

Playing to Learn – An Examination of Two Play-Based Approaches and their Impact on the Learning and Development of Children with and without Autism Spectrum Condition (ASC)

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Personalised learning demands that schools transform their responses to the learner from the largely standardised to the profoundly personalised.

(Hargreaves, in Carpenter 2010:5)

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ABSTRACT

Often parents are concerned that their child is not being treated as an individual and that its particular needs and requirements are not recognised, or, in the case of children with SEND, ignored by the specialist professionals involved (Zablotsky *et al*, 2014), and in some cases by the School as a whole (Carpenter *et al*, 2015). Therefore, parents feel that it is necessary to pay for any extra private support their child needs, and in the case of SEND even opt for home education in order to escape the structures of a formalised, generalised education system (Badman, 2009; Parsons *et al*, 2009; Parsons & Lewis, 2010; Kendell & Taylor, 2016). The present study investigates two play-based approaches and how they impact upon the learning and development of children with and without SEND. These two play-based approaches have their roots in the constructivist epistemology that characterises the approach developed and advocated by Maria Montessori. The study was qualitative in nature and was itself underpinned by a social constructionist epistemological position. I chose to use three data collection methods: observation, questionnaires and semi-structured interviews. These were carried out over a series of visits to the settings.

Using thematic analysis and an inductive approach (Swain, 2018), I investigated the similarities and differences in the way the two settings taught children aged between two and three (without SEND) and four and seven (with SEND). The specific SEND of the children under consideration in this study was Autism Spectrum Condition. I examined a range of factors that could affect the learning and development of the children. These included the learning environment; pedagogy; methods that facilitated positive relationships between staff and children - including the key element of communication; and peer-teacher and peer-peer interactions. The impact on the children's development is critically discussed and analysed in relation to acquisition of knowledge and play-based curricula; curriculum adaptability and flexibility, autonomy-supportive teaching and freedom of choice; independent learning and development of life skills; and physical development. This approach allowed me to gather in-depth information and to investigate group processes in detail, from a micro-perspective (Klonek *et al*, 2016).

Based on the evidence presented in this thesis, my conclusion is that play-based approaches can be highly effective in facilitating children's overall learning and development. They respond to the children's interests, allow them to work at their own pace and do not pressure them to achieve learning that is beyond their capability to grasp at any particular stage.

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS	i
ABSTRACT	ii
PUBLICATIONS AND COMMUNICATIONS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	ix
LIST OF FIGURES	ix
LIST OF IMAGES	ix
GLOSSARY OF TERMS	x
MARIA MONTESSORI	xii
BACKGROUND AND PERSONAL INTEREST FOR THE STUDY	xiii
CHAPTER ONE – CONTEXT OF THE STUDY	1
1.1 Conceptualising Play	1
1.2 Learning Theorists and Play	2
1.3 History of Early Years Education and Play	7
1.4 Government Policy and its impact on Childhood Pedagogy	9
1.5 Defining Special Educational and Disabilities (SEND)	12
1.6 International Perspectives	17
1.7 Children with SEND and Play	19
1.8 Clinical Presentation of Autism Spectrum (ASC)	20
1.9 Neurology of Autism	22
1.10 Play and Autism Spectrum Condition	24
1.11 History of the Montessori Education System	27
1.12 Maria Montessori’s Vision for Change	28
1.13 Maria Montessori’s Ethos and Creative Practice	30
1.14 Limitations of the Montessori Approach	32
1.15 Alternative Play-Based Approaches	34
1.16 Concluding Thoughts	35
CHAPTER TWO – REVIEW OF THE LITERATURE	37
2.1 The Importance of Play within the Learning Process	37
2.2 Play Therapy and the Therapeutic Benefits of Play	45
2.3 Character Development and Play	48
2.4 The Relationship between Play and Playfulness	50
2.5 The Importance of Outdoor Play	51
2.6 Health and Safety Concerns Associated with Outdoor Play	52

2.7 Socio-Economic Status and Play	53
2.8 Children with SEND, Play and Play-Based Approaches	54
2.9 Concluding Thoughts	59
CHAPTER THREE – METHODOLOGY	61
3.1 Philosophical Position	61
3.2 Why Undertake Research on Real-World Issues	65
3.3 Ethical Considerations when Undertaking Research with Children	67
3.4 Qualitative Research, Multi-Method Approaches and Triangulation	73
3.5 Criticality and Reflexivity	73
3.6 The Research Journey so Far...	76
3.6.1 Ups and Downs	77
3.7 Research Design	80
3.7.1 Case Study as a Research Design	81
3.7.2 Benefits of Case Studies	82
3.7.3 Rigour in Research	82
3.8 Data Collection Methods	85
3.8.1 Stage One - Observation: Justification of Use	85
3.8.2 Observation: Participants	86
3.8.3 Observation: Recruitment	86
3.8.4 Observation: Procedure	87
3.9 Stage Two – Questionnaires: Justification of Use	87
3.9.1 Questionnaire Design	88
3.9.2 Questionnaires: Participants	89
3.9.3 Questionnaires: Recruitment	90
3.9.4 Questionnaires: Procedure	90
3.10 Stage Three – Interviews: Justification of Use	90
3.10.1 Interview Design	91
3.10.2 Interviews: Participants	92
3.10.3 Interviews: Recruitment	92
3.10.4 Interviews: Procedure	93
3.11 Data Analysis	93
3.12 Concluding Thoughts	94
CHAPTER FOUR – RESULTS: CASE STUDY – SCHOOL A	95
Demographics of School A	95
Findings Arising from this Study	97
Learning Environments	97
Learning through Play	97
Layout and Class Size	98

Organisation of Learning Environment	98
Resources and Activities	99
How Children are Taught and Supported	100
Acquisition of Knowledge and Play-Based Curricula	101
Curriculum Adaptability and Flexibility, Autonomy-Supportive	103
Teaching and Freedom of Choice	
Communication	103
Independent Learning and Development of Life Skills	104
Physical Development	106
Theories of Learning and their Impact on the	
Play-based Pedagogy at School A	108
Methods that facilitate positive relationships between staff and children	110
Learning Concepts and Children with SEND	111
Turn-Taking and Sharing	114
CHAPTER FIVE – RESULTS: CASE STUDY SCHOOL B	116
Demographics of School B	116
Findings Arising from this Study	118
Learning Environment	119
Learning through Play	119
Layout and Class Size	119
Organisation of Learning Environment	120
Resources and Activities	121
How Children are Taught and Supported	124
Acquisition of Knowledge and Play-Based Curricula,	
Curriculum Adaptability and Flexibility, Autonomy-Supportive	126
Teaching and Freedom of Choice	128
Communication	129
Independent Learning and the Development of Life Skills	131
Physical Development	131
Theories of Learning and their Impact on the	131
Play-based Pedagogy at School B	
Methods that facilitate positive relationships between staff and children	134
Peer-Teacher and Peer-Peer Interactions	136
Learning Concepts and Children with SEND	137
Turn-Taking and Sharing	138
Autism Manifestation Profile	138
Sensory Processing and Self-Regulation	142
Self-Awareness	144

CHAPTER SIX – DISCUSSION: LEARNING AND ACHIEVEMENT	146
6.1 Learning Environments	150
6.1.1 Learning through Play	151
6.1.2 Layout and Class Size	153
6.1.3 Organisation of Learning Environment	157
6.1.4 Resources and Activities	159
6.1.5 How Children are Taught and Supported	162
6.2 Acquisition of Knowledge and Play-Based Curricula	166
6.3 Curriculum Adaptability and Flexibility, Autonomy-Supportive Teaching and Freedom of Choice	169
6.4 Communication	172
6.5 Independent Learning and Development of Life Skills	175
6.6 Physical Development	180
6.7 Concluding Thoughts	183
CHAPTER SEVEN – DISCUSSION: PEDAGOGICAL APPROACHES TO LEARNING	185
7.1 Theories of Learning and their Impact on the Play-Based Pedagogy at School A and School B	185
7.2 Methods that Facilitate Positive Relationships between Staff and Children	191
7.3 Peer-Teacher and Peer-Peer Interactions	200
7.4 Learning Concepts and Children with SEND	203
7.5 Turn-Taking, Sharing and Collaborative Learning	206
7.6 Concluding Thoughts	207
CHAPTER EIGHT – DISCUSSION: MANAGING CHALLENGING BEHAVIOUR	209
8.1 Autism Manifestation Profile and Behaviour	209
8.2 Sensory Processing and Self-Regulation	213
8.3 Self-Awareness	215
CHAPTER NINE – CONCLUSIONS AND RECOMMENDATIONS	219
9.1 Conclusions Arising from this Thesis	219
9.2 Similarities and Differences between the two Play-Based Approaches	224
9.3 Impact on the Education of Children with and without SEND	224
9.4 Reflections on this thesis	225
9.5 Recommendations	228
REFERENCES	230

APPENDICES

Appendix 1: Leuven Scale of Involvement

Appendix 2: Observation at School A (Example 4.1-3)

Appendix 3: Documentation related to this project

Appendix 4: Published Article Arising from this Study – Playing to Learn: an overview of the Montessori Approach with pre-school children with Autism Spectrum Condition (ASC)

LIST OF TABLES

Table	Title	Page
3.1	Response Rate by School Type	83
3.2	Overview of Data Collection and Participant Responses	84
6.1	Themes and Sub-Themes of Results and Discussion Chapters	147
6.2	Similarities and Differences: Learning and Achievement	184
7.1	Similarities and Differences: Pedagogical Approaches to Learning	208

LIST OF FIGURES

1.1	The overlap in clinical diagnosis between Autism, Asperger's Syndrome, Rett Disorder and Childhood Disintegrative Disorder	21
1.2	MEAB Accredited Schools by Region	33
3.1	Stages of the Present Research Project	80
6.1	Montessori Planes of Development	157
6.2	Concentration Graph (Template)	176
6.3	Concentration Graph of a Poorly-Engaged Child	177
6.4	Concentration Graph of an Engaged Child or Class	177
7.1	Representation of Jerome Bruner's Spiral Curriculum	187
7.2	Maslow's Hierarchy of Needs, 1970	190
7.3	Makaton Signs Commonly Used at School B	195
7.4	Makaton signs used in a song	197
7.5	Examples of PECS symbols used in the School B Classroom	200
8.1	Triad of Impairments	210
8.2	Procedure for the Theory of Mind Test	216

LIST OF IMAGES

Image	Title	Page
5.1	Inside School B's classroom, showing the amount of clear space available	119
5.2	School B classroom with activity set up	119
6.1	School A, showing classrooms surrounding one of the play areas	155
6.2	School B, showing a small section of the outdoor environment	155

GLOSSARY OF TERMS

AAC	Augmentative and Alternative Communication
ABA	Applied Behavioural Analysis
ADHD	Attention Deficit Hyperactivity Disorder
AMI	American Montessori International
APA	American Psychological Association
ASC	Autism Spectrum Condition
BDNF	Brain-Derived Neurotrophic Factor
BERA	British Educational Research Association
BMI	Body Mass Index
C&YP	Children and Young People
CCPT	Child-Centred Play Therapy
DBS	Disclosure and Barring Service
DCSF	Department for Children, Schools and Families
DED	Disability Equality Duty
DfE	Department for Education (Coalition, 2010 – 2015)
DFE	Department For Education (Conservative, 2015 onwards)
DfES	Department for Education and Skills
DSM	Diagnostic and Statistical Manual
EHCP	Education Health and Care Plan
EIBI	Early and Intensive Behavioral Intervention
EYFS	Early Years Foundation Stage
GCSE	General Certificate of Secondary Education
ICF	International Classification of Functioning, Disability and Health
ICIDH	International Classification of Impairments, Disabilities and Handicaps
IEP	Individual Education Plan
ILP	Individual Learning Plan
LA	Local Authority
NC	National Curriculum
NCB	National Children's Bureau
NLS	National Literacy Strategy
NMS	National Numeracy Strategy
NDD	Neurodevelopmental Disorder
Ofsted	Office for Standards in Education, Children's Services and Skills
OU	Open University
PDD	Pervasive Developmental Disorder
PDD-NOS	Pervasive Developmental Disorder – Not Otherwise Specified

PECS	Picture Exchange Communication System
PhD	Doctor of Philosophy
PM	Prime Minister
RRB	Restrictive/Repetitive Behaviours
REC	Research Ethics Committee
SENCO	Special Educational Needs Co-ordinator
SEND	Special Educational Needs and Disability
SLCN	Speech, Language and Communication Need
SLD	Specific Learning Difficulty/Severe Learning Difficulties
SLT	Speech and Language Therapy
SRA	Social Research Association
TAs	Teaching Assistants
TES	Times Educational Supplement
UK	United Kingdom
UNCRC	United Nations Convention on the Rights of the Child
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
UNESCO	United Nations Educational Scientific and Cultural Organisation
UN	United Nations
US/USA	United States of America
WHO	World Health Organisation

Maria Montessori



Maria Montessori

31st August 1870 - 6th May 1952

(Image: Children's Place Montessori, n.d.)

The greatest development is achieved in the first years of life and therefore it is then that the greatest care should be taken. If this is done, then the child does not become a burden; he will reveal himself as the greatest marvel of nature. We shall be confronted by a child not as he was considered before a powerless being an empty vessel that must be filled with our wisdom. His dignity will arise in its fullness in front of our eyes as he reveals himself as the constructor of our intelligence as the being who, guided by the inner teacher, in joy and happiness indefatigably following a strict timetable, to the construction of that marvel of nature Man. We, the human teachers, can only help, the great work that is being done, as servants help the master. If we do so we shall be witness to the unfolding of the human soul, to the rising of a New Man who will not be the victim of events, but who will have the clarity of vision to direct and shape the future of human society

Maria Montessori from The Absorbent Mind (1949, pp.7-8)

BACKGROUND AND PERSONAL INTEREST FOR THE STUDY

The Equalities Review stated that:

An equal society protects and promotes equal, real freedom and substantive opportunity to live in the ways people value and would choose, so that everyone can flourish. An equal society recognises people's different needs, situations and goals and removes the barriers that limit what people can do and can be.

(HMSO, 2007, p.6)

This statement implies that all children should be educated in ways that take account of their individual interests and needs. Furthermore, justice in education means that children from disadvantaged backgrounds, regardless of how they came to be in that situation, must take priority (Ben-Shahar, 2016). In terms of children with Autism Spectrum Condition (ASC) this means assisting them to develop the basic educational capacities which are essential for them to gain equality in education and effective engagement in society (Anaby *et al*, 2013; Halfon *et al* 2012; Miles & Singal, 2010; Raghavendra *et al*, 2012; UNESCO, 1990). Given the present and projected increase in the numbers of people with disabilities worldwide (WHO, 2011) it is no surprise that inclusion is both a national and an international issue, and this applies to education.

I have always had an interest in educational research and inclusion. As part of my undergraduate degree I investigated the ways in which children with Autism Spectrum Condition (ASC) acquired the English language. My conclusions showed that parents were concerned that their child was not being treated as an individual and that its particular needs and requirements not recognised, or ignored, by the specialist professionals involved (Zablotsky *et al*, 2014), and in some cases by the School as a whole (Carpenter *et al*, 2015). Therefore, parents felt it necessary to pay for private Speech and Language Therapy and Applied Behavioural Analysis (ABA) training (*ibid*) and even opt for home education in order to escape the strictures of a formalised, generalised education system (Badman, 2009; Parsons *et al*, 2009; Parsons & Lewis, 2010; Kendall & Taylor, 2016). I also found that better training for educational professionals, especially Speech and Language Therapists, was needed to accommodate the needs of children with ASC (Dillenburger *et al*, 2016). It was on completing this research project that I felt the use of alternative educational paradigms needed to be explored given the specific symptomatic profile of children diagnosed with ASC.

During the first two years of my degree, I volunteered at an after-school club for children with SEND where I facilitated activities and also supported a child with high-functioning SEND to be able to communicate more appropriately with those around him (Bambara *et*

al, 2016; Gardner *et al*, 2014). In order for me to be able to do this though, I had to undertake some research of my own in order to understand the difficulties he was experiencing and relevant strategies I could use in order to facilitate appropriate interaction between the child and his peers. As with my study, de Mejia (2002) and Hickey and de Mejia (2014) found that with parents' continued investment, the acquisition of spoken language significantly improves. This said, Buyl and Housen (2014) believe that early language learning is a slow process that should not be evaluated in the early years but only several years later. It was through my supporting this child and comments from my colleagues that I began to question whether or not the National Curriculum (NC) was effective in helping students to gain the skills they need in order to be cope with the demands of 21st century society. This question became the driving force behind choosing the topic for my first dissertation.

When analysing my data I realised that, for children with SEND to develop the skills they need to be able to deal more effectively with the adverse effects of their condition, parents were more often than not having to pay for the well-known intervention treatments. This was because it was thought that such interventions were not appropriate for that child, or if a child did receive a certain intervention the school did not have the time or the resources to be able to justify spending a prolonged period of time with one student. The child's parent was left with the expense of paying privately in order that the intervention be continued for longer (Buescher *et al*, 2014; Lavelle *et al*, 2014). I made a conscious decision to move away from SEND for my Masters dissertation, but the theme of Special Educational Needs and Disability was still very much a common theme when choosing the topic for my final piece of work. When I was offered the opportunity to undertake a PhD, I decided to build upon the work that I had completed as part of my undergraduate degree.

After undertaking some initial research, I decided to examine the impact of alternative curricula such as the Montessori educational ethos in order to investigate whether or not alternative educational approaches have a significant impact upon the overall development and learning outcomes of children with SEND. Perhaps the most important step at the beginning of any journey is to do your groundwork. My previous projects had enabled me to gain an understanding of disability from other people's perspectives, thus having a strong influence on my decision to continue my research within the field of SEND and Inclusion. More importantly, I have a disability myself and have personally experienced many challenges and barriers that are faced by individuals with disabilities within education. Also, I attended a Montessori setting throughout my pre-school education. Montessori believed strongly in freedom of choice and independence, thus supporting the development of self-discipline which in turn would lead to self-motivation and bring about enhanced concentration and perseverance (Pound, 2011). Furthermore, a study undertaken by Lillard and Else-Quest (2006) found that by the end of kindergarten, children who attend play-

based settings, such as Montessori, perform better on standardised tests of reading and maths, engage in more positive interaction on the playground, and display more advanced social cognition and executive control. This also had an impact upon my decision to explore play-based educational approaches and whether these would support the education of children with SEND. Bearing this in mind, this thesis poses two questions:

- 1) What are the main similarities and differences between the Montessori approach and that of a special school that has implemented a play-based approach?
- 2) How do these approaches impact on the learning and development of children with and without SEND?

The chapters outlined below provide an overview as to how this thesis will be presented:

Chapter One – Context of the Study: This chapter introduces the concept of play and covers the history of early years education and play as well as government policy and its impact on childhood pedagogy. Moving through, it defines special education needs and disability (SEND); and introduces play-based curricula, including the history of the Montessori education system, Maria Montessori's vision for change, her ethos and creative practice, as well as the Steiner Waldorf and McMillan approaches.

Chapter Two – Review of the Literature: This chapter examines various aspects of play, including the importance of play within the learning process; learning theorists, their views on play and how these have impacted early childhood education; play therapy and the therapeutic benefits of play; character development and play; the relationship between play and playfulness; the importance of outdoor play; the associated health and safety concerns; socio-economic status and play. It also looks at children with SEND, play and special schools.

Chapter Three – Methodology: This chapter details my philosophical position; the rationale for research; ethical considerations when undertaking research with children; qualitative research, multi-method approaches and triangulation; criticality and reflexivity; case study as a research design; the methods I employed to collect my data and data analysis.

Chapter Four – Results: Case Study School A: This chapter provides an in-depth overview of how learning environments; acquisition of knowledge and play-based curricula; curriculum adaptability and flexibility; freedom of choice and autonomy-supportive teaching; communication; independent learning and physical development; theories of learning and their impact on the play-based pedagogy at School A; methods that facilitate positive

relationships between staff and children; learning concepts and children with SEND as well as examples of how the play-based approach advocated in this environment facilitates development in these areas.

Chapter Five – Results: Case Study School B: This chapter provides an in-depth overview of how learning environments; acquisition of knowledge and play-based curricula; curriculum adaptability and flexibility; freedom of choice and autonomy-supportive teaching; communication; independent learning and physical development; theories of learning and their impact on the play-based pedagogy at School B; methods that facilitate positive relationships between staff and children; peer-teacher and peer-peer interactions; learning concepts and children with SEND; Autism Manifestation Profile; sensory processing and self-regulation; and self-awareness as well as examples of how the play-based approach advocated in this environment facilitates development in these areas.

Chapter Six – Discussion: Learning and Achievement: This chapter provides an in-depth discussion of my findings in terms of learning environments; acquisition of knowledge and play-based curricula; curriculum adaptability and flexibility; freedom of choice and autonomy-supportive teaching; communication; independent learning and physical development.

Chapter Seven – Discussion: Pedagogical Approaches to Learning: In this chapter the following themes are discussed: pedagogical approaches; peer-teacher and peer-peer interactions; learning concepts and children with SEND. The ways in which turn-taking and sharing behaviours are promoted within the two play-based approaches under investigation is also discussed.

Chapter Eight – Discussion: Managing Challenging Behaviour: This chapter provides an in-depth discussion of autism manifestation profile, behaviour, sensory processing and self-regulation and self-awareness.

Chapter Nine – Conclusions and Recommendations: This thesis has examined the similarities and differences between two play-based approaches and how these methods can impact the overall learning and development of children and inform the education of children with SEND. Given the evidence presented this chapter details my conclusions in relation to the issues discussed above, the limitations of my study, my views regarding possible actions by the government, and recommendations for further study.

CHAPTER ONE - CONTEXT OF THE STUDY

This chapter covers definitions and theories of play and provides a history of early years education. An overview of government policy spanning the last fourteen years, and how this has impacted on early childhood pedagogy, is also given. Moving through, the way in which special educational needs and disability (SEND) is defined and assessed is also discussed. The chapter introduces play-based curricula, including an overview of the Montessori education system, followed by Maria Montessori's vision for change, her ethos and creative practice. Other alternative educational approaches (Steiner Waldorf and McMillan) are also briefly discussed.

1.1 Conceptualising Play

There is a revolution occurring regarding the way in which people learn. This revolution is affecting our educational and training systems, teachers and trainers of that system, workplaces and other organisations, our social systems, and learners (Robinson, 2011). To this end this same author also believes that:

Current approaches to education and training are pervaded by assumptions about intelligence and creativity that have squandered...The waste of talent is not deliberate. Most educators have a deep commitment to helping students do their best. Politicians too, make impassioned speeches about making the most of every student's abilities. The waste of talent may not be deliberate but it is systemic. It is systemic because public education is a system, and it is based on deep-seated assumptions that are no longer true.

(ibid, p.8)

According to Ken Robinson, "... we've all agreed nonetheless on the extraordinary capacities that children have, their capacities for innovation ... My contention is that creativity now is as important in education as literacy and we should treat it with the same status" (TED, 2007, 02:39:00 and 03:15:00). Play allows children to be creative and innovative, but this does not mean that the conceptual framework is a simple one. According to Hedges and Cooper (2018) and Zosh *et al*, (2018), play is a concept that has defied a simple definition and the relationship between play, learning, curriculum, pedagogy and outcomes has long been recognised as complex as evidenced by the number of recent research papers that in themselves cite references that are ten years old, or older (Edmiston, 2008; Fisher *et al*, 2008). These include Hedges and Cooper (2018) and Anderson (2018). The authors cited in the aforementioned papers believe that playfulness is a human capacity to move between modes and levels of communication and that conceptualising play involves a multi-faceted dialogue where one expresses resistance and different voices. In the period between 2005 and 2015 research on play witnessed a rise in two seemingly contradictory trends (Lynch, 2015). First, the research increasingly shows

that play expedites a variety of social, cognitive, motor and linguistic improvements (Eberle, 2011). Second, and paradoxically, in spite of the many benefits of play recognised by academics, recent years have seen a steady decrease in the amount of time nursery classes devote to play (Lynch, 2015). Research on the meaning of play accelerated in the 1980s but play in children with profound, multiple disabilities is a topic that is not discussed very often in research (Brodin, 2005). Play is the earliest form of learning for a child (Hewes, 2014). Both Bettelheim (1987) and Ginsburg (2007) have suggested that young children are motivated to learn through play. The term play has been used and interpreted in many ways in the context of early years. The pioneers of play such as Froebel (1782-1852), McMillan (1860-1931), Isaacs (1885-1948), Steiner (1861-1925) and Piaget (1896-1980) placed an emphasis on different elements of play depending on their research interests and experiences, and over the last ten years there have been significant contributions from researchers on the implications of play and practice. What they have said about children's play has influenced what practitioners believe and do in practice. Researching different perspectives about play not only helps practitioners to develop a view about its importance as part of a child's social world but also supports practitioners in becoming aware of the value of play to explore children's interests, discoveries, curiosity and skills. The challenge inherent in the term play is that it is often misinterpreted by practitioners within the same settings *let alone* within the wider early years' community (Canning, 2011), therefore causing confusion for the children in any given School Bs some practitioners avoid using the word 'play' preferring to use the term 'work' for all activities (McInnes *et al*, 2011). If this is the case and children hear the word 'play' used in other contexts such as the home, it could further reinforce their view that play is an activity that children engage in but not adults (ibid).

1.2 Learning Theorists and Play

Theorists such as Froebel, Piaget and Bruner have all written about the importance of learning in early childhood (Bayrak, 2019). Froebel wished to liberate children from rote learning and to acknowledge and respect children's own ideas. The whole child was and continues to be the focus (Smedley & Hoskins, 2019). Thus, all aspects of learning are linked through first-hand experiences of play (Hoskins & Smedley, 2019). It is these sentiments explained in Froebel's 'Education of Man' which made important contributions to the distinctive development of Froebel's approach to the education of young children (Smedley & Hoskins, 2020). As with Montessori Froebel believed that children's self-directed learning was and continues to be an expression of their imagination, creativity and understanding (Blackburn, 2020).

Furthermore, symbolic activities such as art, language, music and dance all nourish the child's inner life providing a means to express and transform understanding (ibid). In

keeping with this, Froebel created the 'gifts' the most well-known being the wooden blocks. Their simplicity and their aesthetic appeal encouraged children to use their imaginations to express themselves and their ideas in construction (Resnick, 2017). In line with its own principles a Froeblian approach does not offer a prescriptive pedagogy but rather sets out an understanding of young children and of learning which should guide adults' interactions with them (Taylor & Boyer, 2020). On that basis and with an attitude of respect and interest adults could judge when and how to intervene to support children's learning. Froebel's views on early childhood education appear to in line with the Montessori learning pedagogy in that Froebel emphasises the use of observation rather than taking an overly didactic stance which could undermine children's authority and autonomy (Hoskins & Smedley, 2016).

Another theorist that wrote about the importance of play and learning in early childhood was Piaget. He developed a theory of cognitive development in which the development of cognitive structures or schema in the child's mind depends on the two processes of accommodation and assimilation (Thomas, 2018). In assimilation a child fits a new experience into an existing schema. This process is balanced by accommodation in which the child adjusts an existing schema to fit in with the nature of the environment and it is through the twin processes of assimilation the child achieves a new stage of development. Assimilation helps the child to consolidate mental structures (Whaite-Stupiansky, 2017). Accommodation results in growth and change (ibid). Piaget's view of play embodies a criticism of some aspects of Gross's approach (play as pre-exercise) and of play as being important in learning was related more to accommodation to reality. This emphasis may be linked to Montessori's influence for Piaget carried out his early research at a modified Montessori School Bnd for many years was president of the Swiss Montessori Society (Lillard & Taggart, 2019). He does not argue a strong role for play in learning however he does see two possibilities for the functional significance of play. Play can consolidate existing skills by repeated execution of known schemas with minor variations (Fesseha & Pyle, 2016). Also, he argued that play can give a child a sense of "ego continuity" that is, confidence and a sense of mastery. It does this because failure is largely circumvented in fantasy play where the real properties of the materials are not at issue and no external goal is aimed for (Russ, 2020). The place of play in Piaget's theory has often been misunderstood. In fact, due to the play ethos it has often been interpreted as more favourable than it actually is. Golinkoff *et al* (2006) write that for Piaget and Vygotsky play was an opportunity to learn more about the world to stretch to accommodate new ideas and to foster their imaginations but in fact Piaget and Vygotsky had rather diverging views and Piaget saw play as assimilation not accommodation (Smith, 2010).

Vygotsky on the other hand combines the affective and cognitive aspects of development in his approach to play. Like psychoanalysis Vygotsky saw the affective drive behind play

as being the imaginary, illusionary realisation of unrealisable desires. He did not however, consider this to be linked with very specific or sexual impulses, but as having to do with, in a much more general sense, the child's confidence and mastery. He stated that play is essentially wish fulfilment, not of isolated wishes but of generalised effects (Lin *et al*, 2019). Nevertheless, this affective drive related to wish fulfilment has strong cognitive implications such that Vygotsky described play as being the leading source of development in the preschool years – in particular, cognitive development. He held such a strong view because the nature of pretend play allows the child to liberate him/herself from the immediate constraints of the situation and getting into the world of ideas (Bodrova & Leong, 2018). A very young child cannot separate out an object from its meaning, but when he/she starts to engage in pretend play and uses an object to represent another then meaning begins to be separated from the concrete object. Thus, Vygotsky believes that the substitute object acts as a pivot, to separate the meaning or concept from the object itself (Siraj-Blatchford, 2009). The child is thus liberated from situational constraints through his or her activity in an imaginary situation.

For Bruner, the pedagogy adopted will depend on the definition of learning assumed. Bruner certainly did not see learning as a passive or an individual experience. He saw learners as being in communities and for him experience and culture were both very important (Blatt-Gross, 2010). In his thinking about culture mind and education he set out four principles or tenets that guided his psycho-cultural approach in education. The first of these is the perspective tenet in essence this says that meaning making involves taking on board the perspective or the frame of reference in which the meaning was constructed, and it suggests that nothing can be culture-free. Everything that learners encounter is set within a cultural context, and learners themselves, although coming from a culture may not be a mirror of the culture. This tenet highlights the importance of individuals making meaning for themselves and being able to not only understand but also create. The second of these is the constraints tenet. For Bruner meaning making is constrained in two ways the first relates to the ways in which we have evolved as a species and our ways of thinking have evolved with us. The way in which we think now depends on and is constrained by what we thought previously. The second constraint is that our cultural i.e the symbolic systems we have developed within cultures – may not always be as useful to us as we need. The implication for education is the need for learners to be equipped with the symbolic systems that will best serve their learning. The third of these is the constructivist tenet. For Bruner this means that reality is not found but made. We construct meaning and in sharing with others may have to reconstruct it. Education must be about equipping to use the tools for making meaning, building understanding and to help in the process of change in order to be able to adapt to changing conditions or circumstances. The fourth and final tenet is the interactional tenet. For Bruner, the passing on of knowledge and skill involves what he calls a sub-

community in interaction allowing learners to learn alongside those with whom they interact (Becker, 2006).

Another theorist that sees the importance of play in early childhood is Plato. He considered that education should begin early. During infancy he believed that children should be protected and cared for develop no fears and experience little pain. When children attend nursery children should play and hear mother goose stories and fairy tales. These tales and fables should be carefully selected to ensure that the first examples that children hear are exemplary models as to be substituted for true and false for God is the author of all things good and children must be taught to conform to His principles (Frost, 2010). According to Livescu (2003), whilst Plato believed that play was the best form of instruction, and therefore is to be practised freely, it had to be purposeful in nature. As such, Plato's proposed education would be a sort of amusement, allowing the teacher to better determine the natural bent of the child and compulsion would not be used. Plato also emphasised the positive significance of play, yet he admitted that there are both good and bad pleasures (Frost, 2010).

Play can be regarded as an innate evolutionary mechanism which enables the young to learn about the world and to practise skills that will be needed in adulthood, as with animals play-fighting (Martin, 2016). Alternatively, its forms can be perceived as a consequence of social conditioning, shaped by the needs and habitus of different societies (ibid). According to Andrews (2012), play is such a common term that we all think we know exactly what it is. The value children place on play stems from cultural influences where children link their play experiences to their family, their immediate play environment and the wider community to which they belong. Play is something that happens in all cultures, although it may be organised in different ways and be dependent on the play environment (Canning, 2011). Furthermore, according to Eberle (2014), the Oxford English Dictionary offers five, dense, three-column pages of definitions and uses of play and still manages not to exhaust the subject. Play is 'diversion' and 'pretence'. Play is exercise, play is 'free' and unimpeded movement'; play is 'boiling up'; play is any brisk activity. To 'deliver blows' counts as play, so does trifling with words, 'dalliance' and 'going on strike'. To 'flit and flutter' and to 'frolic' is to play; to 'abstain from work' is play; to 'strut' is to play and to 'clap with the hands' is play. Play is 'capricious', 'brisk', 'lively' and 'irregular'. As seen from Eberle's discussion of play, the concept is more confusing than many in that it can be a noun, a verb or an adjective, as such play involves a complex interaction of opportunity, motivation disposition and skill (Aras, 2016).

At the time that her work was published in the 1930's, Susan Isaacs (1929, cited in Willan, 2009:153) stated that it was possible to be playful at one's work and work at one's play,

thus allowing children to grow and develop. This function of play can still be seen in state-funded early years settings today as far from allowing the children to shape their own learning as play-based approaches do (Walsh *et al*, 2019), the learning process is shaped and led by adults (Johansson, 2004 cited in Samuelsson & Carlsson, 2008:625). Adults are more than happy to initiate play activities between themselves and the children without taking the time to consider what motivates a child's action or involvement in play (Howes & Smith, 1995). However, Sönmez & Ceylan (2017) believe that personal interest is a determining factor in whether a child involves themselves in activities. According to Wood (2010a), play has a very important role in terms of curriculum development and is also essential in the overall personal development of the child, particularly in areas such as social competence, well-being, and their overall progress with regards to their learning (Wood, 2010a; Stephen, 2010). Through play, young children can develop their own personalities and learn the nuances that are implicit when endeavouring to interact with their peers on different tasks. Such traits could include humour, teasing, jokes, mimicry, riddles and rhymes, singing and chanting, clapping (Wood, 2010a; Singer, 2015), as well as disagreement, cooperation, competition and aggression (Tannock, 2008). These early peer interactions serve not only as a source of enjoyment but are necessary for learning (*ibid*). The importance of play within the learning process will be discussed in more detail in chapter two.

Over the last 10-15 years, many organisations with a vested interest in early childhood education have published policy documents highlighting the importance of play (e.g. Association of Teachers and Lecturers, (2004, cited in Whalley, 2015, p.126); National Association for the Education of Young Children, 2005; Whitebread *et al*, 2012; Ofsted, 2015; National Literacy Trust, 2017). From the aforementioned documents it is clear that there has been a move away from the way in which children were historically treated during their early childhood – that is, that they were expected to work on farms or in factories to play being an essential part of their overall learning and development. This said, throughout history, if families were blessed with the economic resources for their children to be educated outside the home they learned basic life skills and educational concepts through what Plato described as purposeful play (Livescu, 2003). As a result, play is now seen as a right rather than a privilege (Souto-Manning, 2017).

Though there have been significant changes to both personal and policy ideologies with regard to the effectiveness of play within the overall context of child development, there still remain two narratives that have consistently re*-emerged throughout the 21st century; liberal romanticism and psychological cognitive development (Rogers & Lapping, 2012). From the perspective of liberal romanticism, play is associated with childhood innocence and the expression of instinctual desires, whereas from the psychological cognitive perspective,

play is viewed as natural and innate with particular emphasis on the overall cognitive development of the child (ibid). The impact that the period known as liberal romanticism had in changing the attitudes of adults towards the importance of play within the context of education has been explored by, among others (Smith, 2012). Before this, there was an attitude that, for children, play was not valuable or indeed a topic that warranted serious debate (Cohen, 2006). One of the most prominent philosophers of this period was Rousseau who described the ideal education for a man (sic). According to Rousseau, 'The lessons the scholars learn from one another in the playground are worth a hundredfold more than what they learn in the class-room', (Rousseau, 1762). He believed that children should be able to roam freely through natural environments, as these would fire their imaginations, inspire their love for freedom, and perform exercises that would encourage the ability of the body (Cohen, 2006). At the same time, Rousseau also criticised those who would rob 'little innocents' of the joys that pass so quickly (ibid). However, there appears to have been a significant shift in attitudes throughout the 19th, 20th, and 21st centuries with the child having become more of a participant in everyday societal life (Smith, 2012).

It follows then that children, like all human beings, are best understood in a social context (Gaskill & Perry, 2014). As with all human beings, (most) children are at their healthiest and most productive when they are born and nurtured in social groups (Ludy-Dobson & Perry, 2010). As a human race, we have thrived for thousands of years because of our neurobiological drive to form safe, nurturing, mutually rewarding, and lasting attachments. (Szalavitz & Perry (2010) cited in Gaskill & Perry, 2014:178). In normative attachment relationships, children can safely explore new experiences and master developmental competencies, including the ability to regulate themselves cognitively, affectively, behaviourally, physiologically, and relationally. Secure attachments ultimately become the basis of resiliency in children who are exposed to distressing experiences (Gaskill & Perry, 2014). As has been indicated at various points throughout the previous paragraphs, children's play and learning have come full circle so much so that play is often referred to as the language of children because children can communicate their thoughts and feelings in ways that they would otherwise not be able to do (Dix, 2013). Thus, adults have gone from being of the opinion that play was not a valuable part of childhood to it now being viewed as essential building blocks in the early learning process that takes place within early years settings.

1.2 History of Early Years Education and Play

Being a child is an inevitable aspect of being human. Prior to, and during medieval times, childhood existed in the context of other relationships. According to Hanawalt (1995 cited in Lascarides and Hinitz, 2011), adults did take responsibility for their children even though there was no civil or church law that stated that they had to do so. Around the same time

the community began to play more of an active role in terms of being in *loco parentis* when the child was older. Since the middle-ages childhood has been viewed as a time of innocence; there has been belief that children are solely ruled by their drives, and that childhood is a basis for the development of the future adult. Children, then as now, need physical nurturing, affection and contact with adults in order to develop normally (Shahar, 1992 cited in Lascarides & Hinitz, 2011 p.30). Historically, there have been several notable philosophers who wrote about the importance of childhood, education and play. Thus, images of childhood are often criticised as they reduce the child to a pre-form of the human being (Lipman [sic], 2003 cited in Weber, 2011, p.238). Therefore this stage of life is seen as a deficiency whereby children are incapable of philosophical deliberation, therefore they behave as if they are incapable of philosophical thought, and this is the reason why it is argued that good thinking skills should be taught early. In essence, children are taught thinking skills rather than other modes of being in the world such as feeling and perceiving (ibid). Gibbons (2007) discusses the philosophy of childhood in terms of the care received in early years' education settings. At the end of the last century, and certainly in this century, an increasing number of parents have chosen to send their child to private nurseries, which has greatly impacted upon the way in which childhood is now shaped (Lareau *et al*, 2016; Stirrup *et al*, 2017).

In the past parents, especially mothers, were expected to be the main caregivers (Walsh & Mason, 2018; Michoń, 2018). However, successive governments have introduced more affordable childcare policies (HM Government, 2013; HM Government, 2019) and schemes including Tax-Free Childcare, 15 Hours Free Childcare, 30 Hours Free Childcare, Tax Credits for Childcare and Universal Credit for Childcare (ibid), which have allowed parents, particularly mothers, to move back into paid employment (Lewis & West, 2017). According to Gentleman (2010), in 1981 only 24% of women returned to work within a year of childbirth; by 2001, it was 67%, and that 76% of mothers now return to work within 12 to 18 months of having a child. Furthermore, there were about 15,000 nurseries in the UK, and the number is growing. Around 277,000 children under three were enrolled in day nurseries, and 21% of children aged under two spend some time in day nurseries. After grandparents, day nurseries are the most popular form of childcare for working parents who have children under three (ibid). More recent figures detailed in the 2019 in the Department for Education Survey of Childcare and Early Years Providers suggest that there are around 24,000 early years providers a rise of 9,000 since 2001 (DfE, 2019) Therefore, no matter which way we look at it, it is now the job of professionals who have been trained in this area of expertise who spend most of their time with an individual child or group of children. This reflected in recent figures published by the Office for National Statistics (ONS) (2017). The employment rate of mothers in England has increased by 11.8 percentage points to 73.7% between 1996 and 2017.

The long-term benefits of attending an early years setting, for children with and without SEND, are examined by Taggart *et al* (2015), who found that children who attend pre-school have better attainment in language, pre-reading and early number concepts. This trend continued as children moved through the early years of primary school with children sustaining their attainment in English and Maths, with the addition of the development of pro-social behaviour. In the same report, the authors also examine the effect of pre-School Attendance on secondary education. They note that at the age of 14 there is no statically significant influence detected for attendance at pre-school. However, it becomes important at the age of 16 when you take into consideration the fact that those who attend pre-School achieve better grades in English and Maths, they are entered for more full GCSE qualifications and have a higher probability of achieving 5 A* - C grades (ibid) When discussing children with SEND the authors suggest that one in three children were more at risk of having a statement of SEN or the equivalent by the age of seven if they had not attended pre-school. However, when completing

1.3 Government Policy and its Impact on Childhood Pedagogy

In today's society, many government and organisational policies are not implemented without some form of consultation. Within the education sector there have been many policies implemented by different government administrations. These policies have been increasingly used by politicians to support the rise of 'new managerialism' by providing answers 'that can guide national policy, allowing the government to take legitimate control over ever more specific areas of educational practice' (Hartas, 2010). The last few years have seen sweeping political changes which has had a significant impact upon the early childhood policy makers, providers and practitioners who have had to adapt swiftly and sensitively to a new political environment. In 2007 those working in services for young children were taking stock after a period of reform and innovation culminating in Every Child Matters (HM Treasury, 2003) and the Early Years Foundation Stage (DCSF, 2008) and were hoping for a period of stability in which to consolidate their practice and provision. The most that was hoped for was for small changes to current regulations to remove a few of the stresses practitioners were experiencing (Brooker, 2014). Since then, however, economic crises and political change have transformed a service that was relatively well resourced and well-regulated into a site of financial cuts and political contestation. A survey by the Pre-School Learning Alliance (2018) found that the current working conditions were affecting their personal relationships and that their work-life balance was affected leading many who work in the profession to consider leaving it (ibid). This said, the events of 1997-2000 were driven by a specific ideology and agenda: a belief that investment in services for young children - both childcare and early education - would lead to an array of benefits for individuals, families, communities and the nation (Brooker, 2014).

Between 2000 and 2007 the underlying conceptions of the new Foundation Stage were rapidly revised, as a framework for working with children under three years. Birth to Three Matters (DfES, 2002) was introduced. Educators welcomed the new guidance pointing out that provision for children under three was grounded in a more holistic view of the individual – as a ‘strong’ child a ‘skilful communicator’ ‘a competent learner’ and a ‘healthy child’ rather than as a learner progressing through the levels of a subject-based curricula (Brooker, 2014). Practitioners also highlighted the absurdity of dividing children into sectors based on their third birthday and consultation continued towards the introduction of a combined and integrated framework from birth to the end of Reception Year (ibid). Both the DfES and the DCSF commissioned literature reviews on young children’s learning and development (David *et al*, 2003; Evangelou *et al*, 2009). The new EYFS however was not the only element of a new network of initiatives that presented a continuing vision of the power of early childhood services to change society (Brooker, 2014).

Moreover, childcare policy documents and initiatives (for example Quality Protects, Every Child Matters, the National Services Framework (Department of Health 1998; HM Treasury 2003; Department of Health and Social Care, 2004), the green paper Care Matters (DfES, 2006), the Children’s Commissioner’s Participation Strategy for 2014 – 2015) all contained a requirement for young people’s participation and involvement in the planning, design and delivery of children’s services. All the aforementioned policy documents highlight the importance and provide a statutory mechanism to facilitate and ensure that children’s voices are taken into account when discussing matters that affect them (McKay, 2014). The notion of pupil voice has received increasing attention over the last decade, a development which is often attributed to the ratification of the United Nations Convention on the Rights of the Child Article 12 (Lundy, 2007). Pupil voice in its widest sense includes every way in which pupils are allowed or encouraged to offer their views or preferences. Taken more narrowly, pupil voice can be understood as pupils taking a more active role in their education and schooling as a direct result of teachers becoming more attentive, in sustained or routine ways to what pupils say about their experience of learning and school life (Whitty & Wisby, 2007).

From September 2008, the EYFS was implemented in all early childhood settings to replace the non-statutory “Birth to Five Guidance”, the foundation curriculum for three and four-year olds, and the National Standards for Day Care (Roberts-Holmes, 2012). Consequently, there was a move towards a curriculum with a focus on experimental play (Mathieson & Banerjee, 2010). Despite early responses that the EYFS was overwhelmingly complex to manage, many of its features made immediate sense to practitioners and parents. It created a continuous framework from birth until the end of their Reception year while underpinning

the goals of Every Child Matters (HM Treasury, 2003) which had already received widespread support. In schools and settings, it rapidly became the 'new normal' for many practitioners as a series of research reports showed (e.g. Children's Workforce Development Council, 2011). Despite practical differences respondents consistently mentioned child-led learning and user-friendly planning, good practice guidelines and improved record-keeping as particularly strong aspects of the framework. 70% of the members of one organisation reported that they referred to the guidance when planning with 90% of members believing that most of the Early Learning Goals were pitched at the right level (DFE, n.d; DFE, 2010; DFE & Teather, 2011) However, the EYFS did not constitute a shift in direction from earlier frameworks but did try to situate its six 'areas of learning' within a holistic context that prioritised relationships, including with a Key Person, partnership with parents and outdoor learning as essential elements. By extending the Foundation Years until the end of Reception it appeared to stake a claim for play-based and child-initiated learning (Brooker, 2014).

In 2011, two years after the full roll out of the EYFS framework, a government review (Tickell, 2011) was commissioned based on a wide range of evidence that was specially gathered, however it coincided with a change in government, a continuing financial crisis and a powerful new ideological stance towards children and families (Lloyd & Penn, 2014). Overnight the Department for Children, Schools and Families (DCSF) which had driven the expansion of services and the focus on qualifications and developed the EYFS was re-named the Department for Education and almost the entire output of the previous administration was removed from the government's website (Hryniewicz, 2016). Even Every Child Matters became inaccessible, as if its aspirations were no longer officially sanctioned (Symonds, 2011). From 2010 to the present many aspects of early childhood provision have been reduced or dismantled, although the need for this provision has continued to rise as the nation's families have experienced increasing financial and social difficulties (Grimshaw Rbery, 2012; Brooker, 2014).

As a result, a new EYFS was published in 2012; it was an attempt to make the original EYFS 'work' by simplifying its remit and removing some of the most difficult goals to achieve (Tickell, 2011). This is in direct contrast to the previous EYFS which was published by the DCSF and presented in such a way that it appeared to be accessible to both children and their wider family network. As well as the document itself the DSCF also provided teachers and parents with other resources such as DVDs and ideas for activities, but again like the new Department for Education's website the 2012 EYFS abjured any positive images of childhood in its presentation (Brooker, 2014). The statutory framework is contained within one short, sombre document and presents its message in a continuous text covering the learning and development, assessment, safeguarding and welfare requirements. The

content carries some mixed messages for providers, practitioners and parents. For instance, the introduction includes a specific avowal of the value of childhood to the child in the here and now rather than as future capital: a secure safe and happy childhood is important. However, this statement is soon forgotten as the document makes clear that it is imperative 'to ensure that children are ready for school' (Evans, 2016; Brooks & Murray, 2018). As such the EYFS provides quality and consistency in all early year's settings so that 'every child makes good progress and no child gets left behind (Roberts-Holmes, 2015). The final phrase in this statement is an uncomfortable reminder of the much criticised 'No Child Left Behind' legislation in the USA commonly described by educators as 'no child left untested' (Brooker, 2014).

The EYFS that was published in 2012/13 was implemented in a far harsher social, economic and political context than earlier curricula. The government responded to the financial crisis of 2008 and to subsequent periods of recession by cutting or reducing funding to all public services including early childhood services. An initial hope that early childhood funding might be ring-fenced has evaporated as Sure Start centres have cut their services or introduced fees for them or in many cases closed. For practitioners the task of maintaining high levels of quality with reduced levels of resource has created continual stress and difficulty. It is for practitioners to struggle to make these systems work by using their knowledge skills and leadership qualities to turn unhelpful policies into genuinely helpful provision (Brooker, 2014). As is evident throughout this section, over the last 15 years, various government initiatives have been established with the primary aim of improving the overall quality of pre-school childcare provision. A key part of the British government's strategy in 2016 was to help every child reach their full potential. In order to do this, the Prime Minister (PM) claimed to guarantee a 'good school place' for every child (May, 2016). However, charitable organisation Save the Children believes that if the government is to deliver on this aim to significantly improve social mobility across the country, it must guarantee every child not just a good school place but a good nursery place too (Save the Children, 2016). The evidence for this is clear; if a child is already behind when they start primary school, they are more likely to be behind throughout school, and the rest of their lives (ibid). So far in this chapter I have dealt with play, the importance of play within the early childhood context and its relative importance in respect of government policy priorities with the election of each government administration. The rest of this chapter will provide an overview of play and play-based approaches and examine how these impact on the learning and overall development of children with SEND.

