ to ensure inclusion of diverse learners in their teaching and learning processes. The following section elaborates upon how inclusive education within these schools fosters empowerment.

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<sup>87</sup> A medical certificate stating the type and degree of impairment or disability/ies from a medical official in a government hospital has to accompany the application made to the Maharashtra State Secondary and Higher Secondary Board of Education to make a case for accommodating the needs of the student when they sit the final board examinations. The certification is not required to access education in these schools; however, it is required to make the student eligible for the accommodations available to them.



**Figure 36:** Teaching and learning for children with disabilities within mainstream schools creating ‘Engagement’ drawing on the 3E conceptual framework

#### 9.4 Empowerment in and through the education system

The goal of education is not just to provide literacy and numeracy skills to an individual, but also, ‘core educational values’ that are moulded by social and human development outcomes of education that lead to ‘enhancement of lives and freedom’, as articulated by Sen (1999) and mentioned in Miles and Singal (2010). Singal (2013) defines the purpose of education for students with disabilities as ‘Empowerment’ in and through education. She emphasises the need to constantly apply a critical lens to analyse the status of education for children with disabilities and to adopt a more comprehensive approach for developing effective education systems. Thus, this conceptual framework helps to go beyond understanding how inclusive education could be implemented to ascertaining what happens when mainstream schools practice inclusive education. Graham and Slee (2008) also convey the need for the discussion on inclusive education to ask the question “...into what do we seek to include?” (pg. 290).

In other words, when discussing education for students with disabilities within mainstream schools, there is a need to reflect on the intentions behind it. The reason this reflective exercise becomes essential is because it influences how education for children with disabilities is delivered in mainstream schools (Graham and Slee, 2008). This is especially

important within the Indian context, where despite efforts to include children within mainstream schools increasing, systemic issues continue to go unaddressed (Singal, 2019). Using 3E as an analytical framework has helped in critically analysing the multi-dimensional and dynamic nature of inclusive education in relation to what leads to it and emerges from it. There is a need to include children's level of well-being, participation and achievement when assessing whether children with disabilities are getting included in mainstream schools (LeFanu, 2014).

Singal (2013) argues that the schooling system should foster agency, community belongingness and should convert available resources into usable opportunities to enable 'Empowerment' for children with disabilities within inclusive education. Here, I discuss the central tenets that emerged from the research contributing to 'Empowerment':

- these schools *fostered agency* through the practice of holistic inclusion of students with diverse needs that took their intersectional identities into account and through their support for the teachers, thereby addressing inclusion at a systemic level
- *community belonging* emerged through characterisation of each other by the various stakeholders, namely teachers, students, faculty, leadership team, staff, and parents, as members of a family
- the *ability to convert resources into usable opportunities* was observed in the way educational and organisational resources were utilised

#### 9.4.1 Fostering agency among students and teachers

Whilst Singal (2013) has not defined 'agency', she links it to empowerment within the context of 'inclusion into what' and 'inclusion for what purposes' (pg. 212). She further associates it with the need for 'value free' structures of education that 'do not stigmatize the learners' (pg. 213). The research findings have revealed that the objective of empowerment by 'fostering agency' for all students (with and without disabilities) within the focal schools meant addressing systemic issues that hampered inclusive education.

Teachers mentioned their dual goals of *academic and social inclusion* for all the students (sub-section 6.3.3). For students with significant disabilities, teachers spoke about supporting

them in leading independent lives as adults through the acquisition of social and functional academic skills (sub-section 8.3.4). The school had various structures aimed at fostering social inclusion within school that supported it beyond the school. For example, as reported by Myra, the LRG teachers helped create social stories to support parents of students with significant disabilities in socialising their children with neighbours and extended family members. Inclusion encompassed academic goals for all students that strived to create ‘value free’ structures which meant that they made a conscious attempt to not assume how much a student with disabilities can learn. For example, this is illustrated in the way their assessments were structured. While the continuous formative assessments took the students’ various needs into account, the summative ones were designed in a way that did not create assumptions about what the student could do (section 7.6.1).

The teacher education programme was geared towards empowering the teachers to hold inclusive views, with the recognition that they had come from different backgrounds and may have faced marginalisation themselves (section 7.2). The process of *empowerment encompassed teachers along with the students*, with some teachers reporting how their own personal motivation to support the students had grown as they had become more experienced. The schools had a strong focus on empowering the women from the community, which had clearly influenced teachers’ classroom teaching and learning. Some teachers mentioned how their growth in the school meant they were more inclined to support the students in the schools. In a couple of interviews, teachers and faculty members provided examples of a faculty member who had started as a housekeeping staff member, subsequently expressed an interest in training as a teacher and over the years had grown within the organisation, eventually becoming a subject faculty member. Seeing such examples around them helped them see the potential for growth in themselves as well as others.

The pre-service teacher education, the continuous in-service teaching and learning support, the presence of the LRG and Socio-Emotional Department for supporting teachers, all contributed towards fostering agency by creating *a network of support and collaboration* that provided knowledge about how to include students with different learning needs. Such collaboration are important to facilitate a good learning environment for all children in an inclusive set-up (Flem, Moen & Gudmundsdottir, 2004). Autonomy was reported and observed, whereby different subject teachers and faculty were able to devise subject specific

strategies for inclusion, while staying true to the overall objectives of the school in terms of providing all students with an inclusive learning environment, for example, the maths teachers and faculty used ability grouping in their classrooms. Whilst other subject teachers and faculty expressed that they respected the maths department's choice, they were not convinced ability grouping would help the students in other subjects. However, both these choices co-existed. The leadership team was decisive in ensuring that it played a pivotal role in promoting *teacher autonomy*. The NEP 2020 contends that it is essential for more autonomy at the school level, such that teachers are able to take decisions that will promote the inclusion of diverse learners.

Alexander (2001) observed that teachers in India played down the differences between the students (age, ability, special need, behaviour, gender and others) in order to keep the class together and focused their attention on whole class tasks and activities. Most teachers, members of faculty and leadership teams' understanding of inclusion in these focal schools moved beyond disabilities and *acknowledged intersectional identities of the students*. Irrespective of the way they conceptualised disabilities most teachers and faculty members held a holistic view of inclusion (sub-section 6.3.1), with only a couple referring to inclusion exclusively in terms of including children with disabilities. In terms of giving access to curriculum and pedagogy for all learners, school members took factors such as gender, caste, language, disabilities, socio-economic conditions, family situation etc. into account.

Most research in India has listed challenges, such as external non-teaching responsibilities, low levels of support, lack of teaching and learning support etc., which all pertain to why teachers are unable to support inclusive education effectively. However, the challenges reported by the teachers during this research were about what happens once they start working in an inclusive education setting after these initial challenges have been addressed. The teachers were *forthcoming about their challenges* in teaching students with difficulties and disabilities and how they addressed them (section 8.3). They touched upon the importance of understanding their own socio-emotional needs and addressing them using the support structures, such as training or collaboration with colleagues, which in turn led to their developing empathy and addressing the needs of their students. Gray, Wilcox and Nordstokke (2017) reported similar findings from a review of literature and stressed the importance of ensuring that teachers had access to coping strategies, meaningful

collaboration and received support from their co-workers and other staff, while navigating the complexities of inclusive education.

Various students reported a *close relationship with their teachers* (sub-section 6.4.3). They said how they felt able to ask questions without fearing repercussions, if they did not understand a concept. Students emphasised teachers' feedback and positive reinforcements as integral to their teaching and learning experience. This is another example of how the education system in these schools created a non-threatening environment and fostered agency among their students. This aligns with findings by David and Kuyini, 2012 in India, which showed that classroom the practices adopted by teachers and the behaviour displayed by them facilitated social inclusion for students with disabilities. The students reinforced each other's learning in the classroom through *peer learning* encouraged by their teachers (sub-section 7.5.4) and this help create 'agency' among them as well. Both students and teachers overwhelmingly reported that they saw immense value in students with diverse learning needs studying together. The students with disabilities listed friendships with their classmates as one of the primary reasons they enjoyed school.

#### **9.4.2 Community belonging**

Muktangan as an organisation espouses the ethos of community participation as per the accounts of the different stakeholders and this is enshrined in their mission statement. The members of the schools run by Muktangan characterised themselves as constituting a family by way of explaining their sense of belonging. Having a sense of belongingness in life is important (Frederickson and Baxter, 2009) and it is defined as the level of support that individuals get in their social environment in terms of being respected, included, and supported by others (Baumeister and Leary, 1995). The findings have shed light on what community belongingness looks like within the three schools where I conducted these case studies. Multiple stakeholders - members of the leadership team and faculty, teachers, and students - characterised the schools and its members as their family. Within this overarching family there were smaller communities, comprising teachers, faculty members, and students, who described themselves as being interrelated, thus alluding to their belongingness.

Though this research did not focus on the role of parents in inclusive education; the teachers,

faculty, and members of the leadership team included the parents in their conception of community belongingness and inclusion. In the pre-primary section, Gauravi<sup>88</sup> mentioned that they regularly invited the parents to experience how their children were learning through activity and play based education, for this was still a novel concept to many and thus, ‘parents might think their child is playing and not learning in school’. In these sessions, the faculty and teachers would often teach the parents basic conversational English by using the same activity and play-based techniques that their children were engaged, which helped them understand how their child was learning while also helping them learn English.

Moreover, the parents were invited to the Project Day where the students displayed different things they had learned throughout the year to their parents and family members. At the end of the academic year, all the schools celebrated Annual Day, in which all parents were invited to participate. These practices helped foster a community spirit with the parents. This also enabled parents of students with and without disabilities an opportunity to see how their children were working and learning alongside each other. Thus, it can be seen that the school actively devised ways to include the parents and family members in their children’s education. As discussed earlier in the Findings section 8.3, the LRG teachers included parents of children with disabilities in continuing support for their child at home.

When discussing the enablers for inclusion (section 8.6), the teachers and faculty members reported that the different structures, such as the pre-service teacher education, the CUD meetings, LRG members etc., gave them a sense of community and provided them support to include different learners. In addition, many teachers said that they were able to lean on their colleagues when faced with challenges in the classroom for the inclusion of students with diverse needs. Having their fellow teachers share their challenges and receiving feedback was reported as being helpful.

The teachers also expressed that they felt a sense of community with their students and that, in many ways, it was their students who enabled them to be inclusive of different learners. As one of the teachers Deepti said, ‘they inspire us to do more’ and other teachers expressed similar sentiments. As the teachers gained more experience of working in an inclusive environment with students with and without disabilities, they reported feeling more at ease in

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<sup>88</sup> Head of Early Childhood Care and Education

addressing the diverse needs of their students. Parasuram's (2006) research with 340 teachers in Mumbai, India found that being acquainted with any person with disabilities yielded the most positive attitudes towards including children with disabilities in the classroom and similar findings were reported by Bhatnagar and Das, (2013). Similarly, the faculty members credited the teachers and members of the LRG for their ability to include diverse learners. This connects back to the discussion on mutual respect that emerged as one of the components that ensured continued support for inclusion of students with disabilities.

A few students I interviewed had their mothers working in various roles in the school as teachers, faculty members or housekeeping staff. As previously explained, the recruitment of teachers at Mukhtangan takes place from within similar backgrounds as the students (section 7.2), with many members of the leadership team and a few teachers reporting that this enabled the teachers to understand some of the contextual challenges faced by the students much better than were it otherwise. Moreover, it cultivated sensitivity among the teachers towards the students' needs. Related findings were reported by David and Kuyini (2012), which shows that shared similar socio-cultural environments and school practices can promote inclusion.

Many students said that they felt they were part of the classroom with their peers by virtue of shared actions, such as having lunch together, playing together etc. They reported feeling respected by their peers, because they often helped them with learning in the classroom, joined in conversations and were each other's confidants etc. In addition, some students reported feeling a sense of community owing to the amount of time they spent with each other. In a systematic review it was found that children's contact with persons with disabilities creates more positive attitudes towards them (MacMillan et al., 2013), which was also reported and observed in these schools. Finally, some students said that learning together in the class and doing '*masti*' (fun) and having fun interacting with the teacher, when engaging in discussions, made them feel good.

To summarise, community belongingness in these schools encompassed everyone attached to the school system - teachers, faculty members, members of the leadership team, students, parents. Even myself, as a researcher, was welcomed into this community and felt that I belonged. The feeling of belongingness that members of a school experience coupled with

the sense of safety (discussed earlier in section 9.2) is constitutive of the school climate (Thapa et al., 2013), which can impact favourably on the emotional and mental health of the students and teachers (Payton et al., 2008, Way, Reddy, & Rhodes, 2007; Shochet et. al. 2006).

### 9.4.3 Ability to convert resources into usable opportunities

Singal (2013) contends that empowerment ‘in and through education’ (pg. 212) involves the ability to convert resources into usable opportunities. Analysis of the findings helped to interpret ability to convert resources to usable opportunities within the parameters of resource allocation and utilisation. It also emerged that Mukhtangan schools were able to use their *educational and organisational resources* towards the goal of broadening inclusion.

Within the ambit of *educational resources*, as discussed earlier, the teacher education programmes, curriculum, pedagogy and the LRG supported the inclusion of children with disabilities in mainstream teaching and learning. Moreover, a variety of other educational resources furthered this support. For instance, some students had difficulty coping with parts of the syllabus during the academic year due to absence, family issues, disabilities etc. For these students, the teachers held extra classes after the completion of their annual examination and before the school closed for summer vacation. Usually, this took the form of a two-week period when teachers provided targeted support to a few students to ensure their transition into a new year of learning was as smoothly as possible. In addition to this, many teachers and students reported utilising time in between lessons and during lunch breaks to ‘clear up doubts,’ ‘ask questions’ etc.

The various holistic education subjects, such as arts and craft, music, dance, physical education, ICT etc. were reported as ‘fun’ and ‘favourite subject’ by the students and some affirmed that this was giving them the inspiration to pursue a career in dance, music etc. These *holistic subjects* were taught as part of the core curriculum for all the students, that is, they were not extracurricular, but rather, taken as contributing towards active learning. The NEP (2020) has now endorsed the need to have these subjects as part of the overall curriculum and not defining them as extra-curricular. The presence of well-equipped libraries, where library teachers and subject teachers strived to work together to supplement students’ learning, was another way in which these schools effectively used their educational

resources.

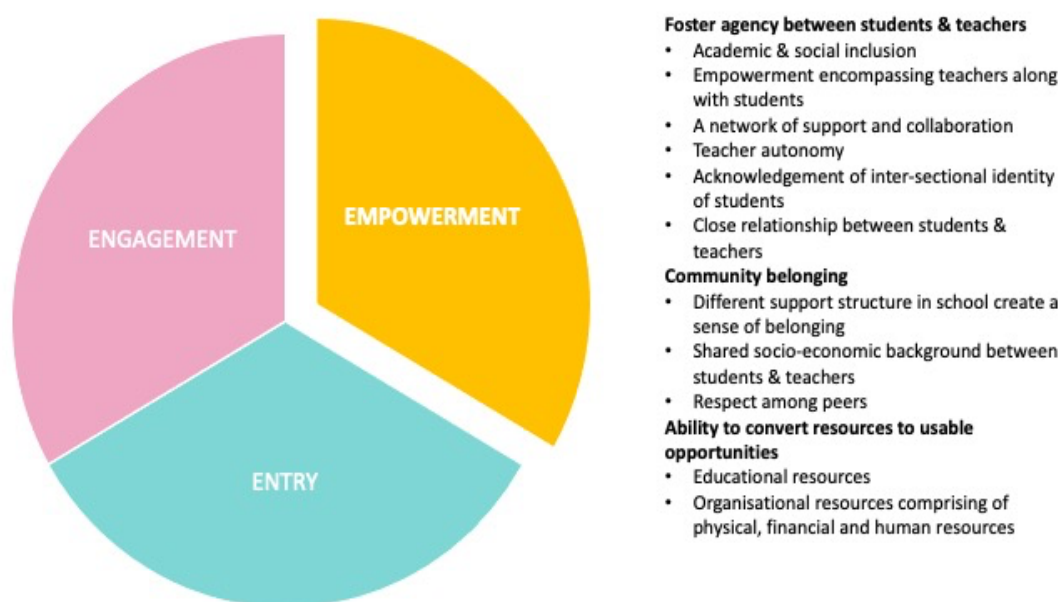
The school stakeholders stressed that the very systems and practices put in place to promote inclusion needed to be regularly examined. This echoes the suggestions of Corbett and Slee (2000) that inclusive education should foster a culture of ‘continual proactive responsiveness’ (pg. 134). In this regard, initially the schools had had an inclusive education department, which resulted in the isolation of children with disabilities from their peers: in effect there was a separate education system for these children, as if working in a silo. Reflection on this situation by school leaders paved the way for the creation of the Learning Resource Group (LRG). It provided all students identified as requiring special education support with direct intervention, whilst also supporting the teachers and faculty such that they could include them in the mainstream classroom teaching and learning. Similarly, the structures in the schools have undergone continuous evolution to address the changing needs arising out of their growth and in response to their circumstance (for example as discussed earlier I observed significant changes in the school’s in-service training structure in the two academic years when I did this research)

The *organisational resources* comprising the *physical resources*, such as the school buildings and infrastructure etc., the *financial resources*, including government support and private donors, and the *human resources*, which included the various members of the schools, are all utilised with the goal of promoting inclusive education. The PPP model that the schools follow has been instrumental in giving free education to the students. The MCGM provides the buildings to enable the schools run by Mukhtangan to operate. Moreover, as with students in other public schools in India, the government provides them free textbooks, uniforms, notebooks, shoes and midday meals, etc. The salaries of the teachers and staff are paid out of funds raised by Mukhtangan through external donors. These external funds also help provide fruit every-day for all students, and a variety of teaching and learning materials. The present research did not involve exploring the use of financial resources in depth.

One of the ways these schools have used their *human resources*, comprising almost 200 teachers, faculty members, teachers and staff is by having *clearly defined roles and responsibilities*. Clearly defined roles and responsibilities for various teachers, members of the faculty and leadership team within the school not only promoted the notion of how to

support diverse learners, for it also clarified where to seek help if they encountered challenges. Alur (2002) and Singal (2006) has described the need for clearly defining roles and responsibilities of various governmental departments in implementing policy and the same holds true at the school level.

The LRG, which consists of teachers trained in special education, has a role akin to that prescribed by the SSA within their inclusive education model, which calls for the employment resource teachers to support children with disabilities. However, neither the RTE Act or SSA clarify the role of these teachers beyond noting that they should support children with special needs, whereas the Mukhtangan schools have clearly depicted what they should be doing. The school system depends on curriculum and pedagogy experts (faculty and departmental leaders) to provide the teachers with support to include students with difficulties and disabilities. They are assisted in this by the LRG teachers, who receive their training from experts in special education and have been gradually build their capacity in-house to ensure sustainability. Figure 37 below summarises how the various practices within the school have created ‘Empowerment’ for the students and teachers in these schools.



**Figure 37:** Empowerment in and through education for children with disabilities within mainstream schools drawing on the 3E conceptual framework

## 9.5 Summary

Figure 38 below summarises the discussion of the findings based on Singal's (2003: 2014) 3E framework of Entry, Engagement and Empowerment. These constructs were seen in practice in the three schools that formed a part of this case study inquiry and they contributed towards attaining in-depth understanding of how inclusive education is perceived and practised in these schools. Ensuring that the ethos of inclusion is maintained within the schools necessitated ongoing reflection on inclusive attitudes and practices promoted by the school leadership. This involves constant monitoring and assessments of their structures, support, and reflection on the part of the teachers and faculty at a whole school level. This reflects the understanding that inclusion is a continuous process rather than something that has to be achieved (Schuelka, 2018). It also requires constant reflection and identification of 'who are the ones who are excluded' so that efforts can be undertaken to include them within the teaching and learning processes. These schools consider inclusion a cornerstone of the education model; however, rather than characterising it as inclusive education, they characterise it as a whole school approach to education for their students. Thus, they have gone beyond creating a separate system within the school to cater for children with diverse needs and instead, have embraced them all, as far as possible, within the mainstream education system.



**Figure 38:** Summary of the findings drawing on the 3E framework

**PART IV**

**CONCLUSION**

## CHAPTER X. INCLUSION AS A WAY OF SCHOOLING

The scholarship in the field of inclusive education has evolved from simply advocating inclusive education to enquiring about the development of systems that acknowledge local contexts and challenges when endeavouring to achieve inclusion (Singal, Johansson and Lynch, 2019). My research has involved drawing on empirical data gathered through a qualitative case study of three mainstream schools in Mumbai (India) run by an NGO, Muktangan, in a public-private partnership with the Municipal Corporation of Greater Mumbai (MCGM). I have presented how an inclusive education system can support teaching and learning together for all children, including those with disabilities.

### 10.1 Revisiting the central research question

In this concluding chapter, I reflect on my central research question. The empirical chapters addressed the sub-research questions in detail and hence, I shall refrain from considering them again. This research journey has brought forth the tensions and synergies that exist in the understanding of disabilities and inclusive education and how the Indian context influences these perspectives. It has also revealed that issues of teacher training, curriculum, pedagogy, classroom-structures etc. are inter-related and inform each other. The findings reflect the complexity that exists in the practice of inclusive education, especially in classrooms.

#### **RQ1. How do mainstream schools in Mumbai, India perceives and practise inclusive education?**

The empirical data collected from teachers, students, members of the leadership team, faculty and staff has provided unique perspectives on disabilities and inclusive education that has helped lay out a roadmap for how inclusive education is practised. Due to the prevalent cultural and social conditioning in India, many teachers in this research held a deficit understanding of what it means to have a disability. However, the schools have made continuous effort towards foregrounding inclusion in both teacher training and school education, which has led to most members of the schools having a holistic understanding of inclusion. This understanding, rooted in the schools' social constructivist philosophy, holds that all students have potential to learn and that it is the teachers' responsibility to support

students as per their needs. They espoused a whole-school approach for implementing inclusive education and emphasis is on learning and growing as a community that includes all students (with and without disabilities), teachers, faculty members, staff, parents, and family members. The curricular and pedagogical processes within these schools were designed and implemented with a view of addressing the learner diversity that exists in the classroom and underpinned by continuous '*self-evaluation of how inclusive we are*'<sup>89</sup> to ensure that these processes addressed the needs of the students in these schools.

The findings highlight the importance of having a strong school leadership team that will spearhead and uphold ethos of inclusion to ensure the sustainability of inclusive education in the mainstream. The empirical findings underscore the need to take into account the intersectional identities of both students and teachers to promote and support inclusion. It also presents the challenges that these schools face in implementing inclusive education. The findings reveal the need for support structures to practise inclusive education, especially the importance of having regular in-service training and trained personnel to support the needs of students with difficulties and disabilities as well as supporting mainstream classroom teachers in including diverse learners. Despite being characterised as inclusive, exclusion exists alongside for some students in accessing these schools either due to lack of physical access or because teachers are not equipped to use sign language, Braille etc. However, for the students who do access education in these schools, the schools strive to provide an equitable education.

The students' lived experiences of learning and their social environment show that these aspects are inter-connected. That is, having peers, teachers and staff ensured their social and emotional well-being and created a sense of belongingness to the school community which in turn facilitated their learning experiences. The students highlighted challenges, both in learning and social situations, whilst also describing ways in which they have tried to overcome them with the support of their peers and teachers.

The empirical data gathered through this case study has shown that implementing inclusive education is a systemic process that involves applying multifaceted structures and practices that ensures inclusive education policies are actionable. It is not a one-time intervention, but

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<sup>89</sup> As mentioned in Chapter 8 (Pg. 161)

rather, a continuous and cyclical process. It has further shown that the road to inclusion is challenging, entailing the investment of time and smart utilisation of resources. Finally, it requires constant reflection, support, collaboration, and engagement of various stakeholders within the school system to make it sustainable.

## 10.2 Informing the field based on the research findings

This research **contributes to the existing scholarship on inclusive education** in the Global South, specifically in the Indian context. Generalisations based on case studies are not appropriate, but such studies do provide opportunities for gaining contextual understanding and thus, adding to the cumulative body of knowledge in a field (Stake, 2000). The findings from this case study provide a nuanced understanding regarding the implementation of inclusive education by providing ‘exemplary knowledge’ (pg. 33) and the interpretation of how to use the knowledge from this case study will be dependent on the needs of those critically reading it to inform their own educational contexts. (Thomas, 2011).

The **theoretical contributions** of this research pertain to the operationalisation of the 3E conceptual model proposed by Singal (2004;2013) from her research in India that I have developed further by using the empirical data from this case study to provide a critical understanding of how the different constructs of ‘Entry’, ‘Engagement’ and ‘Empowerment’ interact and inform inclusive education at the school level. By so doing, I have presented a blueprint for how inclusive systems are created and supported in mainstream schools. I have developed each of these constructs further based on the findings, in particular, expanding upon the conceptualisation of ‘Engagement’ to include how teacher education, curricular access and pedagogy can contribute to the inclusion of children with disabilities in mainstream classroom teaching and learning settings.

The findings from this research **address a gap in the literature** highlighted by multiple scholars working in the Indian context and covered in detail in the literature review. There is limited evidence of what teaching and learning looks like for children with disabilities, especially within mainstream public schools. Rose (2017), who conducted a literature review of the research on inclusive schooling in India, identified a need to understand practices from “schools where there is a commitment to inclusion and where teachers are endeavouring to develop practices that are supportive of children from previously marginalised groups” (p

16). I have thus addressed some of the issues related to the practical aspects of inclusive education including the challenges and enablers.

I have made a **contribution at the school level** for the Muktang schools where the research was situated. As a researcher, I sought to give back to the schools by contributing my knowledge in conducting two professional development sessions. One session for all the library teachers was on “How to make the libraries more accessible to all children” and another was for all the members of LRG on “How to support students without disabilities and class teachers to help their peers/students with disabilities and difficulties”. In addition, I shared my reflections periodically with the school stakeholders as the findings emerged to provide them insights, some of which they have taken into account into their school planning.

This research makes a **methodological contribution** in that this qualitative case study engaged with multiple stakeholders within the school, including children with and without disabilities. Specifically, this study has provided methodological insights on 1) how to research in an inclusive setting; 2) how to design and apply case study research with large scale qualitative data; 3) the ethics of working with students with and without disabilities and safeguarding their interests as well as their rights during the course of research; and 4) reflexivity and positionality. I have demonstrated that to be an effective inclusive researcher respect for the researched subjects and deep immersion is key.

Finally, the research outcomes could **contribute to policy** decisions at the international and the national level. They add to the discourse of how inclusive education is implemented at the school level by identifying factors (as listed in the findings and discussion) that governments, civil society organisations, policy makers etc. should take into account when implementing policies for the education of children with disabilities within mainstream schools. There is a deficit discourse globally on how policies on inclusive education are not implemented at the school level due to several reasons and this is amply evident in the Indian context (as discussed in the literature review). Whilst this case study from India can be seen as an exemplar on how low resourced government schools are able to take steps towards implementation of inclusive education in low-income settings, it could also provide insights for those struggling to implement inclusive education in other contexts across the world.

At the Indian **national policy level**, the research contributes to four areas as follows.