1.4 Defining Special Educational Needs and Disability (SEND)

Education is important for all children, but even more so for children with disabilities whose social and economic opportunities may be limited (Aron & Loprest, 2012). The term Special

Educational Needs and Disability (SEND) can mean different things depending on the context. The definition has changed considerably over time and, as a consequence, so too has our understanding of which students are likely to have such needs (Banks & McCoy, 2012). As well as the definition changing considerably over time, according to Runswick-Cole and Hodge (2009) so too has the language used. The abandonment of the 11 categories of Handicap in the Warnock Report was a key change which was allied to the shift in policy that 'wherever possible' children should be educated in mainstream schools. Yet the term SEND has come to sustain exclusionary practices within education. Examples include the removal of children with emotional and behavioural disorders (as these children are often considered the most challenging) to an internal exclusion room however, far from alleviating the challenging behaviours, it can in fact exacerbate them as a direct result of missing vital teaching (Stanforth & Rose, 2018). As such, education policy has changed significantly over the last 30 years, both nationally and internationally (Poon-McBrayer & Wong, 2013) particularly in terms of Children and Young People (C&YP) with SEND.

The establishment of the Welfare State in Britain in the 1940s had a significant impact upon the way in which disabled people were viewed by wider society. Many policy changes that took place during this time resulted in the removal of vulnerable children from the exploitative conditions of the workhouses to more caring humanitarian environments (Barnes, 2010). According to Townsend *et al* (1990), the World Health Organisation (WHO) developed the International Classification of Impairments, Disabilities and Handicaps (ICIDH), which listed three overall categories, each encompassing multiple sub-categories. However, in the intervening years between the mid-1900s and the present day, subsequent governments have successfully reduced the number of categories of disablement so much so that it is now one all-encompassing conceptual framework. The main reason why they have been able to do so is in part due to the WHO replacing the ICIDH with the International Classification of Functioning, Disability and Health (ICF) in 2001. It remains to be seen whether medical sociologists will now use the new classifications of disability or whether they will continue to use the classifications of disability given under the ICIDH (Thomas, 2012). The replacement of the ICIDH with ICF has also meant a significant shift in policy ideology for subsequent governments (as noted above) as well as having a positive impact on societal attitudes. The establishment of the ICF has meant that disability can no longer be viewed as an individual pathology in the 21st century. This has now resulted in disability being understood as a social pathology and a genuine impetus for change at every level – so much so that people with disabilities have become part of the fabric of society.

Further to the UNCRC, which was published in 1989 and was effective from September 1990, a separate United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) was held in 2007 in which the rights of individuals with disabilities were

discussed. Whilst the former acknowledged that all children had a right to education, including those with disabilities, the UNCRPD went further than this, recognising the importance of accessibility to the physical, social, economic and cultural environment, to health and education and to information and communication, in enabling persons with disabilities to fully enjoy all human rights and fundamental freedoms (UNCRPD, 2007). According to Mégret (2008), although all individuals are entitled to autonomy, it can be said that people with disabilities essentially lacked this in their everyday lives before the UNCRPD was signed. However, the Convention attempted to raise awareness of their human rights thus leading to more effective autonomy (ibid). As has been indicated both earlier in, and discussed in further detail, throughout this literature review historically society has discounted disabled individuals and erroneously regarded them as defective and in need of charity (Harpur, 2012). The Human Rights Convention of 1948 did protect the rights of all persons with or without a disability, however individuals with disabilities have not benefited from such rights.

As a consequence, the UN adopted a convention that specifically protected the rights of such individuals, thus meaning that they no longer have to argue that they have the right to be included in everyday society (Harpur, 2012). As a direct result of both the 1988 and 1993 Education Act mainstream schools were now obliged to give a single member of staff the responsibility of overseeing the smooth transition of children with special needs at the different stages of their educational career, whilst also being responsible for making sure that the school itself was fulfilling its legal obligations as stipulated in the Code of Practice on the Identification and Assessment of Special Educational Needs (Great Britain Department for Education, 1994). Also around this time of radical educational reform, the Salamanca Statement (UNESCO, 1994) was published and it called upon governments worldwide to improve their education systems in order that they were able to include all children regardless of their differences or difficulties. It also promoted the enrolment of such children in mainstream schools unless alternative provision was necessary (ibid).

During the 1996/97 election campaign the then opposition leader Tony Blair made a speech which would prove crucial to the party's eventual coming to power in 1997. In this speech, he stated that his three priorities were "education, education, education" (Blair, 1996). One of the most important pieces of legislation of the 21st century in this regard was the adoption of the Dakar Statement (UNESCO, 2000), a more wide-ranging extension of the Salamanca Statement of 1994, urging governments worldwide to improve early childhood education for all vulnerable and disadvantaged children. It also advocated the elimination of gender inequality

Consequently, a new piece of legislation was passed entitled the Special Educational Needs and Disability Act (SENDA) (HMSO, 2001) which in turn led to the publication of a new Code of Practice (HMSO, 2001). Following this, the Labour government continued to strengthen its ideology behind inclusion both with the enactment of further legislation (Education Act 2002 (HMSO, 2002), the Disability Discrimination Act 2005 (HMSO, 2005), and the Disability Discrimination Act 2008 (HMSO, 2008)), and with the introduction of new educational initiatives which, as stated earlier, were designed to improve the academic outcomes of both disabled and non-disabled C&YP. Two such initiatives are the National Literacy Strategy (NLS) and the National Numeracy Strategy (NMS), the primary aim of these being to raise the academic attainment of all children (Murphy *et al*, 2006). However, though the premises of the new strategies were well-intentioned the government did not take account of the “one size fits all” philosophy of both approaches. A House of Commons Report published in 2006 by the Education and Skills Committee found that there was a problem with the premise on which SEND provision was based, in that it was fundamentally flawed as children’s needs and learning styles can cover a wide spectrum, but they do not fit into neat categories. Also, according to this report, there seemed to be some confusion in the distinctions between SEN and disability, as, whilst children can have Special Educational Needs, it does not follow that they may have a disability or vice-versa (House of Commons: Education and Skills Committee, 2006).

Under the Equality Act (TSO, 2010), you are disabled if you have a physical or mental impairment that has a substantial and long term negative effect on your ability to carry out normal daily activities (Office of Disability Issues, 2011). The legislation has also updated the Disability Equality Duty (DED) as well as contributing towards the most recent educational reforms for children with SEND. The latest Code of Practice was first published in 2014 and updated in January 2015 (DFE & DoH, 2015). It made significant changes with regard to how children with SEND are taught in schools (Council for Disabled Children, 2014). Unlike the previous Code of Practice, which was published in 2001, the new document extended the age range from 0-18 to 0-25 (*ibid*). There is a clearer focus on the views of C&YP and it takes account of the importance of their role in the decision-making process. It includes guidance on the joint planning and commissioning of services to ensure close co-operation between education, health services, and social care (*ibid*). However, according to McCoy *et al* (2012) there is little understanding of the factors influencing how SEND are identified, thus meaning that the way in which such pupils are identified can vary across different school contexts. The fact that the identification and assessment of children with SEND is a multi-layered process has been, and continues to be, the subject of much discussion both nationally and internationally (Kisler, 2014; Penketh, 2014; Veck, 2014a).

One such piece of legislation is the Children and Families Act (TSO, 2014) which received royal assent in 2014. The passing of this Act is viewed as the culmination to the lifespan of the statement of Special Educational Needs (SEND) to be replaced with the Education, Health and Care Plan (EHCP) as the next generation of educational assessment for C&YP with SEND (Marsh, 2014). One of the perceived benefits of the new EHCPs is the fact that decisions are made about the best way to educate a particular child in consultation with all parties who come into contact with the child on a regular basis and therefore could comprise a variety of professionals such as Speech and Language Therapists, Physiotherapists, Educational Psychologists as well as the child's teacher and teaching assistant. Another perceived benefit is the fact that they will enable families to access the support they need particularly if there is also a sibling without the condition (Hall & Graff, 2010; Walker *et al*, 2016; Galpin *et al*, 2017). By co-producing the EHCPs with the help of both education and health professionals, it is also hoped that these professionals will assist the family to understand, cope with, and ultimately be able to cater for the needs of their child (Hodgson, 2014). As can be seen, over the years, the education of C&YP with SEND has been moving progressively towards person-centred approaches and EHCPs are yet another step in that direction (ibid; Hammond & Palmer, 2018).

Turning our attention back to Early Childhood Education: over the last 10-15 years successive governments within Britain have made significant changes to the way in which the overall learning and development of pre-school children is assessed. Now, just as in European countries (Rintakaorpi, 2016; Määttä & Uusiutu, 2012), observation is used to identify any problems that children are experiencing (Schulz, 2015). These observations are an essential component of documents such as individual education plans (IEPs) or support plans that are drafted for children with educational challenges (Rintakaorpi & Reunamo, 2017), and are intended as tools for planning and cooperation with parents and other professionals (Karila & Alasuutari, 2012). The importance of in-depth identification of SEND as a basis for planning effective educational support is often seen as a key justification for predominant extensive and detailed documentation. This said, documentation practices often go unquestioned even though, through documentation, children's educational challenges are permanently formally registered in written form (Basford & Bath, 2014; Paananen & Lipponen, 2018). Therefore, although the process of identifying SEND may appear to be a neutral practice, it is, nevertheless, a process that is founded on the ideas of good and desirable conduct and the future prospects of the child (Heiskanen *et al*, 2018). Having examined how definitions of SEND and the processes of identification have changed on a national level within this country, I will now look at how these have changed on an international level.

1.5 International Perspectives

In 2007 Peters suggested that by 2025 there will be 900 million children and adults with disabilities worldwide of which 650 million will be in developing countries. The reasons behind this phenomenal projection are many – the HIV/AIDS epidemic, increased war and poverty among the most influential. In 2011 the WHO World Report on Disability suggested that there were more than 1 billion people in the world living with some form of disability of whom nearly 200 million experience considerable difficulties in functioning and that in the years ahead disability will be an even greater concern as it is on the rise. Whilst some of the reasons for this increase have already been mentioned, chronic health conditions such as diabetes, cardiovascular disease, cancer and mental health disorders are on the increase. Furthermore, the report suggested that even in the 21st century individuals with disabilities have poorer health outcomes, lower educational achievements, less economic participation and again higher rates of poverty than individuals without disabilities (WHO, 2011). These facts are borne out by more recent figures published in 2015 (WHO, 2015).

Governments, donor agencies and other interested parties have long promoted the expansion of education systems as a way to create more inclusive societies and a better quality of life for individuals and communities alike (Aikman & Dyer, 2012). As such, policy on education and inclusion has been and continues to be prominent on the international education agenda (Van der Bij *et al*, 2016). From an international point of view, there have been many agreements and legislative moves towards both establishing new provision and transforming established mainstream provision. As a direct consequence of these agreements, international practices are unified by the language that is used across all countries as well as technological advances (Bank, 2012). Despite the fact that there have been many agreements and the fact that countries worldwide claim to keep a record of the number of children and young people with disabilities, the actual number of individuals with disabilities remains unknown (Porter *et al*, 2011; Porter *et al*, 2012). This could be due to the fact that different countries apply the classifications differently which means that the categories and levels of educational provision vary from country to country (Rix *et al*, 2013; Anastasiou & Keller, 2014). Therefore, inclusion can mean different things depending on an individual's country of origin (Marshall & Goodall, 2015).

In Western Australia for example, a framework of competency has been developed to ensure that newly qualified teachers include students with a variety of learning needs in their classrooms. This is made clear in phase one, dimension one, of the framework which requires new teachers to cater for the individual student learning styles and needs, therefore newly-qualified teachers are expected to provide individualised programmes, support and instruction for students with specific needs (Forlin & Chambers, 2011; Aspland *et al*, 2012). However, in China, special education teacher training is not an essential part of teacher training programmes, therefore it is of no surprise that such individuals have had no relevant

information or training which, in turn, impacts upon the way in which C&YP with disabilities are treated in mainstream classrooms (Deng & Poon McBrayer, 2012). The same can also be said for Germany where the primary focus is on segregation rather than on inclusion (Jodkowska, 2013), as the education system in this country is extremely rigid (Jahnukainen, 2013). This is in spite of the ratification of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD, 2007: Article 24) which states that Parties to the Convention should ensure that:

- a) Persons with disabilities are not excluded from the general education system on the basis of disability, and that children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability;
- b) Persons with disabilities can access an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live;
- c) Reasonable accommodation of the individual's requirements is provided;
- d) Persons with disabilities receive the support required, within the general education system, to facilitate their effective education;
- e) Effective individualized support measures are provided in environments that maximize academic and social development, consistent with the goal of full inclusion.

In contrast to the German education system, the remit of the Swedish education system is far-reaching (Lundahl *et al*, 2013), so much so that, over the years there has been increasing pressure on schools to take responsibility for children and young people with disabilities (Andreasson & Carlsson, 2013). However, prior to children being educated alongside their non-disabled peers, Sweden, in line with the rest of Europe, educated children and young people in separate institutions. In recent years, however, the variation in the student population has increased (Mattson & Hansen, 2009). In view of the latter point, equity has become the cornerstone of this education system which has, in turn, meant that all children and young people, regardless of disability, socio-economic status, creed, ethnicity or gender are educated alongside their non-disabled peers (Andreasson & Carlsson, 2013). Maxwell and Granlund (2011) also believe that there is a high level of integration as a result of inclusive education policies, and these have allowed Sweden to fulfil their international obligations of providing an inclusive school system and environment. The changes to Swedish education policy are a direct result of the on-going National Action Plan for Disability Policy (World Health Organisation, 2000) which has in turn, had a direct impact upon the Swedish National Agency for Education. Whilst the former and latter inclusive education policies have been formulated at a national level, they are also formulated at a municipal level (Göransson *et al*, 2011). The inclusiveness of the Swedish education system is evident when examining the figures for the number of children with disabilities who attend mainstream schools in this country.

According to Nilholm and Alm (2010) few children with disabilities attend special schools apart from those children and young people who attend special programmes whom are diagnosed with developmental disorders. Despite the claims made by Nilholm and Alm (2010) it has been counter-claimed by Gasser *et al* (2014) that children with disabilities are disproportionately excluded from mainstream education, especially those with learning disabilities, as well as being frequently subjected to social exclusion. As has already been explained earlier in this chapter, the majority of children and young people with disabilities are educated in mainstream schools as opposed to Germany where the majority of pupils with disabilities are taught in special schools. Bearing the latter point in mind it is of no surprise that there are not many special educational needs teachers in Sweden and those that there are have an assistive, advisory role which allows these teachers to collaborate with mainstream teachers to adapt the teaching resources that are used by mainstream teachers on an everyday basis (Takala *et al*, 2012).

1.6 Children with SEND and Play

Like other educational institutions, early years settings have a number of requirements that they are expected to meet in relation to children with SEND. These requirements follow the EYFS framework and underlying them all is the condition for settings to provide equality of opportunity and anti-discriminatory practices ensuring that every child is included and supported (Rix & Parry, 2014). Previous research exploring the relationship between SEND and early years education has suggested that attending a pre-school has a positive impact on the cognitive development of children at risk of SEND. The positive effects of children's play on development in the preschool years have been well documented (Hanline *et al*, 2010). Teaching children to play is important as it is flexible, can be used in multiple settings and sets the occasion for having social and communicative interactions with peers, increases the likelihood of learning in natural and inclusive settings and may offer a foundation for developing leisure skills. Furthermore, play is a context in which intervention strategies for other goals are embedded (Wolery, 1994 cited in Barton & Wolery, 2008 p.109). Young children learn their ongoing experiences with the world rather than less contextually relevant experiences; as a result, play affords contextually relevant instructional opportunities for acquiring, maintaining and generalising other skills (Barton & Wolery, 2008).

The play of young children with disabilities is believed to be affected by the nature of the child's disability (Frey & Kaiser, 2011). Such children may imitate play interactions less often and respond to play engagements differently from other children due to the cognitive (Bergen 2002), communication (Simeonsson *et al*, 2012) physical (Powrie *et al*, 2015) and social limitations. If a child has physical limitations skills such as reaching for and moving to retrieve a desired object that they wish to play with is reduced. Children with social-

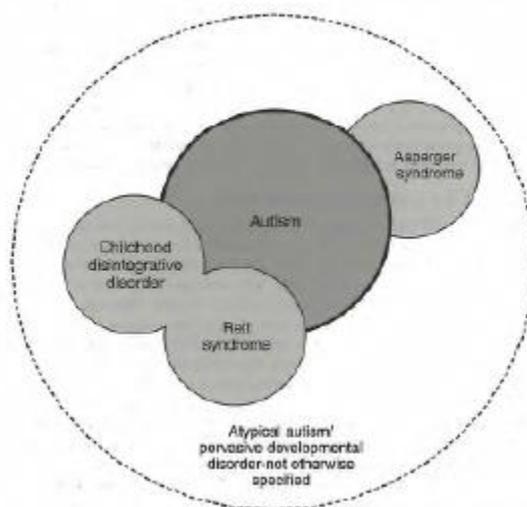
communitive limitations such as communication delays or autism spectrum condition may find appropriately initiating play with others or responding to play bids challenging (Wolfberg & Schuler, 1999). Children with low cognitive abilities as well as those with autism may show a restrictive repertoire of play behaviours, poor motor planning and more solitary play (Katz, 2014). This said, depending on the constellation of a child's special needs, play may be affected in such a way as to limit developmental progress and interaction with others (Childress, 2011). They often exhibit deficits in play that parallel deficits in other areas of development and although deficits in motor, speech, cognitive, or social-emotional domains are readily addressed in early intervention programmes, play deficits are often neglected because emphasis is directed towards educational goals (Hamm, 2006). Goodley and Runswick-Cole (2010) believe that the consequences of the perception that the child with a disability is deficient, other than lacking in terms of play is wide-ranging for them. Once a child's development is identified as atypical, abnormal play becomes the primary tool for assessment and intervention. If this continues to be the case, there is a risk that play will become a means of governance surveillance and control of disabled children and their family's normalcy. The former and latter scenarios give a strong indication as to the value placed on play for disabled and non-disabled children – for children with disabilities play is only valued as a way for developmental goals to be achieved whereas for typically developing children play has been seen as of intrinsic value yet for children with disabilities play has all too often been seen as instrumental. Having examined how government rhetoric has influenced both national and international guidelines on how children with SEND are assessed diagnosed and supported in early years settings within a general context, the rest of this chapter will explore how play-based approaches that are specifically designed for children with SEND help them to achieve and sustain long-term educational aspirations.

1.7 Clinical Presentation of Autism Spectrum Condition

Since autism was first discovered over 60 years ago the condition has been researched by many academics across a wide range of disciplines and it still puzzles them today, perhaps because there is still no known cause (Wolff, 2004). Autism Spectrum Condition (ASC) is a neurodevelopmental disorder which is thought to manifest itself in early childhood (Sparks *et al*, 2002) and is characterised by three main clinical deficits – impairments in social interaction, social communication, and also restrictive repetitive behaviours (Lawrence, 2010; Kita and Hosokawa, 2011). ASC is diagnosed using the American Psychiatric Association's Diagnostic and Statistical Manual (DSM) which lists the visible symptoms that are typically displayed by a child who has the condition. Until very recently ASC was diagnosed using DSM IV.

Based on the diagnostic description of ASC in DSM-IV, professionals made use of several diagnostic instruments in order to make a diagnosis of ASC. This has since been updated and clinicians are now expected to use the diagnostic criteria specified in DSM-V, but are also expected to be, less reliant on diagnostic instruments when assessing an individual for ASC (Volkmar & Reichow, 2013). Moreover, authors such as Paul (2013), as well as noting that in future there will be significant differences to how professionals will diagnose ASC, also acknowledge that such changes will result in the sub-categories of Pervasive Developmental Disorder (PDD), Asperger syndrome and Rett syndrome, no longer recognised as medical conditions within themselves. This means that all children will now obtain a diagnosis of ASC. DSM V also omits criterion related to delay in, or lack of, development of spoken language; whereas DSM IV gave a specific age range for symptoms to be present i.e. “prior to age 3”, DSM V only states that symptoms should be present in the early developmental period (Paul, 2013; Grzadzinski *et al*, 2013).

Figure 1.1: The overlap in clinical diagnosis between Autism, Asperger’s Syndrome, Rett Disorder and Childhood Disintegrative Disorder



(Lord & Risi, 2000)

While it is hoped that DSM V will make it easier for clinicians to assess and diagnose children and young people with ASC, some authors such as Wing *et al* (2011) have criticised the implementation of DSM V as, when DSM IV was introduced it widened the diagnostic criteria for Autism Spectrum Condition and it is feared that DSM V will accentuate this (ibid). Kent *et al* (2013) also raise concerns about the way in which children suspected of having ASC will be diagnosed, as the new criteria might exclude some young people from being diagnosed with the condition. For instance, some individuals may meet the majority of the criteria in terms of specificity but may fail to meet the majority of criteria in terms of sensitivity, resulting in many children not receiving the relevant diagnosis.

For the researcher, the question remains who will be diagnosed with ASC? Kent *et al* (2013), as well as providing some answers as to why the sub-categories of autism are no longer in use, have also found that under the new DSM V criteria only 46% of children would be diagnosed with Pervasive Development Disorder (PDD) and that the percentage of children who would receive a full diagnosis of ASC would be highly dependent upon the Intelligence Quotient (IQ) score of the individual child - with around 90% of children with an IQ score of below 40 meeting the full diagnostic benchmarks, and around 22% meeting the diagnostic measures if they had an IQ score of 70 or above. As part of the diagnostic process parents are asked to complete the Autism Diagnostic Interview Revised (ADI-R) or the Autism Diagnostic Observation Schedule - Generic (ADOS-G). Both of these instruments are used when diagnosing ASC, thus allowing clinicians to obtain information on the social, communicative, and stereotyped behaviour of a child or adolescent with PDD and ASC.

Though the ADI-R and ADOS-G are both utilised when diagnosing ASC, they are not to be used in isolation as they measure slightly different aspects of behaviour, and as such should be used as part of a much larger, more prolonged assessment process (de Bildt *et al*, 2004). Whilst the ADI-R and the ADOS-G are used to assess the severity of the clinical deficits encompassed within the “triad of impairments”, parents may also be asked to complete the Child Behaviour Checklist which allows clinicians to also take account of the behavioural and emotional difficulties that might otherwise not be displayed by the child during the assessment process (Hus & Lord, 2012).

1.8 Neurology of Autism

In 2008, the total prevalence of autism and related ASCs in children aged eight years was measured at 11.3 in 1,000 (1 in 88) (Baio, 2012), however more recent estimates (2010) suggest that this number may be as high as 14.7 in 1,000 (1 in 68) (Baio, 2014). Several studies have investigated whether or not brain abnormalities are associated with autism (Bernier & Gerdts, 2010). The head circumferences of individuals with ASC were also found to be abnormally large in children between the ages of 2-3 years old. It is thought that the increase in brain size is due to excessive amounts of white matter in the cerebellum and cerebrum and there also appeared to be increased amounts of grey matter in the cerebrum within which the frontal lobes were most abnormal (Courchense *et al*, 2003; Esser *et al*, 2010). Moreover, in a more recent study brain growth curves have once more indicated that there is brain overgrowth in both young males and females with ASC followed by slowed growth during later childhood when the normal brain catches up with autistic brain volumes. Thereafter brain volumes decrease in size in ASC at a faster rate than normal, so that by later adulthood the brain is slightly smaller than average (Esser *et al*, 2010; Courchense *et*

al, 2011; Sample, 2017; Hazlett *et al*, 2017). Furthermore, the brain stem, hippocampus, amygdala, and corpus callosum are also thought to be affected (Manes *et al*, 1999; Sweeten *et al*, 2002; Rojas *et al*, 2004; Lander & Garrett-Mayer, 2006; Kemper, 2010; Sturm *et al*, 2013). As well as investigating the molecular pathology-physiology of autism in the brain it is also important to note that autism is a heterogeneous disorder, therefore it is essential to consider clinical variations within the disorder such as IQ and the presence of seizures (Amaral *et al*, 2008).

Although there is still no known overall cause of ASC, some authors such as Dapretto *et al* (2006); Lacoboni and Dapretto (2006); and Oberman *et al* (2007) have all suggested reasons for why individuals with autism display certain behaviours. In terms of social communication, the aforementioned authors have suggested that the dysfunction of the Mirror Neuron System (MNS) may be responsible for children with ASC being unable to recognise a wide range of both subtle and more prominent facial expressions and emotions (Volkmar, 2011).

Hence, this may be the reason for why children with ASC enjoy watching programmes and reading books, which include characters with exaggerated facial expressions as they can use these as a point of reference when trying to identify other peoples' emotions in a given context (Fidler, 2009). Oberman *et al* (2007) have also suggested that the premotor and parietal cortices are not the only regions of the brain affected by dysfunction of the MNS. Consequently, MNS dysfunction may not be the only reason for the behavioural and communication deficits associated with autism. Moreover, Oberman argues that what is perhaps more socially relevant, rather than simply understanding an action's motor properties and being able to produce them, is to be able to understand the thoughts, intentions, and emotions that guide the observed action. As a direct result of over 25 years of research into how individuals with ASC react to said emotions, academics feel that there is something else at play - that of theory of mind or lack thereof. In a study undertaken by Baron-Cohen *et al* in 1985, the hypothesis that children diagnosed with ASC lacked "theory of mind" was tested. To do this the researchers set up a scenario whereby there were two dolls and a marble. Each doll has a basket and the first doll places the marble in her basket she then places the basket on the floor and leaves the scenario for a short time. When she returns the second doll has hidden the marble in another location. All 16 autistic children failed the 'Belief Question' for both trials.

This difference between the groups was highly significant. In addition, the 16 autistic children who failed pointed to where the marble really was rather to any other possible locations. If the children point to the new location, then they will pass the test. However, all the children that were involved in this experiment pointed to the original location of the

marble, thus failing the test. In failing to correctly identify where the marble had been hidden Baron-Cohen believed that this showed a cognitive deficit which could not be attributed to intellectual capacity and had the potential to explain why children on the autism spectrum do not engage in pretend play or indeed socialise with their peers (Baron-Cohen *et al*, 1985). The absence of a theory of mind in autism has been discussed in several papers over the intervening years between the 1980's and the noughties. Two such examples include Tager-Flusberg (2007) and Moran *et al* (2011).

1.9 Play and Autism Spectrum Condition

Historical studies, such as the one undertaken by Barnett and Kleiber (1984) have also found that birth order like the onset of Autism Spectrum Condition (ASC) (discussed in a previous section of this literature review) impacts upon how playful a child will be in the future. As such, it follows that first born children are happier to play alone than their younger siblings – with younger siblings being more popular and possessing the appropriate social skills to be able to forge closer friendships with their peers. These relationships/friendships are fostered in a risk-free environment this in turn helps children to develop coping skills which are essential throughout life (Saunders *et al*, 1999; Hess & Bundy, 2003). Whilst it may be true that young children with playful personalities are more able to cope with stress as has been found by Gordon (2014), the same can also be said about young adults. A more recent study carried out by Magnuson and Barnett (2013) found that university students who have a playful personality are more active and energetic, as well as being split along gender and racial lines (Barnett, 2011).

Furthermore, it was also reported in the Magnuson and Barnett (2013) study suggests that prevailing definitions of coping are similar in conceptualisation to playfulness in that both lay emphasis on the ability to cognitively reframe situations to derive more positive emotional outcomes. In addition, these explanations of playfulness are also quite similar to the literature that views coping as predominantly a cognitive-emotional process. The coping strategies invoked more frequently by playful as opposed to less playful were found to be more cognitive emotional in nature and more approach and engagement focused. Furthermore, more and less playful students generally possessed the same coping resources, more playful students utilised adaptive and stressor focused coping styles more frequently than less playful students.

When conducting a similar study in a workplace environment it was found that a playful personality helped to ease a situation especially if the situation occurs between work colleagues (Proyer, 2014). The overall aim of this research project, as the title suggests, is to assess whether a play-based curriculum has a significant impact upon the overall development of children with ASC with a particular focus on the development of language.

So far this section of the literature review has discussed the general importance of play and a playful personality throughout childhood without much reference to the particular group of interest for this study. According to Mastrangelo (2009a) general definitions of play fail to recognise that children with autism demonstrate any play behaviours whatsoever. This is in part due to the fact that for children with ASC the various stages of play never truly develop, or occur in a fragmented fashion (Mastrangelo, 2009b). Despite the fact that Mastrangelo (2009b) is of the opinion that the various stages of play never truly develop, more recent studies have shown that the play experiences of children with ASC develop differently (Kasari *et al*, 2013) and are often skewed by restricted interests and stereotypic and repetitive behaviours (Jung & Sainato, 2013).

This means that many children with ASC miss out on opportunities to interact with their peers, to develop appropriate play behaviours and also other critical skills for their overall development and this can in turn exacerbate their disability (Wolfberg & Schuler, 1999). Bearing this latter point in mind teachers and support staff should help young children with ASC to engage in a meaningful way with play materials and their peers, thus allowing those with ASC to acquire the critical development skills mentioned above via naturally occurring learning opportunities. Further to Jung and Sainato's (2013) study which found that young children with ASC engage in repetitive and stereotypic play behaviours, other studies such as the one carried out by Field *et al* (2014) has shown that imitation can reduce these behaviours. In other recent studies by Field *et al* (2011) and Field *et al* (2013), it was found that imitation enhances social responsiveness as well as having a positive effect on object manipulation, decreasing self-stimulating behaviours and increasing gaze behaviour. In addition to Field *et al*'s (2013) study Lieberman and Yoder (2012) also found a positive link between object manipulation and improved developmental and learning outcomes for individuals with ASC. By focussing on the aforementioned behaviours through the use of appropriate play materials, it is hoped that teachers and support staff will be able to help these children to improve their social and communicative interactions with their peers (Jung & Sainato, 2013; Pierucci *et al*, 2014).

As has been suggested in the previous few paragraphs, children with ASC struggle particularly with the social interaction element of play. For any child, the first phase of play consists of manipulating toys, however children with autism display atypical features, such as limiting their play to a small selection of toys or an isolated part of a toy. They can become preoccupied for long periods with one object or they will choose toys which will help them to develop their senses including taste, touch, and smell. They will also play with normal everyday objects such as pots and pans, paper and pens and other household items (Mensink, 2010). Kelly (2009) in her thesis states that play and social development for this particular group of children "goes hand in hand – one is the vehicle for the other". In

discussing the social motivation theory of autism Chevallier *et al* (2012) have suggested that social motivation models of ASC posit that early-onset impairments in social attention set in motion developmental processes that ultimately deprive the child of adequate social learning experiences, which in turn leads to imbalances in attending to social and non-social stimuli further disrupting social skill and social cognitive development. Therefore, incorporating play into the treatment plan of children with autism is very important because the play skills of this particular group of children are very different from typically developing children.

Furthermore, according to Askins *et al* (2013) previous literature, that has compared the play behaviours of typically developing children to those with intellectual disabilities, has shown that children with intellectual disabilities often have decreased motivation to interact with objects in the context of play resulting in increased dependence on others and a sense of incompetence when they attempt to produce effects in their environment (*ibid*). A further way in which the play behaviours of children with ASC can be significantly improved is by having a best friend. According to Frankel *et al* (2011) having a best friend may be very important for a child with ASC, as the friend can help to reduce the stress that can be experienced by individuals with ASC and also increase their social competence. However, the authors of this study found that, whilst parents are willing to organise play dates for their neurotypical child with other neurotypical children, they are less willing to organise them with children with specific disabilities such as ASC. Having said this, the overall findings of this study point towards the fact that children with ASC spend more time engaged in positive play behaviours such as turn-taking and conversing, and such behaviours are subsequently reflected in their behaviour at school (*ibid*). As has been discussed earlier in this literature review, play therapy is often used for children who have suffered from bereavement and a variety of other conditions. Whilst play therapy is often used in such circumstances, it is also used to help develop the emotional, intellectual and social skills of those children diagnosed with certain disabilities such as ASC. If play therapy is to be used within education settings, particularly early year's settings, the professional who partakes in these sessions must be adequately trained in that particular area, as there are specific techniques that must be used and also theoretical models that must be followed (Parker & O'Brien, 2011).

With respect to ASC perhaps the most appropriate type of play therapy to discuss is Adlerian Play Therapy its primary purpose being to aid the reduction of disruptive behaviours which come about because of the difficulties linked to the clinical deficits of ASC (Meany-Walen *et al*, 2014). As with all forms of play therapy, the relationship between client and therapist is of central importance. The premise that underpins Adlerian Play Therapy is that it is a collaborative educational process whereby the client enhances and becomes enlightened about his or her life patterns. Throughout the therapy process the therapist

collects information about their client, so that they can understand and interpret the client's lifestyle and develop a picture of how the client navigates through life. By being allowed to do this, the therapist makes soft interpretations and relays this information back to the client so that the client becomes aware of their out-of-consciousness processes (Meany-Walen, 2010). The above paragraph briefly outlines a type of play therapy known as Adlerian Play Therapy and how it can be used to reduce the adverse behaviours associated with ASC. In a research paper by Hartshorne and Herr (1983) they explain the three theories that underpinned and still underpin the causes of ASC today. These are psychoanalytic, existential and behavioural. They go on to explain that Adlerian Play Therapy has elements of all three of the above approaches and promotes cooperation between the child and therapist. This happens because, rather than the therapist trying to prevent adverse behaviours the therapist to a certain degree encourages them.

As such by limiting, ignoring, and encouraging certain behaviours, it helps a child to understand what it means to cooperate with the people around them and thus be more able to engage in instructional tasks. Whilst Adlerian Play Therapy can be used in educational settings, another type of play therapy which is particularly popular within the health sector is Floor-Time Play Therapy (McCannel, 2012). When occupational therapists are consulted as part of the diagnosis process this type of play therapy helps these professionals to assess the severity of the child's condition. Using this approach in such a way may bias the way the child behaves as this therapy approach takes place in the child's natural environment. This is in contrast to other play therapy techniques which usually take place in environments outside the home. Floor-Time Play Therapy centres on the child's own occupations as well as viewing them holistically and as an individual. As a result, the children are encouraged through purposeful activities to learn acceptable and unacceptable behaviours (Dionne & Martini, 2011). As well as social skills being taught with the aid of play therapy, play therapy can also be used to help children gain a moral education. However, in helping a child to obtain this, a specialist type of play therapy can be used – that of sand therapy. Whilst this therapy approach mirrors other play therapy techniques in that it involves both a therapist and client, it differs in that it uses wet or dry sand to create images. Sometimes the client and therapist will talk during the session at others they will remain silent. However, the overall aim of this therapy just like all the others discussed throughout this section remains the same to help with the overall development process (Mahalle *et al*, 2014).

1.10 History of the Montessori Education System

Montessori education was established by Italian doctor Maria Montessori after becoming one of the first female doctors to graduate from medical school in Rome. After graduating, she was offered an internship in the psychiatric unit of the University Hospital of Rome

(Giardiello, 2014). It was during this placement that she was able to gain a deeper understanding of the women and children she was working with, particularly those children who had mental disabilities (Isaacs, 2012). It was through working in close contact with these children during her time at the psychiatric unit that Montessori came to believe that the children who were in the care of the psychiatric unit and thus viewed by those from outside the medical profession as “hapless children” deserved an education, just as much as those who were not diagnosed with mental disabilities and thus deemed ‘normal’ (O’Donnell, 2007). Having decided this to be the case, she became aware of two philosophers who believed that children with mental retardation could be taught.

According to Simpson (2007), before Itard and Seguin, many people had tried various methods to educate a boy known as “sauvage de l’Aveyron” (loosely translated as the wild child of Aveyron) but had deemed him ineducable due to his natural selfish interests, instinctual behaviours and his being amoral and lacking in any notion of property. Despite this however, after his initial assessment of the boy, Itard believed that a programme of instruction that was carefully conceived and experimentally implemented could possibly cure the boy of his idiotism. Following on from Itard’s early investigations concerning the education of “idiot” children, Seguin went even further in trying to establish an educational programme that would be suitable for children with mental disabilities by taking the principle of care and education to the next level using sensorial training. Seguin himself was influenced by John Locke, David Hume and Étienne Bonnot de Condillac who all believed that sensorial experiences were important for the development of the human mind. Seguin was the first person in nineteenth century France to spend most of his time working in shelters for what were at the time termed “idiotic children” but what is now more commonly known as ASC. However, he emigrated to the USA and it was here that he moved away from working directly with ‘idiotic children’ and more towards health policy by becoming a coordinator for various institutes that were being opened for the “feeble minded”. It was also around this time that Montessori found some educational materials that had been developed by Seguin and she would develop these further when she eventually developed her own educational curriculum for children with Special Educational Needs (Constant, 2014).

1.11 Maria Montessori’s Vision for Change

Education is one of the instruments that is used to empower children to live peacefully and to build peace and unity in the world, to be citizens and leaders of tomorrow (Herrington, 2015; Pal & Vishwakarma, 2017). This is not a new concept - Maria Montessori believed that a more peaceful world could be brought about through education (Williams & Keith, 2000; Baligadoo, 2014; Hinkle, 2016). She created schools that were places of joy and contentment (Werner Andrews, 2015) and, in the aftermath of the Second World War

proposed that focusing upon and understanding qualities of childhood could provide new directions and better ways of life for humanity (Manzo, 2018; Lillard & McHugh, 2019). Montessori educators today, following her ideals, see great potential in children as agents for social change giving hope for the future. If educated with care and given freedom in prepared environments, children gain a sense of order and develop the self-discipline and self-control that bring about cooperative working and peaceful living. Montessori educators too model calm and positive attitudes and aim to provide children with opportunities to experience goodness and trust so that they can, in turn, pass on these qualities (Luff *et al*, 2016). Whilst Montessori did eventually open a nursery (more commonly known as a Casa di Bambini (or Children's House) that was based on her educational ethos the road to doing so had not been easy. During her teenage years, she was the only female to attend a technical school for boys and her first ambition was to become an engineer, however, as has already been indicated in this section, she became Italy's first female doctor.

Her ambition lay in developing an education system for the less privileged and those with additional needs within society, although this is no longer the case within 21st century society (O'Donnell, 2013). Originally Maria Montessori wanted her method of education to become a tool for changing society, a tool for helping people have a better life. During her early career she worked in a mental asylum with young children. There, she observed the children manipulating bread; following these observations she began to develop didactic materials which would allow the children to broaden their skills – she developed an educational programme that was very much based on the real world (EDCHAT, 2012). She then entered them into government examinations with the surprising result that they out-performed some of the children who were being educated in the state system. Wondering why this was the case, she went back to University to study the mind instead of the body as well as investigate what was wrong with mainstream education (Thayer-Bacon, 2012). Whilst Seguin's first book, which she translated from French to Italian, became the driving force behind her return to University, it was after studying Seguin's second book that she realised that her educational ethos, as with his, could also be applied to normal children (*ibid*).

Montessori education is often considered to be a form of playful learning (Martin, 2016). This was never the primary aim of the system, however, over the course of several years, it has become increasingly viewed as such, with the teacher guiding the children's learning towards established goals (Miller *et al*. 2003). The children may choose their own activities, conferring a sense of freedom but the teacher still subtly leads them. The whole point of the Montessori educational ethos, however, is for children to direct their own learning by choosing the materials that will enable them to achieve their goals. The Montessori educational philosophy of children directing their own learning does not always fit in with the education system of the 21st century, thus the teacher ends up choosing the materials

that they deem appropriate for the child to achieve their goal. This means that some observers view Montessori education as loose and amorphous, whilst others see it as rigid, when actually in terms of the English education system it falls between the two as it embeds freedom within structure and structure within freedom (Lillard, 2013). This freedom within structure and structure within freedom enable children to develop their executive functioning skills. This has been highlighted by Howell *et al* (2013) who suggest that whilst this was not one of the aims of the Montessori educational philosophy, the way in which lessons are structured (i.e. in three hour blocks) and the activities engaged in, enable the brain to develop equilibrium, elasticity and adaptability. This in turn allows children to develop far superior executive functioning skills, which reflects Montessori's belief that the child must complete work at their own pace. Whilst Montessori has become an education system for those parents who can afford it (Loveless, 2012), Montessori herself was asked by the Director General of the Association of Good Building in Rome to open an infant school in one of his model tenement buildings in the San Lorenzo district. He wanted all the children aged 2.5 – 5 years to attend school in order to reduce the rampant vandalism caused by unsupervised children while their parents were at work at the nearby factories (therefore, you could say that these schools were originally set up for children of a lower socio-economic background) and he planned to open sixteen infant schools in the surrounding area. It was for this reason that he offered Montessori a ground floor apartment which opened onto a courtyard along with another apartment in the building for a teacher. She saw this as the perfect opportunity to study non-deficient children in a scientific manner even if they were socially disadvantaged (O'Donnell, 2013).

1.12 Maria Montessori's Ethos and Creative Practice

With regard to childhood, pretence and creativity appear to be ubiquitous characteristics. Therefore, it is of no surprise that a playful, creative mind-set is also an important part of childhood as this can also improve a child's overall development (Kirkham & Kidd, 2017). Unlike the EYFS, the Montessori curriculum aims to educate the whole child based on a broad cultural curriculum encompassing all NC subjects (Prochazka, 2006 cited in Kirkham & Kidd, 2017:22). Furthermore, unlike the NC, the Montessori pedagogy is underpinned by the concept of stage-like development, with children said to progress through key stages lasting six years beginning with the absorbent mind (0-6 years) through to childhood (6-12 years) and finally adolescence (12-18 years) (Kirkham & Kidd, 2017). As such, constructivist ideas are central throughout Montessori education with active approaches and object manipulation at the heart of learning (Lillard *et al*, 2013). Bearing the latter point in mind practical activities render abstract concepts concrete and employ the body in the service of the mind to develop concentration and independence (Lillard, 2007).

The two aforementioned aspects of human character are developed and assessed using specialist materials that increase in difficulty through a hierarchical sequence. This allows children to progress through, and use the materials at their own pace; they are largely free to choose what activities they engage in, which, in turn, allows children to develop internal direction, motivation and self-discipline (Kirkham & Kidd, 2017). The latter point is corroborated by Krause (2015) who also found that each material offered within a Montessori environment offers a child an isolated concept that develops from simple to complex and concrete to abstract, with built-in control for error and therefore acts as a stepping stone to future learning. Moreover, unlike the NC the Montessori educational ethos means that the children in their care are not assessed using standardised tests as it has been found that grades and rewards can decrease motivation and creativity; this goes against Montessori educational values and, therefore, for all intents and purposes the Montessori curriculum seems to promote creativity (Kirkham & Kidd, 2017).

It is of no surprise to me that objects and materials have long been associated with many educational philosophies and thus become an important learning tool in active and proactive teaching where the construction of knowledge in turn becomes part of the overall development of knowledge (Guerra & Zuccoli, 2012). As well as knowledge being constructed through the use of specialist materials and objects, these specialist materials can also help a child to discover their creative side. The standard definition of creativity is bipartite and requires both originality and effectiveness (Runco & Jaeger, 2012). Creativity is an important element of a child's overall development both on a personal level and within wider society, as it enables them to adapt to different situations, and is predominantly influenced by their environment (Amabile & Pillemer, 2012; Bruno, 2013). These same authors also believe that whilst in the past creativity has been linked to the cognitive abilities associated with intelligence more recently studies have shown that intelligence might not be as important as divergent thinking, mental flexibility, and the ability to encode and combine information in different ways (Besançon, 2013).

Having said this, Passmore (1985 cited in Liang & Chia, 2014:106) believed that imagination is one of the most important cognitive capacities as it enables people to go beyond actual experience and construct alternative possibilities in which a fragmented situation becomes a meaningful whole, thus creative imagination emphasises the attributes of initiation and originality. As well as helping young children to foster and develop their creativity, the Montessori educational ethos also allows children to learn how to look after themselves and their surrounding environment through practical life activities such as hand washing, dusting and mopping. The aforementioned activities allow pre-school children and toddlers to become independent, develop their concentration, and allow them to prepare for later work by learning the basic skills needed for reading and mathematics (Conway & Fink, 2015).

Gilder (2012) corroborates the findings of Conway and Fink's study in that she also believes that the Montessori Method allows children to develop the skills that are essential for learning such as concentration and hand-eye coordination. However, they also offer some further reasons why the practical life skills are important for a child's overall development, such as small and large motor coordination, sensorial quantity awareness, tracking and alignment, crossing the midline, refinement of movement, language and vocabulary growth, categorising, sequencing, counting, tracking, one-to-one correspondence, increased attention span and ultimately inner confidence and self-direction (ibid).

Early Childhood is the foundation on which children build the rest of their lives (May *et al*, 2006). It is not just a preparation for the next stage, but it is vitally important in itself. For children there is no distinction between work and play. Learning for children is a rewarding and enjoyable experience in which they explore, investigate, discover, create, practise, rehearse, repeat, revise and consolidate their learning; develop knowledge and skills, understanding and attitudes (ibid). They recognise the importance of children's play. It is an essential and rich part of the learning process supporting them in all areas of development. Play is a powerful motivator encouraging children to be creative and to develop their ideas, understanding and language. Play is also very flexible and therefore able to suit the learning style of each child. It can provide multiple ways for children to learn a variety of different skills and concepts. In providing these active learning opportunities through play researchers and educators gain an understanding of how central play is to the EYFS framework.

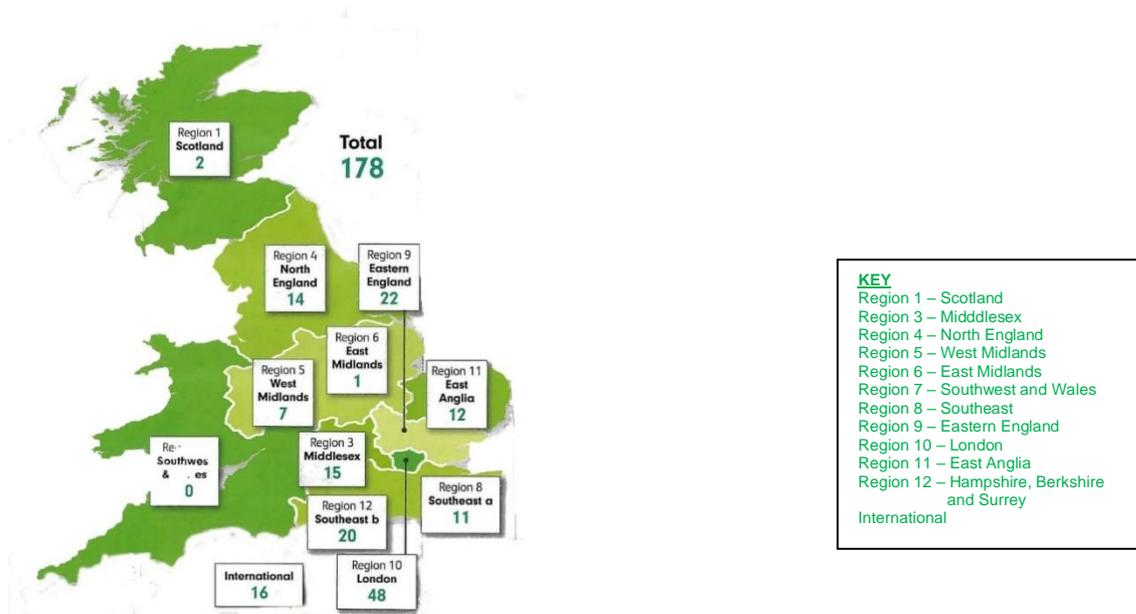
1.13 Limitations of the Montessori Approach

Whilst the above sections have detailed how and why the Montessori approach is a viable alternative to the NC, it is not without its critics. The earliest criticisms date back to 1914. Dr William Heard Kilpatrick, an Assistant Professor of the Philosophy of Education at Columbia University, spoke out against the fact that Montessori's methods rested on the theory of the "unfolding" of a primitive ego when it ought to rest on attainment of education through never ending engagement with an environment of problems throughout life by a purposive and reflective learner (Kibbey, 1977). He also felt that Montessori ignored activities that would bring children to cooperative enterprise. Kilpatrick felt there was a lack of imaginative play and thought, especially through the use of didactic materials which had to be used in a specific manner (ibid). The above author points out, however, that Montessori's definition of imagination is one based on reality and that she therefore felt that the child should be introduced to a lesson or material in an orderly manner. Ültanir (2012) points out that, for constructivists, learners are not passive receptors of knowledge provided by [the] instructor. Instead, they construct meanings for concepts. As a result, learning is best undertaken in 'real world' contexts in which students may acquire and test concepts. The same author

explains that in Montessori the learning process is based on self-direction. Therefore, the fact that Montessori does not encourage cooperative working is to be expected as independent work allows the child to work at his/her own pace, develop his/her inner discipline and creative problem solving skills (ibid).