1) In The Right to Education Act (RTE), 2009, is unclear as to how resource teachers can support students with disabilities, whereas this case study presents clear guidelines based on how the LRG at Mukangan is modelled. The NEP 2020 has addressed training of general teachers as special educators. The findings from this research provide insights into what inclusive practice entails in terms of the benefits of integrating teacher and school education. In particular, the need to provide support structures to both regular and special education teachers when striving to include diverse students in the classroom processes has been strongly identified.

2) The RTE Act fails to explain the meaning of barrier-free access and the process for implementing it (Rao, Shrivastava and Sarkar, 2020). This research has addressed this lacuna by clearly articulating what barrier free access means and how it can be achieved by presenting robust empirical data (sub-section 9.2.1).

3) The NEP 2020 policy calls for curricular changes in consultation with the Department of Empowerment of Persons with Disabilities. The findings can provide additional insights and guidance from these mainstream schools that are already implementing curricular changes to include children with difficulties and disabilities in teaching and learning practices.

4) Finally, NEP 2020 places emphasis on foundational literacy and numeracy for all students up until Grade 3 by 2025. However, these recommendations have been made based on the Annual Survey of Education Report (ASER) reports, which does not collect data from children with disabilities and National Achievement Survey (NAS)<sup>90</sup> that does collect data from children with disabilities but has several limitations<sup>91</sup>. As highlighted when discussing the findings, support for foundational literacy and numeracy may well be required for students with diverse needs. Hence, it is essential to provide continuous literacy and numeracy support on a needs basis, rather than for a limited time period, as envisaged in the NEP policy. The findings can provide a roadmap for providing foundational literacy and numeracy to children with disabilities when striving to guarantee barrier-free access to education for all students.

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<sup>90</sup> Conducted annually by the National Council for Educational Research and Training.

<sup>91</sup> Discussed in Chapter 2

### 10.3 Strengths and limitations of this research

The strength of this research is that it presents a detailed and rich account of what inclusive education looks like in practice in the Indian context and goes beyond the deficit approach often adopted in such research. The presence of multiple data collection tools that gathered a variety of information from various stakeholders in the schools contributed rigour to the research. Another strength is that along with various stakeholders within the school such as administrators, teachers, faculty members etc., who contributed to the understanding of how inclusive education systems are developed and practiced in India it was enriched by accounts from students with and without disabilities in these schools.

As described in the methodology section, the inclusion of children's perspectives in educational research is not as widespread as it should be (Section 5.5). Moreover, in countries like India, a strong age-related hierarchy is observed between elders and younger persons and children where the opinions of children and young persons are not really heard, and adult voices get more prominence. Hence, this research delivers additional methodological perspectives for including children and young persons in educational research within the Indian context and providing equitable place to their perspectives within the analysis and findings of the research. The students with and without disabilities were candid about both the challenges they faced and the ways the teachers and peers supported them. It provided a window into how they perceived their teaching and learning experiences and the social environment in these schools. It helped the research to be inclusive as both adults and children lend their perspectives about the systems and processes in these schools.

Some of the limitations of this research also ought to be acknowledged. While the students opted for either Hindi or English to engage in the semi-structured interviews with me, all the teachers opted to do the semi-structured interview in English. I would characterise the English spoken during the semi-structured interviews as Indian-English (colloquial) and Hinglish (mix of Hindi and English). While I did member checks immediately after the completion of the interviews and as a fellow Indian, I had a context for and understood Indian English and Hinglish, there were times during the analysis that I had to rely on my own meaning making and couldn't conduct another member check (due to the sheer volume of data and also as I was in the UK during the analysis). Another important point to note here would be that employing participant semi-structured observations as a method in educational

research and doing classroom observations as a sole researcher limited the amount of information I could observe and record. Hence, while I took copious notes and spend 160 hours in classroom observations, as a solo researcher sometimes, some of the nuances were lost. However, having multiple methods of data collection had a mitigating effect on these limitations and helped establish triangulation of the data.

Due to restrictions of time and resources, I could not include parent perspectives in this research. Though informal conversations were carried out with a few parents that informed my own contextual understanding as a researcher; parent and caregiver interviews was not woven into the research design. The inclusion of the parents' perspectives could have provided added insights into the academic and social inclusion of the students with disabilities within these schools. However, my dissertation managed to capture views from all the stakeholders within these schools including both adults and children and that made it powerful and strengthened the overall findings. Another limitation, which I also discuss at length in my methodology chapter is that I could not collaborate with the school stakeholders – administrators, teachers, faculty, and students in the development of the tools. Ideally, I would have liked to adopt a more participatory approach in the development of the research tools.

#### **10.4 Future research**

This research involved undertaking a process audit of the structures and processes that are present within the focal mainstream school systems that have been enabling the inclusion of all students especially students with difficulties and disabilities. However, during this research, it was not possible to evaluate the impact of these processes on the learning outcomes, future employment prospects for the students and independent living for students with significant/disabilities in these schools. Future research can explore how education in these schools can impact learning outcomes, employment prospects, independent living and general well-being for students with disabilities. Measure of these outcomes can possibly provide evidence of how inclusive schooling benefits students with disabilities in the long run.

Global reports and movements for inclusive education (GEM, 2020; Incheon Declaration, 2015) highlight the need to improve financing of education to improve the status of education.

Singal (2019) underscore how redistribution of resources within the Indian education is essential to move policy efforts from mere access to improving attendance of children with disabilities in schools and providing quality service provisions. Though I included aspects of the financial implications of the various structures and practices that were in place to support the students with disabilities within these mainstream schools that emerged from the empirical data, but due to the limited scope of the study, I had insufficient time and resources to pursue this further. Future research examining it can equip policy makers with financial planning for inclusive education.

Lastly, public private partnerships in education have yielded a lot of debate among policymakers, researchers, and civil society. It will be worthwhile for future research to explore these aspects in greater detail and develop a nuanced understanding of how the public-private partnership plays a role (if any) in providing inclusive education in these schools.

### **10.5 Final reflections**

This research has captured the complexity of translating policies into practice at the school level. It has emerged that a comprehensive and integrated approach that takes the local context into account is essential to achieving education of children with disabilities within the larger goal of education for all. My research started four years ago and during this time I have witnessed the global narrative for inclusive education for children with disabilities gaining increasing prominence: this year it has emerged with the clarion call of #AllMeansAll. At this critical juncture, this research contributes to the scholarship on how inclusion of children with disabilities requires the holistic conceptualisations of access, pedagogy, curriculum and teacher training with a view to include children with disabilities and ensuring quality education alongside their peers without disabilities. It touches upon some of the outputs that emerges from children with disabilities being in such a system. The most significant learning through this research is that inclusion is not an individual but a collective responsibility.

The year 2020 has been marked by the COVID 19 pandemic causing widespread disruption to education at all levels. As education moves into online and distant learning modes, it especially poses great challenge for students in government schools across India due to resource constraints. These challenges have been exacerbated for children with disabilities,

who were suddenly thrust into an unfamiliar mode of learning and have had to adapt to this new reality, with the added detriment of teachers who are not equipped to address online education. Additionally, families from lower socio-economic backgrounds have had to juggle with reduced income, resource constraints, forced migration, additional care duties and responsibilities of supporting their children's learning needs at home due to the pandemic. Schools have been facing not just technical challenges, but also, complex social challenges that require long term planning for effective implementation of systems and processes that can sustain education for diverse children under various situations. Understanding the underlying culture, practice and policies of the schools run by Mukangan, which have the ethos of inclusion built into their education system and processes can pave the way for ushering in support structures to include different learners as education systems evolve and adapt to the new ground reality.

Inclusive learning environment embodies providing the support and attention to each student so that they are able to learn to the best of their ability within the given context. It would encompass education that is for everyone: persons with disabilities, from various socio-economic backgrounds, different castes, tribes, races, ethnicities, religions, languages, LGBTQI+, girls and all other children and even adults. We mostly understand inclusive education in terms of including students with disabilities, but it should go way beyond this. In order to be truly inclusive in our education systems we have to understand that these intersectionalities exist and different identities affect inequities in education. Inclusive education can be a catalyst for addressing education inequities. In sum, we have to reach a place where education/inclusive education are not dichotomous entities, but one where the word 'education' truly encompasses everyone.

## EPILOGUE

In June 2020, I conducted an online focus group via Zoom and eight phone interviews with members of the seven Mukhtangan schools to understand how COVID 19 has affected them and their students. I enquired about the steps they have been taking to continue education for their students, especially those with disabilities, since school closures in early March. I documented my findings in a blog <sup>92</sup>. In this epilogue, I reflect upon how the schools have been incorporating the principles of inclusion and social justice during this time of crisis and draw on the 3E framework discussed in Chapter 9 to do so.

**Entry:** The teachers had reached out to as many students as they could (they reported not being able to get in touch with a few, who had returned to their native villages during the lockdown) through phone calls as soon as the schools closed. The school authorities conducted surveys to gauge how many students had access to online education through smartphones, tablets, computers etc and how many would continue to have access once their parents returned to work (as mostly they were using their parent's devices). Accessing infrastructure and technology was a challenge for teachers too, so the school made provisions to ensure they could provide smartphones, tablets and computers to students and teachers, who did not have them by engaging and mobilising the community to find additional devices for them. They helped the students download the education apps recommended and provided by the government, mainly with the intent of providing access to the school textbooks. When the new academic year started (June 2020) many teachers returned to school to ensure that they distributed the new textbooks to the students in a safe and socially distant manner, as many students still relied on the physical textbooks.

**Engagement:** Online education is a new mode of teaching for students, teachers, and parents. So, the schools undertook training sessions for the teachers on the use of online platforms and distance learning pedagogies. They also engaged the parents as home-school facilitators and thus, included them in their children's learning. Additionally, they reviewed their curriculum to adapt it to being online and appropriate for distance learning. They created both a short-term strategy to address the immediate needs and a long term one that took into account school closures lasting for a long time (at present, all MCGM schools remain closed until 31<sup>st</sup>

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<sup>92</sup> <https://www.ukfiet.org/2020/education-for-all-under-lockdown-the-path-ahead-for-inclusion-of-children-with-disabilities/>

December 2020 and are continuing with online education). Members of the LRG mentioned that they had prioritised the continued inclusion of children with difficulties and disabilities in whole class teaching and learning to ensure that the online education system did not exclude them. They have illustrated the different ways they have done so, as documented in the blog. However, the LRG teachers were forthcoming about the various difficult challenges and voiced their concerns about the loss of learning gains during the period of online education.

**Empowerment:** The members of the schools, including teachers, faculty members and leadership team, reiterated that they placed topmost priority in ensuring the physical, mental, and socio-emotional well-being of their students, parents, and each other, as they grappled with the challenges placed on them by COVID-19. They reported how they had reached out to students with disabilities and their parents with flash cards to explain what COVID 19 is and to guide them on hygiene practices. The teachers also checked on the mental health and well-being of their students and parents, whereas the faculty members checked on the mental health and well-being of the teachers and so they formed a chain. This quote by a teacher sums up their experience of a sense of community and upholding the ethos of inclusion during a challenging time, *“It is what it is. All we can do is ensure that we look after each other and do the best we can. We hold hope that someday things will return to normal and we will be at school again just like before. Till then, our school leaders help us, and teachers are teaching, and we treat everyone as part of one family.”*

In sum, the ethos of inclusion cultivated and nurtured in the school has helped them to navigate this unfamiliar and new mode of teaching and learning, whilst also supporting them in addressing some of the challenges posed by this change in circumstance. I believe in many ways the systems and structures present in the school that enable them to practise inclusive education have also helped them address the needs of their students and teachers during this pandemic.

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**Appendix 1:** Key provisions on education of children with disabilities under the RPwD Act, 2016 (pg. 11,12)

<b>Under Section 16 of the act, the appropriate government and the local authorities shall endeavour that all educational institutions funded or recognized by them provide inclusive education to children with disabilities and towards that end, shall—</b>
(i) Admit them without discrimination and provide education and opportunities for sports and recreation activities equally with others
(ii) Make building, campus and various facilities accessible
(iii) Provide reasonable accommodation according to the individual's requirements
(iv) Provide necessary support individualized or otherwise in environments that maximize academic and social development consistent with the goal of full inclusion
(v) Ensure that the education to persons who are blind or deaf or both is imparted in the most appropriate languages and modes and means of communication
(vi) Monitor participation, progress in terms of attainment levels and completion of education in respect of every student with disability
(viii) Provide transportation facilities to children with disabilities and also the attendant of the children with disabilities having high support needs
<b>Under section 17 of the act, the appropriate government and the local authorities shall take the following measures: —</b>
(a) to conduct survey of school going children in every five years for identifying children with disabilities, ascertaining their special needs and the extent to which these are being met. (Provided that the first survey shall be conducted within a period of two years from the date of commencement of this act)
(b) to establish an adequate number of teacher training institutions;
(c) to train and employ teachers, including teachers with disability who are qualified in sign language and Braille and also teachers who are trained in teaching children with intellectual disability;
(d) to train professionals and staff to support inclusive education at all levels of school education;
e) to establish an adequate number of resource centres to support educational institutions at all levels of school education;
(f) to promote the use of appropriate augmentative and alternative modes including means and formats of communication, Braille and sign language to supplement the use of one's own speech to fulfil the daily communication needs of persons with speech, communication or language disabilities and enables (sic) them to participate and contribute to their community and society;
(g) to provide books, other learning materials and appropriate assistive devices to students with benchmark disabilities free of cost up to the age of eighteen years;
(h) to provide scholarships in appropriate cases to students with benchmark disability;
(i) to make suitable modifications in the curriculum and examination system to meet the needs of students with disabilities such as extra time for completion of the examination paper, facility of scribe or amanuensis, exemption from second and third language courses;
(j) to promote research to improve learning
(k) any other measures, as may be required

**Appendix 2:** Provisions for education of children with disabilities and special education needs as per India's New Education Policy (NEP), 2020

<b>INCLUSIVE EDUCATION</b>	
1.	The Policy also recognizes the importance of creating enabling mechanisms for providing Children With Special Needs (CWSN) or <i>Divyang</i> , the same opportunities of obtaining quality education as any other child. (Pg. 25)
2.	Ensuring the inclusion and equal participation of children with disabilities in ECCE and the schooling system will also be accorded the highest priority. Children with disabilities will be enabled to fully participate in the regular schooling process from the Foundational Stage to higher education. (Pg. 26)
3.	The Rights of Persons with Disabilities (RPWD) Act 2016 defines inclusive education as a 'system of education wherein students with and without disabilities learn together and the system of teaching and learning is suitably adapted to meet the learning needs of different types of students with disabilities'. This Policy is in complete consonance with the provisions of the RPWD Act 2016 and endorses all its recommendations with regard to school education.(Pg. 26)
4.	To this end, schools/school complexes will be provided resources for the integration of children with disabilities, recruitment of special educators with cross-disability training, and for the establishment of resource centres, wherever needed, especially for children with severe or multiple disabilities. Barrier free access for all children with disabilities will be enabled as per the RPWD Act. Different categories of children with disabilities have differing needs. Schools and school complexes will work and be supported for providing all children with disabilities accommodations and support mechanisms tailored to suit their needs and to ensure their full participation and inclusion in the classroom. (Pg. 26)
5.	As per the RPWD Act 2016, children with benchmark disabilities shall have the choice of regular or special schooling. Resource centres in conjunction with special educators will support the rehabilitation and educational needs of learners with severe or multiple disabilities and will assist parents/guardians in achieving high-quality home schooling and skilling for such students as needed. Home-based education will continue to be a choice available for children with severe and profound disabilities who are unable to go to schools.
6.	cooperation and support across schools for the education of children with disabilities (Pg. 29)
7.	The establishment of school complexes/clusters and the sharing of resources across complexes will have a number of other benefits as a consequence, such as improved support for children with disabilities,
<b>TRAINING</b>	
8.	Trained and qualified social workers from civil society organizations/departments of Social Justice and Empowerment and government functionaries dealing with empowerment of Persons with Disabilities at the State and district level, could be

connected to schools, through various innovative mechanisms adopted by State/UT Governments, to help in carrying out this important work. (Pg. 11)
9. All B.Ed. programmes will include training in time-tested as well as the most recent techniques in pedagogy, including pedagogy with respect to foundational literacy and numeracy, multi-level teaching and evaluation, teaching children with disabilities, teaching children with special interests or talents, use of educational technology, and learner-centered and collaborative learning. (Pg. 23)
10. Shorter post-B.Ed. certification courses will also be made widely available, at multidisciplinary colleges and universities, to teachers who may wish to move into more specialized areas of teaching, such as the teaching of students with disabilities, or into leadership and management positions in the schooling system, or to move from one stage to another between foundational, preparatory, middle, and secondary stages.
11. The awareness and knowledge of how to teach children with specific disabilities (including learning disabilities) will be an integral part of all teacher education programmes, along with gender sensitization and sensitization towards all underrepresented groups in order to reverse their underrepresentation.
<b>IDENTIFICATION</b>
12. While the Indian education system and successive government policies have made steady progress towards bridging gender and social category gaps in all levels of school education, large disparities still remain - especially at the secondary level - particularly for socio-economically disadvantaged groups that have been historically underrepresented in education. Socio-Economically Disadvantaged Groups (SEDGs) can be broadly categorized based on gender identities (particularly female and transgender individuals), socio-cultural identities (such as Scheduled Castes, Scheduled Tribes, OBCs, and minorities), geographical identities (such as students from villages, small towns, and aspirational districts), disabilities (including learning disabilities), and socio-economic conditions (such as migrant communities, low income households, children in vulnerable situations, victims of or children of victims of trafficking, orphans including child beggars in urban areas, and the urban poor).
<b>SPECIAL EDUCATORS</b>
13. There is an urgent need for additional special educators for certain areas of school education. Some examples of such specialist requirements include subject teaching for children with disabilities/ <i>Divyang</i> children at the Middle and Secondary school level, including teaching for specific learning disabilities. (Pg 24)
<b>CURRICULUM RELATED</b>
14. Most classrooms have children with specific learning disabilities who need continuous support. Research is clear that the earlier such support begins, the better the chances of progress. Teachers must be helped to identify such learning disabilities early and plan specifically for their mitigation. Specific actions will include the use of appropriate technology allowing and enabling children to work at their own pace, with flexible

curricula to leverage each child's strengths, and creating an ecosystem for appropriate assessment and certification.
<b>PEDAGOGY RELATED</b>
15. Assessment and certification agencies, including the proposed new National Assessment Centre, PARAKH, will formulate guidelines and recommend appropriate tools for conducting such assessment, from the foundational stage to higher education (including for entrance exams), in order to ensure equitable access and opportunities for all students with learning disabilities. (Pg. 27)
<b>OTHER PROVISIONS</b>
16. Adequate attention will be paid to the safety and security of children with disabilities. (Pg. 27)

## Appendix 3: School layout of Vindhya School

<b>Second floor layout</b>	<b>Utility of the rooms</b>
<i>Classroom</i>	The pre-school is situated within one room and houses students aged 4-6
<i>Classroom – English</i>	The students of Grade 1- 4 come to this classroom for their English lessons as per their timetable
<i>Classroom – Mathematics</i>	The students of Grade 1- 4 come to this classroom for their Mathematics lessons as per their timetable
<i>Classroom – Social Studies</i>	The students of Grade 1- 4 come to this classroom for their Social Science (EVS teaching sections on Geography, History and Civics) lessons as per their timetable
<i>Classroom – Science</i>	The students of Grade 1- 4 come to this classroom for their Science lessons as per their timetable
<i>Classroom – Mathematics</i>	The students of Grade 5 - 8 come to this classroom for their Mathematics lessons as per their timetable
<i>Classroom – Science</i>	The students of Grade 5 - 8 come to this classroom for their Science lessons as per their timetable
<i>Classroom – Computer Science/Office</i>	The students of Grade 1-8 come to this classroom for their computer lessons as per their timetable. The School Faculty has a small desk and cupboard in the corner that constitutes her office
<i>Classroom – Multi-purpose</i>	This room is used for all students and teachers from pre-school to Grade 8. This room is used for physical education classes, for teaching computer science theory, for arts and crafts lessons, utilised by teachers for lesson planning discussions when available etc.
<i>Library</i>	The library is utilised by all the students from pre-school to Grade 8. As this building houses the Teacher Training Program of Mukhtangan, this library also contains reference materials for use by all the Faculty members and teacher trainees.

<i>Corridor – Learning Resource Group (LRG) Room</i>	One end of the corridor is sectioned off using storage cupboards and utilised by the Learning Resource Group for supporting children with difficulties and disabilities. Another end of the corridor has a table which doubles up as an office work space for the school facilitator.
<i>Toilets</i>	Separate toilets are available for boys and girls which are cleaned periodically and are hygienic. There is a separate toilet for teachers.
<i>Handwashing and drinking water area</i>	There is an area in the corridor for handwashing and a drinking water filter with a glass is kept in that area. The fruits that are distributed to the students are sorted and cut in the corridor near here and the Mid-Day meals are sorted and distributed here.
<b>Third floor layout</b>	<b>Utility of the rooms</b>
<i>Classroom – English</i>	The students of Grade 5 - 8 come to this classroom for their English lessons as per their timetable
<i>Classroom – Social Studies</i>	The students of Grade 5 - 8 come to this classroom for their Science lessons as per their timetable
<i>Classrooms</i>	All the other rooms in this floor are used by the Mukhtangan Teacher Training Program for training the teacher trainees.

## Appendix 4: School layout of Nilgiris school

<b>Ground floor layout</b>	<b>Utility of the rooms</b>
<i>Classroom- Multi-purpose</i>	This room is used for all students and teachers from pre-school to Grade 8. It is used for physical education classes, for teaching computer science theory, for arts and crafts lessons, utilised by teachers for lesson planning discussions when available etc. All activities that would have ideally taken place outdoors are held here.
<i>Small room</i>	There is a small room used by the Marathi and Hindi Faculty members as their work area and holds all their teaching and learning materials.
<b>Second floor layout</b>	
<b>Second floor layout</b>	<b>Utility of the rooms</b>
<i>Classroom</i>	The pre-school is situated within one room and houses students aged 4-6
<i>Classroom – English</i>	The students of Grade 1- 4 come to this classroom for their English lessons as per their timetable.
<i>Classroom – Mathematics</i>	The students of Grade 1- 4 come to this classroom for their Mathematics lessons as per their timetable
<i>Classroom – Social Studies</i>	The students of Grade 1- 4 come to this classroom for their Social Science (EVS teaching sections on Geography, History and Civics) lessons as per their timetable
<i>Classroom – Science</i>	The students of Grade 1- 4 come to this classroom for their Science lessons as per their timetable
<i>Classroom – Mathematics</i>	The students of Grade 5 - 8 come to this classroom for their Mathematics lessons as per their timetable
<i>Classroom – Science</i>	The students of Grade 5 - 8 come to this classroom for their Science lessons as per their timetable
<i>Classroom – English</i>	The students of Grade 5 - 8 come to this classroom for their Mathematics lessons as per their timetable
<i>Classroom – Social Science</i>	The students of Grade 5 - 8 come to this classroom for their Science lessons as per their timetable

<i>Library</i>	The library is utilised by all the students from pre-school to Grade 8.
<i>Corridor</i>	There are tables set at various spaces around the corridor which are either used as office space by the School Faculty and school faculty. Some tables are used as spaces for lesson planning and making teaching learning materials (TLM) by the teachers.
<i>Toilets</i>	Separate toilets are available for boys and girls which are cleaned periodically and are hygienic. There is a separate toilet for the pre-school students and teachers.
<i>Handwashing and drinking water</i>	There is an area in the corridor for handwashing and a drinking water filter with a glass is kept in that area.
<i>Pantry</i>	There is a tiny room which is utilised as a pantry for sorting and distributing the Mid-day meal and the fruits that the students receive every day. The fruits are washed and cut here.
<i>Faculty Rooms</i>	There are a set of three rooms that are utilised as the Faculty rooms by the Departmental Leaders, Lead Faculty and all the subject-faculty of English, Social Sciences, Science, and Mathematics and also used to store all their teaching and learning materials.
<b>Fourth floor layout</b>	<b>Utility of the rooms</b>
<i>Classroom- Learning Resource Group (LRG) Room</i>	This floor has only one room utilised by the Mukhtangan school and all other classrooms belong to a different school. This room is utilised as the learning resource room for all the students from Grade 1-8.

## Appendix 5: School layout of Aravalli school

<b>Ground floor layout</b>	<b>Utility of the rooms</b>
<i>Classroom – English</i>	The students of Grade 5 - 6 come to this classroom for their English lessons as per their timetable
<i>Classroom – Mathematics</i>	The students of Grade 5 - 6 come to this classroom for their Mathematics lessons as per their timetable
<i>Classroom – Social Studies</i>	The students of Grade 5 - 6 come to this classroom for their Social Science lessons as per their timetable
<i>Classroom – Science</i>	The students of Grade 5 - 6 come to this classroom for their Science lessons as per their timetable
<i>Classroom – Marathi/Hindi</i>	The students of Grade 5 - 8 come to this classroom for their Marathi/Hindi lessons as per their timetable
<i>Corridor</i>	A desk and chairs are arranged in a small area next to the staircase which doubles as an office space for the school facilitator and a sitting area.
<i>Toilets</i>	Separate toilets are available for boys and girls which are cleaned periodically and are hygienic.
<i>Room</i>	There is a small room which is used a work space by the socio-emotional learning team and houses their materials.
<i>Room</i>	There is a medium sized room that is used as a multi-purpose room.
<b>First floor layout</b>	<b>Utility of the rooms</b>
<i>Classroom – Music</i>	The students of Grade 5 - 10 come to this classroom for their music lessons as per their timetable. (This room had several musical instruments stored as well)
<i>Classroom – Computer Science</i>	The students of Grade 5 - 10 come to this classroom for their Computer Science lessons as per their timetable. (This is the most well-equipped computer room out of the three schools where I conducted the case study)
<i>Classroom - Multi-purpose</i>	This room is used for cultural programs in the school, some group teaching and learning sessions etc.

<i>Classroom- Arts &amp; Crafts</i>	The students come into this room for Arts and Crafts lessons as per their timetable. This room is also used by the members of the Holistic Department for their lesson planning and to store their teaching and learning and other resources. (Only school which had a separate arts and crafts classroom)
<i>Library</i>	The library is utilised by all the students from Grade 5 to Grade 10.
<i>Office room</i>	One room on this floor acts as an office space shared by the Mukangan administrative team, outreach team, Monitoring and Evaluation team and the Early Childhood Care and Education team
<i>Corridor (Pantry)</i>	A small portion of the corridor is partitioned using cupboards and this space is used as a pantry for sorting and distributing the Mid-day meal and the fruits that the students receive every day. The fruits are washed and cut here.
<i>Storeroom</i>	There was a small room marked store room and it was always locked
<b>Second floor layout</b>	
<b>Second floor layout</b>	<b>Utility of the rooms</b>
<i>Classroom – English</i>	The students of Grade 7 - 8 come to this classroom for their English lessons as per their timetable
<i>Classroom – Mathematics</i>	The students of Grade 7 - 8 come to this classroom for their Mathematics lessons as per their timetable
<i>Classroom – Social Studies</i>	The students of Grade 7 - 8 come to this classroom for their Social Science lessons as per their timetable
<i>Classroom – Science</i>	The students of Grade 7 - 8 come to this classroom for their Science lessons as per their timetable
<i>Classroom – Learning Resource Group (LRG) Room</i>	This room is utilised as the learning resource room for all the students from Grade 1 - 10 (school year 2017-18). There were some changes in the second school year (2018-19) and Grade 9 - 10 students received support in their classrooms. All the LRG teaching and learning material is here.