Kibbey (1977) stated that ‘Montessori rarely employs art for its own sake at the pre-school level’. This fundamentally undermined one of the founding principles of the Montessori approach – creativity – however, the author proposed that the associated drawbacks could be remedied by introducing art into the curriculum. Lillard (2011) refers to presence of art materials in the Montessori classroom, and it is my experience that arts materials were available in the Montessori nursery I attended as a child. Chattin-McNichols (1991) conducted research on the levels of classroom intervention among 422 Montessori practitioners from Canada, Haiti, Trinidad and United States, during various types of classroom activity. He found that in the area of fantasy play the teachers were much more variable in their responses to the children, implying a lack of knowledge of the correct response to this type of play. He postulated that Montessori teacher education programmes need to make certain that their graduates are more fully prepared to address this issue. This said, more recent literature (Lillard *et al*, 2017; Taggart *et al*, 2018; Lillard & Heise, 2016) does not make reference to the above criticisms, rather, they promote play-based approaches such as Montessori as a catch-all solution for the shortcomings of the current education system. Hence, the one major drawback of Montessori within Britain is lack of accessibility, as shown by the map below, which highlights the number of accredited Montessori settings by British region and internationally (EU, USA and Eastern countries).

Figure 1.2: MEAB Accredited Schools by Region



(Montessori International, 2016)

There is a clear north-south divide in availability, and as they are private, they are beyond the financial reach of the disadvantaged families they were originally designed for.

1.14 Alternative Play-Based Approaches

Whilst this research project will focus on two specific play-based approaches, Montessori (School B) and School B (names have been changed for the purposes of anonymity and confidentiality), there are many early years settings that subscribe to play-based approaches such as Steiner Waldorf and McMillan. As with Montessori, Steiner Waldorf education aims to respect the essential nature of childhood and, in the early years, an unhurried environment enables children to develop a range of skills which provide a sound foundation for emotional, social and cognitive intelligence later (Nicol, 2016). The kindergarten environment provides a quality sensory experience and is equipped with simple, natural materials and toys enabling the child to develop their spontaneous play which arises from within the innate creativity of each child (ibid). Whilst Steiner Waldorf schools are very similar to Montessori in terms of their global reach (Boland, 2015) they have been criticised for failing to take into account what this expansion means in terms of transmission of ideas into different cultures and different settings (Rawson, 2010). In a similar but different vein to Rawson's paper, an article published by the Guardian states that Ofsted have asked the British government to 'look closely' at Steiner schools in Britain and examine the underlying principles of these settings as children are not adequately safeguarded, nor are they receiving a good education, in fact quite the opposite (Adams, 2019).

The work of Rachel and Margaret McMillan also needs to be considered here; like Montessori the two sisters began to offer classes to those from lower socio-economic backgrounds - girls in particular (Nutbrown & Clough, 2016). It was through this that they became aware of the relationship between workers' physical environment and their intellectual development. At the same time, they were also campaigning for free school meals to be introduced as they believed that hungry children could not learn (ibid). Once the Free School Meals Act of 1906 was passed the two sisters decided to open their own school clinic and 'Night Camp' in 1908 where children living in the slums of London could wash and put on clean clothes (Nutbrown & Clough, 2016; Giardiello, 2014). Five years later, in 1913, the sisters opened their Open-Air Nursery Centre and Training Centre in Deptford for 30 children aged between 18 months and seven years. Rachel was responsible, in the most part for the kindergarten and her sister worked on health issues. Again, for the McMillan sisters, the principal objective of nursery schools was to promote children's physical, emotional and intellectual wellbeing. Time, space and fresh air were at

the heart of the McMillan approach. According to Margaret McMillan: “Free activity involves the provision of spontaneous and purposeful activity in spacious open-air conditions ... as well as an atmosphere of love, joy and freedom ...” (Pound, 2008, p.25). Physical nurture was only a starting point – the starved intellect and emotions had also to be nurtured so food and rich experiences (including music, stories, play and free movement) were regarded as being of equal importance (Pound, 2011). The classrooms were known as ‘shelters’ as just like Montessori they believed that children should spend as much time as possible playing and gardening in the open air (Nutbrown & Clough, 2016). Although the McMillan sisters are associated with the Victorian and Edwardian periods, their educational principles are known to be still followed today in specific nursery schools in Hull and London.

1.15 Concluding Thoughts

This chapter has set out to provide a definition of play that is appropriate within the context of this thesis. Defining play is complicated - what we do know is that through play children learn to develop their own sense of self as well as how to work with others. The philosophical foundations of play have changed the way adults view children and childhood itself. Thus, play is now regarded as one of the essential building blocks in the early learning process. Two facts are established: i) that mothers are no longer expected to be the main caregivers for their children and ii) attending early years settings has long-term benefits for children’s future academic performance. In theory various governments in the UK have recognised the importance of a holistic approach to the development of children. In practice pressures on individual schools (budgets, league tables, staffing shortages) impact negatively on their ability to give children with SEND the support they need. Educationalists and politicians have regularly introduced changes in education that have not borne the fruit expected (Mackenzie, 2001). During the Thatcher period [which I see as ending in 1997, even though she was no longer the Prime Minister], a new set of priorities relating to the economy and efficiency came to dominate education policy and continue to do so (Boronski & Hassan, 2015). According to Lister (2006), it is as citizen-workers of the future that children figure as the prime assets of the ‘social investment state’. The predominant ethos of all governments is to educate children to become economically productive and viable units (Beckley, 2018), rather than ensuring that children achieve their full potential, whatever that might be (Lister, 2006). Moreover, Greenstein (2014) believes that the core values and assumptions of education need to be challenged as the tying of education to economic and market rationalities does not go hand in hand with the inclusion of students with disabilities or indeed other marginalised groups. There is an expressed desire by the current government to provide ‘a good school place for every child’ (May, 2016) but this needs to be preceded by a good nursery place to prevent children falling behind throughout their education and possibly throughout their lives. This is even more the case for children with SEND.

Over the years there have been various official definitions of SEND, culminating in the most recent given in the Equality Act 2010 (TSO, 2010). The definition of SEND, including the international classifications, have all impacted upon the education of children with SEND and how they are catered for within schools (Norwich, 2016; Hollenwerger, 2017). As with schools, early years settings have a number of requirements that they are expected to meet in relation to children with SEND, to ensure that all children are included and supported (National Association of Special Educational Needs, 2017). The positive effects of children's play on development in the preschool years have been well documented therefore it is no surprise to me that play is a context in which intervention strategies for other goals are embedded, especially for children with SEND (Goldstein, 2012 White, n.d.).

Play-based approaches have been under consideration as a way to educate children with SEND since the late 1800s/early 1900s. One such approach is that of the Italian doctor Maria Montessori. She was influenced not only by her own observations but also by two prominent philosophers, Itard and Seguin, who, unlike most in their day, believed that children with SEND were capable of being educated. Features of her approach included the freedom for children to progress at their own pace and promotion of autonomy in learning. She devised materials that allowed children to develop the understanding of concepts moving from simple to complex and concrete to abstract. Her method eschewed standardised tests, instead promoting creativity. Through her approach children with SEND performed better in national tests than their non-disabled peers.

Steiner Waldorf is another play-based approach that achieved international significance, while McMillan was developed with the UK and is currently confined to two nursery schools in the country. Whilst the following statement was made regarding Steiner Waldorf education by Oldfield (2001, p.xxiii), it can be applied to all play-based approaches:

The educational principles presented are not all unique to Waldorf and early childhood educators working with young children, in the many and varied settings, will find much that is common ground. It is not so much the differences between the various approaches to early years education which are of interest but the shared insight which brings confirmation of the way forward into the future.

Therefore, this thesis will examine the similarities and differences between two play-based approaches and how these approaches can inform the education of children, including those with SEND. One approach is Montessori, used in School B School in Lancashire, the other is the approach implemented by School B in Merseyside. The names of both schools have been changed for the purposes of anonymity.

CHAPTER TWO – REVIEW OF THE LITERATURE

This chapter examines the literature with reference to play-based approaches and how these cater for children both with and without SEND. It describes in detail the importance of play in the learning process and the impact this has on future overall academic outcomes. It then examines play therapy and the therapeutic benefits of play, including the importance of the relationship between the therapist and child. Moving through, it looks at the relationship between play and character development, playfulness and the acquisition of certain skills. It also examines other aspects of play, including outdoor play and socio-economic status. Finally, it looks at play, play-based approaches and their impact on children with SEND.

2.1 The Importance of Play within the Learning Process

Brain research carried out over the last 20 years has shown that the early years are an optimal time for learning across all areas (Black *et al*, 2017; Britto *et al*, 2017). Children's play experiences and interactions during play affect the way the brain develops and helps shape its structures. It is also a vehicle for increasing neural structures and a means of children learning the skills they will need for later life (Little & Wyver, 2008). Moreover, a more recent study, conducted by Woolf (2011), as well as corroborating the findings of Little and Wyver's (2008) study, also found that Brain-derived Neurotrophic Factor (BDNF), a protein that is essential for the growth and maintenance of brain cells, is increased. This same author also suggests that play not only creates connections between neurons – it makes new connections between different parts of the brain, making links between thoughts and emotions and rational and creative left and right brain centres (*ibid*). Whilst it may be true that play is an essential part of childhood, international studies have revealed that children now spend more time being instructed and tested and as such, no longer learn through play and exploration using their bodies or imaginations (Nicolopoulou, 2010). The concerns highlighted in the aforementioned study were also emphasised in an open letter written by Ellyatt *et al* (2013) who believed that:

The role of play is being down-valued in England's nurseries and [that] two key qualifications currently being drawn up for nursery teachers and child carers no longer require training in how children learn through play. Current policy suggestions would mean that the tests and targets which dominate primary education will soon be foisted upon four-year-olds.

(Extract from an open letter published in the Telegraph)

Due to the increased focus on academic testing, many children struggle with the standards that are expected of them as they are developmentally inappropriate. The latter point is also raised in the above letter as "Research does not support an early start to testing and quasi-

formal teaching, in fact it provides considerable evidence to challenge it” (ibid). Taking the latter point into consideration it is no surprise that child wellbeing has become an increasing concern in the UK with one in 12 of our adolescents deliberately harming themselves and nearly 80,000 children and young people currently suffering from severe depression including 8,000 children aged under 10 years of age (Save Childhood Movement, 2014).

According to Ellyatt (2015, p.3):

Over the few last decades there have been significant changes in way in which families are structured, a faster-paced lifestyle, a more risk-averse society, and the increasing value of adult-led rather than child initiated learning activities ... We are designed to be dynamic natural learners and to each have a unique set of environmentally modifiable competences. The task of cultures should therefore be to find ways of supporting the innate intelligences and strategies of young children so that every child feels that he or she matters and that their particular competencies have value.

A report written on behalf of the government by Dame Clare Tickell, which looked into the effectiveness of the EYFS, found that children’s experiences in their early life can strongly influence their outcomes in later life. These outcomes can impact across a wide range of areas including their health, social behaviour, employment and educational attainment. The evidence that was submitted when compiling this report highlighted the importance of the first three years of life. If a child has a strong start in life it increases the probability of positive outcomes in later life, whereas a weak foundation increases the risk of later difficulties (Tickell, 2011). The EYFS seeks to provide quality and consistency in all early years’ settings so that every child makes good progress and no child gets left behind (ibid). In a review of early education and childcare qualifications published the following year Nutbrown (2012) provides more detail about how ‘quality’ and ‘consistency’ can be achieved. Firstly, she suggested that there was a need for a new streamlined system of qualifications as the old system was too complicated and was not equipping the workforce with the necessary knowledge and skills to be able to provide high quality early education and care. Secondly, she wanted to see a raising of standards in the early years and enhanced professionalism in the workforce. Continuing professional development for all who work in the sector was an essential part of this, therefore the author felt that individual practitioners and the settings they work in should prioritise this. Furthermore, Nutbrown believed that excellent pedagogical leadership was vital for improving the quality of provision and these progression opportunities need to be open to all. Despite this, more recent research suggests that targets which are often made the subject of government policy (such as qualifications and teacher:child ratios) are not a simple mechanism through which we can expect an improvement in quality (Blanden *et al*, 2017).

Consistency also needs to be considered here. In a report by Callanan *et al* (2017), published by the Department for Education, there were several points of discussion that highlighted the importance of consistency for young children in early-years settings, as fostering happy and confident children was a primary goal. Therefore, warm and positive relationships between staff and children as well as strong relationships with parents (Callanan *et al*, 2017) were advantageous if settings were to achieve consistency. It was also discussed in terms of transition and assessment with practitioners stating that matching activities to a child's interests is an important element when achieving routine and consistency for young children (*ibid*). Furthermore, if assessment is to be used to evaluate consistency then moderation must be carried out at a 'hub' or 'cluster' level across settings to improve consistency and accuracy across settings (*ibid*). Peyton (2017) as well as corroborating the findings of the DfE report provides further detail on the importance of consistency in early-years settings. She believes that achieving consistency between standards in the learning/caring environment and the child's home can be a challenge but as detailed in the DfE report can be promoted through effective collaboration and meaningful communication between early-years providers and parents. Collaboration and consistency also go hand-in-hand when it comes to policy implementation and dealing with challenging issues such as bullying behaviour among preschool children and this, in turn, builds trust (*ibid*).

The areas of teaching covered within the EYFS are creative development; knowledge and understanding of the world; communication; language and literacy; problem solving; reasoning and numeracy (DFE, 2014). Whilst the areas discussed above are the main focus of the EYFS, and thus have an assessment element to them, there are also more subtle learning processes taking place, specifically the continuation of sex-role stereotypes. As such, research carried out by Witt (1997) suggests that gender stereotyping can, and does, take place well before they reach the appropriate age to attend early years' settings, with parents dressing their child in gender-specific colours, presenting them with gender-differentiated toys and expecting different behaviour from boys and girls. Thus, young children associate certain tasks and possessions with men or women as early as two years old, i.e. vacuum cleaners and food are associated with women and cars and tools with men. Furthermore, by the age of three or four children are able to attribute certain stereotypic occupations, toys and activities to each gender and by age five they are able to attribute certain personality traits to males and females (Spinner *et al*, 2018). Such knowledge is then constantly reinforced so that by the age of eight or nine (Halim *et al*, 2013) children are aware of what is expected of them and the types of activities that will allow them to assume their role within society in later life (Bee & Boyd, 2010). Research studies in the USA have suggested that because gender differences in toy interests are large and relatively consistent many parents may seek simplistic explanations for these differences (Hines &

Davis (2018 cited in Dinella and Weisgram, 2018:254) such as a genetic basis or identification with a same gender parent, but when looking at the scientific literature on the topic, the best answer to the question is that it is complicated and like many areas of individuals' behaviour and preferences, there are biological, cognitive and social factors to consider (Dinella & Weisgram, 2018).

The multitude of factors at play are also not mutually exclusive and interact in ways that are not yet well understood (Weisgram & Bruun, 2018). From a biological perspective, researchers have examined the androgens on girls' interests in masculine toys and how other primates react to masculine and feminine toys. Berenbaum and Hines (1992) recruited 3 to 8 year-old boys and girls with congenital adrenal hypoplasia (CAH) who had been exposed to high levels of androgen in the pre- and early- postnatal periods, comparing them with their unexposed relatives of the same age. Masculine toys were linked to transportation and construction; the feminine toys included dolls, kitchen supplies, crayons and paper. Neutral toys were included as a control – jigsaw puzzles and board games. The results suggest that early hormone exposure in females has a masculinising effect on sex-typed toy preferences. Moreover, Berenbaum and Beltz (2016) found that activity interests and participation – from childhood toy preferences to adult hobbies and occupations – continue to be strongly linked to androgen exposure. Furthermore, women with exposure to high levels of pre-natal androgens due to CAH were more likely than controls to have income in the top 20th percentile, reflecting employment in male-typical, higher-paying jobs despite having lower [academic attainment] and more psychosocial problems. From a social perspective, researchers have examined how socio-cultural factors such as parents (Kollmeyer *et al*, 2018), siblings (Endendijk *et al*, 2018), peers (Serbin *et al*, 2001; Todd *et al*, 2017), media and advertising (Brown & Stone, cited in Dinella & Weisgram, 2018:254) impact on children's interests in gender-typed toys. The cognitive developmental perspective suggests that children are attending to the gendered messages given by social agents and then making toy choices based on these implicit and explicit messages which include gender stereotypes, gender labels and gender-typed colours and themes (Dinella & Weisgram, 2018).

Historically, there has been a view that children do not distinguish between play and work (Wood & Attfield, 2005). Consequently, there have been few attempts to elicit children's views (Darbyshire *et al*, 2005). However, this attitude has slowly changed over the years (Howard & McInness, 2013). In Garrick *et al* (2010), children were asked to answer various questions about play opportunities within their early years' settings. The findings of this report were presented as answers to four key questions:

- i) To what extent and in what manner are children's experiences in early years settings based around play and how enjoyable are those experiences?
- ii) How well do children's experiences in Early Years settings meet individual children's needs and interests?
- iii) To what extent do children's experiences in early years settings include physical activity, including physical activity outdoors?
- iv) To what extent do children's views inform planning and delivery of the Early Years Foundation Stage by practitioners?

In response to the first question, children in the EYFS talked about a range of play opportunities, including 'pretend play', construction, drawing and painting. Further, the amount of opportunities for young children to partake in such activities varied from setting to setting (ibid). Duffy (2006:32-33) believes that play is an opportunity to practise and consolidate the skills and knowledge they have acquired. It is also an opportunity for the imagination to come into play and ideas from the unconscious to bubble up. As they play children become aware of patterns and start to see possible connections (ibid). This has implications for the relevance of play-based curricula, which is the subject of the current study. Second, play can be linked to all six 'Areas of Learning' but children expressed that they got the most enjoyment out of play when it was linked to Creative Development, Knowledge and Understanding of the World, Physical Development, and some aspects of Communication, Language and Literacy (Garrick *et al*, 2010). Further, according to Drake (2014, p.xvii),

- Learning should be primarily first-hand, experiential and active. Young children need opportunities and space to explore and discover.
- Children's independence and autonomy needs [sic] to be promoted. Children should be encouraged to take responsibility for their learning.
- Talk is central to the learning process. It should be reciprocal and often initiated and led by the child.
- Young children are social beings and learning should take place in a social context.

Third, children indicated a preference for favourite play areas and resources. Again, however, the type of areas and resources made available to the children varied from setting to setting. Where children have access to a wide range of opportunities to learn through play, they partake in a wider range of more complex play activities (Garrick *et al*, 2010). A challenge for practitioners is to add to and adapt materials, areas within the environment and activities so that they remain fresh and engaging for the children (Brock, 2019 p.167). However, there is a fine balance between ensuring that children are offered materials, equipment, ideas and experiences that are challenging, but not so far removed from the children's existing experiences and knowledge that they are perceived as threatening,

leading to a feeling of anxiety as they are unable to link the new experience to their existing framework (Duffy, 2006 p.40). Fourth, some children indicated that they play the most when it involves 'real world' experiences such as going shopping, arranging flowers and caring for animals – these 'real world' experiences were most likely to be provided for those children whose parents had chosen to send their child to a child minder (Garrick *et al*, 2010). Brock (2019) points out that play serves as an important bridging activity between home and classroom cultures and thus contributes to the child's identity.

In terms of the second question, which relates to whether or not the early years setting caters for children's individual needs and interests, Garrick *et al* (2010) pointed out that in general children responded to this question in a positive way. Children's comments suggested that their needs and interests were usually catered for, whilst also appreciating the social play opportunities, social occasions and opportunities to care for others in their care settings (*ibid*). A briefing paper published by the childhood alliance suggests that effective play in the early years has a strong correlation with school success throughout their schooling years (Bay Area Early Childhood Funders, 2007). Through meaningful play experiences, they are more likely to retain skills and concepts they have learned, with these concepts being developed through activities such as counting, sorting, sequencing, predicting, hypothesising and evaluating (*ibid*). In terms of schooling, this helps a child by allowing them to use a particular object to symbolise another and is essential in subjects like literacy and numeracy, as Roman numerals can represent numbers, and letters can represent sounds and words (Libertus *et al*, 2011; Claessens & Engel, 2013; Sarama *et al*, 2012).

With respect to the third question (to what extent children's experiences in early years settings include physical activity, including physical activity outdoors), most children talked about their enjoyment of physical activities, particularly outdoors. Some children commented positively on being free to choose when to play outside. In a few settings, children described enjoyment of indoor physical activities (DFE, 2010e). It is worth mentioning activity theory here as it fits well with constructivist early-years settings and thus the two play-based approaches under investigation in this research project. It is a powerful socio-cultural and socio-historical lens through which most physical forms of activity can be analysed. It focuses on the interaction of human activity and consciousness within its relevant environmental context (Jonassen & Rohrer-Murphy, 1999). This interaction is essential if constructivist learning environments (CLEs) are to be activity orientated (*ibid*). Furthermore, the interpretive nature of activity theory seeks to find connections between the local School Bnd the broader culture and history. As has become clear throughout this and the previous chapter prominent theorists and philosophers agree that children's play is a universal activity that promotes development (McClintic & Petty, 2015).

Recent developments within Early Years Learning (EYL) has led to an increased focus on the quality and quantity of physical activity provision for young children. The latest UK physical activity guidelines recommend that children capable of walking should be active for 180 minutes and that babies and non-walking toddlers are provided with ample opportunity to 'move' Furthermore, the revision of the EYFS framework in 2012 saw 'Physical Development' promoted to one of three key aims (Stirrup *et al*, 2015), as active living habits are encouraged and developed during this time (Connelly *et al*, 2018). Children are naturally drawn to the outdoors and want to be there thus providing a wonderful opportunity for learning. If given the choice children will choose to be outdoors at least 50% of their waking time. However, early childhood educators may not associate natural outdoors settings with learning, nor may they see an alignment between developmentally appropriate practice in early childhood experiences and unstructured play experiences in nature (Ernst, 2014). Having said this outdoor play offers unique possibilities for learning and development. Moreover, socially, children are not as inhibited outdoors and they are assertive, concentrate longer and benefit from a higher level of learning outdoors (McClintic & Petty, 2015).

In relation to the fourth question: To what extent do children's views inform planning and delivery of the Early Years Foundation Stage by practitioners? Children in the sample often saw themselves as capable of being involved in planning their own activities. Children seemed to find it easier to choose and lead their own activities when the space was less clearly organised into areas designated for specific play themes. Children enjoyed planning their activities, but often they were not as involved in the planning process as they could have been. Many children they spoke to did not recognise the setting record as their own and some children were unhappy that they could not understand the written information (Garrick *et al*, 2010). However, the thoughts cited in the latter report are nothing new, as a report published in 2009 by the previous Labour government shows (DCSF, 2009). They believed that planning should involve deciding 'what next' in order to support the child's learning and responding to what the practitioner understands about the child from the assessment process. As with the current assessment process this cycle was thought about in terms of recorded observations, assessments possibly matched to areas of learning and stages of development and planning for the next day or week. However, in the same document the government offered some examples of how practitioners and the children in their care could become partners in learning:

- i. a child decided to paint a tree using the mark making skills he had recently acquired, and as he was doing this he described his thinking to the adult who took an active interest;

- ii. by moving away from a very structured adult-led approach in all early years classes where planning was determined weeks in advance, to a system that takes account what practitioners have observed in child-initiated activities. The adults have an active role in the plan-do-review sessions but the children have chosen what they want to do and the adults support them to think and to use language, therefore ensuring that the children are making the most of what practitioners are offering them.

It is clear from the latter documents and more recent literature (McInnes *et al*, 2011) that whilst the government wants early years education to become more child-centred, practitioners still make decisions as to the type of activities they want the children in their care to engage in so that they reach their developmental targets.

Over the past decade the rhetoric of ‘children’s participation’ has become prominent within the policy and practice that affect children, despite children’s participation (including those who attend early-years settings) being on the UNCRC agenda since 1990 (Cele & van der Burgt, 2015). As a result, there have been many conceptualisations of children’s participation within the sociology of childhood. Therefore, it is not surprising that these two perspectives are frequently combined. Nonetheless they both seem relevant to understanding various positions. For instance, according to Correia *et al* (2019), studies have shown that there is a need to frame children’s participation from a legal and sociological point of view as well as the need to validate children’s voices and take their views into account, reinforcing the notion of the competent child. Furthermore, participation requires involvement as a way of translating the abstract concept into real action thus increasing their sense of belonging and well-being (*ibid*). In European countries such as Finland children are viewed as active learners, agents of their lives and reproducers of the culture instead of being needy and helpless beings. Thus, children’s participation is seen as part of their learning and the curriculum ensures that children’s ideas and views are taken into account in the pedagogical practices and it is suggested that practitioners are used to support and guide children to become conscious of their own learning (Kangas, 2016). Although the British government has made great strides towards their policy rhetoric becoming child-centred as the Garrick *et al* (2010) report shows, the actual practice is in direct contrast to ECE policy of our European counterparts.

Another area of play that is essential to a child’s overall development is dramatic play. Dramatic play is useful in helping children to develop their oral language skills. The language skills they will come to master and develop will in turn help them with their reading comprehension skills; to become competent in their writing abilities and also to deepen their understanding of subjects such as history, social studies and science. Another key element of play is that it promotes positive approaches to learning and develops children’s curiosity

and motivation as well as helping them to master the key skills that will allow them to succeed over the course of their schooling career (Denham *et al*, 2013a). Through imaginative play and the sharing of materials children learn to cooperate with each other, how to handle frustration, and also to empathise with others (Ray & Smith, 2010; Denham *et al*, 2013b).

As a result, children start school with better social skills and are also more likely to avoid high-risk activities as adolescents (Jackson *et al*, 2012). Whilst many documents I have reviewed examine the benefits of play in terms of social and psychological development, there seems to be less of a focus on benefits of play for a child's overall physical development. According to Andrews (2012), a child's physical development comes about because of the early social interaction and bonding process that takes place between parents and their child. There is a close link between intellectual development and physical play as the brain needs to be able to control the muscles and nerves before any physical activity can take place. In allowing practised physical activity to take place children will increase their ability to control their muscles (Carson *et al*, 2015; Macpherson *et al*, 2017), but as has been indicated in this paragraph the benefits of physical play are often overlooked in favour of the social and cognitive benefits of play (Pesce *et al*, 2016; Muentener *et al*, 2018). Whilst the previous few paragraphs have focused on the general benefits of play across the EYFS, the advantages of play have also been widely recognised across a wide range of sectors including the prison (Brown & Gibbons, 2018) and health service (Koukourikos *et al*, 2015) - thus developing into a profession in its own right, as they often occupy nooks and niches overlooked or considered to be beyond the remit of the wider Children and Families' Workforce (Wragg, 2016). Within prisons, play visits allow prisoners, their partner and their children to interact. Trained playworkers facilitate interaction and encourage family bonding through exploratory child-led play (Woodall & Kinsella, 2017)). Playwork uses the medium of play as a mechanism to address various physical, mental and emotional needs of children and allows children a sense of agency in a prison environment where the structure and procedure are usually enforced upon them (Wragg, 2016). Health play specialists understand child development and use therapeutic play activities to help children cope when in hospital (National Careers Service, 2019).

2.2 Play Therapy and the Therapeutic Benefits of Play

As illustrated in the previous section the benefits of play are now recognised across a wide range of sectors apart from education; within these sectors it is known as play therapy. Play therapy is a type of counselling that aims to meet the emotional needs of children in developmentally appropriate ways. Unlike adults, children are unable to fully express themselves using verbal language, therefore children use the toys offered to them to express themselves symbolically (Ray *et al*, 2013). Bratton *et al* (2005) found that play

therapy is often used to treat children's behavioural and emotional problems due to its responsiveness to their unique and varied developmental needs. Child-Centred Play Therapy (CCPT) was initially established by Virginia Axline after undertaking research with young children (Reddy & Hirisave, 2014). Play therapists endeavour to create an environment which is both nurturing and safe with a few carefully selected toys so that the child they are working with can lead without limitations. Through such play sessions they are able to build rapport with the child and explore the issues that may be at the root of the child's problem (ibid).

Most children under the age of 11 years of age lack the capacity for abstract thought which is a prerequisite to meaningful verbal expression and understanding of complex issues, motives and feelings. Hence, unlike adults who can verbalise their thoughts and feelings, children express such feelings through play. As such, play therapy is viewed as a vehicle for communication between the child and therapist as it is assumed that children will use play materials to directly or symbolically act out feelings, thoughts and experiences that they are not able to meaningfully express through words. Play allows children to bridge the gap between their experiences and understanding – thereby providing the means for insight, learning, problem solving, coping and mastery (Stagnitti, 2004; Bratton *et al*, 2005). In total there are eight principles which should be followed:

1. The therapist must develop a warm, friendly relationship with the child in which good rapport is established as soon as possible.
2. The therapist accepts the child exactly as he is.
3. The therapist establishes a feeling of permissiveness in the relationship so that the child feels free to express his feelings completely.
4. The therapist is alert to recognise the feelings the child is expressing and reflects those feelings back to him in such a manner that he gains insight into his behaviour.
5. The therapist maintains a deep respect for the child's ability to solve his own problems if given an opportunity to do so. The responsibility to make choices and to institute change is the child's.
6. The therapist does not attempt to direct the child's actions or conversation in any manner. The child leads the way; the therapist follows.
7. The therapist does not attempt to hurry the therapy along. It is a gradual process and is recognised as such by the therapist.
8. The therapist establishes only those limitations that are necessary to anchor the therapy to the world of reality and to make the child aware of his responsibility in the relationship.

(Axline, 1989, p.69-70)

Play and play therapy have been adapted over the years in order that the technique be implemented across a wide variety of settings, but the methods that underpin the technique of play therapy have remained the same over the last 60 years (Porter *et al*, 2009). The premise behind each of the play therapy techniques is different depending upon what the therapy is being used for. In family play therapy (also known as child relationship enhancement therapy) parents undertake the role of therapist, thus allowing the parent and child to work towards a healthier relationship. Children also have a preference for an undisrupted rhythm or routine. They favour a predictable, orderly world however if the child's parents become unjust, unfair or inconsistent it can foster feelings of anxiousness, thus leaving them feeling unsafe (Research History, 2012). In this way using play in the family therapy process can help the child to feel safe and rebuild the relationship that they would previously have had with their parents. A second type of play therapy, discussed by Porter *et al* (2009), is child-centred play therapy. This type is most appropriate when the child and therapist are from culturally different backgrounds and aims to have the therapist see the child's point of view, value and accept the child without inflicting beliefs or solutions on the child, and to work within the child's cultural family values in order to promote cooperation and a positive outcome. The final type of play therapy that Porter *et al* discuss is Adlerian play therapy. This type encourages the child to enter into an equal association with an adult and to choose what/how they communicate during therapy sessions. In this way Adlerian play therapy is useful for dealing with problem behaviours, trauma and abuse (*ibid*). As recently as 2014, Maslow's hierarchy of needs has had to be revised to include cognitive needs (knowledge and meaning), aesthetic needs (appreciation and search for beauty), and transcendence needs (helping others to achieve self-actualisation) (McLeod, 2014). One of the main things that children need is to feel safe. At times children may not feel safe especially when they are feeling unwell. They may develop a fear and suffer from nightmares and may need reassurance for a short time after their illness that they have not needed previously.

So far, I have discussed the importance of learning through play with particular reference to the EYFS, but unfortunately in more recent years play, and play therapy are being used across a variety of sectors (as discussed above) as well as throughout a child's later schooling years to deal with an array of problems. In a study undertaken by Clack *et al* (2010) it was found that there was confusion among the professionals (from health, education, social care and child care) who took part in the study as to the differences between play therapy and other forms of intervention which involve play. As such, whilst the participants in this study can see that play therapy can be effective for treating behavioural and emotional problems they may also view other forms of play intervention as therapy, though this is not the case. In another study that explored the therapeutic relationship between children and therapists Robinson (2011) found that in the past the therapeutic

relationship between client and therapist has been viewed as a 'means to an end' as well as a 'means within itself'. Therefore, the child's participation in the therapeutic relationship is seen as vital for it is he who needs to change. Common reasons for a child being referred for play therapy during their later childhood include: social or academic underachievement, disturbed sleep, parents who have separated or divorced, problems making friends, being argumentative, bullying or being bullied, being withdrawn, trauma (including physical, emotional and sexual abuse), loss or bereavement, attachment difficulties, eating disorders, inappropriate emotional responses and elective mutism (ibid).

2.3 Character Development and Play

The previous paragraphs have allowed me to give a brief overview of the historical context of play. Nowadays however, according to Ginsburg (2007) play allows children to develop their physical, social, cognitive and emotional strength through creativity, and it is by developing these strengths that children are subsequently able to engage with the world around them. In being able to engage with the world around them children are able to conquer their fears – perhaps alongside their peers or with the help of adult caregivers. As they overcome their fears children will go on to develop new skills which will lead to enhanced confidence and the foundations of resiliency skills to be able to deal with the challenges that they may face in later life (ibid). Bettelheim (1987), as well as corroborating the findings of Ginsburg (2007), goes on to explain that from observing children during periods of play we can gain an understanding of how children see and construe the world around them. Moreover, through playing children can express how they are feeling, which they would otherwise be unable to do as a result of having not yet developed sufficient verbal language skills. Furthermore, Bettelheim believes that children do not enter into spontaneous play to while away time (although the adults who are caring for them, and the children themselves, may think they are), rather what children choose to play with is motivated by inner processes, desires, problems and anxieties (ibid).

According to Thorne (1993, cited in Lester and Russell, 2010 p.2), through play, children adapt their worlds so that they are either less scary or less boring, thus allowing them to move beyond existing ways of being, to transform structures and cross borders. It appropriates, inverts and subverts adult cultural expectations of children (Lester & Russell, 2010). As such, whilst adults may want their child's play to be part of their overall socialisation process, at times it transgresses this, leading many adults to believe that some types of play are dangerous, disruptive, threatening or of no value, which leads to sanctions and prohibitions (ibid). Children however value play in a very different ways, according to these authors. As discussed below play can mitigate the effects of severe stress. In view of this, the benefits of play and the consequences of playfulness are fundamentally linked to children's rights as a whole. Given these two facts, adults should be aware of the importance

of play and promote and protect the conditions that support it. The universal importance of play to the natural development of and wholeness of children has also been highlighted by the United Nations (UN) “as a universal and inalienable part of childhood” (Landreth, 2002). As such, any intervention to encourage play must acknowledge its characteristics, and allow sufficient flexibility, unpredictability and security for children to play freely (ibid). Moreover, adults should also be aware that children’s play belongs to children. Adults should not destroy children’s own places for play through intensive planning or the pursuit of other adult agendas either by creating places and programmes that segregate children or control their play. These same authors also suggest that adults need to ensure that children’s physical and social environments support their play otherwise their survival, well-being and development may be compromised (Lester & Russell, 2010). Whilst the day-to-day planning of activities is based upon the general principles of the EYFS, the teaching practices that are used can range from direct instruction to practices based upon Plato’s philosophy of ‘free play’ (Frost, 2010; McInnes *et al*, 2011) as discussed above.

Effective early years settings should ensure that the primary learning experiences of a child should be primarily first hand, experiential and active; promote children’s autonomy and independence; and make sure that ‘talk’ is a central part of the learning process – with it being both reciprocal and led by the child or adult at appropriate points throughout their time attending that particular setting. This ensures that learning takes place as part of a social process as children are very social beings (Drake, 2014). According to Rushton *et al* (2010) an early years setting that is conducive to learning should be a non-threatening yet stimulating environment. A significant proportion of the day is given over to exploration; children have choice over what they engage with and are viewed as the ‘expert’; ‘hands-on’ learning is the norm and not just done on an irregular basis; and children have real events to explore, read and write about. Furthermore, state the authors, lessons are modelled for the children and ample opportunities are provided for them to explore, play and celebrate; literature response activities connect to the child’s real world; open dialogue takes place between the children and the teacher as well as between the children themselves. The curriculum across all areas is integrated and opportunities for meaningful problem solving are provided; and finally, the assessment strategies that are used are an authentic outgrowth of children’s activities, resulting in a sense of accomplishment for the children rather than a sense of failure (ibid). All children have the ability to play but the extent to which they do so is dependent on their playfulness. This will be discussed in the next section.

2.4 The Relationship between Play and Playfulness

Dewey (1933 cited in Howard & McInnes, 2013) was the first to make the distinction between play and playfulness, arguing that playfulness was more important than play. He stated that the former is an attitude of mind; the latter is an outward manifestation of this attitude. In a more recent study that examined play and playfulness with particular reference to children with developmental disabilities, Hamm (2006) defined playfulness as a disposition to play and is thought to be a trait of the individual. Further, Barnett (2007) defines playfulness as the ability 'to transform virtually any environment to make it more stimulating, enjoyable and entertaining'. There appears to be a close correlation between play and playfulness although it has been suggested by Youell (2008) and Gordon (2014) that there are significant differences between the two. Youell (2008) suggests that playfulness is a relationship; it is a two-way phenomenon - children can be playful alone but only if they have had first-hand experience of being playful with another. Playfulness is an essential part of play, however within our society play is devoid of playfulness. Play and playfulness are not opposites nor are they mutually exclusive. The development of inhibitions during play is also an important diagnostic factor when thinking about a child's social, emotional and psychological development. It has also been suggested by Gordon (2014) that playfulness throughout life is strongly linked to stress reduction and improved coping mechanisms as an adult. Consequently, individuals who have an extravert personality tend to be more outgoing and sociable - therefore they report significantly lower levels of perceived stress. It has also been argued that it is the internal affective qualities of play that are important both in therapeutic terms and in terms of development. Some of the qualities that make for effective play experiences have been, and will continue to be discussed further in this section. These include: enthusiasm, motivation, and willingness to engage, and these are different from the act of play. For a child to have a playful disposition their personality needs to contain four main elements: intrinsic motivation, internal control, freedom to suspend reality, and framing (Hamm 2006).

Whilst I have referred to several research studies that have mentioned the importance of children possessing certain traits in order to have a playful personality, Hamm's paper is the only one I have found that explains the four elements in such a way that is both detailed and easy to understand. Thus, according to Hamm, intrinsic motivation refers to some unnamed aspect of the activity, rather than an external reward. This element of a child's personality is measured by observing traits of play including play that is all-absorbing, play that involves more processes than product and play that is surprising and unpredictable. Hamm goes on to say that internal control suggests that a child is largely in control of his or her actions and also some aspect of the activity's outcome; this element of the child's personality is observed through traits that show that the child feels safe and is reaching beyond himself or herself to meet a challenge.

Furthermore, Hamm says, freedom to suspend reality means that a child chooses how close the transaction will be to objective reality. This element of play manifests itself when the objects transform into something else for the child. The final element of a playful personality is having the ability to frame – therefore the child has to develop the ability to interpret play cues, as such the child must be able to read and interpret various play and social cues as well as be engaged in meaningful play (ibid). Furthermore, according to Singer (2015), play and playfulness are basic aspects of early childhood education. The younger the child the more important it is that play permeates every aspect of his or her life.

2.5 The Importance of Outdoor Play

Another important element to a child's overall development in terms of play is outdoor play. It has been suggested by Maynard and Walters (2007) that as a result of having access to suitable outdoor environments children appear to be healthier; have improved motor fitness; have improved balance and coordination; and demonstrate more creativity in their play. Playing in outdoor environments also allows young children to explore their surrounding environment and also raises their awareness of environmental education. In raising their awareness of the environment that surrounds them they learn to develop positive and caring attitudes. Alongside this the rich sensory natural environment not only helps in children's own investigations but also provides an ideal context for group activities in which the development of knowledge, concepts and skills from across the EYFS can be embedded within authentic, purposeful and often real-life tasks (ibid). However, the opportunities made available to young children depend on the cultural ethos of the country/countries concerned. For example, in the United Kingdom (UK) and United States of America (USA) the education system is very much focused on prescribed educational outcomes, but rather than the educational pressures of examinations etc. being limited to primary and secondary school, in more recent years the examination processes have filtered down to Early Years settings.

The opportunities to play for young children have become squeezed to such an extent that the EYFS as well as the National Curriculum have become outcome driven, as opposed to activity driven (Waite *et al*, 2013). Whilst this may be true, there may be other elements to take into consideration such as the nursery's proximity to outdoor spaces. However, as Maynard and Waters (2007) have already indicated, having access to outdoor spaces is essential to the development of a child's gross motor and physical skills as well as beginning to develop other important skills which will come into play at a later stage of the educational process. These include depth, form, shape, size and movement perception (Prince *et al*, 2013). Outdoor play can have a particularly positive impact on children from a challenging background as they are able to develop their overall resilience. However, it appears that thus far the literature has failed to view children as being part of, not separate from, nature and it has also failed to consider the importance of the environment in teaching simple life

lessons (McArdle *et al*, 2013). Many research studies have investigated the importance of outdoor play to the advancement of certain skills. It is a fact that many of the outdoor spaces that have been specifically designed so that children can explore and learn, have been designed by adults.

Research undertaken by White and Stoecklin (1998) showed that outdoor spaces designed by the children themselves would not only be fully naturalised, with plants, trees, flowers, water, dirt, animals and insects – it would be rich in a wide variety of play opportunities of every imaginable type, it would be a place where children wanted to spend the whole day (*ibid*). Further evidence of the importance of outdoor play for children is provided by Cagliari *et al* (2016). The book contains a selection of Malaguzzi's writings and speeches, 1945-1993. In 1972 in the 'Rule Book for Municipal Schools' ('Regolamento delle scuole Comunali dell'infanzia'), he sets out the principle of valuing all environments, both indoor and outdoor, as spaces of learning, including kitchens, bathrooms and gardens. Parents also recognise the importance of outdoor play to their child's overall development (Clements, 2004). It has also been found that there are gender differences between the type of outdoor play males and females engage in. For instance, a study carried out by Cullen (1993) found that boys are more active than girls and spend considerably more time outdoors compared to girls when in establishments that offer both indoor and outdoor play spaces concurrently. A more recent paper written by Bilton (2014a) that investigated the importance of outdoor play in developing the skill set *also* found that boys were more likely to make use of outdoor spaces when developing their gross motor skills. Despite this, in the decade since Clements published her paper, an increasing number of parents have become aware of the health and safety risks associated with outdoor play as well as other things such as the sheer volume of traffic that builds up around nurseries and schools alike and 'stranger danger' (Waller, 2007; Trapp *et al*, 2011; Ribena Plus Play Report, 2012). The idea of childhood has, in recent years, become institutionalised with the establishment of breakfast and after-school clubs (Holloway & Pimlott-Wilson, 2014). In a study undertaken by Kernan and Devine (2010) the professionals who cared for the young children stated that an important element of childhood is freedom and that having access to outdoor spaces allows children this. However, one of the main reasons why children are unable to make use of outdoor spaces without adequate staff supervision is because of the very real concern over children's safety (*ibid*), and this may be the reason for the increased institutionalisation of childhood over the last two decades – as it is felt that children should be protected from the perceived dangers of the outside world (Allin *et al*, 2014).

2.6 Health and Safety Concerns Associated with Outdoor Play

In recent years, both early years practitioners and parents have become concerned about child safety when playing outdoors. Veitch *et al* (2006) found that some parent's concerns

lay in how their child was planning on getting from A to B, rather than who they would meet at the park. Other parents, however, were more concerned about the individuals who were at the park, especially teenagers, who loitered. However, parents' safety concerns were not just limited to individuals. Many parents also limited the locations where their children could play – children who lived on or near a main road or through road were less likely to be allowed to play outdoors compared to those children who lived in a cul-de-sac or flat, as flats tend to have internal outdoor spaces (ibid). A more recent study by Carver *et al* (2008), which assessed the impact of neighbourhood safety on children's physical activity, found that in order to combat parents' concerns many schools have put schemes into place such as the walking bus and cycling proficiency. Thus, schools are helping to educate children about road safety as well as increasing their physical activity (Kirby & Inchley, 2009; Rush, 2014). Parents must also realise and accept that children must take risks in order to learn. Little and Eager (2010) define risk as "situations in which we are required to make choices among alternative courses of action where the outcome is unknown". Sandester (2007) categorised the different types of play that involve a certain amount of risk-taking. These include: play that involves great heights; play that involves high speed; play that involves dangerous tools; playing near dangerous elements; play that involves rough and tumble; and play that involves disappearing/getting lost. Studies published in international journals, have corroborated the findings of several studies referred to earlier - particularly the idea that having access to outside space gives children a sense of freedom and also helps with their overall physical development. There are overall learning and major health benefits of having access to outside spaces for both children and adults alike. A literature review conducted by Lee and Maheswaran (2011) pointed to several positive factors that influence whether individuals use the outdoor space but found that the presence of green space itself is not likely to influence whether or not a person engages in physical activity. However there appear to be several contributing factors - these include the activity's overall features, condition, accessibility and safety (ibid).

2.7 Socio-Economic Status and Play

There is an increasing number of children being diagnosed with conditions such as Attention Deficit Hyperactivity Disorder (ADHD), obesity, and obesity-related diseases (McCurdy *et al*, 2010). Whilst a lack of physical activity might not directly impact upon a child being diagnosed with ADHD, the more physical activity a child with this condition engages in, the less likely the child is to engage in, or display, adverse behaviours (ibid). Another finding of the McCurdy *et al* (2010) study was that children who do not engage in physical activity of some form or other are more likely to be classed as obese and be diagnosed with obesity-related diseases. It is often assumed that children from poor backgrounds are the most likely to be in this group due to what the public perceive as poor lifestyle choices. However, Kimbro *et al* (2011) report that of the three participant groups taking part in their study, the

children from the poorest and wealthiest backgrounds had the lowest Body Mass Indexes (BMI) whilst those from a middle-class background had the highest. The second finding of this study was that children who lived in council housing, or those who lived in neighbourhoods where there were increased amounts of public disorder, were more likely to be allowed to play outdoors. Finally, the study demonstrated that, within poorer communities, specific social conditions may give rise to higher rates of physical activity. These are perhaps in part due to parents being placed in dedicated programmes, which, as well as providing housing for these families, also provided them with a basic education, which in turn allowed parents to supervise their children when playing outdoors (ibid). Other European studies have corroborated the findings of both McCurdy *et al* (2010) and Kimbro *et al* (2011) study whilst pointing to the fact that there was a significant increase in children's physical activity when they pursued it with their peers (Aarts *et al*, 2010; Bringolf-Isler *et al*, 2010). It appears that public policy regarding physical activity also has a major influence on the amount of physical activity undertaken by children in early years settings (Trost *et al*, 2010).

It stands to reason then that physical activity should be defined. In a report published by the U.S. Department of Health and Human Services in 2008 physical activity was defined as "any bodily movement produced by the contraction of skeletal muscle that increases energy expenditure above a basic level". As already indicated the Early Years setting may be the first time young children have engaged in physical activity of any sort. According to Ward *et al* (2009) and Trapp *et al* (2011) regular physical activity helps to lower a child's overall risk of becoming obese and developing other chronic diseases. Ward *et al* (2009) also found that young children who engaged in physical activity on a regular basis were more likely to achieve energy balance. Having said this, a study undertaken by Haug *et al* (2010) has shown that whilst it is important that physical activity is engaged in on a regular basis throughout an individual's life, it may be hard to do so particularly within the secondary education sector. This is due to the fact that this age group tends to spend less time in recreational physical activity and also timetabled physical activity due to a lack of usable outdoor space.

2.8 Children with SEND, Play and Play-Based Approaches

As has become clear, play is an important context through which children acquire various cognitive, language, and social abilities. Some even consider play to be a separate developmental domain (Verver *et al*, 2019). Typically developing young children are known to carefully observe and imitate their caregivers and peers. In this way social aspects of play (e.g., the level of social involvement) evolve from solitary, to parallel, and finally to cooperative play, where children actively interact and pursue shared goals within the play context (ibid). Since the 1990s early childhood education has focused on the value of play

when developing programmes for children with special needs (Bray and Cooper, 2007). These authors note that the difficulty with play-based programming is that it is not solely reliant on contextual factors such as the physical School Bnd the number of toys or children in the environment. Instead, the interaction between these factors and others such as the attitudes and actions of the adults present, the child's temperament and previous experiences also need to be considered for play-based programs to be effective (ibid). From my experience, the special education environment tends to have higher educator–student ratios and a more-structured approach. In addition, student numbers are lower, providing more opportunity for individual student time.

Children with disabilities are at a distinct disadvantage when it comes to play (Movahedazarhouligh, 2018). Mobility problems make it difficult, if not impossible to play hide and seek, visual impairments impede a child's ability to find and investigate toys, and cognitive disabilities limit the development of pretend play. In fact any disability (physical, cognitive, or sensory) poses a barrier to spontaneous engagement in play and playful activities (ibid). Appropriately arranging the play environment can be considered as a non-intrusive and relatively easy approach to facilitate social interactions among children (Papacek *et al*, 2016). Taking everything into consideration, the findings of Graham *et al*'s (2018) synthesis of studies are very interesting in that they suggest that sometimes when engaged in play children do not focus upon their disability particularly if non-disabled peers are accommodating.