<i>Small room – office</i>	There is a small room that is used as the office of the School Faculty
<i>Corridor</i>	Space partitioned by cupboards with a table and some chairs is used as a lesson planning area by the teachers when required. At the other end of the corridor a small area is available for handwashing and a drinking water filter with a steel cup is kept.
<i>Toilets</i>	Separate toilets are available for boys and girls which are cleaned periodically and are hygienic.

## Appendix 6: Research tools

### Interview Questions for Head Teacher/Subject Teacher

Introduce myself and explain the purpose of the research. Take informed consent for the interview.

#### Perceptions around diversity of learners

1. Muktangan's vision statement calls it an inclusive school. What does inclusion mean to you?
2. What differences do you find between the children in your group? Why do you think some children struggle with what they are required to learn in school while some children find it easy? (Probe: age, caste, class, ability, gender)
3. Who would you characterise as "good students"? Why would you characterise them as good?
4. Do you have children who have difficulties with learning in your group? What kind of difficulties do the children have (\*probe for each child) Why do think these children has such difficulties? (probe for age, caste, class, gender, disabilities etc.)
5. How do you try and address these difficulties? [Please ask the teacher to elaborate with very clear examples of practice]. (Probe: seating arrangement, peer tutoring, extra time, extra attention, use of TLM) Do you adopt any additional strategies/efforts to help children from very poor families?
6. Are you able to use data on student performance (collected through Monthly Assessments; Half-yearly Assessments; and Annual Assessments) to effectively teach the children in your class?
7. Can you tell us about any children in your group who attend irregularly? What do you think are the reasons for this? Are there any strategies that you adopt to address this concern?
8. Are there any children who are at risk of dropping out? What do you think are the reasons for this? Are there any strategies that you adopt to address this concern?
9. Do you think there is a difference between children with disabilities and children with special educational needs (Probe: how will you characterise a child with disability, how will you characterise a child with special educational needs, how do you think they are same or why do you think they are the same)
10. Do you think the children with disabilities at Muktangan BMC schools have different experience than those going to regular BMC schools? If yes, how?

#### Formal and informal support received by the teacher to teach a diverse classroom

1. Have you received any training to help you to teach children with disabilities? If so, please give details. (Prompts: pre-service training, in-service training programmes etc.) (Probe: duration, what was useful). Do you have any suggestions about what you might find useful? How did the teacher training on inclusion at Muktangan help you to teach children with disabilities?
2. Have you ever requested support to effectively include children with disabilities in your classroom? If yes, give details. Have you ever received support? If yes, what type of support? (Probe specifically for each - from the head teacher, learning resource centre; other teachers in the school, , NGOs; other resource groups, government or private).

3. Have you ever requested support to teach children who find it difficult to learn for some reason? If yes, give details. Have you ever received support? If yes, what type of support? (Probe specifically for each -- from the head teacher, other teachers in the school, learning resource center; resource teachers; any other)

**Perception around teaching children with disabilities in the classroom**

1. What is it that you understand by the term disability? Do you think that children with disabilities have any similarities in attitudes, behaviour etc.?
2. How do you identify a child as having a disability? (Probes: do you test them? Do they bring a certificate?) (If they mention the learning resource centre, ask specifically how they help)
3. Do you have any children with disability in your class? What kind of disability? (Probe: Do you have any children who have difficulties in seeing, hearing, walking etc who are not classified as having a disability? What kind of difficulties? )
4. Have you previously had any experience of teaching a child with disability? What kind of disability?
5. How do other children in your class treat the children who have some type of disability? (Probe: any positive or negative responses) Have you ever had to take any action to stop name-calling / bullying?
6. What do you believe are the main reasons that children with disabilities should be educated?
7. Some teachers believe that it is not possible to teach children with disabilities in mainstream classrooms and that they should be taught in special schools. Based on your experiences what do you think about this -- do you agree/disagree and why? (Probes: different types of disability; different degrees of disability) Have you ever advised parents to send their child to a special school?

**Teaching children with disabilities:**

1. Are you able to include children with disabilities in your classroom teaching? If yes, can you describe one instance where you have done this? (Probes: special steps taken like seating arrangement, peer tutoring, extra time, extra attention, use of TLM, modified curriculum, plan-do-review).
2. Are you able to teach the children with disabilities using the same strategy as the other children in the class? (Probe: what strategies are used to teach all children in the classroom?)
3. Do you feel the need to use different strategies for the children with disabilities than what you use for the other children in the class. If yes, what are these different strategies? Do you feel adopting a different strategy works? (If yes, how? If no, why not?)
4. How did you decide what teaching strategies you will use with different students in the class? (Probes: for children with learning disabilities, physical disabilities or behavioural issues)
5. Can you give me an instance of how you adapted your teaching strategies to include (NAME OF CHILD WITH DISABILITY IDENTIFIED EARLIER) in the teaching learning process? (Probe: How the child with disabilities was identified, how the teacher adapts the curriculum and teaching strategies for the child)
6. How do you assess the children with disabilities during classroom assessments? Do you use the same assessment tools with the other children in the class? Do you use special assessment tools to assess children with disabilities in the classroom?

7. What do you feel are the challenges to teaching a child with disabilities in the classroom? How do you deal with these challenges? How has being in a Mukangan BMC school helped/hindered you in dealing with these challenges?
8. What do you think facilitates you in teaching children with disabilities in the classroom? How has being in a Mukangan BMC school facilitated your experience of teaching children with disabilities?
9. Do you consider yourself a teacher at Mukangan or do you see yourself as a teacher in a BMC school?
10. Children learn in different ways. Do you feel you are able to meet the varied learning needs of all the children in your class?

### Interview Questions for Learning Resource Group (LRG) Teacher

Introduce myself and explain the purpose of the research. Take informed consent for the interview.

#### Perceptions around diversity of learners

1. What is your role as an LRG teacher? What are the activities that you undertake as LRG teacher?
2. Muktangan's vision statement calls it an inclusive school. What does inclusion mean to you?
3. What differences do you find between the children in this school? Why do you think some children struggle with what they are required to learn in school while some children find it easy? (Probe: age, caste, class, ability, gender)
4. Who would you characterise as "good students"? Why would you characterise them as good?
5. What kind of difficulties does the students who you help have? (Probe: kind of difficulty)
6. How do you try to address these difficulties? [Please ask the special ed teacher to elaborate with very clear examples of practice]. (Probe: seating arrangement, extra time, extra attention, IEP)
7. Do you use data on student performance (collected through Monthly Assessments; Half-yearly Assessments; and Annual Assessments) to help teachers plan teaching strategies? Do you use these assessments to decide your own teaching strategies too? Do you conduct any other assessments than the ones in class?
8. Do you think there is a difference between children with disabilities and children with special educational needs (Probe: how will you characterise a child with disability, how will you characterise a child with special educational needs, how do you think they are same or why do you think they are the same)
9. Do you think the children with disabilities at Muktangan BMC schools have different experience than those going to regular BMC schools? If yes, how?

#### Formal and informal support received by the teacher to teach a diverse classroom

1. What kind of training have you received to help you to teach children with disabilities? Please give details. (Prompts: pre-service training, in-service training programmes etc.) (Probe: duration, what was useful).
2. Do you have any suggestions about what you might find useful? How did the teacher training on inclusion at Muktangan help you to teach children with disabilities?
3. Have you ever requested support to effectively include children with disabilities in your group? If yes, give details. Have you ever received support? If yes, what type of support? (Probe specifically for each - from the head teacher, learning resource centre; other teachers in the school, NGOs; other resource groups, government or private).
4. Have you ever requested support to teach children who find it difficult to learn for some reason? If yes, give details. Have you ever received support? If yes, what type of support? (Probe specifically for each -- from the head teacher, other teachers in the school, learning resource centre; resource teachers; any other)

#### Perception around teaching children with disabilities in the classroom

1. What is it that you understand by the term disability? Do you think that children with disabilities have any similarities in attitudes, behaviour etc.?

2. How do you identify a child as having a disability? (Probes: do you test them? Do they bring a certificate?) (Ask to describe the entire process)
3. What kind of disability do the children in your group have? How do you support these children (Probe for examples for different kinds of disabilities)
4. Why do you believe are the main reasons that children with disabilities should be educated?
5. Some teachers believe that it is not possible to teach children with disabilities in mainstream classrooms and that they should be taught in special schools. Based on your experiences what do you think about this -- do you agree/disagree and why? (Probes: different types of disability; different degrees of disability) Have you ever advised parents to send their child to a special school?

### **Teaching children with disabilities:**

1. How do you support class teachers in the classroom? How do you support the students with disabilities? (Probes: special teaching and learning strategies, extra time, extra attention, use of TLM, modified curriculum).
2. Please describe the strategies you use with the different students in your group – in class support and one on one support? (Probe: what strategies are used to teach all children/ specific examples?)
3. Do you feel the need to use different strategies for the children with different disabilities? If yes, what are these different strategies? Do you feel adopting a different strategy works? (If yes, how? If no, why not?)
4. How did you decide what teaching strategies you will use with different students with different kinds of difficulties? (Probes: for children with learning disabilities, physical disabilities, or behavioural issues)
5. Can you give me an instance of how you adapted your teaching strategies to include in the teaching learning process? (Probe: how the teacher adapts the curriculum and teaching strategies for the child)
6. How do you assess the children with disabilities during classroom assessments? Do you use the same assessment tools with the other children in the class? Do you use different assessment tools to assess children with disabilities in the classroom? Do you design different assessments or help the class teachers to develop these assessments.
7. What do you feel are the challenges to teaching a child with disabilities? How do you deal with these challenges? How has being in a Mukhtangan BMC school helped/hindered you in dealing with these challenges?
8. What do you think facilitates you in teaching children with disabilities? How has being in a Mukhtangan school facilitated your experience of teaching children with disabilities?
9. Do you consider yourself a teacher at Mukhtangan or do you see yourself as a teacher in a BMC school?
10. Children learn in different ways. Do you feel you are able to meet the varied learning needs of all the children in your class?

**Interview Questions for Learning Resource Group Faculty Members**

Introduce myself and explain the purpose of the research. Take informed consent for the interview.

1. How long have you been a part of the Learning Resource Group? What is the Learning Resource Center? (How will you describe it?) What kind of educational training do you have (Probe: Level of education, Training in education, special education)
2. What is your role as a member of the Learning Resource Group? What are the activities that you undertake at the Learning Resource Center? (Ask to list down as many activities as possible)
3. How does Muktang as an institution support the LRG? Do you work with the Muktang Teacher Training Institute? How often do the head teachers of the seven Muktang schools seek out your help? What kind of help do they seek? (Ask for instances)
4. What process do you follow if a child is identified as having disabilities at the time of admissions by the parents? (Ask for examples)
5. What are the next steps after a teacher identifies a child as having disabilities? What identification measures do you use to identify a child as having disabilities? (Ask for examples)
6. How many children with disabilities are currently identified by the LRG (approximately)? What kind of disabilities?
7. How do you provide support to the teachers to include all children in the teaching learning process? (Probe for specific examples and strategies used) How often do teachers approach you regarding children with disabilities in their class?
8. Do you also provide support to the individual students with disabilities to assist them to learn in the classroom? What kind of support do you provide the students? (Ask for examples)
9. What kind of classroom support do you provide the teachers? Do you help the teachers to adapt the TLM to ensure teaching and learning for all children in the classroom? Do you help with lesson planning? Do you provide any other in class support to the teachers who have students with disabilities in the class? What kind of in class support?
10. How do you help teachers to adapt the classroom for children with disabilities? (Probe about layout of the classroom, accessibility etc. Ask about examples)

11. What are the challenges that you face at the LRG? How do you overcome these challenges? (Probe for examples)
12. Do you include the parents of the child with disabilities to further the child's education? If yes, how?
13. What active steps are you taking to promote inclusion in Mukangan schools? (Probe for examples)
14. Is there anything else that you want to add about how the LRC supports the students and teachers in teaching and learning?

**Interview Questions for members of the leadership teams at Muktangan schools**

Introduce myself and explain the purpose of the research. Take informed consent for the interview.

1. How long have you been a part of Muktangan? What kind of educational training do you have (Probe: Level of education, Training in education, special education)
2. What is your role as at Muktangan? What are the activities that you undertake? (Ask to list down as many activities as possible)
3. How does the PPP model work? How do you liason with the MCGM. Can you tell me in detail about the PPP structure?
4. How does Muktangan as an institution support inclusive education? How do you work with the MCGM to make Muktangan MCGM school inclusive? (Ask for instances)
5. What active steps are you taking to promote inclusion in Muktangan schools? (Probe for examples)
6. Is there anything else that you want to add about how the LRC supports the students and teachers in teaching and learning?

**Interview Questions for Departmental Leaders at Muktangan schools**

Introduce myself and explain the purpose of the research. Take informed consent for the interview.