Toys are often considered the tools of play in young children and help bring parents and children together in play. According to Diamant-Cohen (2012), when it comes to play for children with disabilities, they are more like children without disabilities than not. They experience the same benefits, but they may struggle to find the opportunity to play. In general, play helps the child with a disability to express themselves, develop a positive image of themselves and learn to interact with the rest of the world. The idea of developing educational toys was originally and to a certain extent still is to train and support children's abilities in order to increase their competence and intelligence or for assessment in intervention. Educational toys are often made of an unpainted wood or construction material, aimed at training a special function in the child (ibid). General opinion suggests that the term 'educational toy' guarantees good quality. As such, the companies that design and produce such toys market them to make parents believe that in buying the products they are giving their child the best possibilities for development (Brodin, 1999).

As has been made clear earlier in this chapter, from earliest infancy, play experiences are the primary way children learn (Simpson & Lynch, 2003; Hamm, 2006). Alston *et al* (2015) suggest that it creates multiple opportunities to experience trust and pleasure, to explore

fears and fantasies and to make meaning in the presence of an interested teacher or support worker. Play involves the exercise of imagination and use of symbols to communicate wishes and feelings. Play is a 'space' where the child and his/her teacher, dyad or group can safely discover and try out different ways of being and relating as well as encouraging children to further develop and expand their imaginative capacities. However, caregivers often doubt their ability to choose appropriate toys for the children in their care (Simpson & Lynch, 2003). Furthermore, the authors offer some guidance when choosing such toys:

- 1) Toys and play materials should be responsive (i.e. toys that produce sound, movement, or light when activated by the child).
- 2) Toys and play materials should be age-appropriate. In general, toys and materials that are appropriate for typically developing infants, toddlers and pre-schoolers are appropriate for young children with disabilities.
- 3) When necessary, toys and materials should be adapted to increase engagement and learning.
- 4) Play materials should include naturally occurring objects such as boxes, kitchen utensils and packing materials.
- 5) Toys and play materials should be selected to promote learning of important skills.

However, children with disabilities need more time and opportunity to become familiar with toys, materials, and equipment in order to discover the different ways to interact with them. In particular, to teach children with disabilities, much repetition is required for them to learn from the materials. Therefore, toys, materials, and other equipment should not be changed or removed too often (Movahedazarhouli, 2018). In terms of education, those who teach children with SEND must consider a variety of factors including the unique capabilities of the child, the adaptation of toys and materials and the impact of environment and setting (Hsieh, 2008). However, in recent years there has been a decline in the number of studies examining the impact of educational toys on the overall development and academic achievement of children with disabilities and a significant move towards the use of technology in the classroom and how such technology is impacting upon the play behaviours of children with disabilities.

In view of the above points, it is worth examining the two play-based approaches discussed in this thesis and how they encourage play behaviours in children with SEND. The Montessori educational approach is very popular in some European countries (Townsend & Friedland, 2016) and the USA (Lopata *et al*, 2005; Kayılı, 2018; Dreyer & Rigler, 1969; Flynn, 1991) as unlike other educational approaches, it has been found to be more

beneficial for children from low socio-economic backgrounds and SEND because the learning environment promotes sense learning and creative exploration.

From Maria Montessori's point of view, 'play is the child's work' (Curtis, 1986), but the only form of play she considered acceptable was that which had a preparatory function for adult interaction. On the other hand, Vygotsky's definition of play does not include many kinds of other activities, such as physical activities, games, object manipulations, and explorations that most people, educators included, still call "play" (Bodrova & Leong, 2015). Although both theorists have a narrow view of play, in my opinion Montessori has a more rounded view than Vygotsky as she includes elements that he does not consider important.

The School B EYFS Policy declares:

We recognise the importance of children's play. It is an essential and rich part of their learning process, supporting them in all areas of development. Play is a powerful motivator encouraging children to be creative and to develop their ideas, understanding and language. Play is also flexible and able to suit the preferred learning style of the child. It can provide multiple ways for children to learn a variety of different skills and concepts. In providing these active learning opportunities through play we understand the central position of play within the EYFS framework. This is essentially a play based curriculum and pedagogy as the provision of play opportunities underpins its delivery.

Furthermore, School B believes that "it is important for adults to support children's learning through play, by getting involved in the play themselves" (stated on School B website). All practitioners are sensitive to the needs of the pupils in their cohort and will plan activities to motivate and scaffold learning.

The School B Curriculum consists of six strands and aims to deliver a broad and balanced curriculum that reflects the individual needs of pupils and has a great emphasis on the four areas of SEND: communication and interaction; cognition and learning; physical and sensory development; and social and emotional wellbeing. The curriculum is based upon Functional Skills which allows young people to develop independence, prepare for everyday life and ultimately prepare for adulthood whether that be supported living, supported employment, volunteering opportunities, social enterprise providers or a personal budget. The curriculum is constantly evolving to ensure that it is responding to the rapidly changing world around us and that pupils are offered the best start in life. The *My Communication* area develops pupil's expressive and receptive skills allowing every individual to functionally communicate. Pupils are encouraged to make and communicate choices, obtain information, question and be actively involved in decision making. The teachers and support staff work closely to identify everyone's communicative starting points in order to facilitate communication both at present and in the future. The next curriculum area is *My Thinking*

and Problem Solving and focuses on pupils developing an understanding of the number system and counting. These skills are embedded throughout the whole curriculum with plenty of opportunities for pupils to develop these functional skills which can later be embedded into practical real-life experiences to prepare them for the future. *How My World Works* allows pupils to investigate and explore the world around them and develop an understanding of how things work in real life and to think about the practicalities of life. *My Community* facilitates pupils to develop an awareness of their unique identity and become an active member of the community. Pupils will ultimately develop an understanding of how they can have a positive impact upon their future and their goals and aspirations through choices and transitions. *My Physical Development* supports pupils to develop their strength and movement in order to explore the world around them. They are also given opportunities to learn about others and how to interact appropriately with each other to develop friendships. *My Emotional Wellbeing* supports pupils to look after themselves and respect their identity as well as learning about other cultures. Pupils will also be supported in activities that will assist them in understanding their feelings, behaviours and aspirations.

Whilst play is crucial to the two approaches, so is observation. “School leaders have the unique responsibility - not only to our communities, but also to Dr Maria Montessori’s memory, to revise our educational practices in a manner that is both respectful of her theories and responsive to an ever-changing educational landscape” (Householder, 2013). Observing children’s play is key to understanding their interests and their needs and is a salient feature of the teaching role. Practitioners will need to allow time for observation of children at play in the setting (Drake, 2014). Children are naturally curious and internally motivated to learn and work (Pullman & Andrew, 2014). Teachers and support staff who work in Montessori settings use observation as one of the main assessment tools to assess a child’s overall development and to identify areas where the child needs extra support - thus ensuring that the children in their care will eventually achieve their full potential, both academically and socially. In this way teachers learn from the children and the children learn from the lessons the teachers facilitate (Martin, 2013). Moreover, teachers are able to observe themselves, their class and other people and learn from the observations without adversely impacting the learning of the children in their care (Sackett, 2016).

Dr Montessori maintained that the capacity to observe has to be carefully developed through long practice. In the American Montessori Institute (AMI) teacher training courses for example, scores of hours are spent with children, observing their actions, recording those observations and crafting them into reports to be reviewed by the teacher trainer. Montessori also advocated training in science as opposed to education for people who want to go into Montessori teaching in part because training in science is training in close observation (Lillard, 2007). All teachers are capable of spontaneous acts of observation,

mental and written note-taking and continuous assessment of a situation: they do it all the time as their constant comments and facial and bodily expressions towards children in the classroom context show (Moyles, 1989). Observation is the basic tool Maria Montessori brought from her background as a physician and applied to her work as an educator (Helfrich, 2016). Therefore, an ability to observe children and detect their needs is fundamental to good Montessori teaching.

2.9 Concluding Thoughts

It is clear that the early years are a key time for learning, and that the quality of early years' experiences will impact on children's later health, social behaviour, educational attainment and employment. It is therefore of serious concern that the role of play in learning has been and continues to be down-valued in the UK. The government measures quality of provision through testing regimes, rather than looking at the development of the whole child. As a result, pedagogical leadership does not allow for creativity, nor does testing of itself produce an improvement in quality of learning and provision. Rather, it has led to a narrowing of assessment targets upon traditional literacy and numeracy (Roberts-Holmes, 2015).

Up until recently, children's views were not taken into account when designing and implementing early years curricula. However, when questioned about their play experiences and preferences, it became clear that play can be linked to the six areas of learning, but that children got the most enjoyment when it was linked to Creative Development; Knowledge and Understanding of the World (particularly 'real world' experiences such as shopping, arranging flowers and caring for animals); Physical Development (particularly outdoor physical activities) and some aspects of Communication, Language and Literacy. In settings that provided a wide range of opportunities to learn through play, the children engaged in a wider range of more complex play activities. Meaningful play experiences helped them to develop skills and concepts. In addition, children enjoyed planning their activities, but were not as involved in the planning process as they could have been, leading in some cases to alienation from the process and the environment itself (Garrick *et al*, 2010). Play is important for development and therefore should permeate every aspect of a child's life. It is used as therapy to treat children's emotional and behavioural problems. Playfulness, which is an important part of play, can be linked to stress reduction and improved coping mechanisms as an adult.

This literature review also discusses how certain biological and social factors combine to influence the types of play that children choose in terms of gender-typed toys. Toys often bring parents and children together in play – this is the same for children with or without SEND. However, children with SEND need more time and opportunities to interact with them. The design of toys is also important, as parents often doubt their ability to choose the most appropriate ones for their children.

Given children's enjoyment of outdoor activities, and their contribution to the development of motor skills, it is a retrograde step when the opportunities for children to play become squeezed. Two other pressures are the lack of outdoor spaces, and parents' Health and Safety/Safeguarding concerns. Thus, parents must realise and accept that children must take risks in order to learn. Contrary to general assumptions it was found that children from both the poorest and wealthiest backgrounds had the lowest BMI while those from the middle classes had the highest. Physical activity was higher among poorer communities, as parents were probably more likely to allow their children to play outdoors. Given all the evidence presented in the literature review, it is clear that the increased regulation and governance of the education system as a whole is being justified by the government, by the notion of a global education 'race' which begins in pre-school (Roberts-Holmes, 2015), leading to increased accountability and surveillance in Early Years.

The constraints placed on children and early years professionals by this increased accountability and surveillance, I will now look at two play-based approaches, comparing their similarities and differences, and looking at how they inform the education of children with and without SEND.

CHAPTER THREE – METHODOLOGY

The overall aims of the current study are to investigate the similarities and differences between two play-based curricula - School A (Montessori) and School B Special School (names of settings changed for the purposes of confidentiality and anonymity); and to examine how play-based curricula cater for children with and without SEND.

In this chapter, the reader is provided with a discussion of my philosophical position; the rationale behind the research and my status with respect to the stance of insider/outsider. Moving through, I consider ethical issues when undertaking research with children and provide a discussion about qualitative research, multi-method approaches, triangulation and the importance of criticality and reflexivity in qualitative research. I then present a detailed account of my research design, including the justification for my methods, the selection and recruitment of participants, and the procedures used for data collection. Finally, I explain my choice of thematic analysis and how this fits with my overall research design.

3.1 Philosophical Position

In recent years, researchers who work within the field of education have had to work within very different policy paradigms – thus educational researchers are working on “shifting sands” (James, 2012). Social knowledge does have an important role within education (Moore, 2013). However, there is sometimes an over-reliance on experience as the means and content of knowledge. There is also a distinction between social knowledge and scientific knowledge but to what extent this distinction exists has been the subject of many a heated debate in recent times, (Banks, 1993). Some research traditions claim that all knowledge is ideological in the sense that it is constructed in the interests and ‘voice’ of a given social group (Shakespeare, 1996; Rose & Shevlin, 2004; Holt, 2004). The current research project utilised observation, semi-structured interviews and questionnaires to gain a more in-depth picture regarding whether or not play-based curricula would be more suitable for children with and without SEND. Qualitative research that directly involves individuals with significant disabilities as participants is extremely limited. However, Gerber (2006, p.245) believes that:

So powerful is the voice of disabled people becoming, and so powerful are the intellectual and ideological forces that seek to give that voice centrality in shaping the discussion of disability, that it may soon become difficult to recall that a short time ago, people with disabilities were little more than the *objects* of study.

Therefore, this research project aimed to create opportunities for traditionally marginalised perspectives to be heard, given that there is a gap in the research regarding giving a voice

to children with SEND (Ashby, 2011; Stafford, 2017). This is further illustrated by Muller (2000) who believes that knowledge construction and reconstruction is evident throughout society. Furthermore, the citizens of this world use this knowledge to participate in a society on both a personal and expressive level by becoming political and economic players (ibid). Whilst it may be true that knowledge is constructed as a direct result of experience, Gardner (2011) suggests that in recent years there have been many criticisms of educational research and the impact it has had on society – in particular how research is communicated and disseminated, as well as how coherent and accumulated it is, how relevant it is, and how well it has been carried out – as it is felt that educational researchers do not have a real grasp of what matters in today's society. It is also felt that educational research does not have the political nous to deal with 'real-world' people (ibid). According to Burkhardt and Schoenfeld (2003) educational research does not often lead directly to practical advances, although it provides useful information, insights and ideas for improvement. Bearing these points in mind, I have undertaken this project with the intention that the results will make a contribution to influencing future government thinking and policy.

According to Clough and Nutbrown (2012) "all social research sets out with specific purposes from a particular position and aims to persuade readers of the significance of its claims; these claims are always broadly political" (p.4). Therefore, the task of situating knowledge is to shed light on the research process, although this should not be seen as navel-gazing (Rose, 1997; Barker & Smith, 2001). In this section I outline the theoretical and positional basis of the current research project whilst also detailing how and why I believe the topic under investigation is important and why I believe it makes a unique contribution within the educational research paradigm, particularly SEND. Over the past twenty years researchers have concentrated on placing themselves centre-stage enabling them to shape their contributions and participate in research on their own terms (Bourke, 2014). Doing so presupposes that as research participants, young people are fully knowable to themselves and privileges their voices as the most authentic and objective source of knowledge about themselves and their lives (McGarry, 2016).

As will become clear in this chapter I attended an early years setting that followed the Montessori educational approach and as Carter *et al* (2014) point out, it is important for researchers to begin with their own story as they seek to understand the stories of others. Oliver and Barnes (1997), the latter of whom identifies as a person with a disability, point out that the track record of non-disabled people undertaking disability research has not been noticeably successful. Hence, they would like to see more disabled researchers not only in the field of disability research but in research generally. The issue of disabled researchers researching disability is discussed in more detail below. Participatory action research approaches empower and protect marginalised individuals however, remain underutilised

(St John *et al*, 2018). The majority of papers that have been written by researchers with disabilities are dated e.g. Kitchin (2000) and Stone & Priestley (1996) however there are a few later papers including Brown and Boardman (2011) and Priestley *et al* (2010). The main reason for my undertaking a research project that examines the effectiveness of alternative educational paradigms lies in the fact that I have a disability myself (Cerebral Palsy) and attended an early-years setting that was based upon the educational values of Maria Montessori, who believed that children with SEND could also make an important contribution to society alongside their able-bodied peers. I have had experience of the Montessori education system from the point of view of someone who has a physical disability (Cerebral Palsy) and thus will be able to relate to the methods that are being utilised to help children with disabilities to achieve their full potential. However, I have no experience of the impact that such methods have on the learning outcomes of children with more complex disabilities, though as part of my undergraduate degree I investigated the ways in which children with SEND acquired the English language.

According to Shakespeare (1996) for those who do not identify as disabled, choosing to undertake research on children with disabilities when I have a disability myself, may feel that I am too close to the process which I seek to analyse. However, to undertake a research project which is totally independent is very hard to do as every researcher will have their reasons for choosing the topic of research they have, and these reasons will ultimately bias the research process. This said having a disability myself gives me insights which will be useful in the research process as they will allow me to get closer to the people and experiences which I am trying to analyse. This said, every researcher will situate themselves within the research paradigm that predominantly aligns with their ideas. However, these can change depending on how much knowledge and experience researchers have of the subject that they wish to investigate. It will also be influenced by the data collection methods they use. I believe that this research project can be situated within an interpretivist paradigm as I hold with what Phothongsunan (2010) believes: "Interpretive researchers do not regard the social world as 'out there' but believe that it is constructed by human beings" (p.1). This leads me nicely on to discuss my epistemological and ontological position.

In the world of social science, the tension and debate between competing epistemologies and ontologies requires researchers to consider their own orientation to knowledge and truth. Furthermore, researchers within this analytical tradition examine how various aspects of a person's identity impact their beliefs and actions (Kezar, 2002). Thus, people make meaning from various aspects of their identity. Research represents a shared space shaped by both researcher and participants (England, 1994). As such the identities of both researcher and participants have the potential to impact the research process. Identities come into play via our perceptions, not only of others but of the ways in which we expect

others will perceive us. Our own biases shape the research process serving as checkpoints along the way. It is through recognition of our biases we presume to gain insights into how we might approach a research setting, members of particular groups as well as how we might seek to engage with participants (Bourke, 2014). With this in mind, it is important to present my philosophical position from the outset. The research process can be 'messy' (Mellor, 2001), as such the epistemological and ontological positions of a researcher may shift (Thomson & Gunter, 2011). This is evident when we consider my own theoretical stance.

According to Blaikie (2007), from an epistemological point of view I am mainly a social constructionist as I am not approaching this research project from a *tabula rasa* position; I am encumbered by concepts, theories, knowledge, and past experiences. However, I also believe that there is an element of conventionalism due to the data collection methods that have been used (observation, semi-structured questionnaires and semi-structured interviews). These methods allow me to use my own judgment when interpreting the data, rather than relying on empirical proof. Therefore, the children, teachers and support staff are just as important to this research project as is the relativist lens that underpins the whole project. In terms of my ontological position, I believe I identify with cautious realism because of the imperfections of the human senses and the fact that the act of observing is an interpretive process (Blaikie, 2007). Furthermore, I believe that there is an element of idealism in my ontological stance as I am influenced by my own cultural values.

There is a dearth of research that has been undertaken by researchers with disabilities that involves people with disabilities. Kitchin's (2000) paper suggests that people with disabilities want to be more involved in disability discourse and they want academics to be engaged in emancipatory and empowering research projects aimed at improving the lives of people with disabilities in both practical and political ways. The emancipatory paradigm promotes the interests of people with disabilities (Walmsley, 2001). As a researcher with a disability, I find it is worth noting that discrimination and other structural barriers combine in a way that marginalises researchers with disabilities particularly when it intersects with race, class, gender and sexuality. The consequences of this marginalisation, according to Sheldon (2017), have been devastating as Disability Studies is ignoring the critiques offered by researchers in this area (who often have disabilities themselves) because those who work in the area continue to use the standard conceptions of disability that undeniably contradict the views and life experiences of many individuals with disabilities. The exclusion of researchers with disabilities is reminiscent of the situation of Lesbian, Gay, Bisexual, Transgender and Queer (LGBTQ) researchers who experience difficulties in accessing schools because of homophobia.

However, the issue with the emancipatory research paradigm is not how to empower people, but, once people have decided to empower themselves, precisely what research can do to facilitate this process (Oliver, 1992). In order for research to become more emancipatory and inclusive there needs to be a shift in power from academic researchers without disabilities undertaking research on individuals with disabilities to becoming co-researchers with individuals with disabilities and chronic conditions (Strnadová & Walmsley, 2018). Many factors can contribute to the oppression of and discrimination against individuals with disabilities and to their exclusion from key decisions affecting the quality of their lives (Barton, 2005). The emancipation of this group of people can take two forms, both of which involve engaging with individuals with disabilities in a common struggle against ableism. The first form is merely ensuring that researchers adopt an inclusive approach (Chown *et al*, 2017; Walmsley *et al*, 2018), whilst the second form goes one step further in that the inclusive approach becomes action and politically led (Hanson & Ogunade, 2016). As such the second form seeks to form strong links between academic theorists, people with disabilities and activists on the ground (Milner & Frawley, 2018). Emancipatory research is not a recent concept. Kitchin's (2000) study also recognised that for academia and research to become truly emancipatory and empowering it has to actively seek rather than hoping that the 'right people' read the work and act upon it. Through this research project, I will endeavour to step away from the didactic top-down approach that is currently being promoted by the government as highlighted earlier in this chapter, and shine the spotlight on children with SEND.

3.2 Why Undertake Research on Real-World Issues

Burkhardt and Schoenfeld (2003) suggest that it is essential for individuals working within any field of research to forge strong links as both research and real-world practice inform one another, thus providing a more robust evidence base for policy-makers which will allow them to make more informed decisions. Slavin (2002) believes evidence-based policies are important within the education system especially as governments at local, national and international level now base funding for schools on examination results. Having said this, what appears to be a funding by results system does not always mean that teachers will engage in best practice. In a more recent study Rowbottom and Aiston (2011) have found that millions of pounds are being spent annually allegedly funding educational research with the sole purpose of informing government policy. Thus, the public bodies that are given overall responsibility of commissioning such research should ensure that it is 'good' research that is ethically sound and epistemologically trustworthy. In the case of universities and other public bodies, as well as individuals undertaking their own research projects, they will also undertake research on behalf of public bodies and this type of research programme can involve a contract. If this is the case, then whoever undertakes the research is at the liberty of the organisation which has commissioned the research, as contracts can

sometimes include clauses that allow the organisations to change articles as they see fit and, as a consequence of having such a system, there is an indirect pressure to re-write papers due to differing opinions on the area of research (ibid). Another point to consider when undertaking research is whether I am an 'insider' or 'outsider'. Simplistically, insider research has been defined as the study of one's own social group or society (Greene, 2014). Early discussions in anthropology and sociology of insider/outsider status assumed that the researcher was either an 'insider' or an 'outsider' and that with each status comes certain advantages and disadvantages.

Previous discussions of insider/outsider status have unveiled the complexity inherent in either status and have acknowledged that the boundaries between the two positions are not all that clearly delineated due to the fact that in the real world of data collection there can be slippage and fluidity between these two states (Merriam *et al*, 2001). According to Merton (1972) and Mercer (2007) the 'insider' is someone whose biography gives them a lived familiarity with the group being researched – thus allowing privileged access (Merton, 1972). On the other hand, the 'outsider' is a researcher who does not have any intimate knowledge of the group being researched prior to entry into the group, therefore, whilst they are able to acquire the same knowledge as an 'insider' it comes at a greater risk and cost (ibid). Dwyer and Buckle's (2009) study, whilst corroborating Merton's (1972) and Mercer's (2007) findings, goes further. They suggest that an 'insider' researcher shares an identity, language and experiential base with the study participants. The complete membership role affords them a certain amount of legitimacy, but it can also generate stigma. The status that comes with being an 'insider' frequently allows researchers more rapid and more complete acceptance by their participants. Participants are more likely to be open with researchers thus allowing greater depth to the data gathered (ibid).

Insider and outsider positionings have long been theorised in the social sciences, with their definitions differing over time and across disciplines (Milligan, 2016). In her paper she discusses the reality of the multiple identities she took on and the fact that these were not static and changed over time. The shifting identities were often characterised by different situations. Her conclusion puts forward the development of the concept of the 'inbetweener' researcher (ibid). Taking the above into consideration, I would consider myself to be an inbetweener researcher. I did not have experience and knowledge of one of the environments that I was investigating as I attended a mainstream school, however I did attend a Montessori early years setting. I did not have role duality since I did not work within the two educational establishments, nor did I have to manage the organisational politics within them (Brannick & Coghlan, 2007). It could be said, however, that I was studying my wider community in the broadest possible sense. Taking into consideration the points made by both Solbue (2011) and Koch (2006) it is perhaps of no surprise that I will base some of

my research assumptions on my prior experiences within the School Bs a child. Rather than take away from my research project I hoped that my prior experience would allow me to provide a more in-depth analysis throughout subsequent phases of the project. There is an element of researcher bias embedded within this research project primarily due to the fact that I have a disability, though the research does not focus on children who have my own condition. Therefore, I do have an understanding of what it is like for individuals to live in a world that is not made for them and the issues this can cause, in terms of attitudinal barriers when trying to negotiate through life. Greene (2014) raises several issues regarding researcher bias including the fact that some consider the individual to be too close to the culture under study to raise provocative questions particularly when it is a subject of interest.

Having said this, it does not mean that researchers should fear bias, far from it, as it may in fact be a source of insight as well as error (Aguilar, 1981), but they must be aware of the potential for biases to creep in and take steps to ensure that the research conducted is as error free as possible (Greene, 2014). To ensure that this happened within my project I proactively involved 'critical friend(s)' – in this case my supervisors (Deuchar, 2008) to react to my work and each 'critical friend' brought a different legitimacy authority and power base (Swaffield & McBeath, 2005) to the table. Reading the research from their own epistemological and ontological positions has meant that my supervisors have often questioned me in a supportive way which has allowed me to 'think aloud' about my work (Kember *et al*, 1997) and consider 'alternative perspectives' (Fouger, 2010), whilst also being as objective as possible to assist with the process of reflection (Costa & Kallick, 1993).

3.3 Ethical Considerations when Undertaking Research with Children

Within the last 25 years there has been a substantial body of research (Graham & Fitzgerald, 2010a; 2010b) which focusses on the importance of affording children the rightful and legitimate claim to 'have their say' and for adults to 'listen to the voices' of children especially regarding the decisions they make and the activities that influence their lives (McTavish *et al*, 2012), which has been afforded them by the United Nations Convention on the Rights of the Child (UNCRC), This allows children to participate in the research projects as much as they wish. One issue that is pertinent to the present study is how children with SEND may convey the fact that they do not wish to take part in the study. In their study, Dockett *et al* (2012) describe how a child with SEND was more comfortable communicating with the support worker who worked with her on an everyday basis and thus was able to explain to the researchers involved in the study that the behaviour she was displaying, i.e. the way she was positioning herself, was the child's way of communicating that she did not wish to participate in the study (*ibid*). Nevertheless, the value of the contribution that children can make to the research process should not be underestimated. In terms of this research project, even though the children were unable to input directly because of their condition, I

believe that they made a critical contribution to the research project. Utilising observation as the main research method meant that I took full responsibility for data collection allowing the children to continue with their daily activities thereby allowing me to observe their natural behaviour in a familiar environment. In some cases, once the children got to know me they actually looked forward to my arrival and did not want me to leave, meaning that the children allowed me to get to know them as well. At the same time, it has also been recognised that children's perspectives are different from those of adults and that the social, cultural and physical spaces of children and childhood are best reported by those who experience them (Dockett *et al*, 2013). Hence, if a researcher wishes to undertake a research project that involves children, he or she must gain authorisation from the individual responsible for the child/children (known as the gatekeeper) to access potential participants.

Despite the fact that an increasing number of research projects focus on children and their everyday lives, obtaining ethical approval for such projects can be quite a long and complex process, given that the philosophical basis of ethics is to deal with right and wrong (Powell *et al* 2012). Flewitt (2005) has raised concerns about gaining access to participants via a gatekeeper, as the researcher risks exploiting the relationship between the gatekeeper and the person they are introducing. In terms of my own study Flewitt offers a perfect example of when such a situation can occur – in that pre-school parents may feel a certain obligation to participate in the research so that that they “get off to a good start” with staff in the setting, fearing that refusing to take part could damage either their relationship with the staff or the services their child receives (Warin, 2011). However, Oliver (2010) highlights how the relationship between researcher and gatekeeper can be symbiotic. As such, whilst the research project may be viewed by the gatekeeper as not entirely appropriate for the establishment that has been approached, it may be possible for the researcher and gatekeeper themselves to work together to create a research programme which will be partially beneficial to the organisation. In terms of this research project, I initially endeavoured to examine how the Montessori educational ethos impacts upon the overall development of children diagnosed with SEND. However, there are very few Montessori nurseries within the local area and even fewer that have a child/children with a confirmed diagnosis of SEND, attending this type of early years setting.

Therefore, after discussing my concerns with my Director of Studies, I decided to broaden the focus of my study, to examine how play-based curricula impact upon the overall development of children with SEND. As well as highlighting the benefits of building a good relationship between a researcher and gatekeeper, Oliver (2010) also raises concerns regarding research with children. For example, gatekeepers may also be concerned about how the research will impact upon the day to day functioning of the organisation. A gatekeeper may also be concerned about whether or not a researcher will disclose

confidential information to individuals who do not work for that organisation. This was a particularly pertinent issue in terms of this project: due to my disability I required an amanuensis to assist me with my observations. However, I informed the gatekeepers (nursery manager and headteacher) of this and they agreed to this on producing a current DBS check. Therefore, it is the researcher's responsibility to ensure that the gatekeeper is fully informed as to the nature of the research project. How such information is disseminated can take a variety of forms, from the traditional in the form of a letter or a leaflet, to more modern techniques, such as tapes, presentations, or DVDs (Fargas-Malet *et al*, 2010). In terms of the current project I wrote to several schools enclosing a research pack, which contained a Gatekeeper Participant Information Sheet which explained the reasoning behind my research project, how I was going to collect my data and how the data would validate my conclusions. The information in this pack and a face-to-face meeting, allowed each of the gatekeepers to make an informed decision about whether or not to grant access to the individuals in question. Providing the gatekeeper with full details of the expected outcomes of the research process as well as what is expected of them throughout the research process has two benefits: it allows the researcher to demonstrate awareness of the areas where the research will impact upon the organisation, whilst also outlining the potential benefits of the research to the organisation itself (*ibid*). For researchers who wish to study this group of society there is also the underlying issue of whether or not young children have the capacity to understand that they are participating in a research project and thus give consent on their own behalf. Dockett and Perry (2011) suggest that, in recent years, it has been increasingly recognised that children have agency. This is defined as "the power to make decisions that impact on self and others and act on them" (*ibid*).

The conclusions drawn by Dockett and Perry have also been found to be true in earlier studies published by many researchers (Shier, 2001; Danby and Farrell, 2004; Sinclair, 2004; Harcourt and Conroy, 2005), who have all found that adults make assumptions about children's understanding and so have a tendency to reduce the amount of information that is given to the children. Harcourt and Conroy (2005), in particular, found that the adults were surprised by the fact that the children who were involved in the study were able to articulate their own gaps in understanding and thus offer alternatives that best fit with the child's skills and abilities. Recent guidelines published by the National Children's Bureau (NCB) Research Centre (2011) reiterate the findings of Einarsdóttir's (2007), Dockett and Perry's (2011), and Dockett *et al*'s (2013) studies, as they also believe that C&YP are social actors who have a right to be involved in research about issues that concern them. In doing so researchers are respecting C&YP's right to participate in research studies (Porter *et al*, 2012). They are also improving the quality of the research itself. The NCB also extend the benefits of involving C&YP in research that have been suggested by Oliver (2010) earlier in this chapter. These include the fact that these individuals can facilitate access to and

increase the number of potential participants; ensure that information and recruitment materials are accessible and relevant to their peers; and enhance the credibility of the study for other C&YP. By involving C&YP in the research process they can also access their right to have a say in the decisions that affect their lives; make an active contribution to their communities by helping to improve facilities in their local area; develop a variety of transferable skills; develop and extend their social skills and networks, through working with both adults and their peers (ibid; Todd, 2012). As with all research projects, researchers will encounter ethical problems particularly when working with children with SEND. According to Gray and Winter (2011), children with special needs are similar to their able-bodied peers in that they differ in terms of their age, gender, race, culture and ability. However, unlike their able-bodied peers, children with SEND differ in terms of the severity, onset, cause, type and impact of their disorder. Bearing in mind the fact that undertaking a study that involves children with SEND can be complicated, these same authors provide researchers with a list of qualities that a gatekeeper may expect the researcher to have before they make a decision as to whether to permit access to the children. This list includes: the individual having qualifications and experience of working with children in general and also with children with disabilities in the age group participating in the project; the ability to communicate with the participating group; knowledge of physical and cognitive impairments and their likely impact on children's experiences and development at different ages. Gatekeepers will also consider whether or not the researcher has sufficient awareness of their own biases, assumptions and prejudices in relation to children in general and also in relation to children with disabilities of the age of those participating in the project (Gray & Winter, 2011).

Given that my study involved young children with SEND I had to obtain full ethical approval from the University Research Ethics Committee (REC). One of the most important aspects of any research project, especially those undertaken within the field of education, is ensuring the anonymity of those who have agreed to participate in it, and that the data the principal researcher collects is kept confidential. In his paper Walford (2005) finds it necessary to explain the difference between anonymity and confidentiality. On an everyday basis, anonymity means that individuals do not name the person or research site involved. However, where research is involved, it usually means that the researcher should not include any information about the individual or research site that would make the person or research site identifiable to others. Confidential, on the other hand, refers to information that is private or secret implying that what you are being told should not be passed on to others (ibid). Though researchers should, as a rule, keep information given to them confidential, Wiles *et al* (2008) suggest that there may be times when confidentiality needs to be broken. For example, where an individual has disclosed that they have committed a crime or are about to commit a crime it would be necessary to break confidentiality as a matter of public

safety. It is understood by all researchers that they are required to adhere to the guidelines which are published on a regular basis by research associations such as the British Educational Research Association (BERA), the American Psychological Association (APA) and the Social Research Association (SRA). Whilst the ethical foundations of every research field remain the same, the way in which individuals interpret such guidelines will depend on the research field they work in. Those who work in the field of education are obliged to follow ethical guidelines published by BERA on a regular basis. The most recent of these (BERA, 2018) include the following:

- [The research should] be inclusive of different interests, values, funders, methods and perspectives.
- [The research should] should respect the privacy, autonomy, diversity, values and dignity of individuals, groups and communities.
- [The research should] be conducted with integrity throughout, employing the most appropriate methods for the research purpose.
- [The researchers should] act with regard to their social responsibilities in conducting and disseminating their research.
- [The research should] aim to maximise benefit and minimise harm.

In terms of this research project I undertook a Disclosure and Barring Service (DBS) check. This ensured the safety of the children I would come into contact with throughout the duration of the project. Also, I had chosen to use observation as one of my main data collection methods. This would allow me to monitor the children's progress in an environment that was familiar to them, thus giving them the freedom to participate in the lessons and activities that were planned for them, without any external influence from me. The current research project was split into two phases, both of which would require data analysis. For the second phase, I hoped that teachers and support staff would agree to complete a questionnaire and participate in an interview. Although all recorded data can be kept for at least 10 years after the research project has been completed, I planned to download and store the data in a secure software programme, which would allow me to destroy the material from devices that other individuals could access, as soon as possible. This material was kept in a secure place prior to it being transferred onto the secure software programme. Given the main aim of the project, I did not expect any direct input from the children; this therefore did not put them under any undue pressure to participate. Furthermore, I was able to focus my attention on all the children that had the capacity to understand and agree to participate in the research, therefore treating them respectfully.

Defining ethics can be difficult, as, whilst all ethical guidelines focus on standards of conduct (Resnik, 2011) every field of research will have their own ethical protocols which have been

written with that particular research field in mind. However, it is fair to say that research which involves human participants starts from a position of ethical tension, in that it involves asking them to take part in, or undergo, procedures that they have not actively sought out or requested and are not solely, or even primarily, intended, for their direct benefit. The overall aim of this study is to compare two play-based curricula and to examine what can be learned from them that can inform the education of children with SEND. I intended to carry out observations to assess the latter by observing the way in which children with SEND engage in play-based learning processes. I would further assess whether engaging in such processes would support children with SEND to improve their social imagination, social communication and social interaction.

3.4 Qualitative Research, Multi-Method Approaches and Triangulation

Individuals who undertake research strive to collect empirical data systematically and examine data patterns, so they can better understand and explain social life, yet differences between research approaches can create miscommunication and misunderstandings (Neuman, 2011). Olson (2013) also believes that the ongoing argument over the relative merits of what are generally referred to as qualitative and quantitative methods is clouded by two problems: 1) there is a lack of coherent definitions and 2) most of the discussions surrounding these methods are based upon the perceived lack of definition instead of the basic theoretical assumptions that underpin these two methodologies. Having said this, the way in which these research methodologies are utilised in both the social and behavioural sciences has undergone radical changes over the past 50 years – so much so that there are now three methodological traditions: quantitative, qualitative and mixed methods.

The way in which data is collected in qualitative research is usually by talking to people directly and seeing how they behave and act within the environment being studied (Olsen, 2013; Pellegrini, 2004). This means that qualitative research is more transparent as it provides the reader with rich descriptions as well as providing the researcher themselves with a platform which allows them to explain to the reader how they discovered their insight and how subsequently they were able to deepen it further through extended engagement with the focal phenomenon and associated data. Moreover, it is also important that researchers who employ qualitative methods are able to convey a clear connection between data and theory (ibid). However, the difficulty of establishing a connection between qualitative data and theory is highlighted by Miles (1979, p.590) who believes that:

The most serious and central difficulty in the use of qualitative data is that methods of analysis are not well formulated. For quantitative data, there are clear conventions the researcher can use. But the analyst faced with a bank of qualitative data has very few guidelines for protection against self-delusion, let alone the presentation of "unreliable" or "invalid" conclusions to scientific or

policy-making audiences. How can we be sure that an "earthy", "undeniable", "serendipitous" finding is not, in fact, wrong?

Mays and Pope (1995) also criticise researchers who use qualitative methods on a regular basis as firstly, this type of research is an assembly of anecdotes and personal impressions and strongly subject to researcher bias. Secondly, it is argued that qualitative research lacks reproducibility, as the research is so personal to the researcher that there is no guarantee that a different researcher would not come to radically different conclusions. Finally, this type of research is also criticised for its lack of generalisability as qualitative methods tend to generate large amounts of detailed information about a small number of settings.

According to Denzin (2012) "The use of multiple methods, or triangulation, reflects an attempt to secure an in-depth understanding of the phenomenon in question. Objective reality can never be captured. We only know a thing through its representations." However, whilst triangulation is not a tool or strategy for validation the combination of multiple methodological practices, empirical materials, perspectives and observers in a single study is best understood as a strategy that adds rigour, breadth, complexity, richness and depth to any research study (ibid). Whilst Denzin's points about triangulation have been corroborated by Flick *et al* (2012) these same authors make the point that by utilising triangulation during the data collection process researchers can look at the same issue under investigation from different perspectives. If you have several researchers investigating the same issue the results can be verified using triangulation. Furthermore, it refers to the combining of several data collection methods but how this is achieved will depend on the theoretical paradigms employed by individual researchers. Therefore, whilst the research question remains the same, the aim is to triangulate two or three sets of data to verify or complement the findings of the various stages of research. To an extent I also identified with ethnomethodology as I strove to collect analyse and present findings about experiences through the participants' own voices (Hughes & Tight, 2013; Spyrou, 2016; Sohn *et al*, 2017).

3.5 Criticality and Reflexivity

The current research project is a Doctor of Philosophy (PhD) thesis. As has been indicated earlier in this chapter I believed that this research project could be situated within the interpretivist paradigm. As such it was necessary to demonstrate self-criticality/reflexivity at various points throughout this project (Guillemin & Gillam, 2004), which involves researchers not just situating themselves in the stages of the research but also in relation to the data they have collected. It is only by situating themselves in the research that researchers can begin the process of reflexive interpretation (Savin-Baden, 2004). Another issue to consider is that of criticality in research. It involves setting up the conditions

necessary to critically think through all aspects of the research process including how you will sample participants and the appropriate methods to collect and analyse data. Understanding peoples lived experiences is complex and should be taken into consideration when designing any research study. The research questions are central to this and any researcher must consider the complexity, inclusivity and scope of their research questions and acknowledge they are the primary instrument in the research. Therefore, the researcher's bias and positionality (discussed earlier in this chapter) must not be taken for granted and reflected in the researcher's choice of topic, the crafting of research questions and the final research design.

As has become clear throughout this chapter it is important that the research community include children with SEND on the research agenda as these children (who can have a diverse range of needs including physical, communication or cognitive impairments) are often overlooked (Stafford, 2017). As a researcher with a disability, whilst I recognise the importance of criticality and reflexivity within research, in terms of this research project, of equal importance is the intersectionality between disability and 'lived experience'. It is impossible for me to talk about others' experiences without talking about my own, particularly when we consider that I attended an early-years setting that adhered to the Montessori educational approach (which is under investigation here). Whilst not necessarily being aware of how or why attending this type of setting would affect my educational career, it certainly set me on the path to achieving my full potential within the mainstream education system and has undoubtedly had an impact upon my own research agenda. The fact that I am using my own experience to inform the research has its roots in phenomenology, in particular phenomenological psychology. This type of psychology was developed by Edmund Husserl in the 1900's and was viewed by many in his field as a bold and radically new way of doing philosophy concerned with putting the philosophy of lived experience centre stage (Langdrige, 2007; Sloan & Bowe, 2014). Therefore, this project has the potential to penetrate deep into the human experience. The data collection methods I have chosen to utilise in this research project have granted me access to rich contextual data and surfaces meaning from human experience (Crowther *et al*, 2016). This quality of illumination of the core state of being requires very careful attention and the outcome is naturally greater than the sum of its parts (Kafle, 2011). Given that this research project deals with human experience, criticality and reflexivity can be achieved by keeping a reflective diary (Elliott, 1997; Hewitt, 2017).

A research diary can be defined as "a written document that students create as they think about various concepts, events, or interactions over a period of time for the purposes of gaining insights into self-awareness and learning" (Thorpe, 2004, p.328). Keeping a research diary for the lifespan of the research allows researchers to keep a record of the

events that take place during the project. These events could be anything from meetings with a supervisor and what was discussed and decided upon – as, at a later date, researchers might need to justify why certain courses of action were taken. In terms of the current research project, I felt it necessary to keep a diary for some of the reasons stated in Glaze's (2002) paper, one of these being that 'far from subjectivity being a negative attribute, qualitative writers recognise that researchers' thoughts cannot and indeed should not be separated from the research process'. Some of my personal thoughts therefore appear within my recorded observations. It also helped to create transparency and allowed for more credibility (Callary *et al*, 2012; Noble & Smith, 2015; Connolly, 2016). Moreover, keeping a diary enabled me to keep an audit trail of my reasoning, judgment and feelings while completing the research as doing so offered me the means to acknowledge how I thought and felt at the time. I did not therefore do any detailed analysis of the diary itself once my observations were completed. As with anything in life, time passes and we retrospectively create a shorter, more sanitised version of events, possibly leaving out crucial information that could be pivotal in furthering a researcher's appreciation of the topic under investigation (King & Horrocks, 2010). Browne (2013), as well as corroborating what has been written about research diaries by King and Horrocks (2010), also suggests that keeping a research diary can be a cathartic experience for a researcher, especially as the deepest frustrations, fears, and anxieties of the researcher can be channelled from the internal to the external in the form of writing.

When working in the research arena we rarely hear about the emotional side of doing research and the implicit message researchers may derive from the silence is that emotions have no role to play and perhaps even should be denied and suppressed (Borg, 2001; Dickson-Swift *et al*, 2009). However, Fitzpatrick and Olson (2015) and Caetano (2015) believe that emotions are an undeniable part of a researcher's work, therefore the research diary can assist them in acknowledging them, expressing them, and, particularly where they threaten the progress of the research, analysing and reacting to them (emerald & Carpenter, 2015). According to Glaze (2002) and Bruno and Dell'Aversana (2017) reflective journals have been used as an effective monitoring and developing reflective practice within the learning and research process. Moreover, Glaze (2002) further suggests that diary keeping can be used as a means of ensuring rigour throughout the research process. Furthermore, rather than subjectivity being viewed as a negative attribute, qualitative writers recognise that researchers' thoughts cannot and indeed should not be separated from the research process. It is also argued that greater credibility can be achieved when the researchers describe and interpret their experience as researchers rather than implying a detached stance, which, in reality is impossible to achieve. In her article Cope (2014) offers some suggestions as to how to increase the credibility of qualitative research. One way to do this is that on completion of the data analysis process the researcher asks the participants to

validate the information to ensure that he/she has interpreted the data correctly. Further, the researcher can provide the reader with rich and vivid quotes; thus, the reader can personally critique the credibility of the study and substantiate the interpretations. Triangulation depicts the use of multiple data sources in the same study for validation purposes (Hussein, 2009). According to Bekhet and Zauszniewski (2012) there are two types of methodological triangulation - across method and within method. Across method studies combine quantitative and qualitative data collection techniques whilst within method studies use two or more quantitative or qualitative data collection methods but not both. In terms of this study, I have adopted the 'within method' approach to triangulation in that within my questionnaires the only questions framed in quantitative terms were those concerning demographics and duration of working career.

3.6 The Research Journey so far...

As is evident by the title of this research study at the beginning of this project the researcher endeavoured to examine the differences between the Montessori educational ethos and the National Curriculum (NC) used in mainstream and special schools. When I first set out on their research journey I did not envisage encountering any of the potential difficulties illustrated in Figure 3.1. The main reason for such thinking was that the main topic under investigation was the impact that the Montessori educational ethos has on the overall educational development of children with Autism Spectrum Condition (ASC). The reason for the choice of topic, at the start of this journey, seemed very simple. As part of my undergraduate degree she investigated the ways in which children with ASC acquired the English language.

As already stated in my Context of Study chapter my conclusions showed that parents were concerned that their child was not being treated as an individual and that its particular needs and requirements not recognised, or ignored, by the specialist professionals involved (Zablotsky *et al*, 2014), and in some cases by the school as a whole (Carpenter *et al*, 2015). Therefore, parents felt it necessary to pay for private language and Applied Behavioural Analysis (ABA) training (ibid) and even opt for home education in order to escape the strictures of a formalised, generalised education system (Badman, 2009; Parsons *et al*, 2009; Parsons & Lewis, 2010; Kendell & Taylor, 2016). Her conclusions also found that better training for educational professionals, especially Speech and Language Therapists was needed to accommodate the needs of children with ASC (Dillenburger *et al*, 2016). It was on completing this research project that the researcher felt the use of alternative educational paradigms needed to be explored given the specific symptomatic profile of children diagnosed with ASC. After undertaking some initial research, I decided to examine the impact of alternative curriculums such as the Montessori educational ethos in order to

investigate whether or not alternative educational approaches have a significant impact upon the overall development and learning outcomes of children with ASC.

3.6.1 Ups and Downs

There are many reasons why I thought that obtaining access to Montessori nurseries would be relatively easy. Firstly, I attended a Montessori nursery as a young child and therefore had some knowledge of how the various pieces of equipment used within this type of early childhood setting aid a child's development. Secondly, the Montessori educational ethos was originally implemented due to the fact that its founder Maria Montessori had observed children who were institutionalised because of their disabilities and whilst her colleagues felt they were ineducable and not interested in what was going on around them, she had noticed that this was not the case (O'Donnell, 2013). It was because of the latter point that I felt that Montessori nurseries would be interested in taking part in the study as whilst this type of education has a relatively high uptake in both Europe and United States of America (USA), the same cannot be said for the UK. This despite there being over 16,000 schools that adhere to the Montessori approach internationally (Isaacs, 2012).

Given that the uptake of Montessori education in the UK is significantly lower than in Europe and the United States, it stands to reason that it does not have the same impact in terms of a British context and therefore many parents are unaware of the alternative type of education that their child could have and therefore she wanted to raise parental awareness of this method of education (Montessori Schools Association, 2016). Thirdly I thought that more parents of children with Special Educational Needs (SEND) would be more aware of this method given that it was originally designed for these children. Finally, the researcher believed that there would be higher numbers of children aged between 0-4 diagnosed with Autism Spectrum Condition (ASC). Unfortunately, it was not to be as easy as I had envisaged. After an initial mail shot of six Montessori nurseries in the Merseyside/Liverpool/Wirral area only one nursery contacted the researcher to express an interest in taking part in the research project (Oppong, 2013). The manager of the nursery did voice concerns that they did not have any children diagnosed with ASC who attended the nursery and also the fact that it was the only Montessori nursery in the local area and therefore was concerned about confidentiality. I explained in the initial meeting with the manager that I was confident of gaining permission to go into another Montessori nursery as I had not yet heard from the other five that I had also contacted. However, this was also not to be the case as after sending a second mail shot which also included a date for final response. After this date had passed and after consulting my PhD supervisor, I decided to contact the nurseries that I had not heard from by telephone.

After I had done this I realised that her research journey was not going to be as simple as I had first thought due to the fact that either the nurseries did not want to participate in the research or were uncontactable. I then decided to contact the two main charities that are responsible for raising awareness of the Montessori educational ethos to ask whether they were aware of any other nurseries in the local area. One of the charities did respond to my request, however I found that I had already contacted one of the nurseries that they had listed in their letter. However, although I had looked at the other nursery they suggested contacting, I had already discounted this nursery due to the travelling distance (as it is located in Manchester) and mobility issues due to the nature of my disability. I then decided to investigate if there were any other nurseries in the local area that I had yet to contact. I found a further two nurseries I could contact and so she also decided to contact these by letter as per my ethical approval.