1. How long have you been a part of Muktangan? What kind of educational training do you have (Probe: Level of education, Training in education, special education)
2. What is your role as at Muktangan? What are the activities that you undertake? (Ask to list down as many activities as possible)
3. How do you approach inclusive teaching and learning in your subject?
4. How do you support the teachers and faculty members to include different students in the classroom teaching and learning?
5. What are the challenges you face to implementing inclusive education?
6. How does Muktangan as an institution support inclusive education? How do you work with the MCGM to make Muktangan MCGM school inclusive? (Ask for instances)
7. What active steps are you taking to promote inclusion in Muktangan schools? (Probe for examples)
8. Is there anything else that you want to add about how the LRC supports the students and teachers in teaching and learning?

**Interview Questions for students of the Muktang schools**

Introduce myself and explain the purpose of the research. Take informed consent for the interview.

**Rapport Building**

1. What are your hobbies in class? (Probe: Why? How they engage in the hobby?)
2. What do you want to do when you grow up? (Probe: Life -goals/motivation/why/how will they do it)

**Teaching and Learning Experience in class**

1. What is your favourite subject in class? (Probe: Why is it favourite subject? What is special about the teaching during this class)
2. What are the different ways you learn in class? Do you have a favourite way of learning in class?
3. Tell me about one time when you had difficulty learning a lesson in class (Probe: What lesson? Why was it difficult? What was the issue? What did the teacher do? Were they able to receive help)
4. Tell me about one time when you understood a lesson really well in class (Probe: What lesson? Why did you understand it? How did the teacher help understand the lesson? )
5. Is it okay if you are not equally good at everything in class? (Probe: Is there a subject or activity you think you are not good at? Is there any subject or activity where you feel you are good?)

**Social Environment in class**

1. Do you have a best friend in class? (Probe: How long have you been friends? What do you do together? Do you help each other in the class? How?)
2. Do you feel like you are a part of the class? (Probe: How? What activities do you do as a part of the class?)
3. Are you able to talk to your teachers openly about your feelings and experiences both in and outside of class (Probe: Some examples of instances shared with teachers, how did they feel, does it help, if yes, how?)

**Conclusion**

1. Is there anything you would like to tell me about your experiences in the classroom?

**Classroom Observation**

Date of Observation: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

School: \_\_\_\_\_

Number of Teachers in the Class: \_\_\_\_\_

Number of Students in the Class: \_\_\_\_\_

Boys: \_\_\_\_\_ Girls: \_\_\_\_\_ Total: \_\_\_\_\_

Class: \_\_\_\_\_ Teacher name/s: \_\_\_\_\_

Topic / Subject being taught: \_\_\_\_\_

Start time of class: \_\_\_\_\_ End time of class: \_\_\_\_\_

Number of children in class at the start of lesson: \_\_\_\_\_ At the end of lesson: \_\_\_\_\_

A pictorial representation of how the class is arranged (blackboard, teacher's desk, children's seating positions). [SEP] For each child give gender as well as any known or visible disability.

Strategies Used: List down all observable strategies used by the teacher to teach the whole class (Provide narrative description)

Revision of what was taught earlier –

2. Asking Questions -

2. Fielding questions from students -

4. Classroom instructions used (eg how the students are arranged in groups etc)-

5. Use of examples and metaphor to explain concepts -

6. Use of TLM (explain the various kinds of TLM used during the class eg chalkboard, diagrams, charts, picture books, science experiments, enactments etc)

7. Reading or writing practice for the students -

9. Setting of tasks for the students at beginning or end of class -

10. Assessment of children's learning at the end of class (assignment, question and answer ; Individual or group tasks for the students etc.)

11. Paying individual attention to children and paying attention to them during class (calling out students by their name to ask if they are following the lesson? Etc.)

12. Any other observations during the lesson:

Quality of interactions	Narrative description	Chronology of lesson events <sup>[SEP]</sup> [Only in bullet points]
<p>Teacher sensitivity and responsiveness to learning needs:</p> <p>Pay attention to and describe any evidence of whether the teacher shows awareness of and/or is responsive to students who are struggling with the learning, e.g.,</p> <ul style="list-style-type: none"> <li>- Noticing students' difficulties or lack of understanding<sup>[SEP]</sup></li> <li>- Providing individualized support<sup>[SEP]</sup></li> <li>- Making attempts or accommodations to include all children, such as explaining visual material to a child with a visual impairment</li> </ul> <p>Please note whether these attempts are routinely targeted at girls/boys /child with disabilities, and/or any specific child</p>		
<p>Lack of sensitivity and responsiveness:</p> <p>Pay attention to and describe any evidence of the teacher failing to notice or ignoring student's needs or struggles, e.g.,</p> <ul style="list-style-type: none"> <li>- Yelling; Sarcastic voice/ statements; Humiliation;</li> <li>Physical punishment- Presenting materials or activities which some students cannot engage with (e.g., due to disability)</li> <li>- Ignoring some children and/or their lack of engagement<sup>[SEP]</sup></li> </ul> <p>Please note</p>		

whether these attempts are routinely targeted at girls/boys /child with disabilities, and/or any specific children		
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This sheet needs to be filled at the end of the lesson after the observation has been completed.

<p><b>Activity and resources</b>                  Prominent activity/activities during the lesson and other activities that took place (e.g., lecturing, Q&amp;A/Whole-class discussion, group work, teacher helping individual students)</p> <p>Did any of these activities visibly exclude any children from participating? Please give concrete examples.</p>				
<p><b>Resources used (circle)</b></p> <p>Textbooks      Blackboard      Wall charts      Supplementary books      <u>Other, what?</u></p>				

Did all children have access to these materials? (E.g., each having a book, all children being able to see the blackboard) and if not, where any alternative arrangements made to include all children? Please give concrete examples.

This sheet needs to be filled at the end of the lesson after the observation has been completed.

Quality of interactions	Low	Middle	High	Additional overall comments (Give examples)
	**Circle one option on each row**			
Teacher sensitivity and responsiveness to learning needs: E.g.,- Noticing students’ difficulties or lack of understanding The teacher fails to show awareness and/or respond to	The teacher fails to show awareness and/or respond to students who need extra support.	The teacher is sometimes responsive to students who need extra support.	The teacher is consistently responsive to students who need extra support.	

<p>students who need extra support.</p> <p>The teacher is sometimes responsive to students who need extra support.</p> <p>The teacher is consistently responsive to students who need extra support.</p> <p>- Providing individualised support</p> <p>- Making attempts or accommodations to include all children<sup>[SEP]</sup>Please note whether these attempts are targeted at a girl/boy and CWD.</p>				
<p>Lack of sensitivity and responsiveness:</p> <p>There are no or few instances in which some children are excluded from the learning activity or allowed to remain unengaged.</p> <p>There are some instances in which a child/ren are excluded from the learning activity.</p> <p>One or several children are repeatedly excluded from the learning activity, by not being able to take part or being allowed to disengage.</p> <p>E.g.,- Presenting materials or activities which some children cannot engage with (e.g., due to a disability)- Ignoring some children and/or their lack of engagement. Please note whether these attempts are targeted at a girl/boy and CWD.</p>	<p>There are no or few instances in which some children are excluded from the learning activity or allowed to remain unengaged.</p>	<p>There are some instances in which a child/ren are excluded from the learning activity.</p>	<p>One or several children are repeatedly excluded from the learning activity, by not being able to take part or being allowed to disengage.</p>	
<p>Positive relationships and affect:</p> <p>There are few, if any, indications that the teacher and students enjoy warm, supportive relationships with one another.</p> <p>There are some indications that the teacher and students</p>	<p>There are few, if any, indications that the teacher and students enjoy warm, supportive relationships</p>	<p>There are some indications that the teacher and students enjoy warm, supportive relationships</p>	<p>There are many indications that the teacher and students enjoy warm, supportive relationships</p>	

<p>enjoy warm, supportive relationships with one another.</p> <p>There are many indications that the teacher and students enjoy warm, supportive relationships with one another.</p> <p>E.g.,- Smiling-Laughter-Enthusiasm</p>	with one another.	with one another.	with one another.	
<p>Negative relationships and/or disrespect: E.g., Yelling</p> <p>There are no instances of severe negativity towards the students.</p> <p>There are some instances of severe negativity towards the students.</p> <p>There are frequent instances of severe negativity towards the students.</p> <p>- Sarcastic voice/ statements etc. - Humiliation- Physical punishment</p>	There are no instances of severe negativity towards the students.	There are some instances of severe negativity towards the students.	There are frequent instances of severe negativity towards the students.	

## Appendix 7. Consent Forms

## CONSENT FORM – Interviews

Teaching and learning for children with disabilities in mainstream classrooms of India study consent form

I would like to invite you for an interview regarding the teaching and learning practices you follow in school. Please read this form carefully and ask any questions you may have before agreeing to take part in the study.

**What the study is about:** The purpose of this study is to learn how teachers teach in the classroom and information regarding the teachers experiences in terms of training, education and teaching in the classroom.

**What I will ask you to do:** If you agree to be in this study, I would like to take an interview with you. The interview will include questions about your job, your teaching practices, your experiences at Mukhtangan and your views . The interview will take about 30-45 minutes to complete. With your permission, I would also like to tape-record the interview.

**Risks and benefits:** I do not anticipate any risks to you participating in this study other than those encountered in day-to-day life.

There are no direct benefits to you but I hope to share my learning with you at the end of the PhD research.

**Your answers will be confidential.** The records of this study will be kept private. In any sort of report we make public we will not include any information that will make it possible to identify you. Research records will be kept in a locked file; only the researchers will have access to the records. If I tape-record the interview, I will destroy the tape at the end of this research.

**Taking part is voluntary:** Taking part in this study is completely voluntary. You may skip any questions that you do not want to answer. If you decide not to take part or to skip some of the questions it is completely alright and doesn't cause any repercussions. If you decide to take part, you are free to withdraw at any time.

I, Seema Nath am the researcher conducting this study and I am guided by my supervisor Dr Nidhi Singal. Please ask me any questions you have now. If you have questions later, you may contact me (Seema Nath) at sn401@cam.ac.uk or at +91 9920069480 (India) or +44 7375319903 (UK). You can reach Dr. Nidhi Singal at sn241@cam.ac.uk. You will be given a copy of this form to keep for your records.

**Statement of Consent:** I have read and understood the Participant Information Sheet. I have been given the opportunity to ask questions and have had them answered to my satisfaction. I agree to take part in this project. I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason. I understand that I would not be identified by name anywhere in any publication or report. I consent to take part in the study.

Your Signature \_\_\_\_\_ Date \_\_\_\_\_  
Your Name (printed) \_\_\_\_\_

In addition to agreeing to participate, I also consent to having the interview tape-recorded.

Your Signature \_\_\_\_\_ Date \_\_\_\_\_  
Signature of person obtaining consent \_\_\_\_\_ Date \_\_\_\_\_  
Printed name of person obtaining consent \_\_\_\_\_ Date \_\_\_\_\_

## Research Assent Form



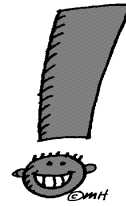
### What is a research study?

Research studies help us learn new things. First, we ask a question. Then we try to find the answer.

This paper talks about my research and the choice that you have to take part in it. I want you to ask me any questions that you have. You can ask questions any time.

### Important things to know...

- You get to decide if you want to take part.
- You can say 'No' or you can say 'Yes'.
- No one will be upset if you say 'No'.
- If you say 'Yes', you can always say 'No' later.
- You can say 'No' at anytime.
- I would still take good care of you no matter what you decide.



### Why are we doing this research?

We are doing this research to find out more about about your experiences learning in the school.



### What would happen if I join this research?

If you decide to be in the research, we would ask you to do the following:

- Talking: I would ask you questions. Then you would say your answers out loud.

You can say 'no' to what we ask you to do for the research at any time and we will stop.



### What else should I know about this research?

If you do not want to be in the study, you do not have to be.

It is also OK to say yes and change your mind later. You can stop being in the research at any time. If you want to stop, please tell me and we will stop.

You can ask questions any time. You can talk to me and ask any questions you have. Take the time you need to make your choice.



Is there anything else?

If you want to be in the research after we talk, please write your name below. I will write my name too. This shows we talked about the research and that you want to take part

*Name of Participant*

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\_\_\_\_\_

(To be written by child/adolescent)

Printed Name of Researcher

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Signature of Researcher

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Date

Time

**Appendix 8:** List of Mukhtangan School documents examined

- Borges, V and Kant, S (2016). Integrated Pedagogy Model in Science Education at Low Cost English-Medium Municipal Schools in Mumbai. Mukhtangan Paragon Charitable Trust
- Gray Matters (undated). Research Report on Government Partnership Schools in India. The Education Alliance
- Jadhav, G and Borges, V (2017). Parent Perceptions of Appropriate ECCE Practices. Mukhtangan Paragon Charitable Trust
- Jagtap, S and Rampurwala, J (2017). Curriculum Transition Processes from Preschool to Early primary. Mukhtangan Paragon Charitable Trust
- Mukhtangan (2013). The Mukhtangan Story. Mumbai, Maharashtra
- Mukhtangan (2014). Annual Report. Mumbai, Maharashtra
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- Mukhtangan Schools. Accessed from <https://www.mukhtanganedu.org/schools/>
- Pawar, J (undated). A Small Step Towards gender Equality. The Mukhtangan Way. Mukhtangan Paragon Charitable Trust
- Rampurawala, J; Borges, V & Mehta, E. (2017). Social Diversity and Teacher Education: Challenges, Opportunities and Innovative Practices. Mukhtangan Paragon Charitable Trust
- Ranganathan, H; Ghadigaonkar, P and Suryawanshi, S (2018). Connecting Literature to Reading. Mukhtangan Paragon Charitable Trust
- Russel, M; Anabel, N and Fernandes, M (2018). Quasi-exploratory study on Mukhtangan alumni.
- Sharma, P and Singh, R (2018). Pre-service teacher education at Mukhtangan. Documentation of Key Effective Practices. Center for Education, Innovation and Action Research. Center of Excellence in Teacher Education. Tata Institute of Social Sciences. Mumbai
- Tewari, N; Saritha, V.N. and Shrivastava. P (2018). Methodologies adapted in maths education by Mukhtangan to create and maintain interest in learners. Mukhtangan Paragon Charitable Trust

Appendix 9: Sample coded sheet of teacher interview using NVivo (5 pages)

**Aravalli School**  
**Standard 5 Class Teacher**  
**English and SS teacher for 5<sup>th</sup> and 6<sup>th</sup> std**

S- Researcher, Seema  
 T - Teacher

S: .Maam I am starting the recording.  
 T: Yes

S: So Mukhtangan's vision statement calls it an inclusive school. What does inclusion mean to you?  
 T: Inclusion means here children of all castes we are not doing any discrimination. Children of different castes and religions are all enrolled here and we don't do any discrimination. And in every activity we include all the children and we celebrate all the festivals.