As with the other six nurseries I contacted, I sent an initial letter out to the two other nurseries she later found but she did not receive any interest from the initial letter she sent, so she again sent a second letter out to the other nurseries she had found with a final date for expressing an interest to taking part in her research project. However, she did not receive any response from either of the two nurseries she later found so then discussed with her PhD supervisor how to proceed. We discussed various options but decided that a way forward would be to write to two of the main charities that assist children and families diagnosed with ASC, but I also received no response from them. Following on from not receiving any response from the two main charities that assist children with ASC and their families I arranged another meeting with my supervisor to discuss how best to move the research forward given the fact that she was not much success when she focussed solely on trying to obtain permission from Montessori nurseries. During the meeting, we realised that out of the four main research questions I was aiming to answer by undertaking this research project there was only one that primarily focused on the Montessori educational ethos and therefore during this meeting it was decided that the focus of the research should change slightly. Doing so meant that I could now make contact with both mainstream and special schools both of which were likely to have children diagnosed with ASC on their roll. Soon after the meeting I she again did a search for schools who she felt would be willing to participate in her research and again as per my ethical approval she sent an initial letter out to both mainstream and special schools in the local area. To start with, my PhD supervisor suggested she contact the University's Work-Related Learning Unit to request a list of schools in the local area whom receive requests from Liverpool John Moores University (LJMU) students to participate in research projects on a regular basis.

Once this had been done, I also contacted a health professional who worked who worked at one of the charities she had recently contacted. The lady with whom she spoke, although

she was from a health background and not an education background, was able to suggest possible routes forward as well as a list of other schools and regional organisations she could contact in order that she be able to move her research forward. After discussing these various routes, the lady also followed this up with an email which listed all the schools within the Liverpool/Merseyside/Wirral area that had an ASC resource base attached to the school and therefore by writing to these schools I was hopeful that I would obtain permission from at least one of the schools to undertake my research in that particular setting. Once I received this email I immediately sent out a research participant information pack to the various different individuals and educational organisations so that they were able to make an informed decision with regards to whether or not to take part in the research project. At first she did not receive any response from any of the organisations that the lady had listed in her email, however, I again sent a second participant information pack out to all the organisations listed in the email with a final date for expressing an interest to participate in the project.

I then went on leave for a few weeks but during her leave she received a few emails from organisations informing her that due to the nature of the organisation i.e. the organisation did not work with children rather they worked with adults with ASC and therefore were not able to assist with the research project and another organisation informed me that they did not ascribe to the educational ethos that is being investigated in this research project, moreover, they were unable to assist with the research due to not having the capacity to do so. At this point I thought that i would have to arrange yet another meeting with my Director of Studies but had since received a response from one of the schools that she contacted for a second time prior to going on leave, and I sent another letter to them having realised that the school may have misunderstood the research project in its entirety as a member of staff had only sent back a consent form which meant that they had only given permission to participate in the second phase of the research. I contacted the school in question and spoke to the SENCO who had not realised that there was a second consent form that she had to sign. Once I had established that she was happy for the school to participate in the study I arranged a meeting with her to explain the nature of the study and what would be expected of them in terms of data collection. At the meeting I explained that the first stage of my study involved detailed observations of the children in the classroom setting. She seemed hesitant about this but took me on a tour of the classroom and informed me that she would contact me in a few days to arrange a date for me to commence the observation phase of my study.

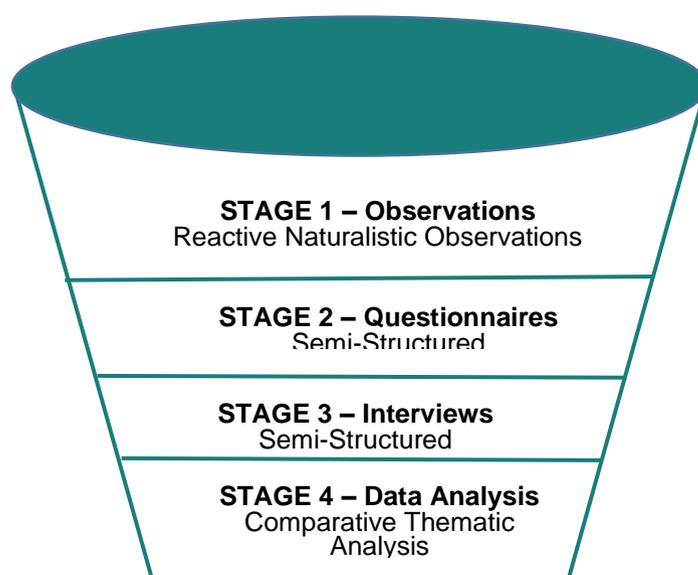
A few days later I received a phone call from the headmaster of the school to inform me that due to health and safety concerns as a result of my disability the school did not feel they could assist me with my observations. However, the headteacher informed me that they

would still like to participate in the study in some way. It was therefore agreed that the teachers and support staff would complete the questionnaire and interview stage of my study. A few months later I attended a supervision meeting with all of my team and they advised me that they felt I did not have enough data from the primary school to justify it being included in my study. As a result, it was decided that I should contact one of the special schools again to explain that my research criteria had been widened and would they consider participating. A few weeks later I received a positive response. A meeting was subsequently organised to inform them about what they study would entail.

3.7 Research Design

This section will describe the way I designed my study, which will include an overview of the advantages and disadvantages of my chosen methods, how I recruited my participants, the research procedure and an overview of my chosen method of thematic analysis. My design allowed teachers and support staff's comments, their answers to my questions, and general impressions formed during data collection, to all contribute to my thought processes when undertaking analysis. I did not attempt to suppress these views in the interests of purity of thought, rather I incorporated them into the analysis (Bloor, 1978) although I understand that the views I have incorporated in this thesis are those of people who work in educational settings that adhere to play-based approaches and therefore will offer opinions on these two approaches from a particular angle (Farrance *et al*, 2016). Bearing in mind the findings of the Farrance *et al* (2016) I have chosen to present my findings as two case studies.

Figure 3.1: The Stages of the Present Research Project



3.7.1 Case Study as a Research Design

According to Bryman (2012) the basic case study design involves the detailed and intensive analysis of a single case. All social researchers who choose to make use of the case study have a desire to derive an up and close or otherwise in-depth understanding of a single or small number of “cases” set in their real-world contexts (Yin, 2012). The closeness aims to produce an invaluable and deep understanding – that is an insightful appreciation of the cases – hopefully resulting in new learning about real-world behaviour and its meaning. Therefore, case study research assumes that examining the context and other complex conditions related to the case being studied are integral to understanding the case (ibid). The in-depth focus on the case as well as the desire to cover broader range of contextual and other complex conditions, produce a wide range of topics to be covered by any given case study (Brogan *et al*, 2019). In this sense case study research goes beyond the study of isolated variables. As a by-product and as a final feature in appreciating case study research, the relevant case study data are likely to come from multiple and not singular sources of evidence (ibid). Furthermore, the use of multiple data collection methods provides a more convincing and accurate case study (Lee & Chavis, 2012). Triangulation can increase the credibility of case studies. The two main reasons for using this type of data collection are to ‘confirm’ data and to ensure data are ‘complete’ (Casey & Murphy, 2009; Houghton *et al*, 2013). Confirmation is the process of comparing data gathered from multiple sources to explore the extent to which findings can be verified. If data gathered from multiple sources is found to be consistent it can increase confidence in the credibility of findings (Houghton *et al*, 2013). To construct validity of a procedure refers to the extent to which a study investigates what it claims to investigate, that is the extent to which a procedure leads to an accurate observation of reality (Gibbert & Ruigrok, 2010)

One of the main challenges for case study researchers is to develop a well considered set of actions rather than using “subjective” judgements. Constructive validity and the notion of “objective” knowledge it presupposes represents the one criterion were interpretivists and positivists find it difficult to develop common ground (Roth & Mehta, 2000). Silverman argues that models underlying qualitative research are “typically compatible with the assumption that an objective reality can be obtained from different ways of looking at it”. The positivist literature however provides concrete research actions that need to be considered to ensure construct validity. Two main strategies have been suggested (Chowdhury, 2014). First researchers have sought to triangulate, that is, adopt different angles from which to look at the same phenomenon by using different data collection strategies and different data sources (ibid) such as interviews archival evidence and participatory or direct observation. Practically speaking authors may report that they themselves or their assistants conducted the interviews. This is in contrast to interviews taken from or other archival sources. These archival sources may, nevertheless, be used

to triangulate and corroborate interview data. Additionally, participant or direct observation may be used in triangulation. This data may come from taking part in or observing for example meetings and workshops in the researched organisation (Lee & Chavis, 2012)

3.7.2 Benefits of Case Studies

If researchers choose to study a specific phenomenon arising from a particular entity, then a single case-study can be used as they allow for an in-depth understanding of the single phenomenon. In contrast using a multiple case approach allows a researcher to compare the individual similarities and differences embedded within the quintain. Evidence arising from multiple case studies is often stronger and more reliable than from single case research. Multiple case research allows for more comprehensive exploration of research questions and theory development (Brogan *et al*, 2019). Despite a number of advantages to the case study method as with anything there are also disadvantages. The sheer volume of data is difficult to organise and data analysis and integration strategies need to be carefully thought through. Sometimes there is also a temptation to veer away from the research focus (Heale & Twycross, 2018).

3.7.2 Rigour in Research

There is general agreement that all research studies must be open to critique and evaluation. Failure to assess the worth of a study – the soundness of its method, the accuracy of its findings and the integrity of assumptions made, or conclusions reached – could have dire consequences. Ambiguous or meaningless findings may result in wasted time and effort, while findings which are simply wrong could result in the adoption of dangerous or harmful practices. In terms of the current research project the researcher decided to employ triangulation (Denzin (2012)). As the definition suggests researchers usually choose three data collection methods (*ibid*). In my case these included observations, semi-structured questionnaires, and semi-structured interviews.

Given the points made by Denzin (2012) I chose to triangulate the data (as detailed in Figure 3.1, p.80 and disuccessed in further detail below) thus allowing me to build an in-depth picture of the play-based approaches under investigation in this thesis. Prior to undertaking any data collection I endeavoured to contact several settings that advocated play-based approaches to facilitate the learning and development of children with and without Autism Spectrum Condition (ASC) Table 3.1 below details the type of setting contacted; the number of settings; the number of settings that responded; and the percentage of settings that responded. Table 3.2 also provides an overview of the different data collection methods including the number of observations undertaken at each school; and the number of staff

that provided responses in my questionnaires and interviews; as well as an overall response rate for each school.

Table 3.1 Response Rate by School Type

Type of Setting	Number of Settings Contacted	Number of Responses	Percentage of Responses
Montessori	8	1	12.5%
Primary School (with ASC Resource Base)	8	1	12.5%
Special School	2	1	50%

Table 3.2 Overview of Data Collection Methods and Participant Responses

Type of Setting	Number of Observations	Number of Staff Employed at Setting	Number of Questionnaires Completed	Percentage Responses (Questionnaires)	Number of Interviews Carried Out	Percentage Responses (Interviews)
Montessori Setting	6	28	6	21%	6	21%
Primary School (with ASC Resource Base)	0	71	6	8%	6	8%
Special School	6	20	5	25%	5	25%

3.8 Data Collection Methods

Having provided a detailed overview of my research design in the previous section I will now give a detailed account of the methods I employed to collect my data.

3.8.1 Stage One – Observation: Justification of Use

Many observational methods have their roots in anthropology. Researchers visit little known ‘tribes’ and record their activities for subsequent analysis and interpretation (Cotton *et al*, 2010). Anthropological methods (including observation) have been adopted by education researchers and other social scientists, primarily through the development of ethnography as an approach to social research (Hammersley and Atkinson, 2007). A crucial part of observation – particularly important in educational research is to ‘make the familiar strange’ and to look beyond what is being overtly taught (Cotton *et al*, 2010). As such, the use of observation is most important in today’s world as cultures are changing and society is shifting at an exponentially fast pace. The merits of using observation as a research tool have been discussed by Forman and Hall (2013). Their study investigated why teachers use observations as a form of assessment. They stated that they can discover children’s interests; assess their developmental needs; develop strategies to help the children to achieve their full potential; determine what skills the children need to practise; and learn about their personalities (*ibid*). The value of using observation as a research method when conducting studies that involve children has also been debated by Pellegrini *et al* (2004) who also believe that if researchers are interested in understanding the way in which children develop in their everyday world, it is important that researchers spend time observing them in those situations which they ordinarily inhabit.

I undertook observations as one of my primary data collection methods. The reason for doing so is because it is the main tool that is used by Montessori practitioners to assess a child’s overall development as well as uncover the needs of individual children and the classroom community as a whole (Monson, 2006; Cossentino, 2009; Ültanir, 2012; Huxel, 2013; Tahir *et al*, 2013). According to Sackett (2016, p.7), “Maria Montessori was our first scientist in the classroom... Montessori came to this work as a scientist and she remained first and foremost a scientist until the end” When Montessori began she did not know what she was going to discover...” (*ibid*, p.12). Neither do the teachers who come into contact with the children on a daily basis. Furthermore, observation ensured that I did not feel that I was imposing on the everyday running of the nurseries; I asked if I could assist in any way (while still keeping professional distance). In doing so it allowed me to build up a rapport with the children and therefore become more familiar with the techniques that are used to assist all children, but especially those with SEND or autistic tendencies to achieve their full potential. The method that I chose to use is more commonly known as naturalistic

observation (Arthur *et al*, 2012) in which researchers do not seek to control what goes on at the research site; rather, their main task is to observe what happens naturally. I also hoped that by using a method that the children were already familiar with, they would not be too deterred from behaving normally when faced with an unfamiliar adult (National Children's Bureau, 2011; Jug & Vilar, 2015).

This is particularly important as according to Huxel (2013) teachers who work in Montessori settings are either seated on the floor or at a table working with a child or observing from the perimeter. I undertook reactive observation (*ibid*) as this allowed me to explain the purpose of the research to those I wished to observe and to be able to intervene when necessary, although I endeavoured to do so without compromising my role as a researcher. In terms of the current research project, I used two techniques – continuous sampling for when I was focussing on what was happening in the classroom as a whole and time sampling for when I wished to focus on more one-to-one interactions between either a teacher and a child or two or more children (Bryman, 2016).

3.8.2 Observation: Participants

Observation was utilised during the first stage of data collection. The participants were aged between 0-7 years of age; due to their age and vulnerability a Participant Information (PI) pack was sent to the manager/headteacher of all the settings I wished to be involved (Oliver, 2010). Only one Montessori nursery responded to my request, and after my initial meeting with the manager (Gatekeeper) where I explained the purpose of my study in more detail and answered any questions the manager had regarding the study (*ibid*), it was agreed that they would send out the PI packs to recruit the children on their roll as due to their age parents would have to give consent for them to take part in the study (Alderson, 2014). A date to commence the observations was also agreed upon.

3.8.3 Observation: Recruitment

I contacted a total of seven nurseries which uphold the Montessori teaching and learning ethos. After an initial mail shot of six Montessori nurseries in the Merseyside/Liverpool/Wirral area, only one contacted me to express an interest in taking part in the project (Oppong, 2013). The manager of the nursery did voice concerns that they did not have any children diagnosed with SEND who attended the nursery and also the fact that as it was the only Montessori nursery in the local area and he was concerned about confidentiality/anonymity. However, even though every effort was made (including writing to two of the main charities that assist children and families diagnosed with SEND for assistance in recruiting other Montessori nurseries), these proved unsuccessful.

I then met with my supervisor to discuss how best to move the research forward given the lack of success when I focused solely on trying to obtain permission from Montessori nurseries. During the meeting, we realised that out of the four main research questions I was aiming to answer, only one focused primarily on the Montessori educational ethos; during this meeting therefore, it was decided that the focus of the research should change slightly. This meant that I could now make contact with mainstream and special schools, both of which were likely to have children diagnosed with SEND on their roll. I did a search for mainstream and special schools in the local area whom I felt would be willing to participate in my research. Another contact was a health professional who worked at one of the charities I had recently contacted who was able to supply a list of all the schools within the Liverpool/Merseyside/Wirral area that had a SEND resource base attached. Responses received included emails from a Special School informing me that they did not subscribe to the Montessori ethos and could not assist. However, after the change of criteria had been clarified, they agreed to participate.

3.8.4 Observation: Procedure

As mentioned earlier, I decided to carry out naturalistic observations as opposed to time-interval sampling in both settings due to the age of the participants and also because of the unpredictable and adverse behaviour that C&YP with SEND can often display when new people enter an environment that they are familiar with. However, there can be problems with this type of data collection method particularly if the researcher writes long-hand accounts and has permission from several individuals to participate in the research, as they are required to direct most of their attention to the actual recording of behaviours instead of directing it towards the subject's behaviour and the tasks they are completing (Lipinski & Nelson, 1974). Therefore, I also chose to utilise a voice recorder to capture the 'voices' of both the children and the practitioners (Kambouri, 2016). It was still difficult to remain what O'Leary and Kent (1971, cited in Lipinski and Nelson, 1974, p.345) refers to as a neutral stimulus particularly in the Special School setting, because as with the Montessori setting the children who took part in the study were of pre-School Bge. Furthermore, they were unable to understand that I was not supposed to interact with them, due to the severity of their SEND. However, as the data collection progressed, I felt that the interactions between the participants and me enriched the data that I collected as I was able to create a narrative thread and make connections with the information I had been given at the beginning of the observation period with regard to each child's targets for the school term.

3.9 Stage Two – Questionnaires: Justification of Use

The study was divided into four stages, each of which assisted in answering the two research questions. The first stage of the current study involved observing some of the

children who attended the settings (as discussed above). Throughout this research project, I took an interpretivist view of the topic under investigation. As such, I asked the teachers and support staff to complete a semi-structured questionnaire which allowed them to consider and express their thoughts and feelings in relation to the questions asked. Through this I endeavoured to gain an insight into the way children who attend these settings are taught as well as whether or not children with or without SEND thrive academically and developmentally.

3.9.1 Questionnaire Design

According to Oppenheim (1992) “designing a questionnaire cannot be taught using a textbook, as every study presents new and different problems and a textbook can only hope to prevent some of the worst pitfalls and to give practical, do-it-yourself kind of information that will point the way out of difficulties” (p.1). According to Bell (2010) and Denscombe (2010) there are several factors to consider when designing a questionnaire for research purposes. These include the advantages and limitations of different question types (Bell, 2010) as well as the costs associated with the production, distribution, and collection of the questionnaire. It also includes the time it takes to produce a well-designed questionnaire; the time it takes to distribute, collect, and analyse the information provided in the questionnaire; and providing respondents with a realistic timescale to complete and return the questionnaire. Further, depending on the issues covered in the questionnaire, there may also be a need for the researcher to obtain permission from those in authority to complete them (Denscombe, 2010). Questionnaires can be utilised in every research sector, but they are especially popular within the health sector (O’Cathain & Thomas, 2004; Rattray & Jones, 2007). Therefore, if researchers want to conduct research that utilises questionnaires as one of the data collection methods, the above points made by Bell and Denscombe need to be considered.

Many researchers design questionnaires which mainly consist of closed questions which allows data collection, coding and analysis to be more efficient. Efficiency is viewed as an important factor to consider when designing questionnaires for research purposes – especially where the premise of a research project is to obtain the attitudes or experiences of a representative sample for generalisation to a wider population (O’Cathain & Thomas, 2004). The above scenario highlights how, in the past, researchers have preferred to design questionnaires which provide them with data of a quantifiable nature. However, in more recent years an increasing number of researchers have moved away from using quantitative methods as their main approach to data collection towards more qualitative methods. Whilst there are similarities between quantitative and qualitative research methods, in that questionnaires can be utilised in both research traditions, questionnaires that are designed

for qualitative research usually include a combination of both quantitative and qualitative questions.

The questionnaire was designed to gain an insight into advantages and disadvantages of play-based curricula for children from the point of view of the teachers, practitioners and support staff. Whilst the majority of the questions in the questionnaire were of a qualitative nature, there were a small number of quantitative questions which allowed me to find out specific details about the respondent – age, gender, length of time at the school, length of career (Dawson, 2009). The qualitative questions were more open in nature thus providing respondents with an opportunity to provide a more detailed response (ibid). These questions covered the following areas: if applicable, the reason for transfer from a state to a play-based setting; the differences in training between the two environments; their experience of working with children with SEND; the benefit of play-based approaches in the development of children (with or without SEND), and the impact of play-based approaches on their future academic outcomes.

Another issue to consider when designing a questionnaire for research purposes is what the questionnaire will look like on completion of the design process. According to Boynton and Greenhalgh (2004) researchers rarely spend time on the physical layout of the questionnaire, believing that the science lies in the content of the questions and not in such details as the font size or colour. It is of no surprise therefore, that some respondents cannot read or follow the questionnaire which inevitably contributes to a low response rate (ibid). Thus, I endeavoured to ensure that the teachers did not feel overwhelmed by the number of questions, whilst managing to collect the data I required. I gave, at the start of the questionnaire, an indication of the time required for completion, given that teachers are very busy. For this reason, I also adopted a simple layout. As has already been explained earlier in this chapter, the current research project was divided into three stages.

3.9.2 Questionnaires: Participants

During the initial meeting with each of the gatekeepers (nursery manager, headteacher and SENCO) I explained how I intended to gather the information I required after the observation phase of the research was completed. The children from School B who took part in this study had a diagnosis of SEND and due to its severity, were non-verbal. Consequently, in order to build an in-depth picture of the differences between the Montessori educational approach and the School B play-based curriculum, the questionnaires for School B were completed by the teachers and support staff who came into contact with the children on a daily basis, as they were familiar with the initial research that had been undertaken prior to implementing the play-based curriculum and the overall impact (in terms of educational and

developmental targets) that it had had on the children. At the time of completing the questionnaires both the teacher and the additional support staff had spent at least a year with the children that participated in the study (Monson, *et al*, 2014). As part of the ethical approval process I had had to design a questionnaire that would be suitable to distribute in a Montessori setting. Having had to broaden the scope of my research to include a Special school (Lucarelli, 2014; Herbert & Rainford, 2014), I therefore had to adapt the questions to reflect the teaching methods in that particular School Bnd allow for meaningful interpretation of the data (Twining *et al*, 2017).

3.8.3 Questionnaires: Recruitment

As already mentioned, the questionnaires were distributed to all teachers and support staff who worked with and alongside the children, both in the Montessori nursery and at School B. After I had completed my observations, I left PI packs and consent forms for the manager, who was the gatekeeper, to distribute to the staff. Once he felt that he had enough staff who were willing to complete the questionnaire (five), he contacted me and we agreed a date for me to return to the nursery. In terms of the Special school it was not possible for me to carry out the stages in the same way that I had with the Montessori setting due to timing constraints (Hine, 2013).

3.8.4 Questionnaires: Procedure

As has already been indicated in the previous section the questionnaire was completed in both settings by staff who had spent at least one academic year supporting or teaching the children. The questionnaire was designed in such a way as to not only provide me with raw data but also allowed respondents to engage with and think about the issues that were going to be discussed in the interview, as described earlier in this section. There were two reasons for this: firstly, it would enhance the richness of the answers given during the interviews and secondly, it would help address the problem of respondents making statements during interviews which differed from what they thought or believed before, after or even during the interview (Maher & Twining, 2017). Although concerns have been raised regarding the fact that the presence of a researcher can bias the data that is collected (Miyazaki & Taylor, 2008), I felt it necessary to be present when staff were completing them in case they had any questions (Louviere *et al*, 2013).

3.10 Stage Three – Interviews: Justification of Use

I chose to carry out semi-structured interviews as these allowed me to explore the main question sufficiently. Many researchers view questionnaires as an easy way for novice researchers to obtain data and access information from a large number of respondents and the data gathered may therefore be seen as generalisable. Interviews can be very time

consuming. Having said this, for those researchers who wish to undertake interviews as part of their research projects, Rowley (2012) offers some advice – conducting interviews requires skill and experience. Therefore, it is of no surprise that the most popular type of interview is the semi-structured interview, and these can take a variety of different forms with varying numbers of questions, and varying degrees of adaptation to accommodate the interviewee (ibid). The interview can be described as a form of conversation – it is an activity steeped in cultural codes and modes of intuitive and spontaneous interpretations (Gudmundsdottir, 1996). Having said this, some aspects of the research interview have been somewhat stripped away and others added so that the interview can become more scientific in nature (ibid). As such the research interview becomes a cooperative process between the researcher and participants jointly putting the pieces together making a meaningful whole. Thus, the interviewee feels like they have left their mark on the process and the product (Gudmundsdottir, 1996; Kvale & Brinkmann, 2008).

To summarise, interviews can be useful when the research objectives centre on understanding experiences, opinions, attitudes, values and processes; when there is not enough known about the subject to be able to draft a questionnaire; and/or when the potential interviewees may be more receptive to an interview than other data collection methods (ibid). As shown in Figure 3.1, my journey is shaped like a funnel with each of my chosen methods allowing me to gain a deeper insight into the responses to my research questions. The semi-structured interviews allowed me to explore in more detail the themes addressed in the questionnaire, drilling down to the impact of play-based curricula on individual children. This involved conducting interviews with those members of staff within the Montessori environment who indicated that they would be willing to take part in this stage of the research project. In contrast, all the staff at School B were willing to be interviewed. According to Rowley (2012) researchers who choose to use interviews as one of their data collection methods do so because they are interested in collecting “facts” or gaining insight into/understanding opinions, attitudes, experiences, processes, behaviours or predictions; since I adopted an interpretivist approach, I aimed to understand each individual staff member’s perceptions of their world in relation to my research questions.

3.10.1 Interview Design

To some extent the quality of an interview will depend on both the interview design and on the skill of the interviewer. The interviews consisted of only eight questions that were asked in the same sequential order but followed a logical progression (Open University, 2013); I also ensured that they were easy to understand (ibid; Bryman, 2016). Roulston (2014) also discusses some of the problems that may occur as a result of interactional problems between interviewer and interviewee, and it is often due to failures on the researcher’s part

to build a rapport with the individual involved. In another article by Irvine *et al* (2012) comparing the interrelatedness between interviewer and interviewee when conducting telephone and face-to-face interviews, the authors contend that face-to-face interaction compels more small talk, politeness routines, joking, non-verbal communication and asides in which people can fully express their humanity. I had already built a rapport with the participants, which had a positive impact on the conduct of the interviews. Each interview varied in length depending on the knowledge of the participant around the subjects being explored. By avoiding the temptation to ask leading questions, and by allowing sufficient time for the participants to provide information, I tried not to consciously or unconsciously influence the responses that were volunteered by the interviewee (Fox, 2009). In line with good practice guidelines (Roulston, 2014; Open University (OU), 2018), I introduced myself, reiterated the aim of the interview and made sure the interviewee was fully aware of the purpose of the research. In line with the recommendations of Doody and Noonan (2013) and Bryman (2016), I recorded the interviews so I could listen actively to participants without the distraction of attempting to take notes.

Semi-structured interviews are more flexible than structured interviews (Woods, 2011) and do not presume that the researcher is only looking for facts to validate what they already know (Greig *et al*, 2007). In line with my interpretivist view, I specifically chose semi-structured interviews as they allowed me to explore points that I had not considered when designing my interview schedule, but that emerged in the course of the interview (Gill *et al*, 2008).

3.10.2 Interviews: Participants

The third stage of this research project involved conducting interviews with the staff who had completed the questionnaires to gain a clearer picture of how the Montessori educational ethos, NC and a play-based curriculum impacted upon the overall development of C&YP with SEND. I felt this would be useful since the teachers and support staff had been working with and alongside the children for a full academic year (September – July) whilst I myself was only able to obtain a snapshot, through the observations I completed in Stage One of this research project, of what went on in a classroom in order to facilitate the learning and development of children with SEND (Palaiologou, 2014). The interview allowed me to explore the themes that emerged from the questionnaire in more detail.

3.10.3 Interviews: Recruitment

As with the questionnaire PI sheets were distributed to all the teachers and support staff who were again asked to read the information within so that they could ask any questions they might have about what was expected of them prior to the interviews taking place. They

were also told that if they did not want any of the data to be used in the write-up of the study they could inform me of this either when I was on site or at any other time.

3.10.4 Interviews: Procedure

The interviews took place away from the children, in an office in another part of both schools (Osbourne *et al*, 2014) but close enough to the classrooms so that if any issues arose with the children the staff could return to the classroom as quickly as possible. Each member of staff was interviewed individually, especially as, due to the nature and degree of the children's disabilities (Mulholland & O'Connor, 2016) at School B, I wanted to ensure that the teacher: child ratio in the classroom was not compromised at any point during this stage of the research. The Standards recommend a ratio of one staff member to every ten children in a mainstream classroom and one staff member for every six children with disabilities and a second adult is required when there are more than seven children enrolled in one classroom (Pelatti *et al*, 2016). The interviews were transcribed verbatim.

3.11 Data Analysis

I chose to undertake thematic analysis because it fitted well with my interpretivist approach. Thematic analysis is relatively unique among qualitative analytic methods in that it only provides a method of data analysis; it does not prescribe methods of data collection, theoretical positions, epistemological or ontological frameworks. The fact that it is just a method is its main strength (Braun & Clarke, 2013). Furthermore, thematic analysis has been identified as a useful method for recognising analysing and reporting patterns within the data through in-depth description of the themes identified (Eynon *et al*, 2018). King (2004) and Nowell *et al* (2017) argue that there are advantages and disadvantages to thematic analysis: they include the fact it is a useful method for examining perspectives of different research participants, highlighting similarities and differences and generating unanticipated insights. The latter authors also offer some disadvantages believing that these become more apparent when considered in relation to other qualitative research methods. Furthermore, as indicated earlier in this section a thematic analysis can be flexible although this flexibility can lead to inconsistency and a lack of coherence when developing themes derived from the research data. This said, consistency and cohesion can be promoted by the researcher making explicit an epistemological position that can coherently underpin the study's empirical claims (Holloway & Todres, 2003).

Braun and Clarke (2006) point out that analysing data is not linear and is a complex process, but they do offer a guide as to how to complete this stage of the research. This research project aimed to examine the similarities and differences between two play-based approaches and investigate their impact on the learning and development of children with

and without SEND. Therefore, I applied an inductive approach to thematic analysis across all three data collection methods as themes were yet to be discovered. As such they were generated and developed from new (Swain, 2018). As suggested by Braun and Clarke (2006), I firstly familiarised myself with the data I had collected. This involved transcribing the data, reading and re-reading the data, noting down initial ideas. Secondly, I generated initial codes by looking for interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code. Thirdly, I collated codes into potential themes gathering all data relevant to each potential theme. Next, I reviewed the themes, checking to see if they worked in relation to the coded extracts and the entire data set, generating a 'thematic map' of the analysis. The penultimate stage to this process was to define and name themes. These themes will be discussed in more detail as part of my findings and discussion in Chapters 4, 5 and 6. The last stage was writing the report. It was the final opportunity to select vivid compelling extract examples and analyse these extracts, referring back to the research question, and literature review to produce an in-depth scholarly report of the analysis. I made the decision to use a specialist qualitative data analysis (QDA) package, Nvivo, during this research project, as it provided an organised single location storage system for all stored material; gave quick and easy access to coded material without using cut-and-paste techniques; and could handle large amounts of data very quickly (Robson, 2011). This approach allowed me to gather in-depth information and to investigate group processes in detail, from a micro-perspective (Klonek *et al*, 2016).

3.12 Concluding Thoughts

In this chapter, I have given a brief overview of the reasons for undertaking this project and the reasons why I chose the methods I used to collect the relevant data to answer my two research questions. I have clarified my philosophical position and given the reasons why I saw myself sitting in the space that I did with respect to epistemology, ontology and insider-outsider positioning. I have described how each of my research methods allowed me to identify and compare the main similarities and differences between the two play-based approaches, and to examine how they can inform the education of children with SEND. I have also justified my choice of Thematic Analysis and described how I would implement the process. In the next two chapters I present my data and provide a detailed discussion of my findings in chapters six, seven and eight in relation to my research questions as detailed at the beginning of this chapter.

CHAPTER FOUR – RESULTS: CASE STUDY SCHOOL A

The following two chapters will examine how the play-based approaches considered in this thesis impact on the learning and development of children with and without SEND and chapters Six, Seven and Eight will provide an in-depth discussion of the similarities and differences between School A which advocates the Montessori approach and the play-based approach that has been implemented at School B.

Case Study – School A

Population West Lancashire is one of 12 districts in Lancashire and stretches from the outskirts of Liverpool to the south of the River Ribble, with Southport to the West and Wigan and Chorley to the east. In 2012, the district had a population of 110,600 and is made up of a number of small towns, villages and rural farmland. More than 20% of the population in West Lancashire consider that their day-to-day activities are limited by health which is significantly higher than the national average. Almost 12,000 residents have a hearing impairment and just short of 2,000 have a visual impairment. More than 2,000 residents have a learning disability and 12,682 (12%) are diagnosed with a common mental health disorder including depression and anxiety (West Lancashire Council, 2014).

Ethnicity The ethnicity of residents is almost entirely White British — around 5% of the population in Skelmersdale declared themselves to be White other which could reflect the Eastern European community living and working in the area. There are very small numbers of residents who have other ethnicities (less than one half of one percent) and these live across the borough. Less than 1% of residents have a mixed ethnicity (866). In the most recent census, 76% of residents declared themselves to be Christian with 17% stating that they do not follow a religion. The remaining 7% of the population have beliefs that include Buddhism, Hinduism, Judaism, Islam and Sikhism.

Education In 2013, 52% of children achieved a good level of development. More girls achieved a good level of development than boys, 60% girls compared with 44% boys. The average score achieved on the Early Years Foundation Stage (EYFS) is 32.8 points. 34 points is the equivalent of children achieving the expected level across all early learning goals. In each of the 17 early learning goals, a higher proportion of girls than boys achieved at least the expected level (Department for Education, 2013). The borough is also home to Edge Hill University which has more than 22,350 students most of whom

live in the area – the population of Ormskirk has a high level of 18-24 year olds. The 2011 census has shown that West Lancashire has a generally aging population – 23% rise in those over 65 in a ten-year period.

Overview of School and Curriculum In this setting the children have the opportunity to explore their outdoor environment and are able to watch the seasons change in the extensive grounds and orchard area. All the activities are planned to help the child to continue his/her social, emotional, physical, and intellectual development. Children learn through play. They develop new skills, discover new things about themselves and the world around them, and learn to share and communicate with others. The learning that takes place in this setting is underpinned by the educational values of Maria Montessori who believes that learning is inseparable from development and so education centres on each child as a unique individual. In doing so the children who attend these settings become motivated and responsible for their own learning. The key benefits of Montessori education are that it is an enabling environment that truly follows the child waiting for individual signs of readiness towards progress. It fosters independence and an ability to stay focused which are so important for starting school. During the data collection phase of my study I observed children between the ages of two and three and were often engaged in activities that included the pink, yellow and blue towers, the dressing frames, broad stairs wooden cylinders, red rods and several activities that involved number recognition and counting.

Recent Ofsted Report The leadership and management of the nursery are inspirational. The management team are incredibly knowledgeable, highly skilled and qualified. Together they draw upon their experience and expertise to provide superb support and guidance for the staff team. Managers have a clear vision for the nursery and demonstrate an uncompromising and highly successful drive to maintain the outstanding practice in place. Self-evaluation is incisive and leads to targeted improvement plans that have a substantial impact on outcomes for children. Parents receive a wealth of information about the nursery and are entirely involved in their children's learning. They fully contribute to assessments of their children's learning and are greatly supported to continue learning at home. Parents are extremely complimentary about the nursery and staff team. Children's emotional well-being is significantly enhanced by the carefully considered and seamless transitions they experience as they start nursery and move between rooms. Children of all ages form secure emotional attachments with their key person, greatly impacting on their confidence to explore and learn. The learning environment, activities and staff interactions with children are all equally outstanding.

Staff use their expert knowledge to plan imaginative and inspired learning experiences for children, supporting them to make excellent progress.

Having given a brief overview of the area where the setting is located and the setting itself, I will now discuss my findings in relation to this setting. My findings can be separated into two main categories Learning and Achievement and Pedagogical Approaches to Learning.

Findings Arising from this Study When I analysed my data, I examined the impact of the **Learning Environment** from both a macro and micro perspective. The educational approach at School B advocates a learning environment that takes account of the individual needs of each child. As demonstrated by Sophie below in designing the learning in this way allows them to develop their independence and confidence. From a micro perspective I examined the impact of learning through play; layout and class size; organisation of learning environment; resources and activities and how the children are taught and supported.

Example 4.1-1 (School A, interview with Ella, practitioner)

We have seen a development in confidence and self-assurance. There have been ... we have seen an improvement and development in likes of ... they are happy to go off and do an activity and they are confident in using it themselves having to rely on somebody else. We have seen a development in independence and confidence and we – it's flexible in learning so it's applicable to all learning types rather than one. All the children we have seen have used it and benefited from it in some way.

Learning through Play High quality Early Years education which is characterised by child-centred approaches provides ample opportunity for learning through play whilst also impacting upon a child's future learning (Nicholson, 2019). The following interview extracts highlight how the staff feel children attending a setting that advocates the Montessori approach impacts their educational attainment in later life.

Example 4.1.1-1 (School A, interview, Ella, practitioner)

I think so, because obviously they're picking up all these practical skills, life skills that they need; they're really independent as well because obviously they're getting their own work mat out, and need to put it away after them and everything, so all these skills - they're setting up for life really aren't they?

Example 4.1.1-2 (School A, interview, Judith, practitioner)

Erm – they do the washing up, they set the table, they fold the napkins because they've seen it, they've done it, they know what they are, because when you first put them out they all say "What are these?" and they're using them to put them on the dolls and things, and we say "No, that's a napkin, and we use it at the table," and so you're explaining what these things are. So it's also, erm, putting the coats on for themselves and ... so they're ready for mum when they're going, put the shoes on, all this sort of thing – I think it's quite good for the home. And you can see it too and the parents seem to quite pleased with all – with that development.

Example 4.1.1-3 (School A, interview with Linda, practitioner)

... Communication skills are really coming on, especially Rainbow and Sunshine, with the age of them. Erm, as I said with the cooperative play, they're asking each other and they're picking up new words as well, with what the Montessori equipment is, so they are picking up new words.

Example 4.1.1-4 (School A, interview, Judith)

and they were able to sit in a group and wait for their turn; if there was something to say like a gathering, if they had things to say they'd wait and put their hand up and do things like that.

Having provided examples that highlight the overall impact of the learning environment on the learning and achievement I will now examine some of the micro aspects of the Montessori learning environment that are important to the overall learning and development of children who attend these settings

Layout and Class Size The examples below demonstrate the way in which the classroom is laid out plays a key role in supporting and extending children's development and learning.

Example 4.1.2-1 (School A, observation)

Pardon? Some of the children are playing outside, have you been playing outside?... Have you finished E? Right E do you want to play outside for a while?... L2 come and finish off darling because we are going to outside in the big garden.

Example 4.1.2-2 (School A, observation)

There are a lot of children talking over each other, it is not clear which child is talking to the Montessori practitioner Judith, you what? You can't hear the child's response but the Montessori practitioner Judith replies, I know someone's taken a bite out of it....

Example 4.1.2-3 (School A, Interview with Sophie, practitioner)

They are going to get trays and the likes of getting the mats out then do the activity

Example 4.1.2-4 (School A, Interview with Linda, practitioner)

...they will go and get activities and help themselves.

Organisation of Learning Environment One of the key things to highlight in this section is that young children are unconscious learners and therefore appear drawn to activities that develop their skills talking, movement, interaction with people, tasting, smelling, hearing, seeing, touching and creating order from all the information they are gathering. The following examples show why planning how the learning environment is organised is essential to the overall learning and development of young children.

Example 4.1.3-1 (School A, interview with Ella, practitioner)

I've noticed a big difference to be honest, because I was upstairs when they introduced Montessori altogether – well – we introduced it, I should say. Erm ... loads of things, like they're using their senses a lot more ... erm ... obviously that could be smelling things, and then describing textures and different smells, different sounds, all sorts.

Example 4.1.3-2 (School A, observation)

We are going to mix all these cylinders up and you have got to find which is the largest all the way to the smallest, so let's mix them all up and now you have got to start here and find the largest one. Ok...that's it that one, oh does that fit in there? No! So you need to look again. ...and you need to look for the largest one, which is.... Well done try it in there...well done, that fits in that fits in all the way round.

Example 4.1.3-3 (School A, observation)

...the race is over one bear is missing on each team, find the missing bear and....put it any...in any of the baskets. So can you get me the colours, I don't know whether we have got the colours. Purple. So see if you can find the different colours on each team on each team there is two and we need three and there are different sizes, that's a small and that's a medium, so what size do you think is missing? E2 says the big one, the Montessori practitioner J, says yeah, the big green one, find the big green one. E2 says clearly, the big green one and the Montessori practitioner J, says yeah put it there...have we

got purple? I don't think we have...so in the red what size do we need...I don't think we have, we might have some upstairs. Yeah, that's right, is that the big? Is that the Medium? Yeah, that's right, no that's the big, have you got the medium size? That's the small one, that's the big and that's the small one. So the one that's missing is in the middle. Is the middle sized one like that. E-ar that's the medium can you see? We've got big, medium, small and that's the medium, right there and that's your big, so what's this...in the yellow ones? E2 says the yellow is the medium one, the Montessori practitioner J, says yeah, you're right.

Example 4.1.3-4 (School A, observation)

The last activity of the morning involved three of the children from the group using the dressing frames. I had noticed on a previous observation visit that it was the first time that any of the children had shown any interest in the dressing frames. The dressing frames allow children to practise the skills they need to be able to dress themselves on a daily basis such as doing up zips on boots, coats etc, buttons on blouses and shirts and laces/buckles on shoes.

Resources and Activities Whilst the way in which the classroom is designed and organised is important the resources and activities the resources and activities that are made available to the children are also essential as the Montessori materials are seen as stepping stones to future and allows concepts to be simple to complex.

Example 4.1.4-1 (School A, observation)

Right put them in here, put them in the bowl...right, are you going to put those there? And get some more? Right do some more here then with me. That's a blue one, that's a button...they are all buttons, you have buttons like me on your red top...you've got a red top like me....ok, count them then... (L2 counts by himself) 1, 2, 3, 4, 5, 6...do you want to get some more? The Montessori practitioner, Judith, starts L2 off counting 1 ...L2 then continues 1. 2, 3, 4, 5...the Montessori practitioner joins in with L2 saying 5. That's it put them in a nice row, which ones the small one there? 1 can see a very small one...yeah that's it so you have a small green one, what size is that one? Big or small? Yeah that's a big one and you have a medium one, can you see? Put that one in the middle...small, medium, big.

Example 4.1.4-2 (School A, interview with Ella, practitioner)

We have a lot more than downstairs ... erm ... so we've got like bath bombs and soaps and things for them to smell, and smelling bottles of all different herbs. We've got, like, these sound boxes where you've gotta, like, listen and then go and find the one that's the same, so they're really good. And then we've got, like, all different textures so they can feel and describe the different textures, so that's really brought them on with that. Erm... and then the

physical skills as well because we use things like pegs, so the fine motor skills I think have really come on. That's something we wouldn't normally use.

How Children are Taught and Supported As stated in the literature review Maria Montessori set out to develop an educational approach that was child centred and this is direct contrast to the didactic top-down approach currently advocated in mainstream schools. As such, the Montessori practitioner offers children activities that are developmentally appropriate and works alongside or observes from the edge and only intervenes when they deem it necessary to do so thereby facilitating the children's learning.

Example 4.1.5-1 (School A, observation)

The Montessori practitioner Judith, says to an unnamed child, Go and get your mat then first.... do you want to do something else? ...put this away then, are you sure? Do you want to do some work here? Put it on the mats, on the mats...are you looking for something particular? Yes you can do that... you can sit on the mat and do it, do you want to? Go and get your mat out then, sit down. Do you want to do anything J? Yes? Do you want to get a mat then? Put that here and then you can get that

Example 4.1.5-2 (School A, observation)

The Montessori practitioner Judith says to an unnamed child (I think it's P), that's 0 so that means you don't put anything there. Where is number 1? The Montessori practitioner J, then says to another unnamed child, no you get your own mat, no we are not sharing...that's what it's all about, so you find...get some trays if you want...P wants to do it on her own.. can you do it? That's it...boys go and play go in the sunshine room if you want, I will call you later... right that's number 2....e-ar El do you want to have a go with this one?

Example 4.1.5-3 (School A, observation)

Once Rosheen (the Montessori practitioner) has finished demonstrating how to assemble the pink tower she says H's turn first so let's take them all down and spread them out so we start with the biggest and remember to put it right into the corner on the stand...push it into the corner H...that's it... well done. ..excellent... H then proceeds to identify the next biggest cube and place it on top of the biggest cube which has been used as the base of the tower, however, R has to again gently remind H to push the next cube right into the corner of the stand...remember to push it right into the corner H...that's it...well done...and then the next biggest one...which is the next biggest one...now

push right into the corner...that's it... well done...we start from the biggest and we're getting smaller and smaller all the way up aren't we...

Example 4.1.5-4 (School A – interview with Sophie, practitioner, talking about the impact of the Montessori curriculum on children's later learning)

Yes, I would, because children are learning basic skills that they perhaps wouldn't learn as such in mainstream education or in the state system ... erm ... so they're learning ... the main one they are developing is independence which, because it's one to one, they're happy and more reassured in themselves. Erm ... but they're learning basic skills, so, how to set a table, or pouring, so they are learning motor skills, whereas that is not something you'd necessarily get outside here.

Whilst all of the above examples provide a detailed picture of the impact of the learning environment on the overall learning and development of children. I will now provide examples of how the Montessori learning approach impacts on the Acquisition of Knowledge; Curriculum Adaptability and Flexibility, Autonomy Supportive Teaching and Freedom of Choice; Communication; Independent Learning and the Development of Life Skills; Physical Development

Acquisition of Knowledge As stated in the previous section Montessori practitioners will work alongside the children as such learning becomes a reciprocal process the examples below highlight the importance of this for future learning and development.

Example 4.2-1 (School A, interview with Ella, practitioner)

Erm ... well their communication – I've noticed a lot more language because they're describing the textures so they need to introduce those new words and things ... erm ... and we're talking about ... obviously we're saying a lot to them that they need to repeat, like we're like, this is the biggest one, this is the smallest one, so they're doing all that language. And I feel like they're getting a better relationship with us, because we do a lot of one-on-one with them. So we're getting more knowledge of how they're progressing, so I feel like they're getting better relationships with us.

Example 4.2-2 (School A, observation)

Part A

Once R has finished demonstrating how to assemble the pink tower she says H's turn first so let's take them all down and spread them out so we start with the biggest and remember to put it right into the corner on the stand...

Part B (a further step in the hierarchical sequence).

(Practitioner): "... and just like the pink tower you have to look for the biggest yellow block and then the next biggest and so on until you get to the smallest block and just like the pink tower we've got to make sure that you've built it correctly".

After the practitioner had finished demonstrating the yellow tower to the children, each of the children decided that they wanted to have a go at building the yellow tower which to them was like building a smaller version of the pink tower [more challenging]. Many of the children within the group did struggle to put the tower together in the correct order but perhaps this was because the blocks used to build the yellow were on a smaller scale. Some of children were able to complete the tower without much guidance whilst others required some intervention from Judith (Montessori practitioner) who used phrases such as "*look for the biggest is that the biggest*" if the child indicated a positive response either by nodding their head or saying "yes" then Judith (Montessori practitioner) let the child continue to build the tower until the last block is in place then Judith (Montessori practitioner) would ask the child again whether or not they felt that they had built the tower correctly.

Example 4.2-3 (School A, observation)

Now, try to have a go at this, put that one away, because it's too hard for you all, [aside to me - there is only J1 who can do this. There's only J1 who can do this, that's why I bought it for her. They only do the ones under the age, when they get to 4.

Example 4.2-4 (School A, observation)

E2 says 2, the Montessori practitioner Judith, says so you need another yellow. Yep, so how many blue have you got? So you need how many? E2 says, I can do these myself. The Montessori practitioner Judith, says yes, turn them all out and put them on your mat and then you can put them back in then. Like we have done with the beads did you do it all? Did you count to 5? Good.

Example 4.2-5 (School A, observation)

The Montessori practitioner, Judith, speaks to B (I think, as she doesn't use the children's names who she is working with), who has been doing the shapes and colours. Oh, are they all in the right place? But they are not in the right order are they? Size...can you put them in the sizes that they should go

in now? Which is the biggest size? What colour? B says blue... The Montessori practitioner J, says blue, put all the blue at the back, do your blue ones, move your blue ones...E-ar B...Right, are all the blue ones at the back? Which is the next size up? The next colour? E-ar here's your blue...so in that hand there...what colours that? Yes... So which is the next biggest? What colour is it going to be green, orange, red yellow? Is that the next biggest one? Which ones the smallest brick? So that one goes that side...and which is the next biggest to that? Right, and which is the next biggest to that? You have got 2 here, which one is the next biggest one? That's it...