S: And what are the different kinds of children in your group? What are the differences that you see among the children in your group?  
 T: The level. For example average and smart children. Some children's parents are educated and some are not. They are living in slums and such an area where the atmosphere is not proper to their education. Their parents also not educated so they are lagging behind. So here the LRG teachers are there, the Sunday system is there so those who are lagging behind so this teacher teach them and bring them at the level of the other children. Atleast they try.

S: And why do you think some children learn things very fast and some children struggle with their learning? Do you think gender plays a role?  
 T: Some children take the admission in the middle means after the 1st standard and 2nd standard and some children initially they studied in Hindi or Marathi medium and this creates difficulties for them. Gender no

S: Who would you characterise as a good student? According to you who are a good student?  
 T: We cant discriminate because all are smart. Because of their nature, some are shy and some are talkative. Because sometimes they don't pay attention and they are distracted so they lag behind.

S: Do you have any children who have difficulties in seeing, hearing, speaking or any other difficulties in your group?  
 T: Yes. One child. Kinshuk (name changed)

S: What is his difficulty?  
 From born he has the difficulty in speech. He cant speak properly. His speech is unclear.

S: How do you support Kinshuk?  
 T: If sometimes if I don't understand his language then I ask the other children to please translate it.  
 S: Do you do any special seating arrangement or give him extra time or attention?  
 T: If sometime I get I make them sit beside me and make them read separately. But it happens rarely okay...not all the time. Actually I would like to take their extra sessions but we don't get time.

S: And you do assessments periodically. How does the assessment data help you? Are you able to decide your teaching strategies based on the assessment data?  
 T: The assessments data means so we can understand how much they have understood and if they attempted any answers then we can take that topic again.

S: Are there any children in your group who are at the risk of dropping out you think?  
 T: No

S: And what do you think is the difference between children who have disabilities and children who have difficulties in understanding?  
 T: Actually all children have a good grasping power because this is the age and so many things in their mind. But like I said they sometimes get distracted so to get their attention we ask them questions and we call them by their name. So they can pay attention otherwise they will look here and there. It depends on us how we get their attention and make them learn.

S: And do you think children with disabilities in Mukhtangan schools have a different experience than if they went to a different BMC school?  
 T: Because the LRG teachers are taking so much efforts.

S: So you think they have different experiences?  
 T: Yes

S: And have you received any training on teaching children with disabilities in your pre-service or in-service training? Have you had inclusion as a subject?  
 T: Yes here in Mukhtangan we have had the training. Before joining the service we have done this during the Mukhtangan training. During PD sessions, we have some sessions

S: And have you said that you have a child in your class Vivek. Have you ever asked for extra help to teach him in class?  
 T: No No ...I handle

S: How do you manage? What do you do?

Challenges to inclusion  
 Personal will for inclusion  
 Challenge to teaching is centered on the teacher and not student  
 Measuring of disability  
 Deficit construct  
 Including peers to facilitate inclusion in teaching  
 Sessions against bullying  
 Teaching  
 Challenges to teaching  
 Curriculum  
 No discrimination  
 Includes children from different castes  
 Identification of children with disabilities  
 Identifying children with difficulties  
 Teachers responsibility to support the child  
 Teacher training  
 Assessment  
 Complexity in classroom teaching and learning  
 Use of charts and models for teaching  
 Lesson plan  
 LRG Teachers  
 Different ways students are supported  
 Meaning of inclusion  
 Example of inclusion  
 Example of teaching strategy  
 Coding Density  
 Child with disabilities in the classroom

Challenges to inclusion  
 Personal will for inclusion  
 Challenge to teaching is centered on the teacher and not student  
 Measuring of disability  
 Deficit construct  
 Including peers to facilitate inclusion in teaching  
 Sessions against bullying  
 Teaching  
 Challenges to teaching  
 Curriculum  
 No discrimination  
 Includes children from different castes  
 Identification of children with disabilities  
 Identifying children with difficulties  
 Assessment  
 Complexity in classroom teaching and learning  
 Use of charts and models for teaching  
 Lesson plan  
 Different ways students are supported  
 Child with disabilities in the classroom  
 Meaning of inclusion  
 Example of inclusion  
 Example of teaching strategy  
 Coding Density  
 LRG Teachers  
 Teachers responsibility to support the child  
 Teacher training  
 Example of differences

T: I ask questions. Sometimes if I am not able to understand then I ask others. Sometimes I tell you he speaks so fast na I have difficulty. Then I ask his friends what he said and then I understand. Now I am understanding him better.

S: And what do you understand by the term disabilities? What does it mean to you?  
 T: Disability means the children who has some problem of hearing, speaking or something like that

S: Do you think children with disabilities have differences in attitudes and behaviours than children without disabilities?  
 T: No here in Mukangan all are the same. Means you will see in 6th standard there is a child Surya (name changed) and he has speaking problems but he is very smart, smarter than other children. And all are the same, they are trying to be with all children and they are not thinking that because I have disabilities I will not take part. We are also including them in all the activities whether he is able to do that or not but we include.

S: And how do you identify a child as having a disabilities?  
 T: With LRG teacher we sit together before starting school. All teachers sit together and discuss

S: So you have a history of the child? This is in the beginning of the academic year in June?  
 T: Yes yes

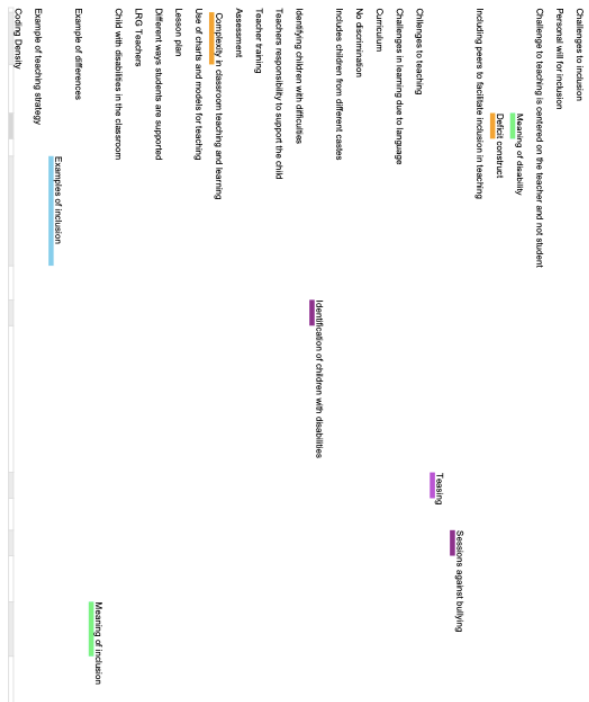
S: And other than Vivek do you have any other children with disabilities in your group?  
 T: I was in other school last year and then I had a child. He participate in the group but he had speech problems.

S: And how do the other students treat the students with disabilities?  
 T: Tease...sometimes they tease them but he also manages to deal with them

S: Do you also help?  
 T: Means we tell them dont tease. we have morning classes where we tell all students about why it is bad to tease and we are all same.

S: And why do you think is the main reason that children with disabilities should be educated?  
 T: They should be independent and they should not have to depend on others. And disabilities does not mean for example if they do not have a hand, handicapped children are also learning, so why not include. They have little problem but otherwise they are fit to learn.

S: Some teachers believe that it is not possible to teach children with disabilities in the same class as other children. What do you think?



T: Actually I had an autistic child in class and he couldn't write and I was new and even then he got habituated to me. I used to make him sit beside me and taught him. And he used to get hyper, at that time I used to not understand why he got hyper but then I got to know that whenever he is hungry that time he gets hyper. So initially I was very in tension on how to handle him but I wanted to teach him so I used to take time for him. Five ten minutes in our 45 minutes class I used to take for him.

S: And you think that 5-10 minutes made a difference?  
 T: Yes

S: And what kind of strategies did you use with him?  
 T: I used to use some objects, LRG also used to help. We used to talk to each other, that means LRG and me and we just to be in contact. So whatever she used to do she tell. She used her own strategies and I used my own strategies. So whatever we had taken with the children, the same topic I had taken with him also but in a simple way. So he used to give answers.

S: Anything else?  
 T: Yes materials we use, we use activities here also.

S: What kind of materials do you use?  
 T: For example in SS (Social Studies) we use models, the charts. Have you seen the models we have made here? Downstairs also

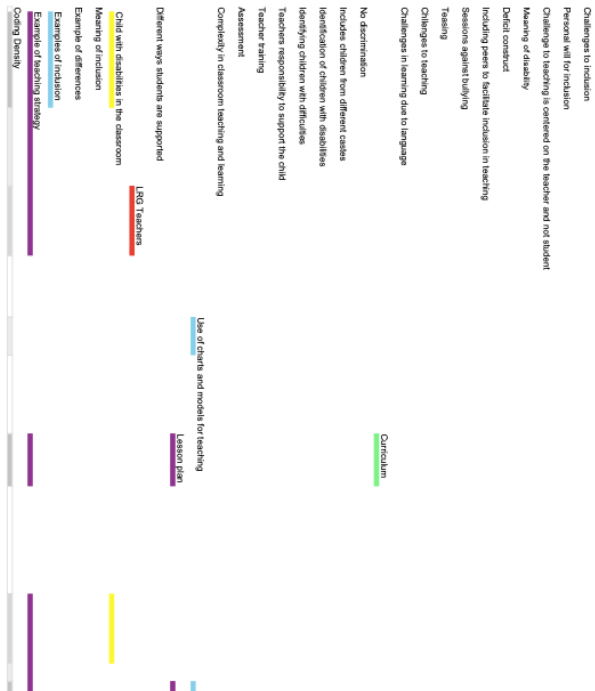
S: Yes I have seen the downstairs one. Are you able to include all the children in your teaching and learning processes in the class?  
 T: Yes

S: How do you include all the children in your classroom teaching?  
 T: Ummm...if they couldnt understand then we have to change the curriculum, we have to make it for everybody. We make lesson plan for all children.

S: Are you able to use the same teachings strategies for children with disabilities as other children or do you use other strategies?  
 T: Because now I have this group and I have no problem with any child so I do not have to use any different strategies but if I had then I would have to use different strategies.

S: Like what, can you give an example?  
 T: I had an autism child and I would make him sit beside me and teach with concrete materials. He used to get hyper whenever he was hungry. Whenever he used to tell me that he is hungry, then I used to feel like ...now he is hungry, I used to take him to his tiffin box and he used to eat.

S: What kind of teaching strategies do you use in class?



T: Like I said we do activities and roleplay, we taught directions using role play and we also made volcano. In English we made crowns and we distributed them and made them characters to do role play to explain the lesson. Actually for one lesson we have many activities and to teach the concept we have many activities. There are grammar activities and we do role plays and if you want I can show you, we have different activities in our lesson plans.

S: And how do you know if any child has difficulties?  
 T: We have to assess to first see if some children have reading problem or writing problem and then we see why they have the problem. Then we ask LRG to see.

S: So what way do you assess?  
 T: I read the first time and then I make him read it. If he understand and when I ask the question then he give the answer on his own, then I tell him to write the answer. If he was not able to answer...not if he is not able to answer, then I explain again and ask him. If he still not understanding for long then I ask LRG.

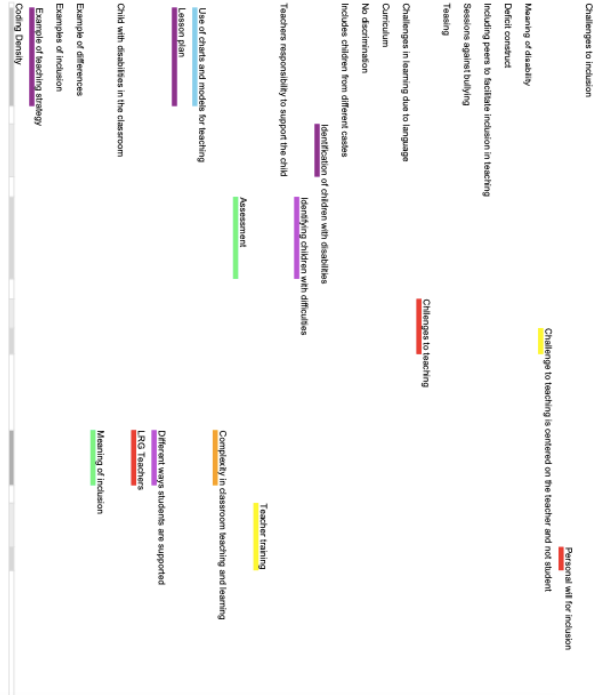
S: What is the most challenging part of teaching children with disabilities and difficulties?  
 T: Challenging is that if the children have a reading problem then I find it challenging.

S: And anything else?  
 T: No

S: And what helps you teach children with different needs?  
 T: LRG teacher is there and also we take reading sessions in the class and that helps. Even their classmates help. Because as a teacher I cant discriminate between any child and I want to teach all children. I want to bring all child to the same level of understanding. He should not lag behind.

S: And do you think being in Muktangan has helped you teach children with different needs?  
 T: Yes. In PD also we have a session on this and in training also we have sessions on this. And it depends on us also. Actually personally we should be able to do this. We should have interest.

S: Thank you so much for your time maam.  
 T: Yes



## Appendix 10: Extract from code book

\* This is not an exhaustive lists of codes but examples of the codes that were used for coding the teacher interviews and later re-coded leading to the emergence of the themes

<b>Emergent themes</b>	<b>Re-coding</b>	<b>Coding</b> (derived from teacher interview responses)
Understanding concepts	Inclusion	Caste, Religion, Physical disabilities, learner diversity, examples of inclusion
	Disability	Physical disability, behaviour problem, unable to learn, autism, handicap, example of disabilities
	Exclusion	Blind students, complete hearing loss, no sign language, no Braille, behaviour problems, physical disabilities, older students with disabilities, intellectual disabilities
Training for inclusion	Pre-service	MITEP, Case studies, Pre-service curriculum, changing attitudes for inclusion
	In-service	Curriculum Understanding and Design (CUD), Lesson Design Meeting (LDM), PD, Subject Faculty, School Faculty, Fellow Teachers
Including children with and without disabilities in the teaching and learning process	Teaching strategies	Seating arrangements, peer tutoring, spiral curriculum, dual language, one on one attention, modified curriculum, extra time, role play, activities, games, differentiated instruction, support of LRG teachers,
	Materials	Charts, models, concrete objects, Dienes blocks, puzzles, big books, library books, science experiments
	Assessments	Formative, summative, role play for assessment, written assessment, weekly assessment, same assessment but different levels of interpretation, believe in abilities of all students, evolution of assessment process
Learning Resource Group (LRG) for including	Direct support for students	Literacy, numeracy, ADL, IEPs, timetables outside classrooms, parents trained to support at home, Sunday system, charts, phonetics, Dienes blocks, activities, games, small group teaching, one on one teaching, identification of difficulties, students with language challenges

diverse learners	Support for teachers	Classroom support, lesson planning, making teaching learning materials, help understand student with disabilities challenges, strategies to calm student, help counsel parents of children without disabilities
	Function of LRG	Literacy, numeracy, ADL, help to counsel parents, identification of children with difficulties and disabilities, recommend parents on seeking diagnoses, help get accommodations during exams, help parents get certifications, support classroom teachers, adapt assessments
Support for inclusion	Formal	Pre-service training, in-service training, LRG support, PD session, Subject Faculty, CUD, LDM, school head, circle time
	Informal	LRG teachers, fellow class teachers, students with and without disabilities acceptance of each other, Liz, parents
Challenges to inclusion	School	Steps, multi-storeyed building, large curriculum, teasing
	Classroom	Complexity in higher grades subject, teaching scientific vocabulary, memorising formulas, behavioural issues, time

## Appendix 11: Muktangans Schools' Child Protection Policy

## Child Protection Policy—Muktangan

## A. Overview of Muktangan

Muktangan is an innovative model of education located within mainstream Government schools providing quality, child-centred, inclusive English-medium schooling to thousands of underprivileged children in Mumbai. We are truly “**Education for the Community, by the Community**”, developing teachers from the same neighbourhoods as the students, who then become empowered change agents. Our schools support the natural curiosity of children, their creativity and joy of learning, while developing in them independent and critical thinking skills.

**Mission:** To evolve sustainable, replicable, inclusive models of quality child-centered teacher education and school programmes in partnership with marginalized communities and to advocate them to the larger system

**Vision:** An inclusive, empowered world in which all live in harmony with freedom of expression, respect, and with integrity

## B. Where is the Child Protection Policy applicable?

1. School premises (including school building, playground, gate).
2. Paragon Charitable Trust premises.
3. All organizational fieldtrips and events outside school premises where a Muktangan a staff/ or authorized volunteer is accompanying the student/s.

## C. Definitions

**Child:** According to the UN Convention on the Rights of the Child (Article 1) a child is every human being below the age of 18 years.

**Child Abuse:** It “constitutes all forms of physical and/or emotional ill treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child’s health, survival, development or dignity in the context of a relationship of responsibility, trust or power”(World Health Organization, 1999). Child abuse may be a deliberate act or it may be failing to act to prevent harm. It consists of anything which individuals, institutions or processes do or fail to do, intentionally or unintentionally, which harms a child or child’s well being, dignity and prospect of safe and healthy development into adulthood.

- **Physical Abuse-** Physical abuse is the inflicting of physical injury upon a child. This may include burning, hitting, punching, shaking, kicking, beating or otherwise harming a child. This harm could be intentional or unintentional. It may, however, be the result of over-discipline or physical punishment that is inappropriate to the child’s age (WCD, 2007).
- **Emotional abuse:**

Emotional abuse would mean and include verbal abuse, mental abuse, and psychological maltreatment. It includes acts or the failure to act by parents, teachers or caretakers that have caused or could cause, serious behavioural, cognitive, emotional, or mental trauma (WCD, 2007). These acts must be reasonably within the control of the parent, teacher or a person in a relationship of responsibility, trust or power. Acts include restriction of movement, patterns of belittling, denigrating, scapegoating, threatening, scaring, discriminating, ridiculing, or other non-physical forms of hostile or rejecting treatment (WHO, 1999).

- **Neglect:** It is the failure to provide for the child's basic needs. Neglect can be physical, educational, emotional etc. Physical neglect can include not providing adequate food or clothing, appropriate medical care, supervision, or proper weather protection (heat or cold). It may include abandonment. Educational neglect includes failure to provide appropriate schooling or special educational needs, allowing excessive truancies. Psychological neglect includes the lack of any emotional support and love, never attending to the child, substance abuse including allowing the child to participate in drug and alcohol use (WCD, 2007).
- **Sexual abuse:** "Any act, using a child for the sexual gratification of another powerful person". It includes fondling a Child's genitals, making the Child fondle the adult's genitals, intercourse, incest, rape, sodomy, exhibitionism and sexual exploitation, showing and/or shooting of pornographic videos and pictures. Child sexual abuse is therefore evidenced by an activity between a child and adult or another child who by age or development is in a relationship of responsibility, trust or power, the activity being intended to gratify or satisfy the needs of the other person. If anybody commits these acts, it could be considered sexual assault and shall be handled solely by the police and criminal courts attracting consequences under criminal law.

**Muktangan India:** Paragon Charitable Trust, a charity established in India which works for Muktangan group of schools.

**Muktangan UK:** Muktangan Education Trust (registered with UK Charity Commission under no: 1155393), a charity which supports the work of Muktangan India.

**Child Protection:** A broad term to describe the responsibilities, preventive and responsive measures and activities that Muktangan (India and UK) undertakes to ensure protection of children from any kind of harm (intentional or unintentional) as a result of his/her association with Muktangan, contact with Muktangan staff, visitors, volunteers and associates and policies, systems and code of conduct of the organization to safeguard children.

**Staff:** Trustees and employees of Muktangan.

**Visitor:** A person who may come into contact with children through Muktangan, including journalists, media, celebrities and researchers.

**Volunteer:** Any person, who has chosen out of his/her own will, to extend help in any programmatic or non-programmatic areas of Muktangan operations, without any

remuneration whatsoever, and who has signed an application cum undertaking to protect children's best interests at all times during the period of his/her association with Mukhtangan following the due process of volunteer selection as laid down in the Volunteer Policy of the organisation.

**Associates:** Paid or unpaid individuals who have committed to work with or support Mukhtangan. It includes among others volunteers, interns, sponsors, researchers, donors, consultants, contractors and representatives of partner organizations.

**Management:** School Faculty and School Coordinator.

### C. Code of Conduct:

#### CI Code of Conduct for Mukhtangan Staff, Trainees, Associates and Visitors

1. Do not hit child/ren with any object/s (ruler, chalk, duster, chair, stool, table etc), raise your hand, punch, shake, kick, beat, pull the collar, burn, pinch, elbow, slap, spank, make threatening gestures or postures, punish the child (making the child kneel down, sit ups, asking the child to be in embarrassing positions) intentionally or unintentionally.
2. Do not shame, belittle, put down, scape-goat, threaten, scare, argue, discriminate, ridicule, insult, shout and use abusive language for children.
3. Do not pass sexual comments, show your private parts or ask the child to show her/his private parts, show pornographic material (magazines, videos, emails, stories, pictures, jokes, sms, mms, via social media).
4. Do not touch/fondle child for self arousal or ask the child to touch/fondle you/or himself/herself for your sexual gratification, insert objects in child's private parts, attempt or commit sexual offences like rape or sodomy.
5. Do not ask/give sexual favours (like sexual intercourse, anal sex, oral sex, kiss etc) from/to parents, colleagues, volunteers, visitors and students.
6. Do not ignore/withdraw/withhold child's needs such as need to go to the toilet, need for food, medical aid, questions/doubts.
7. Do not leave a child alone in the class, lock him/her in a toilet or classroom, during/after school under any circumstance.
8. Do not keep the child waiting after school under any circumstances without prior permission from the management.
9. Staff of Mukhtangan cannot have romantic/sexual relationship/s with students, parents or colleagues in Mukhtangan premises or elsewhere. This does not include relationship/s between staff member(s) outside Mukhtangan premises.
10. Children, parents, colleagues, faculty report to management in case of any Child abuse and Child protection concerns they have in accordance with this policy.
11. Children cannot be called before the working hours of the school or made to wait after working hours of the school without prior consent from the management.

12. Respond to a Child who may have been abused or exploited, in accordance with this policy.
13. Cooperate fully and confidentially in any investigation of concerns' or allegations of Child Abuse.
14. Contribute to building an environment where Children are respected and encouraged to discuss their concerns and rights.
15. Always treat Children in a manner which is respectful of their rights, integrity and dignity, considers their best interests and does not expose them to, or place them at risk of, harm. For example: when taking images/pictures during visits, interacting with Children or generating stories about any Child, ensure that this is done in a manner consistent with this policy.
16. Never ask for or accept personal contact details (this includes email ids, telephone numbers, social media contacts, address, Webcam id, Skype id, etc) from any Child or family associated or formerly associated with Muktangan's work, or share their own personal contact details with such individuals. For Staff and partner organisations, there is an exception where this has been explicitly authorised for business purposes in a manner which is in line with Muktangan policies and procedures, and has the consent of the Child's parent or guardian.
17. Never disclose, or support the disclosure of, information that identifies Children through any medium, unless that disclosure is in accordance with Muktangan policies and procedures and/or has the explicit consent of Muktangan. Media include paper, photographs and social media.
18. Always obtain prior consent for photographs of Children, and ensure that all images of children which are taken are respectful and based on the child's best interests.
19. Never make any contact with a Child or his or her family members in connection with Muktangan's work which is not supervised or sanctioned by a senior member of Staff. Such contact may include, but is not limited to, visits and any form of communication via social media, phone call, email or letter.
20. Never promise and/or give children and their families/ caretakers - any monetary or non-monetary favours (gifts, prizes, donations) without the knowledge and permission of Muktangan management.
20. Gifts for students must be given to the school in charge and not to students directly nor should donor/s specifically elude to it to the child.

**Staff and Associates must:**

Only arrange visits to meet with Children in a protected space as chosen by Muktangan. This may include in their homes with the consent of the Child's family, and on the advice of Muktangan - staff who must always accompany the visit.

**Personal Conduct During Outside Activities for Muktangan**

Muktangan does not dictate the belief and value system by which Staff, Associates or Visitors should conduct their personal lives. However, Staff, Associates and Visitors should bear in mind the principles of this Policy and heighten their awareness of how their behaviour may be perceived, both when engaged in tasks for or for the benefit of Muktangan and otherwise.

**D1. Preventive Measures**

1. Muktangan staff will be educated on child rights, child abuse and new policies in that regard during pre-service and in-service training.
2. Teachers and faculty should try to resolve the issues if any.
3. Teachers and faculty of Muktangan will educate children and parents on child abuse through meetings and workshops.
4. At the time of induction new employees will commit to adhere to Child Protection Policy of Muktangan by signing the document.
5. Referral check would be done with previous organization and institutions on conduct of the candidate.
6. Teacher who has emotional issues can approach Socio-emotional department for counselling.

**D2. Protective Measures**

1. The management of Muktangan are ultimately accountable for this Policy and are responsible for its implementation.
2. Breach of this Policy and failure to comply with the responsibilities set out herein may incur the following sanctions:

For Staff – Depending on severity

- i.) Staff could be referred for counselling and given a warning.
- ii.) If the action is repeated again the staff member would be suspended.
- iii.) Dismissal and or police complaint against the staff.

For Associates or Visitors –

up to and including termination of all relations including contractual and partnership agreements with Muktangan.

3. Associates must acknowledge in writing that they have read and will abide by this Policy.
4. Where concerns exist about the conduct of any Staff, Associate or Visitor in relation to Child protection and/or where there has been a breach of this Policy, consideration will be given to referral to statutory authorities for criminal investigation under the law of the country in which the conduct concerned took place.

5. If a legitimate concern about suspected Child Abuse is raised, which proves to be unfounded on investigation, appropriate action will be taken against the reporter.
- 

I have read Mukstangan's Child Protection Policies and will abide by this policy.

Seema Nath  
- 17<sup>th</sup> July, 2017  
(SEEMA NATH)  
PhD Student  
University of Cambridge  
Faculty of Education