Curriculum Adaptability and Flexibility, Autonomy Supportive Teaching and Freedom of Choice I did not necessarily set out to examine this at the beginning of the data collection however although it was not specifically asked about when I conducted the interviews it was evident that this was an important part of the Montessori approach although it can look very different as in a setting that advocates the Montessori approach as it is based upon the developmental appropriateness of the curriculum for the age range and plane of development rather than the individual child.

Example 4.3-1 (School A, observation):

Do you want to do anything on here? The child says yes, in a clear voice. The Montessori practitioner Judith, asks... What would you like to do? You what? What would you like to do? How about the material? Would you like to do that? They've got wooden beads; right what shapes are all these missus? What shape is it? Right, what have we got? No these are conkers, not the aeroplane...the conkers...which do you want? The child answers planes...there is a second child who wants to play with the conkers...The Montessori practitioner Judith, answers right, the conkers for you and the planes.

Example 4.3-2 (School A, observation):

The Montessori practitioner Judith, says to an unnamed child, Go and get your mat then first.... do you want to do something else? ...put this away then, are you sure? Do you want to do some work here? Put it on the mats, on the mats... are you looking for something particular? Yes, you can do that...you can sit on the mat and do it, do you want to? Go and get your mat out then, sit down. Do you want to do anything J? Yes? Do you want to get a mat then? Put that here and then you can get that (The Montessori practitioner Judith, has not mentioned the child's name but Laura has mentioned B, so The Montessori practitioner Judith, must be working with J2 and B presently). What do you want to do? J2 do you want to get the trays, or do you want to get the bag out? You can do materials or snakes... J2 says he wants to do the first one...

Communication This is the foundation of social interaction, the essential means through which people initiate and maintain social relationships. The examples below highlight the importance of communication when children are engaged in the Montessori learning process as well as their overall development whether at home or within the School A itself.

Example 4.4-1 (School A, observation)

1, 2, 3, 4 how many rings have you got there? The child answers 4. The Montessori practitioner Judith, then asks how many rings do you have there and the child replies 3, the Montessori practitioner Judith, then ask how many do you have there? The child answers 2, again the Montessori practitioner J, ask how many rings do you have there? And the child answers 1...and finally how many do you have there? And the child responds none...

Example 4.4-2 (School A, observation)

As E had suspected the next activity was in fact the yellow tower and she went skipping over to her friend and said "*I told you it was the yellow tower*".

Example 4.4-3 (School A, interview with Ella, practitioner)

Q: In your opinion – I know there is a thing with home education and Montessori education – do you think that the home education side ... impacts upon their learning in the nursery and vice versa?

A: Definitely. Definitely. We do send a lot of things home so that we've got a link between home and nursery, especially now we're starting the letters and the phonics. So some of the children are a bit more advanced and they know all the sounds now; they're sent getting reading books home or ... or children aren't great with their scissors, we're sending the scissors home for them to practise, so we do like to have that link and them having similar kind of learning at home that they're having here.

Independent Learning and the Development of Life Skills describes a process in which individuals take the initiative with or without the help of others in identifying their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies and evaluating learning outcomes and is more commonly known as self-directed learning.

Example 4.5-1 (School A, interview with Sophie, practitioner)

Yes, I would, because children are learning basic skills that they perhaps wouldn't learn as such in mainstream education or in the state system ... erm ... so they're learning ... the main one they are developing is independence

which, because it's one to one, they're happy and more reassured in themselves. Erm ... but they're learning basic skills, so, how to set a table, or pouring, so they are learning motor skills, whereas that is not something you'd necessarily get outside here.

Example 4.5-2 (School A, observation)

Which is the next one? No, do you want to measure it up? Does it look right? Does it look like stairs? Do you think so? What about this one? You are going up and then you are going back down, do you think that might be the wrong way? Does it look right to you E? Does it look like a stairs? Which one is wrong? That one's right, that one's right, that one's right, but look it rocks too much...right that was the biggest one and we measure it like that, ok...ok?

Example 4.5-3 (School A, interview, Ella, practitioner)

I think so, because obviously they're picking up all these practical skills, life skills that they need; they're really independent as well because obviously they're getting their own work mat out, and need to put it away after them and everything, so all these skills - they're setting up for life really aren't they?

One of the main ways that the Montessori approach encourages independent learning is with the use of the Montessori work cycle

Example 4.5-4 (School A, observation)

Judith came over to the carpet to start the activities with the children. It was at this point that J ran off to the home corner saying "*I haven't finished my show yet*" Judith then proceeded to tell J that he can "*finish his show later*" "*we're going to start our work now*". Judith, having reinforced the fact that the children should never start a Montessori activity without first getting a Montessori mat from the storage rack then proceeded to commence demonstrating the wooden cylinder task. However J was still acting silly for several minutes ... Judith had to become quite firm with saying "J we are doing this now, you can finish your show later no you can either sit down next to I-R or go and find something else to do". Instead of sitting down next to I-R J chose to stand at the edge of the Montessori area.

Example 4.5-5 (School A, observation)

The Montessori practitioner J, then says *do you know that?* B responds, 6, 7, 8, 9 and 10. *Well done. So what you have to do is, when that says zero how many shells do you put on zero?* B replies 1. *No its not 1 is it, it's nothing, no shells go there but number 1 has 1 shell, number 2 has how many shells? 2.. you do it..* .B then says 3, the Montessori practitioner J, says *yes, right, you do it, put it underneath like that, .yeah, well done....let's start from the*

beginning....The Montessori practitioner J, then sees a fish made by one of the other children, that's a beautiful fish, well done, that's really good. The Montessori practitioner J, then asks the girl (possibly E) right which ones this one? The child answers 4. Right. So, that's zero, do we put anything there? B answers no, as does the Montessori practitioner J.

Example 4.5-6 (School A, observation)

L seems distracted with his task so, Judith told him to put it away. He's joined P and T in playing with the small coloured marbles. They are scooping them up with spoons from a bowl and putting them into a jar, then tipping them back into the dish and repeating everything.

Example 4.5-7 (School A, observation):

The last activity of the morning involved three of the children from the group using the dressing frames. I had noticed on a previous observation visit that it was the first time that any of the children in Rainbow room had shown any interest in the dressing frames. The dressing frames allow children to practice the skills they need to be able to dress themselves on a daily basis such as doing up zips on boots coats etc, buttons on blouses and shirts and laces/buckles on shoes.

Example 4.5-8 (School A, observation):

E then asked Judith (Montessori practitioner) what it was they were going to do then she spotted a small wooden box with a yellow lid on it and commented to her friend E "I bet it's the yellow tower... As E had suspected the next activity was in fact the yellow tower and she went skipping over to her friend and said "I told you it was the yellow tower"... Whilst Judith (Montessori practitioner) demonstrated how to build the yellow tower she said "this is another piece of Montessori equipment that will be available for you to use when you go up to Sunflower room...Judith then proceeded to explain that there were three smaller towers upstairs that were just like the pink tower "and just like the pink tower you have to look for the biggest yellow block and then the next biggest and so on until you get to the smallest block and just like the pink tower we've got to make sure that you've built it correctly.

Example 4.5-9 (School A, observation):

The last activity of the morning involved three of the children from the group using the dressing frames. I had noticed on a previous observation visit that it was the first time that any of the children in Rainbow room had shown any interest in the dressing frames. The dressing frames allow children to practice the skills they need to be able to dress themselves on a daily basis such as doing up zips on boots coats etc, buttons on blouses and shirts and laces/buckles on shoes.

Example 4.5-10 (School A, observation):

E then asked Judith (Montessori practitioner) what it was they were going to do then she spotted a small wooden box with a yellow lid on it and commented to her friend E "I bet it's the yellow tower... As E had suspected the next activity was in fact the yellow tower and she went skipping over to her friend and said "I told you it was the yellow tower"... Whilst Judith (Montessori practitioner) demonstrated how to build the yellow tower she said "this is another piece of Montessori equipment that will be available for you to use when you go up to Sunflower room...Judith then proceeded to explain that there were three smaller towers upstairs that were just like the pink tower "and just like the pink tower you have to look for the biggest yellow block and then the next biggest and so on until you get to the smallest block and just like the pink tower we've got to make sure that you've built it correctly.

Example 4.5-11 (School A, interview with Judith)

...They do washing up, they set the table, they fold the napkins because they've seen it, they've done it, they know what they are because when you first put them out and they all say "what are these" [and they start putting them] on the dolls and things, so we say "No that's a napkin, and we use it at the table", so we're explaining what these things are...Putting the coats on for themselves...so they're ready for [their parents when they are collected]

Physical Development This area of development is very important within the Montessori education particularly in relation to the development of fine motor skills.

Example 4.6-1 (School A, observation)

Oh this is called the folding game. Open up the napkins, open it up, open it up, what shapes that? A square, what you have to do is fold it over, that is called a rectangle, and then fold it over again, fold it over, not turn it over, fold it over, that's it do it like that, fold it again, fold it again that's it, like that and then...like that. Shall we do it again? Yes? Does it look like an aeroplane? Yes...have you had enough now? Have you finished? Do you want to put them in the bowls? You can use a spoon to put them in or you can pour them in... use a spoon or you can pour them in...

Example 4.6-2 (School A, observation)

That's a big button is there any more small buttons? Two that's right you have two in your hands haven't you? Two big buttons, any more small ones? Any more small ones? Can you see any more small buttons? That's it put it in there in the right..... well done, that goes in that pot, well done, very good at sorting out your sizes of buttons, that is well done, it is any more small ones? Any more small ones can you see any more small ones? Any more small ones? I can see lots....yeah can you see, lots of small ones...that goes in that pot well done.

Example 4.6-3 (School A, observation)

What are these? Plates...do we want plates on? Yes, well done. On here we want our saucers and our cups don't we? Saucers, you know what a saucer is? This one, that's your saucer and that's your plate. Can you get the other one and put it on this side? That's your saucer that's there isn't it? For your tea, you've got your knife, and you fork and your spoon and your plate...what you going to eat? Are you going to use your spoon? Delicious...spoon them in... 's very nice...what do you want to put them in? Put them in jugs...I will get you another jug.... You can put them in both jugs, then pour it together. Like this, pour it...have you finished L2? Ok, carry on then...that's it...then pour it into that one...I don't need..., use it in that one...like this one, like that, you are good at pouring, yeah you are...do it with your other hand now.

Example 4.6-4 (School A, observation – stock pictures used here)



(Snyder, n.d.)



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Having provided examples of how the Montessori learning environment as a whole and how different elements impact their overall learning and development I will now give examples in relation to Pedagogical Theories of Learning and their Impact on Children's

Learning and Development; Interventions that Facilitate Positive Relationships between Staff and Children; Peer-Teacher and Peer-Peer Interactions; Learning Concepts and Children with SEND; Turn-Taking and Sharing

Theories of Learning and their Impact on the Play-based Pedagogy at School A As

stated in the literature the Montessori educational approach underpinned by constructivism and several elements of this theory are illustrated in the examples below

Example 4.7-1 (School A, observation)

Whilst Judith (Montessori practitioner) demonstrated how to build the yellow tower she said *“this is another piece of Montessori equipment that will be available for you to use when you go up to Sunflower room M (another Montessori practitioner based in Sunflower room) will show how to use it if you forget”*. Judith (Montessori practitioner) then proceeded to explain that there were three smaller towers upstairs that were just like the pink tower *“and just like the pink tower you have to look for the biggest yellow block and then the next biggest and so on until you get to the smallest block and just like the pink tower we’ve got to make sure that you’ve built it correctly”*. After Judith (Montessori practitioner) had finished demonstrating the yellow tower to the children in the group which now consisted of E, E, E (male) T, L, and Z. Each of the children decided that they wanted to have a go at building the yellow tower which to them was like building a smaller version of the pink tower.

Example 4.7-2 (School A, observation)

Do you want to do anything on here? The child says yes, in a clear voice. The Montessori practitioner Judith, asks... What would you like to do? You what? What would you like to do? How about the material? Would you like to do that? They've got wooden beads; right what shapes are all these missus? What shape is it? Right, what have we got? No these are conkers, not the aeroplane...the conkers...which do you want? The child answers planes...there is a second child who wants to play with the conkers...The Montessori practitioner Judith, answers right, the conkers for you and the planes.

Example 4.7-3 (School A, observation of the cylinder activity)

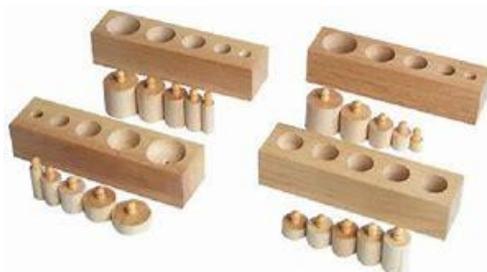


Figure 5.2 Montessori Cylinder Activity
(Rundle, n.d.)

Well done...that's it, they are different size cylinders and they all fit in different size holes don't they? Ok and that one...well done...which one comes next? Well done...and the cylinder goes in there...well done, excellent. ...well done, which one comes next? Which ones the biggest... well done...that one goes first and the smallest last...well done. Well, let N

have a go and when N has had a go we are going to mix them all up and see if we can find the correct holes for the cylinders to go in ok? I think the girls want you to do something with them P. Start with the largest in the largest...excellent well done...we are started with the largest and we are going to the smallest... aren't we? Excellent N well done...well done ...we are going to take all the cylinders out and we are going to mix them up and we have to find which holes they go into... so we are still going to start here with the largest one and we are going to go all the way down to the smallest...and you have to find now which is the largest one ...have a look at them which one do you think is the largest one ...try it...try it...see if it fits in ...well done, excellent, now which one do you think is the next largest

Example 4.7-4 (School A, observation of a different session of the cylinder activity)

Part A

Judith (Montessori practitioner) said *"I've just realised that there is one of these wooden blocks with wider cylinders upstairs"* *"do you want me to go and get the one from upstairs"* *"I'll go and get the one from upstairs"* Once Rosheen (Montessori practitioner) had returned from Sunflower room for a second time Judith (Montessori practitioner) demonstrated the difference between all three of the wooden block activities. After demonstrating how each of the cylinder activities got deeper and how holes to accommodate each of the cylinders also deepened, Judith placed three Montessori mats within the Montessori area and then allowed each of the children who were left in the circle have a go at the wooden cylinder activity.

Part B

Once Judith (Montessori practitioner) had demonstrated the wooden cylinder activity a few times she decided to let the children have a go ...I was quite surprised however to find that P was unsure of which cylinder went in which hole often asking for reassurance from Judith (Montessori practitioner) when she thought she had identified the correct cylinder for the correct hole. If P hadn't identified the correct cylinder J (Montessori practitioner) prompted P to *"look again at the different cylinders in front of her is that the next biggest"*

Methods that facilitate positive relationships between staff and children The activities available to the children in School A encourage individual learning rather than group learning as shown in the examples below

Example 4.8-1 (School A, observation)

Do you want to do some counting, right get your numbers in the right way? Zero first. There's some numbers, put them in the right order, what's that one? Zero, you've got.... do you know what that one is? B replies 1. The Montessori practitioner Judith, asks *and what is that one?* B answers 2 and continues to count 3, 4, and 5. The Montessori practitioner J, then says *do you know that?* B responds, 6, 7, 8, 9 and 10. *Well done. So what you have to do is, when that says zero how many shells do you put on zero?* B replies 1. *No its not 1 is it, it's nothing, no shells go there but number 1 has 1 shell, number 2 has*

how many shells? 2.. you do it...B then says 3, the Montessori practitioner Judith, says yes, right, you do it, put it underneath like that, yeah, well done...let's start from the beginning...

Example 4.8-2 (School A, observation)

The Montessori practitioner Judith, says yeah do you want to do one? That one? We haven't got those...they snap, that's not this.... This is this square...this is find the different colours. What do you want to do B? You hear J2 saying blue and he repeats it twice, the Montessori practitioner Judith, then speaks to J2 saying....no, they are green, bring it over J2....look at them that side...you can hear J2 saying clearly they are green, the Montessori practitioner Judith, agrees saying...they are green... The Montessori practitioner then agrees with B saying yes they are orange. That goes there...are you doing the tiny ones? You have to put your hand in the thing and look for them, look you need baby ones, look for the baby ones in the tub, you are not looking...There is a discussion about glitter and glue and a child has been told to play with it outside.

Example 4.8-3 (School A, observation)

The Montessori practitioner Judith asks E2 so what numbers this one then? What's after 4? You hear a boy say that he has finished now...The Montessori practitioner Judith, says well pour them into your bag if you don't want them...that's right, you don't need...The Montessori practitioner Judith, then asks what's up? Have you got them all? There you go...is that the one? Well done...pull it tight, pull your string...that's it...and that links too. The Montessori practitioner Judith, asks, have you finished? The Montessori practitioner Judith says...erm, I don't know, have a look...there are 2 of everything, you have to match the material up... (I is doing the material tray) Do you want to do all the animals on the mat? No? Or there is dinosaurs...do you want to do anything on the trays on there? Or Lego?

Example 4.8-4 (School A, observation)

One at a time. K. Right put them all back on the mat for E. It's her turn now. ... Put them on like this. Like that. One at a time though. Do one at a time. Right E's turn.

Example 4.8-5 (School A, interview with Judith, practitioner)

Erm, they did group activities as well in ... in the nursery itself – and they were able to sit in a group and wait for their turn; if there was something to say like a gathering, if they had things to say they'd wait and put their hand up and do things like that.

Example 4.8-6 (School A, interview with Sophie, practitioner)

Sometimes. I can see positives and negatives for both sides because, I think, Montessori approach is individual – gives you the option to develop children's weaknesses and improve strengths; but then I also see it from the other side

that there's two things. Perhaps one is the child who got it out isn't as strong in that development activity or skill but somebody else is, one of the friends is... then it can help in a way because one's got strength and a weakness and they can support each other.

Learning Concepts and Children with SEND As has been stated earlier in this thesis Maria Montessori advocated moving learning from the concrete to the abstract. The following examples show how the activities could potentially assist with the learning of basic concepts when working with children with SEND.

Example 4.9-1 (School A, observation):

T what colour, T what colour are these rods? What colour are they? Red, they're red aren't they? Let's count them, let's start with the smallest 1, 2, 3, 4, 5, 6, 7, 8, 9 that one is really tall you stand next to it...now hang on, is that one taller than you? Is that one taller than you? It is taller than you... hang on a minute, so that one's taller than you. Let's see the next one, is the next one taller than you? I think that's, let's see...oh I think that's your size to you, isn't it? That's your height, that's how tall you are T you're the same size as this one, that's how tall

Example 4.9-2 (School A, observation)

H has built a tower Rosheen (Montessori practitioner) counts the building blocks with I, 1, 2, 3, 4, 5, 6, 7, 8, 9 and reinforces that I has built the tower from the largest to the smallest, and was able to measure the correct blocks with the square. R (Montessori practitioner) states that A can have a go. Remember we start with the biggest one, take the biggest one — that's it well done, it has to go to the bottom, push it right into the corner, push it right into the corner A, push it right into the corner A, that's it, which is the next...well done, excellent...push it right into this corner... which is the next largest? That's it well done, excellent.

Example 4.9-3 (School A, observation)

Yeah so let's tip them out onto the mat and let's sort them...we will have a pot here and a pot here and a pot here so let's sort them out, shall we sort them out by size first? So, where's the big one, can you find a big button, where's the big button? Is that a big one or is that a little one? You find a big one... The big one, put all the big buttons in there and all the little buttons, is that a little button? Put all the little buttons in there, you put all the little buttons in there for me, you put all the big ones in this one and all the little ones in that one. That's a...well done, the little ones in this one, the little ones in this one, that's it, and the big ones in that one and the little ones in that one, well done L2 you are sorting them by size, well done excellent, keep going...

Example 4.9-4 (School A, questionnaire, Linda)

[The resources] help the children to build on their strengths and work on their weaknesses.

Example 4.9-5 (School A, questionnaire, Judith)

Different children will use different resources to learn about the same concept therefore the Montessori approach is suitable for all children regardless of their learning style.

Example 4.9-6 (School A, questionnaire, Sophie)

[The resources] allow the children to subconsciously develop their skills in certain areas such as mathematics (as shown above) and physical movement.

Turn-Taking and Sharing - Turn-taking and sharing are principles that were being clearly taught in both settings.

Example 4.10-1 (School A, observation)

(L2 counts by himself) 1, 2, 3, 4, 5, 6...do you want to get some more? The Montessori practitioner J starts L2 off counting 1...L2 then continues 1. 2, 3, 4, 5....the Montessori practitioner joins in with L2 saying 5. That's it put them in a nice row, which ones the small one there? ...Oh, you have a big pile now. You tidy up now, you've made the mess ... I'm going to see if B2 wants a turn, tidy it all up and put it away... Have you done it L2? You can hear L2 reply quite clearly, yeah! The Montessori practitioner J, then says ... Oh, well done...keep going...keep tidying up...put them in, see if B2 wants a turn.

Example 4.10-2 (School A, observation)

Put it on the mat. Put them on this mat here. You don't need to put them behind each other. Have to make it hard for the next person. Mix it up a bit. Right, do you want to go and play Harry or are you watching the others? [children "my turn, my turn now"]

Example 4.10-3 (School A, observation)

One at a time. K. Right put them all back on the mat for E. It's her turn now. Put them on like this. Like that. One at a time though. Do one at a time. Right E's turn. Do you want to play somewhere else? Because you've been here all the time. No don't take the blanket. You've got to move them all to the mat. Move them all to the mat so that the next person can have a go. gonna go right. ... So I'm going to take them all away. One at a time. And then it's going to be C's turn first. .

Example 4.10-4 (School B, interview with Linda):

Well, with the ... with the Montessori they have been doing it independently but sometimes they will get their friends with them, and we haven't stopped them to do that. Erm ...and they've worked cooperatively.

Example 4.10-5 (School B, observation)

J, then asks a child to wait a bit. Because you have already had a go. The Montessori practitioner J, then says to a child get a mat then.... And says to

G... G put your mat away please, when you have finished...right L2 get a mat...

...yes, well he's not put them back yet, wait till there is a mat available...have you finished? Right have you finished because I (another child) would like a go now? So you go and play then ...

CHAPTER FIVE – RESULTS: CASE STUDY SCHOOL B

Case Study – School B

Population This area of Sefton is one of the least affected by child poverty with 15.7% of children living in the ward coming from low-income families. Two of the Lower Layer Super Output Area (LSOA) where the school is located have 25% or more of children living in poverty. One LSOA has the least number of children living in poverty in the borough at three percent. It is estimated that 345 children aged between 0-19 live in low-income families within the ward. 185 (54%) of these live in the two LSOA's with more than 25% of children living in low-income families. The most affected LSOA within the area where the school is located has 26.1% of children living in poverty.

Ethnicity According to the 2011 Census the population residing in the area was 12,102 of which 96% (11,604) of residents deemed themselves to be White British. This is higher than the Southport rate, 92% and slightly higher than the rate seen across Sefton at 95%. Of the remaining 498 residents, the biggest proportion deemed themselves to be White other (29%/146).

Education Educational attainment where the setting is located for state funded primary schools shows an overall increase when comparing 2014 to 2012 for the proportion of pupils achieving Level 4 or above in reading, writing and maths. Educational attainment in Ainsdale for its one state funded Secondary school shows an overall decrease when comparing 2014 to 2011 for the proportion of pupils achieving 5+ A* - C GCSE's (including English and Maths). However, in 2014 the achievements of the only secondary school in the ward, Birkdale High School were above both the Sefton and national rates (it has been continually above these rates across the four years).

Overview of School and Curriculum Setting B is a Special School Based in the Metropolitan Borough of Sefton. At setting B, they believe that it is every child's entitlement to achieve all that they are capable of achieving. They strive to create opportunities for all the pupils to shine, to show the staff what they can do and hopefully to surprise themselves by discovering new talents and abilities. The setting is built on shared values of respect, fairness and hard work. In Lower School, the curriculum is specifically tailored towards the needs and interests of each pupil and based on the outcomes outlined in the pupil's Education, Health and Care Plan (EHCP). Developing Communication remains a key focus and we work closely with each individual to establish

their communication needs and provide a bespoke support package to enable them to reach their full potential. They take a thematic approach to planning in order to ensure lessons are engaging, interesting and exciting. They believe that when pupils are engaged, they make the most progress. Skills from all areas of the curriculum are then applied and developed through practical and real-life activities. Lessons are designed to make meaningful links between all areas of development, therefore making learning consistent and coherent. In order to support our pupils to prepare for the next stage in their lives, we learn about the importance of transitions. This starts with supporting pupils with small journeys away from their familiar classroom environments building up to getting out and about and keeping safe in the local community. As pupils move through Lower School, they also begin to develop their independent learning skills which allows for a seamless transition into Upper School. All learning activities within the EYFS at the school come under the umbrella term of 'Encounter and Discover' and could include trampolines, exercise balls, puzzles, cardboard boxes, water and sand.

Recent Ofsted Report Leaders and governors are uncompromising in their drive to deliver the very best education for all pupils. They have a clear vision for the continuing improvement of the school. Senior and middle leaders are highly skilled. They share a determination for each pupil to succeed. They have developed a warm, purposeful learning environment. This motivates pupils to quickly engage in education. Leaders have devised a curriculum which is adapted to meet the individual needs of each pupil. This ensures that they develop useful skills for life. The quality of teaching is outstanding. Teachers know the specific needs of pupils and plan extremely well to engage their interest and develop their skills. As a result, the progress that pupils make is impressive. Behaviour is excellent. Pupils are very respectful of each other, staff and visitors. Safeguarding arrangements are very thorough and effective. Governors are proud and ambitious for the school. They provide strong and effective leadership. They analyse information in detail and challenge leaders effectively. Pupils' academic progress is closely checked. Leaders act promptly and effectively to ensure that pupils make consistently strong progress. The social and personal development of pupils is exceptional. Pupils are cared for very well. There is a sharp focus on improving pupils' communication skills. Leaders are trialling a system to measure how well pupils' self-esteem and confidence develop. This will gather evidence of progress across all aspects of a pupil's personal development in addition to their academic progress. The early years provision is outstanding. Children make very strong progress. Teachers and teaching assistants know the children and the curriculum exceptionally well. They create a stimulating learning environment for the children in which they can learn and play effectively. Students aged 16 to 19 make outstanding progress and achieve recognised

accreditation. They are exceptionally well prepared for the next stage of their lives. Staff work effectively with providers to make sure students' transition is as smooth as possible.

Findings arising from this study - As stated in Chapter Three of this thesis one of the main aims of this project was to highlight the similarities and differences between the two play-based approaches detailed in this project. As such, I will examine the setting using the same themes and sub-themes as those used to examine School A.

Learning Environment – As with the Montessori setting discussed in case study A, setting B advocates a learning environment that takes account of individual needs. Therefore, they design a space which stimulates and challenges the child; uses the child's interests to enable them to explore and experiment; is flexible enough to allow for quiet, reflective and focused learning; encourages their creativity and imagination; permits them to take risks and make mistakes; encourages independence and helps the child to develop a positive attitude towards learning

Example 5.1-1 (School B, interview with Hannah, Teacher)

Er O.K. so again our curriculum is a lot more flexible than state early years erm we can really respond to the needs of the children and the interests of the children erm it's highly personalised erm and we really can focus in on what they need to develop their independence and also with our particular setting we've got a very small number of children to a very high ratio of staff whereas in a state-funded obviously there is a lot less staff and a lot more children erm so I feel that we can be a lot more responsive to how to make the children as independent as possible.

The example above tells a very different story to the National Curriculum as highlighted by Carol in the examples below

Example 5.1-2 (School B, questionnaire, Carol)

The lack of funding, space, equipment and true understanding of the children was very frustrating. In general staff's lack of understanding/training causes them to have completely unfair expectations of some children. This led in some instances to children experiencing 'exclusion within inclusion!' Very distressing for the child, parents and staff.

Example 5.1-3 (School B, questionnaire, Carol)

Staffing levels/expertise are not adequate. The majority of classrooms are not laid out with resources or equipment to support sensory integration teaching. Children are over stimulated in noisy crowded environments. This causes adrenalin levels to rise and 'melt-downs'. Life for the ASC child can be a very traumatic one.

Learning through Play – Similar to School A notions of child-centeredness, child-initiation and an holistic learning experience are evident in School B as children are given the opportunity to play independently as well as explore and construct their own understandings in a safe and fun environment (Walsh et al, 2019).

Example 5.1.1-1 (School A, Interview with Hannah, Teacher)

... with us being play-based there is less pressure for them to sit and to learn which obviously our children don't do easily erm and we've found that...erm they've developed at their own pace...we've not put them under too much pressure...and their interests that they have exhibited we've used them to scaffold their learning and they've developed fantastically...

Example 5.1.1-2 (School A, Interview with Carol, TA)

The way I look at it is in mainstream I was trying to fit a square peg into a round hole. At [School A] we make the hole round and we say how big is it and deep would you like it? We make the curriculum fit the child rather than trying to get the child to fit into a box.

Layout and Class Size – Similar to School A the environment played a key role in extending children's development and learning. However, the class sizes at setting B was significantly smaller than at School A therefore good teaching can look very different with children who vary widely by age. The classroom in School A is estimated at 6m x 9m, with a carpeted area of 3.6 m x 2m where the children had story time. The images below give an idea of the amount of space needed to accommodate the physical needs of children who attend School B.



Image 5.1 - Inside the School B classroom, showing the amount of clear space available (School B, n.d.)



Image 5.2 - School B - classroom with activity set up (School B, n.d.)

The following examples show how the layout and smaller class in comparison to that of School A impacted on the overall learning and development of children with ASC

Example 5.1.2-1 (School B, Interview with Carol, TA)

... we started in September with a more traditional approach... and we very quickly realised that it wasn't going to work for the children and I think in a lot of ways we're quite brave... saying...going to Sue and saying do you know what this isn't going to happen can we please try something which J and I have been on a course for... We believe this is going to help can we try it...? So we de-cluttered the classroom, we made everthing in there appropriate...

Example 5.1.2-2 (School B, interview with Carol, TA)

... from what I've read children with autism believe that being outside is a much calmer environment for them. There's no overload and they will almost desensitise themselves as they go out. Erm so it's basically knowing our boys, knowing what triggers these things and putting things in place to stop it.

Example 5.1.2-3 (School B, Interview with Hannah, Teacher)

O.K. ... so in September...erm...obviously they came to me I had five new pupils...four of which are those that you are studying...and erm...they were very difficult to engage...erm as we've moved through the year the curriculum has enabled us to get them to engage on a more meaningful level because it's very flexible and it's very responsive to their needs...

Organisation of Learning Environment – A significant difference between School A and setting B is relates to the use of multi-age or mixed-age groupings; in School A the children were aged between four and seven whereas in School A they were aged between two and three. This

Example 5.1.3-1 (School B, observation)

James had in fact started to transport the sand from the sand tray to the box that Beth had filled for water play. After several fruitless attempts to try and stop him doing this, the staff and I realised that he had enlisted the help of one of the other [younger] boys in the class to assist in this. James had poured the majority of the sand into the water, but he enlisted the help of one of the other boys to transfer the remaining sand from the tray to the water box.

The example above highlights some of the activities that are available to the children when playing outside as well as the impact that mixed aged grouping can have on children's overall learning and development. The example below gives an idea of the

activities that the children undertake when they are in the classroom environment some of which reflected the activities found in School A particularly 'practical life' and 'grace and courtesy'.

Example 5.1.3-2 (School B, interview with Hannah, teacher)

O.K. sooo...erm...when I went on a sensory integration course back in November erm I came back to school very inspired to help the children with sensory processing issues that are ASC erm so I think that the equipment that we've got in our class that has been of most use is all of the gross motor skills equipment erm the beanbags, the erm the gymball, the trampolines erm the mats, the swing everything that provides the children with some real sensory input because it's enabled them to be able to cope with the world around them so much more which means they play better, they engage better and they are generally happier children.

Example 5.1.3-3 (School B, interview with Beth, TA)

Erm, he...he's started to throw the ball to other children and waits for it to be passed back and then throws it again or kicks it again. Erm he uses a lot more outdoor equipment appropriately...he doesn't just throw it now erm he knows what to do with it... erm he likes to play with his peers. We've noticed that with one of the erm pupils he likes to play catch or football with them erm and waits for them to give it him back and if he doesn't then he gets the ball again and goes and basically asks them to play with him.

Resources and Activities – It became clear that no matter what type of activity the children engaged in Makaton was used to facilitate language development.

Example 5.1.4-1 (School B, observation)

The song was called I Love Bugs and whilst the main aim of the song was to assist the children in learning the MAKATON signs for the bugs mentioned in the song, another aim of the song was to get the boys to learn about simple rhythms therefore, whilst also trying to sign the different bugs when they came on screen in between they had to shake their instruments to the beat of the music. The second song that the class sang was Big Bugs, Small Bugs to the tune of 'Frère Jacques' and this time J got the boys to replicate two simple mathematical concepts, that of bigger and smaller.

Whilst the above example provides a context whereby facilitative methods are used to engage children in the learning process when in a group scenario however the example below highlights the different activities that the teachers use to engage children in the learning process and as stated earlier in this case study the curriculum is designed to take account of individual learning needs.

Example 5.1.4-2 (School B, interview with Hannah – these examples are taken from a research interview so the range of resources discussed relates to the individual needs of different children.)

Part A

Hannah: Err...so using all of our beanbags, the gym ball...the trampolines, the swing, all of that equipment has enabled him to be I think comfortable in his own skin really...

... he's got a weighted backpack and that has helped him physically because it helps him calm down and he is actually able to sit now and to concentrate which is really lovely... he's started holding a pen erm and mark making equipment and things like that ...

Part B

Erm...I don't think there's been any changes in Tom's physical development...there has been in his sensory development with regards to being able to self-soothe now and that is done through physical kind of exertion...the er...bouncing on the spacehopper...bouncing on the trampoline...being on the swing err...so again his physical development is kind of more a calming...kind of situation... he's become a lot calmer since we implemented all of his like big gross motor skills kind of activities.

Part C

... he will now use his PECS book...so his Picture Exchange Communication book, with photo symbols to ask for items at snack-time and also in structured activities he can use a photo of a balloon in exchange for a balloon because he enjoys the sensory experience of blowing a balloon up and letting it go...

Part D

Alex has started communicating through gesture and again it was the sensory integration that has put that into place.

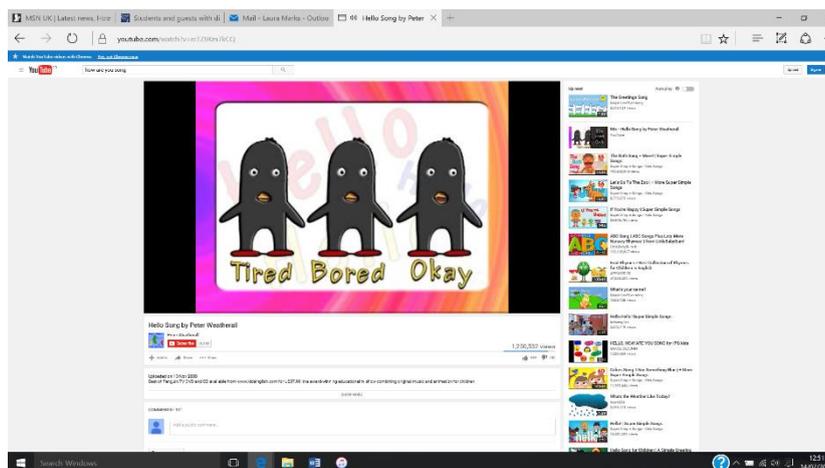
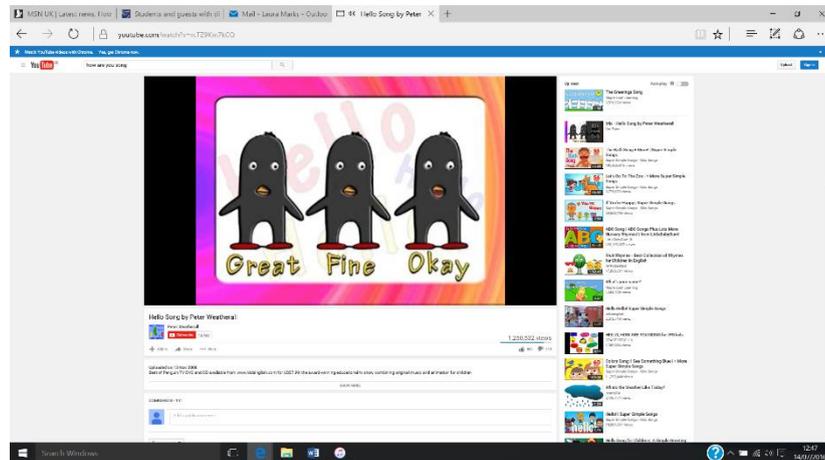
Again, in contrast to setting A it is clear from the examples below that teachers and support staff also make use of technology to facilitate the learning and development of the children in their care.

Example 5.1.4-3 (School B, interview with Hayley, TA)

...so he will now start doing that unaided...where we always used to have to sit behind him or sit him in his chair and help him to join in...now he will or when we're using the iPad erm we used to...we play like a firework game and now he will like physically move his hands to do it himself not just with someone sat behind him so.

Example 5.1.4-4 (School B, observation)

Similarly, each of the boys has to press the switch and then the staff and other children sing a song which consists of each person saying How are you today? The children then listen to a song entitled the “Hello Song” [with the interactive whiteboard]



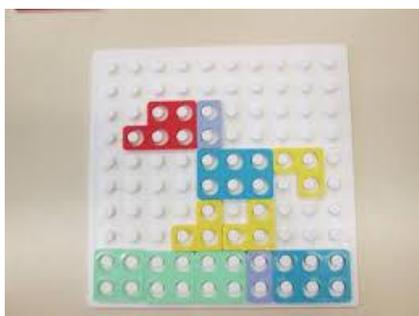
(Weatherall, 2008: 00:00:26 and 00:00:57)

During the “Hello” song MAKATON is again used to reinforce the boys’ individual language skills. Hannah then continued morning group with a story. This week, as it was the previous week, the story was related to this half-term’s theme which is Roald Dahl. The first story that J had picked for the children was James and the Giant Peach, Charlie and the Chocolate Factory and George and his Marvellous Medicine. Throughout story time MAKATON is again used to reinforce the boys use of verbal and non-verbal language Hannah also used music to help facilitate the boys’ listening skills as well as their interaction skills with both their peers and classroom staff.

How Children are Taught and Supported – As indicated earlier in this case study setting B uses facilitative methods to promote learning and development instead of the top-down approaches popularised in mainstream settings. In doing so they can develop at their own pace.

Example 5.1.5-1 (School B, observation)

(This example involves the use of Numicon, shown below, a colour coordinated activity [this is a distinctive multi-sensory approach to children's mathematical learning that emphasises three key aspects of doing mathematics – communicating mathematically, exploring relationships, solving problems in everyday life experiences.])



(NUMICON, Vaida, n.d.)

James is presented with Numicon. He picks up the pieces and makes 'ooo' 'ah' and 'eh' [sounds]. James makes the picture without error and the teacher, Hannah, praises him, 'Brilliant!' James smiles. He puts the pieces back away in the box in their correct places. Hannah says, 'Two', 'Four'; James repeats the numbers after her as she lifts the pieces up to try find a missing one. James

begins to identify the pieces by the colour and number of holes in each one, 'One', 'Two' on his own. Hannah says 'Five'; James says 'Fa' then carries on counting independently up to 10. Hannah says 'High five', James says 'High'. Hannah praised James for finding and giving her the piece with 'eight'. James picks up the puzzle picture and pokes his fingers through the holes.

Example 5.1.5-2 (School B, interview with Hannah, teacher)

... erm they've developed at their own pace...we've not put them under too much pressure...and their interests that they have exhibited we've used them to scaffold their learning and they've developed fantastically...the children we had in September and the children now are two very different cohorts of boys they will now sit and engage for a developmentally appropriate amount of time depending on the child...they are...on the whole the're happier, less anxieties...less sensory processing issues because we've put a real push on the sensory integration...erm...and letting them do what they need to do in order to be comfortable...so the [School B] curriculum has enabled us to do that because we can be really personalised to the pupils needs.

It is also clear that Teaching Assistants play a key role in facilitating the learning and development of the children as shown in the examples below

Example 5.1.5-3 (School B, observations)

Part A

Tom starts crying whilst music plays 'New York' whilst everyone is kicking legs and making jazz hands. TA sat him on her knee and he calmed. Tom gets up off TA's knee and walks around the class before settling on the floor by the fan.

Part B

Tom starts to cry and stamps feet. TA takes him outside.

Part C

Alex stands up then stands on tip toes and holds out his arms to the side, swings arms. TA asks him 'want apple?' Alex replies 'No...no'. then makes cat like sounds. He goes and gets his PECS book and chooses his PECS then takes to the TA. Alex points and speaks the words 'I want swirly' TA gives him his swirly toy and he walks around the classroom playing and smiling.

Part D

Robert puts spikey ball on his arm after watching the TA do it. 'eee'

Part E

Dillon bouncing on ball in the corner looking at the TA who is sat on a small chair in front of him. TA counting to ten, Dillon smiling and stops bouncing after ten counts.

Example 5.1.5-4 (School B, observation):

Part A

At this point it was almost time to go back inside for afternoon lessons. When we got back inside Hannah [teacher] asked the teaching assistants if they could set up the circle for afternoon group. I had witnessed what happened during morning group but was unaware of what happened during afternoon group.

Part B

Carol, one of the other teaching assistants, was getting concerned about Tom as he had spent a lot of time in the sun during the day and despite her best efforts to move him into the shade he kept moving over to the pile of soil in the opposite corner of the play area, so Hannah advised her to find an object to protect him from the sun as it was still so hot. As a consequence of the situation Hannah decided that she would change Tom next for swimming as this meant that once he was changed he would have to stay inside.

The approach advocated by School A promotes a strong sense of achievement as stated on their website

We want to encourage and develop a strong sense of achievement within all our pupils that will stay with them throughout their lives... We strive to build the confidence of each child so that they are able to achieve their potential. We want all our pupils to access an outstanding curriculum with an array of opportunities for personalised learning to meet the individual needs of the

pupil and learning experiences are planned based on the principle that our pupils are more engaged in learning when they are interested and motivated. We are committed to meeting the needs of our pupils and valuing the contributions they make.

It also became clear that the TA's felt that the holistic approach advocated at School B was essential to the learning and development of the children

Example 5.1.5-5 (School B, interview with Carol, TA)

Sadly, league table results and pressure on school staff to produce the best results have led to children with SEND being 'unwanted'. Their results bring the results down. The staff do not have resources or time to support them fully. Their 1:1 TA's are very often used to support other lower ability children to try to improve their results. Many pupils 'survive' primary' but cannot find suitable support in mainstream high schools.

Acquisition of Knowledge and Play-Based Curricula – As with School A the play-based approach advocated at Setting B was essential to ensuring that children acquire the relevant knowledge to enable them to succeed in their overall learning and development. The examples below detail how this manifests itself in setting B

Example 5.2-1 (School B, interview with Beth, TA)

I've observed that ... they have developed interactive social skills through play ... Erm I'd say that they're not forced into doing anything within early years erm we do have a timetable for them to do but we base it on what their abilities are so we don't force them to do anything that they can't do or might struggle to do and er going through play they learn to play with others erm around them erm (how has it helped developing their independence)

Example 5.2-2 (School B, interview with Hannah, teacher)

erm as we've moved through the year the curriculum has enabled us to get them to engage on a more meaningful level because it's very flexible and it's very responsive to their needs we spent the first term...half-term to term really assessing what their needs were and bringing in lots of different methods like sensory integration that we've been doing...er with the curriculum as it stands... with us being play-based there is less pressure for them to sit and to learn which obviously our children don't do easily erm and we've found that...erm they've developed at their own pace...we've not put them under too much pressure...and their interests that they have exhibited we've used them to scaffold their learning and they've developed fantastically...

Example 5.2-3 (School B, interview with Carol, TA)

When asked. "Which pieces of equipment have you found to be of most use with the children in Foxes class?"

Our eyes and ears. You need to listen, you need to look, you need to observe, you need to find what's right for that child.

Example 5.2-4 (School B, taken observation)

Part A

However, unlike the other boys Robert did not have curry or chilli con carne he had toast and crackers. I asked Beth (TA) the reason for this and she explained to me that the staff could not work out the reason why he would only eat toast and crackers at the moment either. She also told me that Robert did used to eat the meals that were offered by the School Bnd had made significant progress with him in terms of getting him to try different things but for some reason he had reverted back to what he had been eating at the beginning of the year...

(Ten minutes later)

Beth (TA) asked Hayley (TA) whether she thought Robert might like the rice pudding...Beth began to offer Robert the rice pudding that one of the other boys had left because he had tried to eat it when it was too hot and had burnt his mouth. Surprisingly given what Beth had just told me a few minutes earlier regarding the fact that Robert had regressed in terms of his eating habits and the fact that he would only currently eat toast, crackers and a yoghurt for his lunch, all the staff and myself were surprised when Robert happily ate the rest of the rice pudding.

Part B

Elsewhere, Tom was attempting to eat his lunch and whilst he also required assistance in order to eat his lunch, but he preferred at that moment in time to use his hands as cutlery, therefore causing his food to go all over the floor ... On seeing what was happening the welfare assistant for the class came over and sat next to Tom and proceeded to help him with his food.

Example 5.2-5 (School B, interview with Beth, TA)

So, he asks... he comes up to you and takes your hand if he wants something...so if he wants the swing...he'll take your hand and he'll take you over to the swing.

Example 5.2-6 (School B, interview with Hayley, TA)

I think one of the really good things is that he can now push himself on the swing he doesn't just...just wait for us to go over and push him, he'll sit down himself and he will...he has learnt that forwards and backwards movement and he will push himself.

Example 5.2-7 (School B, interview with Carol, TA)

Tom, again at first, we didn't know with Tom when Tom was upset...was he wet...was he hungry...was he thirsty we use to go through those things. Now it's becoming quite obvious with Tom there are different...different sounds that he makes and we, as team, now know him so well that we think oh that's because he wants to go on the swing or that's because he's just...he's too hot.

Curriculum Adaptability and Flexibility, Autonomy Supportive Teaching and Freedom of Choice – Similar to School A although curriculum adaptability and flexibility were not specifically asked about during the questionnaire and interview stage of the data collection phase of my study it was a theme that was generated when I was analysing my data however it looked very different in the two settings as in School A it was linked to autonomy supportive teaching.

Example 5.3-1 (School B, interview with Hannah, teacher)

Erm the School B Curriculum is suited to the needs of an SLD...a child with SLD and a child...a child on the ASC spectrum...erm...we are responsive to the children's needs er the curriculum is responsive to the children's needs and the children's interests and...erm...we encourage all of our pupils to make the most of themselves throughout their time at School B. Tom will hopefully stay with us until he is 19 and...erm...I've got high hopes for his future.

Example 5.3-2 (School B, interview with Hayley, TA)

One thing [Dillon] has got really really good at is throwing and catching a ball ... he just used to throw the ball and then he'd run off but now he knows, he waits and he can actually catch the ball now...we're looking at Dillon's individuality what ability he's got, what suits him, we're not going to make him do something that he can't do so I think it will help him gain in confidence and it'll give him the skills that he needs so if he's good at football we'll really help him to excel in that rather than something he's going to find difficult

Example 5.3-3 (School B, interview with Hannah, teacher)

Part A

O.K. ... so Dillon's got fantastic gross motor skills anyway erm and came to us with those gross motor skills he's very adept at climbing, running, jumping everything like that erm we've given him tools to keep him calm...so the sensory processing thing we've let him climb in a safe environment and we've encouraged that I wouldn't say there's any changes in his physical development he's still very much a very active little boy...erm...he's just able to sit for slightly longer periods of time.

Part B

Err...Again James came to us fantastic gross motor skills...what he has done...and I think the equipment that we have given him has helped...is...he's learnt how to (Laughs) he's learnt how to do a forward roll...he can do a handstand...and he is very aware of his physical needs...so using all of our beanbags, the gym ball...the trampolines the swing all of that equipment has enabled him to be I think comfortable in his own skin really.

Example 5.3-4 (School B, interview with Beth, TA)

I suppose if activities are left out for them then they can go and investigate themselves, they don't have to be asked or told to go and do an activity...if it's just free play then they choose what they want to do.

Communication – As already stated in the case study for School A communication is the foundation of social interaction, the essential means through which people initiate and maintain social relationships. The examples below detail the importance of both verbal and non-verbal communication to the overall learning and development of the children who attend the school

Example 5.4-1 (School B, interview with Hayley, TA)

Now [Alex] he didn't have any verbal communication when he came to us and he will now say "I want swing", "I want Swirlie", because we've been using the PECS (This is described and discussed in more detail in Chapter Five) all the time so at first he was pointing...he was pointing to the 'I want' and then pointing to the PE...er the swing and now he says "I want Swing" "I want Swirlie" so he's really coming on.

Example 5.4-2 (School B, interview with Hannah, teacher)

so he's really kind of 'found his voice' using PECS also the symbols that we use to indicate where he's to go next...he now understands...so we show him 'the chair', 'the toilet', and the 'Foxes' symbol and he'll go to 'Foxes' class, he'll go to his chair and sit down and he'll go straight to the toilet...which is huge because back in September he wouldn't do any of that

Example 5.4-3 (School B, interview with Beth, TA)

I mean when you come up to him and say... like try and interact with him... say Hi and stuff he knows that it's you so he gives you a big hug and he giggles and laughs and...yeah he feels comfortable with you. He's not so much interacting with the kids because he's not at that level but he's starting to interact with us.

Example 5.4-4 (School B – interview with Beth, TA)

... erm he likes to play with his peers. We've noticed that with one of the erm pupils he likes to play catch or football with them erm and waits for them to give it him back and if he doesn't then he gets the ball again and goes and basically asks them [by gesture] to play with him.

Example 5.4-5 (School B, questionnaire, Hayley, TA)

They are equipped with skills to help them to be as independent as possible. They will have the ability to be able to choose, communicate and say 'No' They will be able to interact with others in some manner and have a way of communicating whether that be verbally, using sign or visuals.

Example 5.4-6 (School B, interview with Hannah, teacher)

Err... James will conform to some social boundaries when given the right instructions. Erm...he will follow his 'Now and Next' board. Erm he will follow instructions when given a visual prompt but again his social awareness is very very low he doesn't understand...kind of...social parameters

Example 5.4-7 (School B, observation)

Although he reached out to try and grab the food that he wanted Hannah was vigilant and firm, insisting that he find the correct symbols to request what he wanted of the four types of snack that were on offer to him. Robert then looked through his PECS book in order to find the correct symbols that would communicate the sentence "I want biscuit" Hannah then offers Robert four plates with several different choices of snack and then let him choose the biscuit for himself and then reinforce the word biscuit once it had been chosen. It appears that the teaching and support staff do this to develop the boys spoken communication skills for the future.

Example 5.4-8 (School B, interview with Hannah, teacher)

Part A

Again, being here has made the world of difference for Robert...er parents have reported that his progress is fantastic...because...having such a personalised curriculum.

Part B

Er James was brand new to the school in September erm...and I feel that this is definitely the right place for him again. It's very personalised to his learning. Mum says that he does things at home that he doesn't do for us in school like he can erm...he can do his times tables and he does his sisters Maths (inflection) homework (Hannah laughs)...but he won't do any of that for us but Mum reports that erm his progress within his... erm within himself, within his personality and the way...how happy he is being in school is making a huge difference to him so I think that his attainment here will be fantastic in line with his development.

Independent Learning and the Development of Life Skills – As stated in the case study for School A independent learning describes a process in which individuals take the initiative with or without the help of others in identifying their learning needs, formulating learning goals, identifying human and material resources for learning.

Example 5.5-1 (School B, questionnaire, Hannah, teacher)

Having a wide and varied range of resources allows me to tailor activities to individual needs. It also gives me scope to change an activity at short notice should a pupil be resistant. ... We encourage independence through

- communication systems
- life skills e.g. tidying up, getting dressed/undressed
- making choices

Example 5.5-2 (School B, questionnaire, Hayley, TA)

I believe the play-based environment helps children gain confidence and helps with their communication skills. They have more time to interact with others and learn vital life skills ... Yes, I believe it is very important, children gain the ability to choose, share, turn-take and think for themselves. They gain communication and life skills.

Example 5.5-3 (School B, interview with Hayley, TA)

... it [the School B Curriculum] can focus on a child's individual needs erm time can be spent on learning life skills and ways to communicate erm we can encourage play...how to play...different types of play and social communication.

Physical Development – Similar to School A the importance of engaging the children in activities that promote physical development was evident when I carried out my data collection. The following examples show how the activities the children engage in facilitates overall learning and development.

Example 5.6-1 (School B, interview with Carol, TA)

Question: What changes, if any have you observed in terms of B's physical development?

Carol: (Takes a deep breath) Because our boys are so ambulant...they are so capable ...the physical development, if anything, that you're noticing is the fine motor...the gross motor skills were there. What I think we've found is because of the sensory integration ... they're taking care of those gross motor need..the bouncing and things like that so then the fine motor is becoming more prominent...so for somebody like B to actually sit down and turn the

pages of a book rather than just picking the book up and throwing it across the room that's the kind of thing we're noticing.

Example 5.6-2 (School B, interview with Beth, TA)

...erm (pauses) he can...(laughs) he can pick up a pen and will like...you know on the...mega-sketcher... he picks up a pen and he can draw on it erm and then he knows that if you push the thing up and down it goes and he writes on it again. That's what he did the other week ...

Example 5.6-3 (School B, interview with Carol, TA)

What I think we've found is because of the sensory integration ... they're taking care of those gross motor needs ... the bouncing and things like that so then the fine motor is becoming more prominent ... so for somebody like B to actually sit down and turn the pages of a book rather than just picking the book up and throwing it across the room that's the kind of thing we're noticing.

(regarding another child)

...in September would literally take everything out of the cupboard or drawer and throw it as far as he could and then he'd pick them up off the floor and throw them further. Now he will sit, he will do peg jigsaws ... He will interact with playdough and he will feed himself ... So his fine manipulative skills have just rocketed.

Example 5.6-4 (School B, interview with Hannah, teacher)

Erm with regards to things like fine motor skills he's started holding a pen erm and mark making equipment and things like that and because we've done lots of work on the gross motor skills the fine motor skills are coming and that actually goes for James and for Dillon as well.

Example 5.6-5 (School B, interview with Hayley, TA)

...erm I'd say with things like painting... he will...he'll join in now. I think his confidence has really gone in things like you know picking up the pens, picking up the paintbrushes things like that but I mean J2 came to us with quite good physical development anyway so it's just working on that really

Example 5.6-6 (School B, interview with Hayley, TA)

...Hmmm... Yeah when he runs round in the playground he always used to like trip up or fall over a little bit but now with the P.E. that we do he's now like a lot more stable we go to different places...we go different places we go to Shoreside, we go to the activity trail...now he'll join in...he'll stand on the ropes and the tyres and things and he'll join in there so

Theories of Learning and their Impact on the Play-based Pedagogy at setting B –

As in School A constructivist learning approaches underpinned the play-based approach at setting B. Elements of social constructivism were also present: smaller group sizes, teacher modelling and questioning (TES, 2018).

Example 5.7-1 (School B, observation)

James worked with Hannah on the etch-a-sketch again doing some Maths for the second time. However, although Hannah informed James that he would have to write the numbers down himself on the etch-a-sketch it turned out that Hannah wrote the numbers down on the etch-a-sketch whilst James requested the numbers that he wanted writing down using spoken language.

Example 5.7-2 (School B, interview with Hannah, teacher)

Alex will follow instructions and does understand things like tones of voice so if he's done something and there are to be consequences he does understand...he will sit at a table and eat his dinner erm he will drink and he will follow instructions...verbal instructions now which he didn't use to actually at the beginning the year...verbal instructions...or January even...verbal instructions had absolutely no kind of bearing on J2 whatsoever but now if I say to J2 no you need to go and sit on your chair he will actually follow that instruction and he responds to his name really well which he didn't do in January which is lovely.

Example 5.7-3 (School B, interview with Hannah, teacher)

... so in September...erm...obviously they came to me I had five new pupils...four of which are those that you are studying...and erm...they were very difficult to engage...they were...a lot of them had very high anxiety...lots of sensory processing issues...and very noisy for want of a better word...erm as we've moved through the year the curriculum has enabled us to get them to engage on a more meaningful level because it's very flexible and it's very responsive to their needs we spent the first term...half-term to term really assessing what their needs were and bringing in lots of different methods like sensory integration that we've been doing...er with the curriculum as it stands... with us being play-based there is less pressure for them to sit and to learn which obviously our children don't do easily erm and we've found that...erm they've developed at their own pace...we've not put them under too much pressure...and their interests that they have exhibited we've used them to scaffold their learning and they've developed fantastically...the children we had in September and the children now are two very different cohorts of boys they will now sit and engage for a developmentally appropriate amount of time depending on the child...they are...on the whole they're happier, less anxieties...less sensory processing issues because we've put a real push on the sensory integration...erm...and letting them do what they need to do in order to be comfortable...so the [School B] curriculum has enabled us to do that because we can be really personalised to the pupils needs.

Example 5.7-4 (School B, interview with Hannah, teacher)

... so Dillon's got fantastic gross motor skills anyway erm and came to us with those gross motor skills he's very adept at climbing, running, jumping everything like that erm we've given him tools to keep him calm...so the sensory processing thing we've let him climb in a safe environment and we've encouraged that I wouldn't say there's any changes in his physical development he's still very much a very active little boy...erm...he's just able to sit for slightly longer periods of time.

Example 5.7-5 (School B, interview with Hannah, teacher)

...the School B Curriculum is suited to the needs of an SLD...a child with SLD and a child...a child on the ASC spectrum...erm...we are responsive to the children's needs er the curriculum is responsive to the children's needs and the children's interests and...erm...we encourage all of our pupils to make the most of themselves throughout their time at School B. Tom will hopefully stay with us until he is 19 and...erm...I've got high hopes for his future.

Methods that facilitate positive relationships between staff and children – Again, as the following examples show as in School A the activities on offer facilitated positive relationships between staff and children

Example 5.8-1 (School B, observation)

Alex went over to the wall where the PECS folders are hung. He got his PECS and held it out to the teacher. As he points to the words the teacher [Hannah] read out 'I want toy'.

Example 5.8-2 (School B, observation)

... Robert became impatient when Hannah's (the teacher's) attention was not fully focused on him. Hannah used the MAKATON sign for "waiting" at which point Robert became less impatient.

Example 5.8-3 (School B, observation)

Lunchtime had not quite finished when all the boys were changed and so Hannah put Mr. Tumble on the interactive white board for the boys to watch. I had realised from my previous visits that this programme relies heavily on MAKATON to reinforce spoken language, therefore it is used as a tool which allows the children to practise their MAKATON symbols.

Example 5.8-4 (School B, observation)

Teacher rocks 1 over ball and he smiles. Teacher says 'squash' as she presses the beanbag on 1 and he smiles. He smiles then rubs his eyes. Teacher asks in speech and sign 'finished or more?' 1 pushes bean bag away and rolls in to the blanket 'No...No'

Example 5.8-5 (School B, interview with Hannah, teacher)

O.K. Alex. Alex has started communicating through gesture and again it was the sensory integration that has put that into place. Erm we ask Alex...and all of the boys actually if they want 'More' or 'Finished' and give them adequate processing time to actually make that choice and make that decision and Alex shows that choice by reaching for our hands and placing them on his body where he wants the sensory input and he will do that consistently now which he hadn't done before.

Example 5.8-6 (School B, interview with Hayley, TA)

Erm Dillon's came on really well with his communication erm PECS...he uses his PECS so at snack time he has now got erm pictures but he hasn't got symbols its actually a photograph of what he'll be having...so crisps...so picture of crisps and he'll pick it up and he'll pass it to you in exchange for crisps erm he says the word again so we know that if he likes something he'll always say again because he wants you to do it again erm and he's got really good at taking you...so taking your hands and showing you what he wants and communicating through pictures, taking you places and PECS really.

Example 5.8-7 (School B interview with Carol, TA)

Part A

Alex...again Alex's communication erm was to be offensive rather than defensive with things so if there was something he didn't like he would be quite...not aggressive but he would let you know in a way that that wasn't what he wanted. Now he's using the PECS book erm to the point that no matter what he wants he uses the PECS book so if it's swing he uses the PECS book, uses the symbols but he's also verbalising it so we're getting more and more verbal communication.

Part B

Physically, I would say that Alex has learnt not to use hands and feet as a way of getting attention ... if that makes sense. Because of his sensory integration he now uses his PECS book ... whereas before if he was unhappy he'd lash out at us.

Example 5.8-8 (School B, interview with Hannah, teacher)

Ah...Robert is a success story...erm with PECS...we started off with lots of physical prompting with Robert Robert erm...back in October Robert just used to throw his PECS book he used to throw the symbols erm he didn't have any er understanding or want to communicate with us - he was in a world of his own and through real kind of intense erm speech and language kind of PECS work he's now able to use his PECS book to communicate with us during structured activities and during snack erm and is very competent with it he's actually one of the one's that's made the most progress and I've made a DVD of it to go on the website. You can really track the progress he's made with it. He doesn't need physical prompting anymore he will communicate intentionally with staff...and it can be anyone as well...it doesn't have to be one member of staff...which is brilliant... so he's really kind of 'found his voice' using PECS also the symbols that we use to indicate where

he's to go next...he now understands...so we show him 'the chair', 'the toilet', and the 'Foxes' symbol and he'll go to 'Foxes' class, he'll go to his chair and sit down and he'll go straight to the toilet...which is huge because back in September he wouldn't do any of that

Example 5.8-9 (School B, interview with Hannah, teacher)

[Dillon] will now use his PECS book...so his Picture Exchange Communication book, with photo symbols to ask for items at snack-time and also in structured activities he can use a photo of a balloon in exchange for a balloon because he enjoys the sensory experience of blowing a balloon up and letting it go...er...so with regards to Dillon's communication he's starting to...erm communicate intentionally erm...so using PECS, using the sensory integration has really helped with Dillon.

Peer-Teacher and Peer-Peer Interactions - In the context of this study, peer-teacher interactions and interventions that facilitate positive relationships between staff and children are interlinked.

Example 5.9-1 (School B, observation)

In order to ensure that Alex had understood her correctly by repeating the question "Do you want to try some now", and when he shook his head she repeated the word "No" and then "Are you sure" only for him to shake his head again. She repeated this sequence of questions several times before putting the dish down on the table and moving it out of his reach to see if he asked for it a few minutes.

Example 5.9-2 (School B, interview with Carol, TA)

Tom again at first we didn't know with Tom when Tom was upset...was he wet...was he hungry...was he thirsty we use to go through those things. Now it's becoming quite obvious with Tom there are different...different sounds that he makes and we, as team, now know him so well that we think oh that's because he wants to go on the swing or that's because he's just...he's too hot and needs to come out the room. Erm he is definitely coming to the world. He's aware that we're here and he's aware that we can actually help him with things and he comes to us for that.

Example 5.9-3 (School B, observation)

I again noticed something that I had observed during all my previous sessions with the class that Robert was using a gesture that was familiar to him. This gesture consisted of him making a "V" with the first and second fingers of both of his hands. He then proceeded to use this gesture as a form of communication with Helen as Helen then proceeded to make use of this gesture as a mirroring tool. As well as using his using his two-finger downward "V" as a way to engage with him also mirrored the vocalisations that he was making during the session. Helen seemed to recognise and enjoy the fact that she did this and, to my surprise, Robert then proceeded to direct the session himself by indicating to Helen what he wanted her to do by making gestures

with his hands and then pointing to Helen's hands in order to get her to copy him.

Example 5.9-4 (School B, interview with Hayley, TA)

Part A

Robert ... likes to be on his own really, he won't really interact with other children. Erm he likes hearing the other children...he will look but then he won't throw a ball or ask them to join in on something...S...he wouldn't join in with the other children really.

Part B

Tom...he likes group activities like he likes it when we all do Music. He'll know everybody else is in the room, he'll wait for the drum to get passed round and he'll have his go on the drum but he wouldn't do it if it wasn't adult led.

Part C

James ... again he does like the social side of things. He likes to sit on the swing with other children erm he'll run round...he'll play chase erm he likes it in P.E. when we get the slide out and he'll sit next to a certain child and then they'll slide down together and roll so.

Part D

[James] playing with rolling balls down a track two at once, [James] turned round to look at another child that was sat by him. He puts three balls down the ramp and stops them half way down the track. The other child [Alex] snatches balls off James and rolls them away. James goes to pick them up and then sits down again. Other child [Alex] pushes balls away again, James reacts by picking up the balls and moving away from the other child [Alex].

Learning Concepts and Children with SEND – As in School A the acquisition of learning concepts is just as important in setting B

Example 5.10-1 (School B, observation)

Alex crouched in box swirling shoe lace. Picks up links in the box but only the red and yellow ones. He makes the sounds 'oo' 'a' 'ee'. He takes the links out of the box then holding four of them goes to the top of the slide and places them one at a time on top of each other. He then gets hold of them and goes down the slide on his stomach. 2 then goes and gets one more link and repeats this but going down the slide sat up with the links behind him. This was repeated two more times adding a link each.

Example 5.10-2 (School B, observation)

Alex collects seven stones and puts them in a line on the wall. He picks them back up then shakes them in his hand. He goes and sits under the tarpaulin and adds another stone to the collection, then lines them up along the pallet. He then shakes the corner of the tarpaulin like a swirly toy.

As has become clear throughout this case study children with SEND only attended setting B in this particular case ASC therefore I will now provide examples of setting B manages challenging behaviour. I will provide examples in relation to the Autism Manifestation Profile; Sensory Processing and Self-Regulation and Self-Awareness.

Turn-Taking and Sharing - Turn-taking and sharing are principles that were being clearly taught in School B as well as School A.

Example 5.11-1 (School B, interview with Hannah, teacher)

Part A

We teach them basic things like how to share, how to take turns, how to get by in everyday life. Erm they join in with other children.

Part B

Also, we do a lot of Intensive Interaction with Tom and feel that he is now more able to turn-take...which is lovely...erm and he is giving some really lovely eye contact and wants more physical contact which is developmentally the right kind of level for Tom communication...erm and he's doing really really well so.

Part C

James chooses to communicate through erm...more Intensive Interaction methods. He enjoys turn-taking activities like 'Ready Steady Go' erm counting back from five and saying 'Lift Off'

Part D

Alex...Erm Alex does quite like time on his own, but he did find it really difficult with sharing but now he will sit on the floor with a jigsaw and he will allow other children to join in that's erm that's taken like quite a few months but he's getting there with that.

Example 5.11-2 (School B, observation)

Hannah decided that she would work with Robert. However, when she requested for Robert to lie down whilst she did his sensory integration he was very agitated ...Hannah then sat him in his chair and put on his weighted backpack to try and calm him down. Even though he appeared to calm he still did not want to do the shape sorter that Hannah had offered to him. She then realised that the staff would be better doing his sensory integration in the chair that he uses during morning and afternoon group. Hannah then turned her attention to James who had already snatched the shape sorter away from Robert a few minutes earlier due to his wanting to play with it. Therefore, once Hannah had finished Robert's sensory integration she turned her attention to James. She took the shapes out of the wooden insert and then proceeded to ask James to identify the different shapes and put in the correct shape inserts.

Autism Manifestation Profile - The phrase autism literally means “self-ism” and originates from the Greek word autos (Baron-Cohen, 2005; Elmoose *et al*, 2016). It is a neurodevelopmental disorder (NDD) and is characterised by the ‘triad of impairments’

with onset early in life. As a direct result of the aforementioned statement, I will now provide examples of the way the condition can manifest itself and affect the learning and development of each child.

Example 5.12-1 (School B, interview with Hannah, teacher)

Part A

Robert so err Robert no social awareness whatsoever unfortunately...he er...the noises that he makes can be very distressing to others he...er...can be very destructive although he has calmed down significantly he can be very, very difficult to manage.

Part B

... he can become very distressed and very upset, he makes lots of very loud noises

Example 5.12-2 (School B, observation)

When I got outside I was firstly greeted by Dillon, for whom having a diagnosis of ASC means he approaches the world from a sensory point of view... I was aware from my previous visit that he was very likely to sniff me throughout the visit [as this was his way of greeting].

Example 5.12-3 (School B, observation)

Beth decided to try and play with Robert. For children with ASC having other people enter their personal space in such a way can sometimes cause them to have 'meltdowns' however, Beth was surprised that Robert "did not mind her putting her head in" especially given that that morning the class had been subject to a lot of visitors and I felt that the staff were surprised that Robert had not had a 'meltdown' as a result of the events that had taken place in the morning.

Example 5.12-4 (School B, observation)

At the same time Alex was also in a cardboard box and once Beth had spent time with Robert in his cardboard box she decided to also spend some time playing with Alex doing the same, only this time she repeatedly opened and closed the flaps of the box and using the space that would have been sealed with tape to play peek-a-boo with him... After Hannah had finished her lesson preparation for the afternoon she came outside and sat down next to the [James's] box and waited for him to open the lid of the box before she attempted to interact with him. When he eventually did open the box she began to communicate with him in his own way which essentially meant mirroring his pre-verbal utterings. She also got into the box with James. For a while he did not seem to mind this, however after about ten minutes he climbed out of the box and started to run around. Hannah took this as a sign that he had had enough and apologised to him for "outstaying her welcome"

Example 5.12-5 (School B, observation)

Elsewhere, Tom was attempting to eat his lunch and whilst he also required assistance in order to eat his lunch, he preferred at that moment in time to use his hands as cutlery, therefore causing his food to go all over the floor but a mishap was avoided with his clothes as he had been covered in a piece of protective cloth. On seeing what was happening the welfare assistant for the class came over and sat next to Tom and proceeded to help him with his food.

Example 5.12-6 (School B, interview with Hannah, teacher)

... so in September...erm...obviously they came to me I had five new pupils...four of which are those that you are studying...and erm...they were very difficult to engage...they were...a lot of them had very high anxiety...lots of sensory processing issues...and very noisy for want of a better word...

Example 5.12-7 (School B, observation)

[Robert] was still agitated and kept running between the two tables that constitute the classroom workspace. On one table were some chalk, chalk boards colouring pencils and a book of drawings that could be coloured in if the children so wished. Whilst two of the other boys in class did some work on identifying creatures by matching the cards with the pictures on the laminated grid that Hannah had made for them. Whilst the boys were concentrating on doing this Robert was still quite distressed. This manifested itself in him verbalising high-pitched sounds and throwing the chalks onto the floor of the classroom and although the classroom assistants did try to put the chalks back in the dish Robert continued to throw the chalks out of the bowl ... I realised that Robert was using a different medium to try to focus his attention on the different activities that were taking place within the classroom environment. I had noted during previous visits that Robert usually used two fingers to focus his attention on different spaces and materials that are both within the classroom environment and the surrounding area and he appeared to be using the bowl as an alternative medium for the world as he saw it.

Example 5.12-8 (School B, interview with Hayley, TA)

Tom...we're still working on re...getting him to respond to his name...he did do it this week but we...we don't know whether it's going to be consistent yet erm...

Example 5.12-9 (School B, interview with Hannah, teacher)

Part A

We would distract them by trying to play a different game or if there is something too noisy we would take them out...maybe outside for a little bit of a break, if they're too cold then we'll bring them in so we would just try and see where the triggers lie.

Part B

[Referring to the ways in which Dillon's behaviour has changed when engaging in activities] ...and as a staff feel that it's enabled him to calm enough to take part in the communication activities.

Part C

[Referring to the difference in Tom's behaviour since the beginning of the year] and that is done through physical kind of exertion...the er...bouncing on the spacehopper...bouncing on the trampoline...being on the swing err...so again his physical development is kind of more a calming...kind of situation... he's become a lot calmer since we implemented all of his like big gross motor skills kind of activities.

Example 5.12-10 (School B, observation session)

Helen started by massaging his arms and legs and although he was calmer than I had witnessed the previous week I noticed that Robert was still slightly agitated. Noticing this herself, Helen proceeded to take off her glasses and then ask Robert if "that was better" I asked her why she had done this. She explained to me that, due to the fact that she didn't have to wear her glasses all the time, on the on the occasions that she did, they did not like it because they thought that she was a different person. Once she had done this Robert appeared to settle again and his sensory integration session could continue.

Example 5.12-11 (School B, interview with Hannah, teacher)

Errm...O.K...soo, again sensory processing issues can often be a trigger of the most challenging behaviour that we see and it's getting to the bottom of what those sensory processing issues are erm and how important it is to give them sensory input throughout their day to enable them to cope. Er we've seen a marked decrease in 'meltdowns' from erm from Dillon, from Alex and from Robert erm a marked decrease in anxiety because of the sensory processing...the input that we're giving them on a regular basis. Another reason that can trigger challenging behaviour is communication problems our children struggle to get their needs met because they don't have a voice...they can't communicate their needs so we've...we've put into place communication systems erm...like PECS, like intensive interaction in order to give them a voice erm and hope that it alleviates some of those communication problems.

Example 5.12-12 (School B, interview with Beth, TA)

Erm objects being taken away from the children without warning or countdown erm sudden loud noises if they're sound sensitive they don't like that erm being told 'No' when they can't have something might trigger some angry or upset traits...Erm PECS books definitely the most erm useful equipment erm and location markers erm with the children that don't use the PECS books erm or don't know symbols location markers are really handy to let them know where they're going because autistic children get worried if they don't know where they're going.

Example 5.12-13 (School B, interview with Carol, TA)

There's always a reason whether it be, there is a sensory overload, there's too much noise, they're too hot erm they're hungry

Sensory Processing and Self-Regulation - Whilst the main clinical deficits (discussed earlier in this section) are referred to as the “triad of impairments” and as such are the established set of symptoms that clinicians will look for when diagnosing ASC, it is important to remember that there are less obvious signs and symptoms that a child may display if they have ASC. I will now provide examples of how sensory processing issues can present themselves and how the teachers engage with a child as well as how the children self-regulate

Example 5.13-1 (School B, extract from sensory issues Dillon’s Annual Learning overview in relation to the auditory sense, and compensating interventions)

1.Blocks ears at unexplained times

Ensure that only one adult at a time is talking to Dillon – understand that he may be trying to drown out other sounds and be having difficulty processing them all.

2.Hums and covers ears

Use a distraction free area where possible to complete given tasks

3.Doesn’t appear to hear you when spoken to

Ensure staff are in front of Dillon when talking to him

Place hand on Dillon’s arm/hand when giving instructions to focus attention

Example 5.13-2 (School B, observation)

Hannah decided that she would work with Robert. However, when she requested for Robert to lie down whilst she did his sensory integration he was very agitated ...Hannah then sat him in his chair and put on his weighted backpack to try and calm him down.

Example 5.13-3 (School B, observation)

Beth rocks Alex over ball and he smiles. Beth says ‘squash’ as she presses the beanbag on Alex and he smiles. He smiles then rubs his eyes. Beth asks in speech and sign ‘finished or more?’ Alex pushes bean bag away and rolls in to the blanket ‘No...No’

Example 5.13-4 (School B, observation)

On my previous observation visit Robert had been quite distressed and could not settle and concentrate on any of the activities that had been suggested to him the previous week. I was interested to see the difference in how he tolerated the activities that were planned during the morning session. I was to be surprised however when Helen sat him in his chair and also put on his weighted backpack to keep him as calm as possible. She then proceeded to

commence the intensive interaction.

Example 5.13-5 (School B, observation)

...Once he had indicated to the staff that he wished his sensory integration to finish he came over to me and said "hello" in his own unique way. I had been told during my first observation session that Dillon was very sensory-oriented and liked to sniff people. [Therefore, whilst I was initially confused as to why Dillon was doing, I soon] realised that this was how he negotiated initial interactions with others. So, it was no surprise to me that the first thing that Dillon did during my third visit was to sniff my arm as this was his way of greeting an individual. Dillon then proceeded to spend the time between his sensory integration finishing and snack-time interacting with me.

Example 5.13-6 (School B, observation)

He began by investigating my wheelchair going around each side of my wheelchair and behind it to investigate what each how each element of my wheelchair works. He had done this during the previous sessions at the School But never with such intensity. Dillon even began to investigate the inside of my chair by pushing down several times on the edge of the cushion I was sitting on. After doing this several times I asked Dillon why he was doing what he was doing but it became a rhetorical question as Dillon is non-verbal. In order to answer my own question, I started to explore my own wheelchair in order to see the world as he was seeing it at that moment in time. I began by feeling my way around my chair as he had been doing and realised when I got to the cushion that I was sitting on was in fact not smooth as I had previously thought but there were bumps where the foam was gathered in the cushion, thus enhancing Dillon's sensory experience.

Example 5.13-7 (School B, questionnaire, Carol, TA)

[Do] not expect them to communicate with you initially until their sensory needs are met.

Example 5.13-7 (School B, questionnaire, Carol, TA)

[Do] not expect them to communicate with you initially until their sensory needs are met.

Example 5.13-8 (School B, questionnaire, Hannah, teacher)

I believe that a mainstream setting could be detrimental to the early development of a pupil with ASC due to the sensory overload that may occur – too much 'going on', too noisy, too busy and not enough trained staff to be responsive to needs.

Example 5.13-9 (School B, questionnaire, Carol, TA)

The majority of classrooms are not laid out with resources or equipment to support sensory integration teaching...Children are over stimulated in noisy crowded environments.

Example 5.13-10 (School B, interview with Carol, TA)

Erm so first of all you try the sensory integration relieve that sensory overload if necessary take children out, from what I've read children with autism believe that being outside is a much calmer environment...There's no overload and they will almost desensitise themselves as they go out. Erm so it's basically knowing our boys, knowing what triggers these things and putting things in place to stop it.

Example 5.13-11 (School B, interview with Beth, TA)

Part A

...Erm they have learnt to self-regulate as a result of sensory integration and they have developed interactive social skills through play.

Part B

Tom...he is really good at self-regulating now erm when he knows he's going into 'meltdown' he gets on the spacehopper or the gym ball and rolls on it himself without anybody telling him to do it.

Part C

[Talking about Dillon] he waits for you to play with him...do like silly little games with him erm and then he carries on playing by himself and then he'll come back to you

Example 5.13-12 (School B, interview with Hayley, TA)

[Referring to Dillon] Erm his attention...he...he just used to throw the ball and then he'd run off but now he knows, he waits, and he can actually catch the ball now.

Self-Awareness - Sensory processing and self-regulation are linked to a child's self-awareness. In this last section I will examine how children with ASC develop self-awareness, and its impact on their ability to engage with the world around them.

Example 5.14-1 (School B, interview with Hannah, teacher)

Err...Again James came to us fantastic gross motor skills...what he has done...and I think the equipment that we have given him has helped...is...he's learnt how to (Laughs) he's learnt how to do a forward roll...he can do a handstand...and he is very aware of his physical needs...so using all of our beanbags, the gym ball...the trampolines the swing all of that equipment has enabled him to be I think comfortable in his own skin really.

Example 5.14-2 (School B, interview with Hannah, teacher)

[Talking about Tom] he can become very distressed and very upset, he makes lots of very loud noises...erm doesn't seem to be very aware of what he's doing and the effect it might have on others...so yeah he doesn't really have any social awareness either.

Example 5.14-3 (School B, extract from Dillon's Annual Learning Overview)

1. Anxious when not in control of own movements

Practise fast angular movements during fun interactions that [Dillon] already tolerates e.g. pick up then tickle

Teach [Dillon] to use his feet to activate toys – e.g. space hopper

2. Shows no sense of danger when climbing

Divert to safe play equipment and reinforce 'no climbing here'

Example 5.14-4 (School B, observation)

Hannah subsequently calls to James to come and join the group. Hannah called him over once and he appeared to not hear after a few seconds she called him again. This time James came running over and sat himself on Hannah's lap. James did this quite happily, but in doing so, had not registered the fact that in the time prior to Hannah asking James to join the group Hannah had gone over to the sink to fill a water spray as part of the interactive experience. James joined the group at the point in the story where the family had found the bear in the cave and where now trying to escape the bear. They had to run back through the snow storm, the mud, the forest, but when it came to the family running back through the water Hannah picked up the spray she had just filled and that is when James realised Hannah was going to spray him with it. James made a face and tried to pull away. Hayley noticed and commented, "Look, he knows, he knows what's coming."

CHAPTER SIX – DISCUSSION: LEARNING AND ACHIEVEMENT

This thesis set out to examine the similarities and differences between two play-based approaches and how these can inform the education of children with and without SEND. As mentioned in Chapter Three, I carried out a thematic analysis of the data collected, and this generated a number of themes. Sub themes were also generated as a result of personal conversations with teachers and support staff (prior to data collection), in-depth analysis of the data and discussions with my colleagues as critical friends. My data included observations, questionnaires and interviews – a more in-depth discussion of these is provided in Chapter Three. Whilst many of the themes are discussed in their own right, some related sub themes have been grouped together; I therefore want to draw the reader's attention to the fact that some of the examples can be applied to several of the sub-themes.

In this and the following chapters, I will accordingly present my results and in-depth discussions around the headings shown in Table 6.1 overleaf.

It is at this point that I should draw the reader's attention to two facts. The first is that School B is what was referred to by Lillard (2012) as a 'supplemented' Montessori nursery – one in which conventional School Activities and materials were added to the core programme. Thus, the children could also be involved in painting, art and craft activities; they still had a dressing up area, a home area, areas for reading and doing puzzles, and whilst these could be seen as Montessori activities, they were set up in such a way as to be seen as part of a conventional early years environment. The children could therefore take part in Montessori activities or conventional early years activities. School B is a Special School for 4 – 19 year olds. The class that I observed was for 4 to 7 year olds and followed the School B Early Years Foundation curriculum. This curriculum is an adaption of the play-based curriculum of an outstanding teaching school (Ofsted, 2017) in London.

Secondly, I only discuss SEND (specifically ASC) in relation to School B as there were no children on the roll of School B Montessori nursery with that condition at the time of data collection. Keeping in mind the fact that Montessori originally designed her approach for children with SEND, I hope that while examining the similarities and differences between the two settings I will be able to investigate how play-based approaches impact the overall education and development of non-disabled children, as well as their impact on those diagnosed with SEND.

Table 6.1: Themes and Sub Themes of Results and Discussion Chapters

Chapter	Themes	Sub themes	
Six	Learning and Achievement	6.1 Learning Environments	6.1.1 Learning through Play 6.1.2 Layout and Class Size 6.1.3 Organisation of Learning Environment 6.1.4 Resources and Activities 6.1.5 How Children are Taught and Supported
		6.2 Acquisition of Knowledge and Play-Based Curricula	
		6.3 Curriculum Adaptability and Flexibility, Freedom of Choice and Autonomy Supportive Teaching	
		6.4 Communication	

		6.5 Independent Learning and Development of Life Skills	
		6.6 Concluding Thoughts	
Seven	Pedagogical Approaches to Learning	<p>7.1 Pedagogical Theories of Learning and their Impact on the Play-based Pedagogy at School B and School B</p> <p>7.2 Methods that Facilitate Positive Relationships between Staff and Children</p> <p>7.3 Peer-Teacher and Peer-Peer Interactions</p> <p>7.4 Learning Concepts and Children with SEND</p> <p>7.5 Turn-Taking and Sharing and Collaboration</p> <p>7.6 Concluding Thoughts</p>	

Eight	Managing Challenging Behaviour	8.1 Autism Manifestation Profile and Behaviour 8.2 Sensory Processing and Self-Regulation 8.3 Self Awareness	
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6.1 Learning Environments

In terms of the current thesis one of the things that became abundantly clear was the importance of the learning environment for children in both School A and School B. Throughout my data collection period at both settings practitioners, teachers and support staff did everything they could to ensure that the learning environment was arranged in such a way that the individual learning needs of each child were taken into account.

According to Hodgman (2011), an enabling environment is one which stimulates and challenges the child; uses the child's interests to enable them to explore and experiment; is flexible enough to allow for quiet, reflective and focused learning; encourages their creativity and imagination; permits them to take risks and make mistakes; encourages independence and helps the child to develop a positive attitude towards learning. This could be said of School A and of School B – see chapters Four and Five.

Whilst the United Nations Convention on the Rights of the Child (UNESCO, 1949) encourages and supports the right of young children to be cared for and educated in inclusive classrooms alongside their typically developing peers (Coelho *et al*, 2019), Porter and Ashdown (2002, cited in Carpenter, 2015) describe pupils with complex needs as thus: "...a wide and varied group of learners...including pupils who do not simply require a differentiated curriculum or teaching at a slower pace but who, at times, require further adaptations to teaching if they are to make progress". Therefore, it is no surprise to me that the inclusion of children in unsuitable learning environments can have a negative effect on the behaviour of C&YP with SEND and their outcomes in later life. This stands in marked contrast to the examples detailed above which shed light on how alternative learning environments such as those that are discussed in this thesis can facilitate deeper learning and accelerate their progress. Carpenter *et al* (2011, p.68) suggest that:

sustainable learning can occur only when there is meaningful engagement. The process of engagement is a journey which connects a child and their environment (including people, ideas, materials and concepts) to enable learning and achievement.

As is evident from Example 5.1-1 (Case Study – School B), the curriculum that has been implemented by School B and the fact that they have a high staff to student ratio means that they can focus on the children's needs. They also make reference to the fact that suitable activities and resources can facilitate independence. As a direct contrast, the examples below reveal the impact of an unsuitable learning environment for children with SEND. Carol, a TA at School B with twenty-five years' experience of working with and alongside children with SEND, comments in the examples below about working with these children in mainstream schools:

According to Peeters (2012, cited in Feinstein, 2019 p.38), so-called 'inclusive' environments can be hopelessly naïve and sometimes cruel for children with autism. Even when they are formally included, the degree and nature of that inclusion often is deeply questionable (Pellicano *et al*, 2018). Collectively, autistic children's intrinsic characteristics, the increasingly demanding nature of the school context, and the difficulties teachers and school staff appear to have in supporting these young people may therefore place them at heightened risk of being marginalised in school – and, ultimately, of being excluded from school (Brede *et al*, 2017). According to Sproston *et al* (2017), despite the girls and their parents having some differing perspectives regarding the girls' education experiences, similar themes were found across the entire sample, with (a) inappropriate school environments, (b) tensions in school relationships and (c) problems with staff responses all contributing to educational experiences. The lack of understanding shown by teachers made the young people feel very vulnerable (*ibid*).

Moreover, Carol's responses (Examples 5.1-2 and 5.1-3: Case Study: School B) highlight the fact that children with ASC more often than not struggle in mainstream classrooms as they are designed in such a way that they are highly interactive, unpredictable environments, even when the daily activities have been carefully orchestrated (Martin, 2016). Therefore, it is no surprise that children with ASC display unusual reactions to certain stimuli (Williams *et al*, 2019). The most stressful places for them include corridors, entrances and exits; the school canteen and playgrounds, where social interactions tend to be unstructured; as well as unpredictable, and where there is lots of noise and overcrowding. Furthermore, these same authors also suggest that mainstream settings that promote themselves as being inclusive in a lot of ways accentuate C&YP's sense of being different in a negative way heightening their risk of developing low self-esteem; poor sense of self-worth and mental health problems. Moreover Kopec (2012, cited in Martin, 2016) points out that children of preschool through kindergarten age do not have more well-developed coping mechanisms; thus their stress levels are typically more intense than in older children facing the same challenges.

6.1.1 Learning through play

Learning through play has long been a central tenet in early childhood education (Nolan and Paatsch, 2018), thus, notions of child-centeredness, child-initiation and an holistic learning experience have dominated such discourse as children are given the opportunity to play independently as well as explore and construct their own understandings in a safe and fun environment (Walsh *et al*, 2019). High quality Early Years education which is characterised by child-centred approaches provides ample opportunity for learning through play whilst also impacting upon a child's future learning (Nicholson, 2019). This is a founding

principle of both play-based approaches.

The School A Website states:

Children learn through play. They develop new skills, discover new things about themselves and the world around them, and learn to share and communicate with others. They also have the opportunity to use their imagination and be creative. We believe that through play, children can realise their full potential.

Examples 4.1.1-1, 4.1.1-2, 4.1.1-3 and 4.1.1-4 (Case Study – School A) show evidence of how children develop new practical skills, communication and collaborative working skills, turn-taking, using their imaginations (putting napkins on dolls) and discovering new things about the world (what napkins are really used for). Fisher (2013, p.11) states that:

“In the course of learning skills, children develop their own peculiar set of strategies for trying out, rehearsing or repeating what they have done. ... These strategies become part of the characteristics of the child as a learner and are the basis of all strategies that will be adopted if the child is left to learn alone.”

Cohen and MacKeith (1991, cited in Wood, 2013 p.18) point out that “there are lifelong links between children’s play worlds and subsequent adult roles, identities and occupations”, as shown above. The imaginary worlds that are constructed in childhood can develop into adulthood and become more elaborate and structured (ibid). Furthermore, according to Wood (2013) playfulness, imagination and creativity are inextricably linked in our playing and working lives. Thus, creating a continuum between lifelong playing and learning is possibly even more critical in the twenty first century as economic success relies on people who are creative, flexible, innovative, imaginative and playful in the workplace (ibid). According to Pyle and Danniels (2017, p.281):

Play is extremely important but it’s a chance for them to practice the skills that they’ve been taught. When the direct teaching happens and then they’re allowed to play and explore and change things up within their play, their play changes. It gives them a chance to process, to ask questions about that, to share their knowledge with other people and feel really good about themselves ...

This perspective is reflected in government guidelines which recommend that instruction should be more active-participatory and child-centred (Chen, 2011; British Association for Early Childhood Education, 2012) Furthermore, the guidelines offer teachers facilitation strategies which allow them to scaffold the children’s learning and challenge them to expand upon their current interest while never pushing them too hard toward the acquisition of new content or skills (Bailey, 2018).

Similarly, the School B website states:

We recognise the importance of children's play. It is an essential and rich part of their learning process, supporting them in all areas of development. Play is a powerful motivator encouraging children to be creative and to develop their ideas, understanding and language. Play is also flexible and able to suit the preferred learning style of the child. It can provide multiple ways for children to learn a variety of different skills and concepts.

In providing these active learning opportunities through play we understand the central position of play within the EYFS framework. This is essentially a play based curriculum and pedagogy as the provision of play opportunities underpins its delivery.

Fesseha & Pyle (2016) advocate that play only facilitates social and personal development of children in this age group. However, as shown in the examples below the staff at School B believe that compared to mainstream schools that adhere to the National Curriculum (NC), a play-based holistic approach is more appropriate for C&YP with SEND. This is borne out in the examples 5.1.1-1 and 5.1.1-2 (Case Study – School B).

The DFE (2017 p.9) states that practitioners must respond to each child's emerging needs and interests guiding their development through warm positive interaction; in spite of these good intentions there is an obvious tension between what the government wishes to happen (as stated above) and what actually happens within the state-funded education system due to the competing demands of the national curriculum and the needs of the individual child (Le Maistre & Paré, 2010; Rose & Rogers, 2012; Clausen, 2015). Again, this stands in marked contrast to the play-based approaches advocated by School A and School B, which allow children to progress naturally through their learning journey rather than having to meet specific goals at prescribed assessment points (Moss, 2015).

6.1.2 Layout and Class Size

The environment plays a key role in supporting and extending children's development and learning (Burke, 2007). In terms of learning environment, there were several similarities and differences between the two settings. These concerned the layout and organisation of the learning environment, the way in which the children are taught and supported, class size, the activities and the resources available to the children. I will firstly discuss the classroom layout and how this was organised in both settings, starting with School B. The School B classroom is estimated at 6m x 9m, with a carpeted area of 3.6 m x 2m where the children had story time. Images 5.1 and 5.2 give an idea of the amount of space needed to accommodate the physical needs of children who attend School B.

At the time of writing *The Absorbent Mind* (2016) Maria Montessori spoke of the problems facing the education system and C&YP with SEND. The [deviant] child, according to her,

has no love for their environment because it presents too many difficulties, too much resistance. It is sought therefore to diminish the avoidable obstacles and resistance that the environment presents to the child and if possible, to eliminate them altogether. Due to the de-cluttering referred to by Carol in Example 5.1.2-1: Case Study – School B, there could be three activities going on at any one time involving different children. The activities were chosen to meet individual learning or developmental goals and sensory needs. The de-cluttering of the environment meant that the children had significantly more space in which to work off excess physical energy so that they could settle and engage with learning. Visual displays were limited to two to avoid sensory overload. Taking everything into consideration School B's environment can be seen as what Montessori referred to as an environment of least resistance. In contrast, the School A classroom was smaller – about two-thirds the size of School B's, with a Montessori area approximately 2m x 2m where all the Montessori activities took place. As stated at the beginning of this chapter, School A was what is known as a supplemented Montessori setting, meaning that the layout was very similar to that of a state-funded Early Years setting, with an area for imaginary/role play, and offered the children more conventional activities such as puzzles, craft materials and toys that were purchased as a result of the children's likes and dislikes (Lillard, 2012). The classroom was smaller in size which led to a crowded, busy and noisy environment, with up to five activities going on at any one time, including Montessori activities. As there were no children with SEND enrolled at School B, the children were able to cope with everything that was going on around them, however the same would not have been said of children with SEND in the same environment since, as well as sensory overload, they can also be subject to auditory overload. Therefore, a supplemented Montessori environment would not be a suitable learning environment for them.

A similarity between the two settings is that the children always had access to the outdoor environment; they were not kept within the classroom and were not dictated to by time or bells as in normal state-funded early years settings.



Image 6.1 - School A, showing classrooms surrounding one of the play areas (School A School website, n.d.)



Image 6.2 - School B, showing a small section of the outdoor environment (School B website, n.d.)

As a result, the children had a choice about where and how they wanted to learn. According to Lindon (2013, cited in Maynard, 2014 p.59) and Wood (2010b, p.16), “Child-initiated activity is closely associated with children’s spontaneous, free or self-chosen play or investigation”, and “ ... has been linked to wider benefits including children’s physical and mental health, emotional well-being, creativity and social inclusion as well as positive disposition.” Another difference between the two environments relates to class size. Good teaching may look different with smaller groups of children who vary widely by age (Householder, 2013), as shown in the example below.

Class sizes vary between countries. In the UK, class sizes are relatively large—the fourth largest in the OECD; the UK is unusual across OECD countries in that the number of pupils per class tends to decrease between primary and lower secondary education (average of twenty seven at primary and twenty at lower secondary (Blatchford & Webster, 2018). One of the justifications of small classes is the hope that they will help those with the most ground to make up academically (e.g. children with neurodevelopmental disabilities) receive more individual attention and be better able to concentrate (ibid). Pupil numbers in School B were significantly lower than in School A, allowing for smaller class sizes, as can be seen from Example .1.2-4: Case Study – School B. In contrast there could be up to fifteen children in School A at any one time. Moreover, children who attended School B could do so for the full day, or in the morning or afternoon only, depending on parental commitment. They were also younger. In contrast the children who attended School A were of primary age and therefore attended all day. As a result, the School A staff had to ensure that the environment was appropriate for all children. They not only looked at individual needs but at what worked for the whole class. For instance, relaxing music played in the background whilst the children worked and was particularly evident during their Early and Intensive Behavioral

Intervention (EIBI) sessions which took place on a daily basis. Music is a familiar component of many interventions for children with SEND (particularly ASC) as it is both interesting and motivating (Lim, 2012). Moreover, it can provide the children with much needed neurological stimulation acting as a catalyst for change and growth; it allows children to develop the skills they need to process visual, auditory, sensory and motoric information through imitation and synchronicity. Responding to others is seen as a core deficit in children with ASC therefore utilising music in the classroom may be of benefit to them as it can enhance interaction and socialisation (Schlaug *et al*, 2009). However, music did not feature in School A.

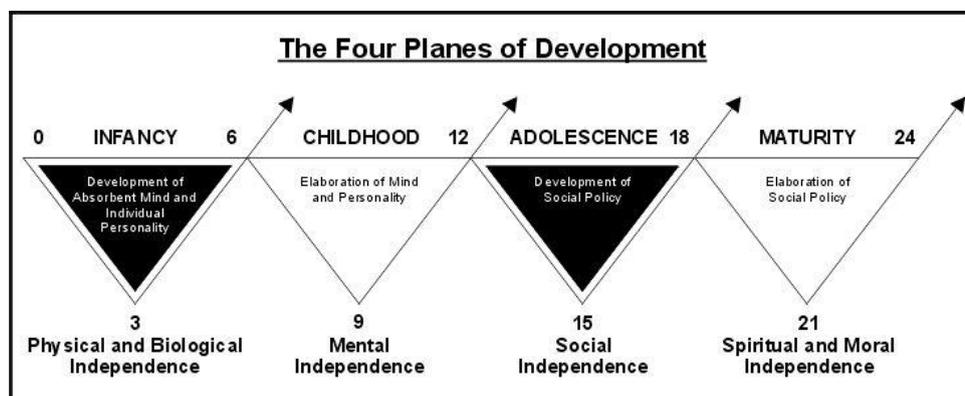
In contrast to School B, as you will see from the examples below, although the classroom was busy and noisy as shown in Example 4.1.2-2: Case Study – School A, when the children entered the Montessori area, they knew exactly what was expected of them prior to engaging in the Montessori activities as well as displaying calmer behaviour (Example 4.1.2-3 and Example 4.1.2-4: Case Study – School A).

Earlier in this section I made reference to the fact that at School B there was a higher staff:child ratio compared to state-funded early years settings and School A. However, the Montessori approach has had to alter and adapt to take into account changes in government policy as early years providers are now expected to deliver 30 hours of free childcare a week; settings like School A have consequently had to increase the number of staff to ensure an adequate staff:child ratio. In addition, the government expects children to have acquired certain skills and abilities by the end of the EYFS. As a direct result Montessori settings are having to find a balance between what the DFE (2017, p.9) states “...practitioners must respond to each child’s emerging needs and interests guiding their development through warm positive interaction” and the need to ensure that children are ready to start School Bs stated in the EYFS. However, it seems that the government has recognised this tension and have recently announced the introduction of a new inspection framework which makes a conscious effort to move away from attainment and focus more on what is taught and how. It will endeavour to ensure that good results are achieved from teaching a broad, rich curriculum and reflect real learning, not just intensive preparation for a test (Ofsted, 2019). Whilst early years practitioners still face obstacles due to the fact that they will still have to ensure that children are ready for school my hope is that the new Ofsted framework will allow inspectors to assess whether the education the children are receiving takes account of their overall development rather than just assess their competency and proficiency in particular subjects.

6.1.3 Organisation of Learning Environment

An immediate difference between the two play-based approaches relates to the use of multi-age or mixed-age groupings. School A did not use mixed-age groupings; rather, the age range reflected that which would be expected in any state-funded early years setting, i.e. two and three (The British Association of Early Childhood Education, 2012). In contrast, the children observed at School B were aged between four and seven. At my initial meeting at School B, the headteacher Bev informed me that “the brains of children with SEND (ASC) are wired differently” (see Weinstein *et al*, 2011; Conti *et al*, 2016) and that as a consequence of the pupils’ diverse needs the school had a policy of smaller classes and that the age range within each class was one year older compared to NC ages and Key Stages. Therefore, the age groupings in School B reflect more accurately the mixed-age groupings related to Montessori’s periods of growth (Montessori, 2016). These are also referred to as the planes of development – Figure 6.1.

Figure 6.1: Montessori Planes of Development



(Miller, n.d.)

According to Katz *et al* (1990): “Mixed-age groupings relax the rigid lock step curriculum with its age-graded expectations, which are inappropriate for a large proportion of children.” The key advantages of this mixed-age approach as I observed at School B, and as demonstrated above, are that the children could learn from each other; the younger children were inspired by the older children; and the older children could also use the knowledge they had acquired to demonstrate, explain and problem solve with the younger children. During the first plane of development in Figure 6.1 (from birth through six years), the children are sensitive to the acquisition of certain skills and knowledge (Schmidt with Schmidt, 2009). They are unconscious learners and appear drawn to activities that develop their skills in talking, movement, interaction with people, tasting, smelling, hearing, seeing, touching and creating order from all the information they are gathering. This is evident in 4.1.3-1 Case Study: School A.

Montessori designed her materials to educate every sense separately. She isolated each sense to concentrate the child's attention upon the particular sensory stimulus acting upon him/her. Some of the sensorial materials allow for control of error which leads to the children correcting themselves. Self-correction leads children to concentrate upon the differences of dimension and to compare the various pieces of Montessori material (Bahatgeg, 2010). The materials help the children to improve their visual awareness and control errors by their eyes as shown in examples 4.1.3-2 and 4.1.3-3: Case Study – School A.

Furthermore, these activities also refine the eye's power of discrimination which increases every time the children move from one activity to the next as well as educate the eye to analyse objects in the environment (Bahatgeg, 2010). They also provide sufficient practice in recognising pairs, recognising contrasts and discriminating between objects which are very similar to each other. Similarly, Example 5.1.3-2: Case Study – School B shows how the sensory-based resources and equipment in the School B classroom have a positive impact on the children's behaviour. The trampolines, mats swing, and beanbags mentioned in Example 5.1.3-2 (Case Study – School B) are examples of the resources that were used as part of the boys' sensory integration. It is thought that exposure to particular sensations can reduce hyper-responsivity over time as they become accustomed to the sensory experiences (Amos *et al*, 2019).

As mentioned in earlier in this chapter, (p.150) an enabling environment is one that uses the child's interests to enable them to explore and experiment. During my data collection at School B there were instances, one of which is given below, of when the children chose to interact with the practical life activities within the environment, in line with the developmental expectations of their age range.

The Montessori practitioner, Judith, drew my attention to the fact that the dressing frames had been available to the children all year and that it was only now that they were due to transition to another class that they had started to choose to engage with this set of Montessori activities. It was evident to me that the practitioners who worked at School A were aware that the learning and development of children between the ages of two and three is rapid. Therefore, they not only planned the environment around the children's developmental needs at the time but included resources that would in time become developmentally appropriate. The fact that practitioners included such activities reflects the Montessori planes of development.

According to Elcombe (2017) practical life activities can be broken down into three categories: care for oneself, care of the environment, and grace and courtesy. Example

4.1.3.4 (Case Study – School A) clearly falls into the category of “self-care”. Children at School B also engaged in practical life activities. Although Example 5.1.3-3 refers to School B it is clear that it reflects another category of the Montessori practical life activities: grace and courtesy. According to Cobb (2015) courtesy can be easily defined as well-mannered conduct indicative of respect for or consideration of others.

Work in the area of practical life helps children to develop the social and emotional skills needed to complete more complex tasks in the academic areas as well as solid work habits and a strong inner sense (Elcombe, 2017). The purpose is not to master these tasks for their own sake, rather it aids the inner construction of discipline, organisation, independence and self-esteem through concentration on a precise and completed cycle of activity (ibid). It is evident that although the children who attend School B have SEND the play-based approach advocated by the school does not just teach the lessons that you would see in a mainstream School But also facilitates the promotion of desirable personality traits (e.g. patience) when interacting with their peers.

6.1.4 Resources and Activities

As mentioned in the Literature Review, Krause (2015) found that each activity offered within a Montessori environment offers a child an isolated concept that develops from simple to complex and concrete to abstract. A first similarity relates to the fact that the resources used in both environments follow this principle and provide the children with a built-in control for error, therefore acting as stepping stones to future learning (ibid). In Example 4.1.4-1 (Case Study – School A) the children and practitioner are engaging in a mathematical activity that facilitates learning the difference between sizes. Within the learning process, the practitioner combines instruction with the use of manipulative objects so that the children are able to grasp the abstract concept associated with the use of the concrete objects (Uttal *et al*, 1997; Laski *et al*, 2015).

As is clear from Example 5.1.4-1 (Case study – School B) above teachers sign alongside the music linking the Makaton signs to the content of the song (Tsiakyroudi, 2015). Furthermore, according to Janzen and Thaut (2018), there is a growing body of research evidence that demonstrates that music has a profound impact on domains such as memory, auditory perception, emotion, and language in children with SEND, particularly those with ASC, and that music in itself can promote and facilitate functional changes in non-musical brain and behavioural functions. Moreover, whilst some of the signs within the songs in Example 5.1.4-1 will not be used on a regular basis, the constant use of Makaton reinforces the importance of using functional communication devices (PECS and Makaton in the case of School B) when engaging in the learning process (American Speech-Language-Hearing

Association, N.D.). A more detailed discussion of communication and augmentative and alternative communication (AAC) is given in Section 6.5.

A wide range of resources was also made available in both environments to facilitate learning, as shown in examples. 4.1.4-2 (Case Study – School A) and 5.1.4-2 (Case Study – School B). It is no surprise that there were significant differences between School A and School B in terms of how resources were used to facilitate learning. The resources that were available at School B were unusual in that many of them like the trampoline and space hopper (Example 5.1.4-2B Case Study – School B) are used by neuro-typical children when they are playing outdoors. However, studies have shown that for children with certain SEND trampolines and space-hoppers can improve motor proficiency and strength of the inferior limbs (Lourenço *et al*, 2015) and as Example 5.1.4-2B in Case Study – School B indicates reduces stereotypical behaviours and increases attention and concentration (Neely *et al*, 2015). Furthermore, weighted backpacks and blankets were made available for two of the children (Example 5.1.4-2A: Case Study – School B), as the school had found that for them this was an effective way of engaging them in the learning process. C&YP with SEND can also have an adverse reaction to close contact with those around them but crave deep pressure stimulation (Clifford, 2013; Bestbier & Williams, 2017). Mullen *et al* (2008) also found that deep pressure stimulation was beneficial for individuals diagnosed with conditions associated with ASC such as Pervasive Development Disorder (PDD) and Attention Deficit Hyperactivity Disorder (ADHD), as it can reduce anxiety and arousal as well as increase their ability to focus on fine motor tasks.

Another difference was the use of technology in the latter environment. At School B, technology was used to promote and enhance the learning opportunities. In their paper King *et al* (2014) suggest that technology-based treatments can be used as speech generating, augmentative, and alternative communication systems, which support communication, to facilitate participation in the classroom and also teach specific academic skills. The examples above show how, at School B, technology was used to facilitate the development of fine motor skills and support the development of spoken language. Again, according to King *et al* (2014), the rapid rise of the iPad has led many educational services in the United States of America (USA) and elsewhere to purchase iPads for their students with SEND. The recent growth in the use of technology has meant that education professionals have bought iPads and are downloading apps without research-based guidance on how to use them effectively and efficiently. However, at School B the teachers and support staff only downloaded apps that were recommended by fellow colleagues or health professionals.

Example 5.1.4-3 shows how a specific app facilitated the development of Tom's fine motor skills, as well as his independence.

In another study that investigated the impact that iPads have on reducing the challenging behaviour displayed by individuals with ASC, Neely *et al* (2013) have found that the presence of an iPad functions as a motivating operation that influences both challenging behaviour and academic engagement. These same authors have also demonstrated that children diagnosed with ASC displayed a reduction in challenging behaviour when instruction was provided via the iPad as well as an increase in academic engagement (*ibid*). In the case of Tom, as is the case of the space hoppers and trampoline (Example 5.1.4-2B), the iPad was used as a tool to reduce self-stimulating and negative behaviour. According to Clark *et al* (2015), it is necessary to assess the degree to which parental and professional attitudes towards assistive technology will enhance their ability to encourage their children/patients with ASC to make use of the iPad to enhance their ability to communicate. However, prior to using an iPad to assist with a child's learning it is necessary to ascertain the extent to which children with ASC understand the symbolic role of pictures and how they might learn from them (Allen *et al*, 2015; Allen *et al*, 2016). Alongside the iPad, another piece of technology that was used to facilitate the children's learning was the interactive whiteboard (IWB). As Example 5.1.4-4 (Case Study – School B) shows, IWBs can play an active role in increasing interaction and participation, making learning enjoyable and enriching the environment (Cogill, 2001 cited in Tatli and Kiliç, 2016: p.1440). At School B the IWB was again used as an augmentative tool to develop the children's verbal and non-verbal communication skills.

In direct contrast, School A utilised many of the resources that Montessori herself had designed to engage children in the learning process. As Jones (2017) has found, whilst in recent years there has been a push for digital technology to be integrated into the Montessori learning environment, practitioners who work in these environments do not feel comfortable doing so because they wish to keep the pedagogical foundations and traditions of the Montessori approach alive. The technology used in the Montessori classroom tends to be non-digital, given that young children are encouraged to socialise and exert physical energy so that they are more able to engage with the learning process. Many of the studies that examine C&YP's use of technology relate to the impact of the amount of time spent in front of the screen and the associated sedentary behaviour: musculoskeletal problems, depression (Costigan *et al*, 2013), lack of sleep (Hale and Guan, 2015), deterioration in executive function (Reid Chassiakos *et al*, 2016) are just a few of the problems that are discussed. Bearing all this in mind, it is no surprise that practitioners may resist the introduction of digital technology into Montessori classrooms for young children. According

to Macdonald (2016), some of the major benefits cited for the use of digital devices in classrooms, including provision of personalised instruction, self-paced learning, and improved access to information for “research”, are already embedded in Montessori classrooms through the materials and teaching approaches.

6.1.5 How Children are Taught and Supported

The way in which children are taught and supported is extremely similar in both environments in that they employ facilitative methods instead of the didactic, top down approaches found in mainstream schools.

Children use their knowledge to assert their agentic rights and sometimes to manipulate teacher authority but given that teachers predominately locate themselves as directors of classroom interactions, there is a tension between how teachers afford children agency while still maintaining order (Houen *et al*, 2016). As you can see from the examples above those who work within Montessori settings are affording children agency (“...do you want to do something else?” - Example 4.1.5-1: Case Study – School A) while making clear what is expected of the child in order for him/her to engage in the learning process meaningfully (ibid) (“...no you get your own mat, no we are not sharing...” – Example 4.1.5-2: Case Study – School A). The term ‘agency’ recognises that children, as social actors, actively engage in constructing meaning-making and identity work – it is not a static concept but dynamic and unfolding through the actions of the participants (Breathnach *et al*, 2017). What is also obvious from the examples above is that within the classroom educators afford children agency through co-constructed interactions between themselves and the children and providing them with opportunities to exercise initiative, decision-making and control in their practices, and respecting their interests (ibid).

In contrast to School A, whilst School B uses facilitative methods, these methods are in line with the child’s Individual Learning Plan (ILP). As you can see from Example 5.1.5-1 (Case Study – School B, activities are chosen to help children with their learning and development in particular areas, in this case mathematics, whilst also allowing for the development of simple spoken communication. What is also obvious is the high level of positive reinforcement in the learning process. Rivera *et al* (2015) suggest that high rates of praise are more effective for strengthening and maintaining on-task student behaviour than low rates of praise. As can be seen from the example above, the more positive reinforcement James received, the better he performed on the task (ibid).

According to School B’s website, “Pupils at School B follow a highly personalised pathway which focuses on the development of the individual. They explore all the curriculum areas

through various multi-sensory experiences that are carefully planned and coordinated to facilitate the development of skills, in responding, interacting and communicating.” Furthermore, School B aims to provide a safe, challenging, stimulating, caring and sharing environment which is sensitive to the needs of the child. According to Hayley, a TA at School B, “*Having the correct resources [available] can encourage and motivate children [with ASC] and encourage communication and speech*”. This is borne out in Example 5.1.5-2 (Case Study: School B).

School A, in contrast, does not provide a personalised pathway for each child; instead the resources that are offered are developmentally age-appropriate according to the stages of development outlined in the guide to the Montessori early years foundation stage (Montessori Schools Association, 2012). Example 4.1.5-3 shows the type of developmentally appropriate resources for a child aged 22 to 36 months.

As at School B, high levels of positive reinforcement were also evident at School B, as seen in Example 4.1.5-3 (Adibsereshki *et al*, 2015). Moreover, in the example above (the pink tower activity) the children demonstrated several skills, including showing control in holding and moving objects (appropriate for 22 – 36 months) (Montessori Schools Association, 2012); being able to follow directions if not intently focused on their own choice of activity (30 – 50 months) (*ibid*); maintaining attention, concentrating and sitting quietly during an appropriate activity (40 – 60+ months) (*ibid*). Whilst most of the skills they demonstrated were in line with their developmental parameters, they also demonstrated skills which were much more advanced in terms of their age, illustrating that facilitative methods do help a child to reach, and in many cases exceed, their learning and developmental targets.

Despite there being no children with a diagnosis of SEND enrolled at the Montessori nursery where I carried out my observations, I witnessed how the Montessori approach to learning could at first glance be viewed by outsiders as a form of guided play (Hansen, 2018). This was also very much evident in School B. It refers to learning experiences that combine the child-directed nature of free play which involves active engagement and is fun, voluntary and flexible, with a focus on learning outcomes and adult mentorship (Weisberg *et al*, 2016). It can have two forms; in one, adults design the setting to highlight a learning goal while ensuring children have autonomy to explore within that setting. The second occurs when adults watch child-directed activities and make comments to encourage children to question and extend their interests (Weisberg *et al*, 2016). The second type of guided play was evident in both settings as shown by Example 5.1.5-1 (Case Study – School B) and 4.1.5-3 (Case Study – School A) above. Guided play offers an exemplary pedagogy because it respects children’s autonomy and their pride in discovery. It thus may help to cultivate

children's love of learning, promoting their engagement while offering support for knowledge acquisition (ibid). As can be seen from Example 5.1.5-2, this was the experience particularly for children with SEND.

It is not just the learning resources that are important within play-based environments. A crucial contribution is also made by Teaching Assistants (TAs) at School B and practitioners at School B. As can be seen from Example 5.1.5-3, the TAs at School B play a pivotal role in supporting children with SEND (see Part A, B and C above) and in so doing they have a positive impact on the learning experiences of these children (Part D and E). As has been noted, both in my literature review, and throughout the academic literature, for more than two decades the effectiveness of inclusion within the mainstream classroom has been debated by various authors (Coady *et al*, 2016; McMenamin, 2018; Dimitrellou *et al*, 2018). In so doing, a more discrete debate has emerged: the positive impact that Teaching Assistants (TAs) can have on the learning experiences of children with additional needs. Historically the role that classroom assistants used to play within the classroom environment was mundane in nature (Moran & Abbott, 2002; Sharma & Salend, 2016). However, significant changes have taken place in terms of disability legislation with the vast majority of TAs now taking on more of a teaching role under the supervision of the classroom teacher (Butt, 2016), as seen in Part C and Part E. Some authors have also suggested that within the context of inclusive education a TA's time is used to best effect when creating more independent learning opportunities for the pupil in question. In order to be able to do this successfully the individual who is supporting the child on a 1:1 basis must have tact and the skills that are needed to be able to work alongside the teacher when in the classroom (ibid). This was evident at School B. Although the instances in Example 5.1.5-3 (Case Study – School B) might seem relatively insignificant, they were actually key in ensuring that the classroom environment was conducive to the children's learning given the children's complex behavioural needs. Though the usefulness of TAs within the mainstream classroom has been the subject of many academic studies (Farrell *et al*, 2010; Devecchi *et al*, 2012). However, authors such as Koegel *et al* (2010) have also investigated the ways in which teaching staff can help to motivate children with autism to participate in a meaningful way. Children with autism can display challenging behaviours, when in pain and unable to communicate how they are feeling, however, they can also display such behaviours when they are presented with an activity they do not wish to partake in. Koegel *et al*'s study concluded that the use of motivational techniques, within a classroom environment, results in faster completion of work set, a significant decrease in disruptive behaviour and an overall increase in interest in the task at hand (see Example 5.1.5-3 D and E: Case Study School B). If teachers can improve the overall engagement of a child with ASC it can create positive early learning experiences which in turn can influence their learning experiences as they get older.

It is obvious from the examples (see 5.1.5-4B: Case Study – School B) that teachers and parasupport staff valued the sharing of knowledge (Devecchi & Rouse, 2010). The aforementioned authors also offer examples as to how teachers and TAs can work together for the benefit of the children in their care. As at School B, there were several members of staff within the classroom at School B; however, unlike at School B, they were not differentiated as teachers and TAs – all were known as practitioners. There was only ever one practitioner in the Montessori area at a time, working with a group of up to six children. The practitioners had sound knowledge of the Montessori approach and of each child, so knew when to intervene, and when a child could be left alone (Isaacs, 2010; Isaacs, 2012), as in Example 4.1.5-1 (Case Study: School A) (p.100).

As shown in the examples in Case Study – School B the TAs at School B believe that compared to mainstream schools that adhere to the National Curriculum (NC), a play-based holistic approach is more appropriate for C&YP with SEND (see Example 5.1.5-5: Case Study – School B).

Carol has worked in both mainstream and special schools for over 25 years. The extract highlights how teachers in mainstream schools focus on those pupils who are more likely to maintain or even improve the school's position in the league tables (Baird & Elliott, 2018; Timpson Review, 2019). In contrast to this the School B website states:

We want to encourage and develop a strong sense of achievement within all our pupils that will stay with them throughout their lives... We strive to build the confidence of each child so that they are able to achieve their potential. We want all our pupils to access an outstanding curriculum with an array of opportunities for personalised learning to meet the individual needs of the pupil and learning experiences are planned based on the principle that our pupils are more engaged in learning when they are interested and motivated. We are committed to meeting the needs of our pupils and valuing the contributions they make.

Examples 5.1.5-6 (Case Study – School B) and 4.1.5-4 (Case Study – School A) highlight the importance of approaches that are tailored to the needs of the children. Of particular interest is the fact that even though the Montessori nursery did not have any children with a diagnosis of ASC on their roll you can see how both play-based approaches are a suitable alternative learning pedagogy for children with SEND as they focus on activities that promote physical, social and emotional development as well as basic life skills. Furthermore, in terms of academic learning in schools that promote play-based approaches teachers prepare activities that focus on moving the concrete to abstract (Purington, 2017) rather than abstract to concrete as in mainstream schools. This stands in marked contrast to the fact that many teachers in mainstream education fail to take into consideration the learning needs of those who are less able (Busby, 2018; Meadows & Black, 2018) with the government even arguing that by adjusting for pupil characteristics, contextual value-added

(CVA) league tables led to a system-level acceptance that socially and other disadvantaged groups would make less progress than their more advantaged peers (Leckie & Goldstein, 2017).

6.2 Acquisition of Knowledge and Play-Based Curricula

Early childhood is a highly critical time period for learning and more broadly the acquisition of knowledge (Black *et al*, 2017; Britto *et al*, 2017).

Piaget believes:

The goal in education is not to increase the amount of knowledge, but, to create the possibilities for a child to invent and discover. When we teach too fast, we keep the child from inventing and discovering himself... Teaching means creating situations where structures can be discovered; it does not mean transmitting structures ...

(Piaget cited in Duckworth, 1964 p.174)

The acquisition of knowledge in the learning process is extremely important. Since the last decades of the nineteenth century many theories and understandings of learning have been launched (Illeris, 2009). They have different angles, different epistemological platforms and very different content. All learning implies the integration of two very different processes namely an external interaction process between the learner and his or her social, cultural and material environment, and an internal psychological process of acquisition and elaboration in which new impulses are connected with the results of prior learning (ibid).

Cremin *et al* (2015) found that playful hands-on experiences encourage children to make connections between academic subjects and their surroundings. Engaging in dialogue (see Example 4.2-1: Case Study School A) plays an important role in children acquiring knowledge as, in so doing, they are able to externalise share and develop their thinking, as well as helping them to consolidate their thinking (ibid). Similarly, in terms of problem solving, by engaging with this process children have been shown to foster agency, take ownership of their own learning as well as develop self-determination and control (ibid) (Example 5.2-1: Case Study – School B). The British Association of Early Childhood Education (2012), Bailey (2018) and Pyle and Danniels (2017) believe that early years classrooms have become more academically focused. This is reflected in Cremin *et al*'s (2015) paper which suggests that the educational process can inhibit children's curiosity, their impulse to question and to engage in mental play. The play-based approaches examined in this thesis encourage children to do exactly the opposite of this. They focus on mastering knowledge appropriate to the child's development ("...we don't force them to do anything..." - Example 5.2-1), instead of placing emphasis on grades derived from formal assessments (Momin, 2012), and both curricula have clear learning objectives supported

by teacher guidance and scaffolding. The findings of this study relating to acquisition of knowledge are not dissimilar to Pyle and Alaca's (2018) findings in that the children in both settings engaged in free play and by doing so they learned personal-social skills. The example below illustrates the process of teacher guidance and scaffolding advocated by Montessori.

To Montessori knowledge is constructivist (Ültanir, 2012; Carriger, 2015) and hierarchical, and establishing a mental framework early is important. Therefore, as can be seen from Example 4.2-2, the curriculum follows a hierarchical sequence and a depth of integration not found anywhere else (Lillard, 2007). Hierarchical knowledge entails that perceptual knowledge (or lower order concepts) are the building blocks of higher order concepts (Colgan, 2016). This suggests that the highest of abstractions can eventually be tied to the senses, and as Aristotle argued the proper route to these abstractions is through perception. We can see from Example 4.2-2 Part B that the teacher encouraged the children to use their previous knowledge of the activity and visual senses to determine for themselves if they had completed it correctly. At School B, therefore, hierarchical sequencing was very much in evidence.

As can be seen from Example 5.2-2, hierarchical sequencing also occurred at School B but was linked to the children's ILPs. A lot of time was dedicated to assessing each individual child's needs and determining how best to engage with and develop the child. Although I was not at School B at the right time to be able to see the teachers and support staff there complete a written assessment of the children's needs, I was shown the Leuven Scale of Involvement which was used when assessing the levels of engagement of each child (see Appendix 1), as this is known to be a reliable and valid tool for observation of children with SEND (Nabuco & Prates, 2003; Adams, 2017). As can be seen from Example 5.2-3, teachers and support staff use observation to continuously assess the needs and overall development of the children in their care.

I often saw either the teacher or TAs taking photographs of the children when engaged in their chosen activities by themselves, with their peers or with the teacher and support staff, as part of recording their observations. Similarly, observation was used at School B. Continuous observation allowed the practitioner to present activities that would further individual children's development. As such, as can be seen in Example 4.2-3, each child's development was assessed, and activities made available in line with their development. A key advantage of using observation as a form of progress assessment is that it allows settings to adapt to each child's learning style as well as his or her particular 'quirks'.

In some cases, at School B children were able to make progress whilst others showed intermittent regression followed by progress in their learning because of the severity of their condition (this could be from day to day). The instance in Example 5.2-4, food selectivity, is a common problem in children with ASC and is of particular concern because of its negative impact on nutrient adequacy and family mealtimes (Bandini *et al*, 2017). According to Chistol *et al* (2018), whole grains, lean protein, fresh fruits, and vegetables are foods that are nutrient-dense, but often characterised by strong flavours and textures; children with ASC who exhibit oral sensory sensitivity may be less likely to accept these types of foods, which consequently may put them at risk for inadequate nutrition. Such findings support the need for interventions early in childhood to increase variety and promote healthy eating among them (Bandini *et al*, 2017), such as those undertaken at School B. These interventions were also aimed at improving mealtime behaviour (Curtin *et al*, 2015), as shown in Example 5.2-4 Part B.

Examples 4.2-4, 4.2-5 (Case Study – School A) 5.2-5, 5.2-6, and 5.2-7 (Case Study – School B) show how knowledge acquisition for the children and staff at both School A and School B is a reciprocal process (Williams *et al*, 2014).

According to Bronfenbrenner (1979 cited in Smith, 1999 p.87):

Learning and development are facilitated by the participation of the developing person in more complex patterns of reciprocal activity with someone with whom that person has developed a strong and enduring emotional attachment and when the balance of power gradually shifts in favour of the developing person.

Hedges and Cullen (2012) refer to a concept of 'intentional teaching'. It encourages teachers to be active, thoughtful partners in children's learning and knowledge building. Intentional and responsive teaching comes from teachers and children knowing each other well and sharing purposeful learning (*ibid*). These positive, reciprocal interactions allow children to develop their critical thinking skills, enquiry, initiative, identity and independence (*ibid*). Therefore, teachers require sophisticated understandings of development, learning and teaching in order to be intentional and responsive (*ibid*). It is clear from all the examples above, whether at School B or School B, that the early childhood environments both sets of staff have created are of a high quality as they both featured adults who were willing to participate in activities that involved joint attention or involvement with objects or ideas.

6.3 Curriculum Adaptability and Flexibility, Autonomy Supportive Teaching and Freedom of Choice

Although curriculum adaptability and flexibility were not asked about explicitly during the questionnaire and interview phase of the study it was very much in evidence when completing the data analysis, so much so that it became just one of the many themes that were generated. Curriculum adaptability and flexibility were very much evident at School B and although Montessori, in her writings, talks about these as well, her version is very much based on the developmental appropriateness of the curriculum for the age range and plane of development rather than for the individual child. At School B it was also linked to freedom of choice and autonomy supportive teaching. Therefore, curriculum adaptability and flexibility in the two settings looked quite different as in one it was dependent upon the child's ILP while in the other it was dependent upon the activities the child chose.

Across a number of countries, play-based learning is the mandated pedagogy in early years' curricula (Pyle *et al*, 2017). The benefits of play to children's development and academic learning are often discussed in the research. However, to this day opinion is still divided as to definitions of play, the purpose of play in educational settings and how play should be implemented in view of the fact that teachers have to meet increasingly high academic standards (Pyle & Bigelow, 2015), ultimately causing conflict with the motives of teachers who want to do justice to their pupils' interests and sense making (van Oers, 2015). In contrast the teachers and support staff at School B, to anyone looking from the outside in, can be seen as researchers who observe the children in their care to decide how to extend their learning both in the moment and by planning new play environments (McDonald, 2018). This same author also suggests that teachers must figure out how to quietly intervene to help children connect contexts to everyday concepts and academic content, leading to further cognitive social and emotional development. By strategically expanding play and asking questions that challenge children's thinking teachers create meaningful learning opportunities to help children draw an understanding between their observations ideas and judgements (ibid).

Examples 5.3-1 and 5.3-2 highlight the advantages of this approach for the children at School B. The school's aim is to 'engage the pupils in enjoyable learning activities that are of functional value to them now and in the future'. In line with the Curriculum Overview statement on the School B website, the curriculum constantly evolves to ensure that it responds to a rapidly developing world and that the school is offering its pupils the best start to their lives – Example 5.3-3. The fact that children stay on longer within the same environment provides them with consistency and coherence. As Example 5.3-2 shows, when children embark on learning a new skill, staff at School B demonstrate persistence.

This allows the children the time and space to learn the new skill at their own pace. The importance of physical activity on the engagement of children with ASC in the learning process has been discussed by Miramontez and Schwartz (2016); they found that vigorous physical activity has a greater positive effect on on-task behaviours and serves as a more fulfilling sensory experience, allowing students to be available for learning, following the active vigorous engagement. Authors such as Mottron *et al* (2013), Gunn and Delafield-Butt (2016), Koenig and Williams (2017) and Wood (2019) have suggested that children with ASC who pursue intense interests when younger can develop self-taught expertise to a high level of skill, resulting in a potential route to employment.

Self-Determination Theory (SDT) (Niemiec and Ryan, 2009) is very much linked to Autonomy Supportive Teaching. Humans are said to possess three psychological needs: autonomy, competence and relatedness (*ibid*). The satisfaction of these three needs by the social context provides the psychological nutrients necessary for learning, positive classroom functioning and psychological wellbeing (Jang *et al*, 2016). The theory also suggests that C&YP have inherent needs and growth propensities to seek out and constructively engage in their classroom surroundings. These classroom surroundings, as in Example 5.3-3, feature a host of influences that affect C&YP's daily motivations and longer-term motivational development (Reeve, 2006). Further, Hogan (2012) states that autonomy-supportive environments involve and nurture (rather than neglect and frustrate) C&YP's psychological needs, personal interests and integrated values. Supporting these inner motivational resources, as with Dillon and James in Example 5.3-3 above, is a worthwhile undertaking because students who are taught in classrooms that foster autonomy-supportive teaching experience an impressive and meaningful range of positive educational outcomes including greater perceived competence; higher mastery motivation; enhanced creativity; a preference for optimal challenge over easy success; increased conceptual understanding; active and deeper information processing; greater engagement; higher intrinsic motivation; enhanced wellbeing; better academic performance; and academic persistence rather than dropping out of school (*ibid*). True discipline comes from within the child. This inner discipline takes much longer to achieve than using threats of punishment as it is much more beneficial and long lasting. In the beginning the young child is still struggling to gain control over their movements (Fuchs & Craft (2012, cited in McCabe, 2016, p.5); McCabe, 2016; İman *et al*, 2017). It is useless to urge a toddler to sit still for they do not have the self-control or coordination over their minds and bodies to attempt to obey such a command (Hogan, 2012). During this time the child requires the help and care of the practitioner (not discipline) to assist them in achieving such discipline (*ibid*). In the case of Dillon (Example 5.3-3 Part A), the activities he selected have helped him to develop inner discipline and therefore to be able sit still for longer periods of time.

There was awareness of the need for freedom of choice at School B as Example 5.3-4: Case Study – School B shows. The children were able to make a choice as to the type of activity they engaged in but in some cases, e.g. reading a book, the teacher would have to ask the child: “Do you want to read a book?” in order to elicit a positive or negative response. It is clear that for the C&YP who attend School B freedom of choice is inextricably linked to the ability to communicate. Due to the nature of the SEND, children’s verbal communication was delayed, therefore teachers had no option but to choose resources that would be beneficial to the children’s learning and development. Communication is discussed in detail in Section 6.4.

As at School B, curriculum adaptability and flexibility, autonomy supportive teaching and freedom of choice were evident in School A. The points discussed in relation to these aspects of teaching and learning – creation of meaningful learning opportunities, Self Determination Theory, inner discipline and so on - relate equally to School A. A significant difference is that the children’s communication was within normal developmental parameters and they were able to express their choices.

When Bunnag (2000) undertook his/her study, he/she sought to determine how individual Montessori-trained teachers choose to adapt the original Montessori philosophy and introduce new elements into their classrooms. He/she spoke to, and observed, how different practitioners went about preparing the environment. The quality that one practitioner valued most was that of the children having fun whilst learning. A second stated that she encouraged the children in her care to make their own decisions and accept the consequences. In her classroom the emphasis was on the process of learning, not the final outcome. She saw herself as a facilitator who merely observed the children and kept things running smoothly in the classroom. In Example 4.3-1, it is clear that the practitioner operated according to the second approach, allowing the children freedom of movement within the learning environment as well as the freedom to choose the activities they wished to engage in (Tzuo, 2007). This freedom requires a set of limits, a simple set of rules as to what is and what is not acceptable behaviour and must be explained to them in a way that they will understand; so that when they experience the natural consequences of their actions the child connects cause and effect and is eventually able to think through and predict the possible consequences before he acts so he may choose more wisely (ibid). It is clear from Example 4.3-2 that the children at School A still had to abide by a common set of rules – this included getting their mat first, getting their activity, sitting down and carrying out the activity, rolling up their mat when they had finished and putting it away.

As has become evident throughout this section curriculum adaptability, flexibility and autonomy supportive teaching are an essential part of the play-based approaches

discussed in this thesis and when these play-based approaches are implemented appropriately can promote the learning and overall development of C&YP with and without disabilities.

6.4 Communication

Communication is the foundation of social interaction, the essential means through which people initiate and maintain social relationships. Various communication skills have been found to predict social acceptance in middle childhood and training in these skills has been found to be successful as a means for bolstering peer acceptance in school-aged children (Hazen & Black, 1989). The examples below show communication - verbal and non-verbal, peer-to-peer and pupil-to-teacher, in both settings in this study.

Split *et al* (2014) investigated the importance of close teacher-child relationships in early childhood for the development of communication. They suggested that affective teacher-child relationships are similar (but not identical to) parent-child relationships. Therefore, according to these authors, the secure-base function of the teacher-child relationship has been considered an essential determinant of child development within the school context. Example 5.4-1 (Case Study – School B) is a clear demonstration of an affective teacher-child relationship. Affective relationships are defined as those interpersonal relationships that satisfy our needs for emotional interactions with significant others; they include the needs for emotional support, exchanging warm attention, and giving nurture (Takahashi, 2005). Korthagen *et al* (2014) suggest that good teacher-student contact, as perceived by the teacher, seemed to promote active learning behaviour in the student and almost always led to affective outcomes in the child, such as self-assurance, autonomy, and engagement. Lei *et al* (2016) corroborate my findings in relation to affective teacher-child relationships at School B as the authors found that affective teacher-student relationships reduce the students' externalising behaviour problems. Split *et al* (2014) also hypothesised that children with better receptive language skills develop closer relationships with teachers. These skills, they stated, are necessary for children to engage in more sophisticated and extended conversations which can go a long way towards facilitating good relationships between children and teachers. At the same time those children with poor receptive communication skills are at risk of poor relationships with others due to difficulties in comprehending others which makes it difficult to respond in an appropriate manner (*ibid*). This stands in contrast to my own data, which indicates that teachers and children had formed good receptive communication which in turn had led to close teacher-child relationships – Examples 5.4-1 and 5.4-2. This was achieved through the use of augmentative and alternative communication (discussed in detail in Section 5.1). In 5.4-1 the communication is initiated by the child, in 5.4-2, it is initiated by the teacher. It can be

seen that if children are given the appropriate tools then effective communication takes place, resulting in better teacher-child relationships. Peer-peer communication was mainly non-verbal – see Example 5.4-4, but clearly effective. Peer-peer interaction between the children is discussed in section 7.3.

At School A, in contrast, verbal communication took place between the children themselves and between children and staff, as shown in examples 4.4-1 and 4.4-2; however a lot of the communication was related to keeping children on task or intervening when an individual child was struggling to complete the task, as the Montessori practitioners facilitate learning on a 1:1 basis. Furthermore, as is evident from the following comment by Judith, a practitioner, "... occasionally they would [sic] want to work as a duo, so erm...we, we sometimes let them, but mainly we were trying to get them to work on their own", although they do allow the children to work in groups, this type of learning was not encouraged by Montessori herself when the educational approach was first established, therefore it is not really encouraged in modern-day Montessori settings.

Teacher-child communication in School A appeared to be on a superficial level compared with School B and could be due to the fact that at School B the children were non-verbal so the staff had to make more of an effort to communicate in a manner that was compatible with the children's abilities. This, coupled with the fact that they had to address the children's externalisation of negative feelings and resultant behaviours, led to stronger affective relationships. Teaching children to communicate is a key driver in the learning process at School B, as Examples 5.4-5 and 5.4-6 show.

As Example 5.4-5 shows, the teachers and support staff at School B plan activities that will ultimately enable the children to be as independent as possible in the future as well as being able to communicate their wants and needs. In the case of one boy that I observed at School B, he and the school itself had been provided with a number of resources to assist in the development of spoken language as recommended by a Speech and Language Therapist, such as 'Now and Next' boards, as in Example 5.4-6. I observed that the teachers used these to firstly demonstrate the correct words but also to ensure that the child understood and followed instructions as part of his development. On several occasions I did witness how the teachers and support staff expected the children to use the correct sentence structure before fulfilling their request. In contrast, as Wood's (2020) research study shows whilst some staff in mainstream schools were prepared to 'go the extra mile' when explaining what was going on around them, others were unsure of how to support autistic children both in terms of their curriculum access and their communication skills.

In addition to verbal communication, teachers and support staff at School B also used AAC methods to embed aspects of social etiquette. According to Chandler (2017), experiencing intimate, close mealtimes provides opportunities for children to enhance their learning. Through the routine of eating together, on repeated occasions, children were able to practise their independent, self-regulatory capabilities at the dinner table, interactions with others as well as their knowledge of food and basic healthy eating habits (ibid). At School B, children and staff sat together at the table at least twice a day for snack and lunch. This scenario is very similar to that of a family style meal and is the context for the example above. Chandler (2017) also states that through routine style meals in the early childhood classroom, children use their familiar classroom setting to practise being part of the community, taking part in conversations, and practising the physical motor skills necessary to eat and be part of a meal in a socially acceptable way. Moreover, according to Brodzeller *et al* (2018) children with ASC need multiple opportunities to practise a skill prior to acquiring it. They also require support in learning how to generalise acquired skills to new activities, settings, materials and people. Whilst the child may be successful in using ACC interventions in a one-to-one context as can be seen in Example 5.4-7, Robert required additional prompting and reinforcement when attempting to use the communication system during mealtime routines that include a group of children and different adults.

Another aspect that must be mentioned is the importance of communication between the School B and the home. Home-school communication was also important in both settings because parents were encouraged to continue the learning of the children at home in order to embed the concepts and skills that have been introduced in the nursery/school environment – Example 4.4-3 (Hallett, 2017) as well as helping the school to understand what the child is capable of, as seen in Example 5.4-8B. This reporting happened mainly at School B via the home-school diary as the parents did not meet up with the teachers face-to-face on an everyday basis, due to the school's safeguarding measures. In School B the communication was mainly face-to-face, when the parents came to drop their children off. Ma *et al* (2016) found that there was a strong positive correlation between family involvement and learning outcomes in early years settings. Furthermore, Blich (2017) suggests that two-way communication (such as the home-school diary and face-to-face) between parents and teachers (as opposed to one-way, such as newsletters) provides parents specifically with the opportunity to communicate and connect with teachers, thereby encouraging both parties to build a rapport and reducing the 'social distance' between them, placing them as equals to one another.

Since the publication of the "Higher Standards Better Schools for All – More Choice for Parents" White Paper in 2005, there has been significant focus and investment at both

national and local level in the implementation of programmes aimed at increasing parent involvement, but there is relatively little large-scale research that examines the impact of parent involvement on student outcomes in the UK (Hampden-Thompson & Galindo, 2017). Furthermore, it has been suggested by Kuhn *et al* (2017) that for those children who display negative behaviours parents and teachers need to work together to stem the tide of cascading events that can happen as a direct result. These relationships should be nurtured within a framework which is focused on collaboration and joint problem solving which allows parents and teachers to operate as a team to anticipate, prevent or address children's challenging behaviours and support children's positive social, emotional and behavioural development across home and school environments (*ibid*). As can be seen from Example 5.4-8, these positive parent-teacher relationships have a positive impact upon the overall learning and development of children with SEND.

6.5 Independent Learning and the Development of Life Skills

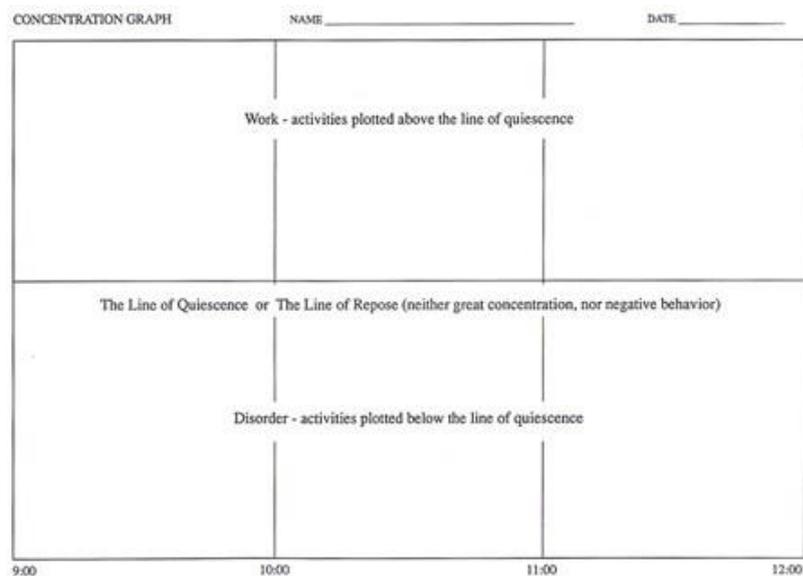
Independent learning or as it is more popularly known within the Montessori approach, self-directed learning, describes a process in which individuals take the initiative with or without the help of others in identifying their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies and evaluating learning outcomes (Knowles 1975 (cited in Netoliky, p.78); Kittredge *et al*, 2018).

As can be seen from examples 4.5-1, 4.5-2, 4.5-3 and 5.5-1 independent or self-directed learning was evident in both settings. Children's capacity to engage directly with activities both with and without regulation by teachers is fundamental to education (Booren *et al*, 2012). The findings of this study reflected those of Perry *et al* (2002) in that the play-based approaches advocated in both settings gave the children choices (see Example 5.5-1); opportunities to challenge themselves (Example 4.5-1); opportunities to evaluate their own and others' learning (Example 4.5-2); at the same time the practitioners, teachers and support staff were able to deliver instrumental support and provide feedback that was non-threatening and mastery-oriented (see also Example 4.2-2). Independent learning was more evident in School A than in School B – as mentioned in Section 6.3, the freedom to choose, which is linked to independent learning, was impacted by the delay in verbal communication experienced by the children with SEND at School B. In this setting progress in the area of independent learning and independence was more incremental and based on the child's ILP.

As has become clear throughout the previous sections of this chapter, important though the Montessori resources are, they do not, in isolation, constitute the Montessori approach

because they need to be engaged with in a particular way. Montessori also observed that the young child is capable of longer periods of concentration if the activities capture his spontaneous interest (Marshall, 2017). There are two elements to the way in which children engage with the learning materials that Montessori claimed promoted this concentration. The first is the cycle of activity surrounding the use of each piece of material and is the child's internal work cycle. This is the sequence of activity entailed in choosing, doing, and completing work; elements of it are referred to in Example 4.5-3 (Case Study – School A). The conclusion of the internal work cycle is determined not by the completion of a given task, but by the child's psychic needs (Cossentino, 2006). The second is the Montessori (external) work cycle – this is that period of time observed exclusively for the child's work (Marshall, 2017). In most Montessori schools it consists of a lengthy (usually three hours) period of uninterrupted work. During those three hours children are mostly free to select activities on their own and with others, and to find their own rhythm of activity, moving freely around the classroom as they do so (ibid). Individual or whole class levels of concentration during such a cycle can be plotted on a graph such as the one below:

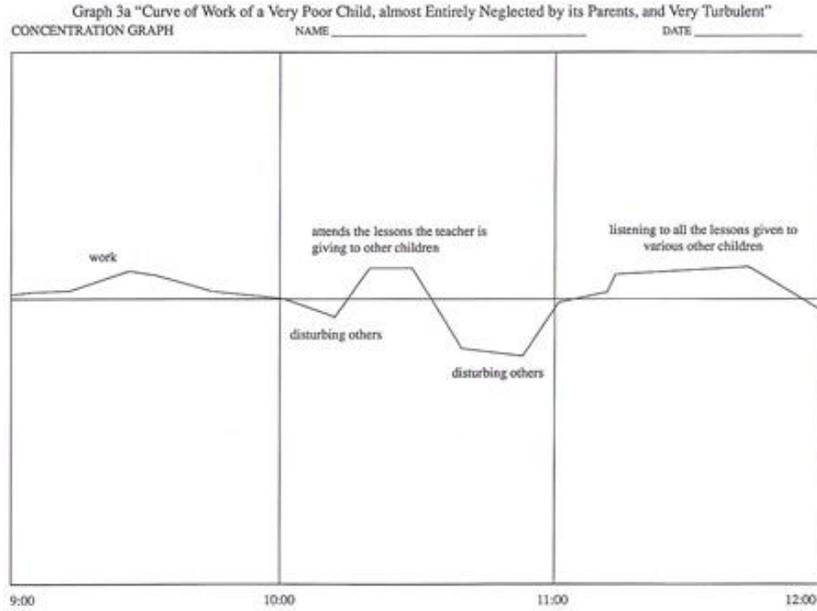
Figure 6.2 – Concentration Graph (Template)



(Olaf, n.d.)

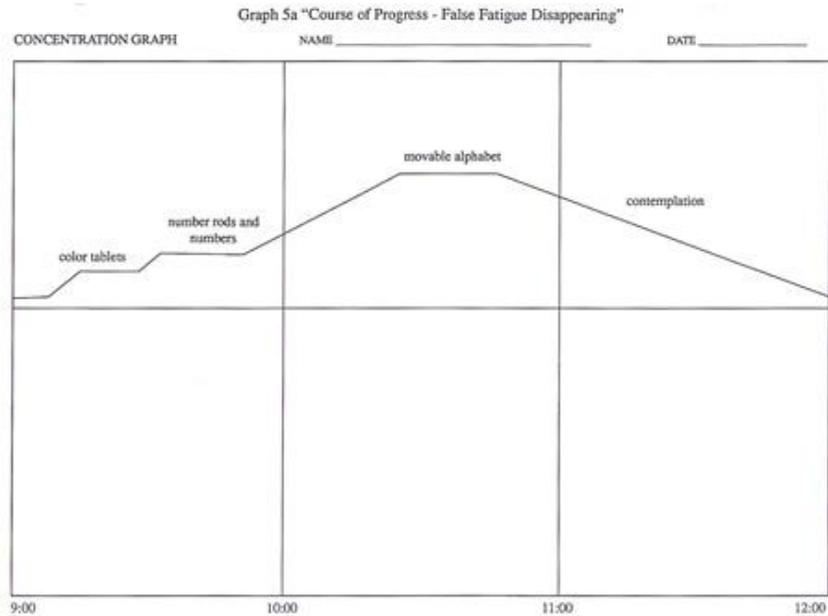
A child engaging poorly in the learning process would spend a significant amount of time below the line of repose, in the area of disorder (Figure 6.3), while a child who is highly engaged in the learning process would spend the majority of time well above the line of repose (Figure 6.4).

Figure 6.3 – Concentration Graph of a Poorly-Engaged Child



(Olaf, n.d.)

Figure 6.4 – Concentration Graph of an Engaged Child or Class



(Olaf, n.d.)

As detailed in the case study for School A examples of the Montessori work cycles were observed. The first few minutes of the work cycle are always the busiest and noisiest. This is the period of time when friends are greeting each other, sharing stories and 'catching up'. In the initial minutes there are also lots of adults in the room – something which has a

palpable effect on the dynamic as it means that there is extra conversation and more children seeking attention and affection rather than focusing solely on the Montessori environment (Langford, 2014). This can be seen in J's behaviour in Example 4.5-4. Example 4.5-5 demonstrates a period when children choose a familiar activity that they have experienced many times before. This ritual helps children to mentally 'switch on' and to build a sense of self-confidence through independent achievement; by working on a relatively easy task a child is able to feel competent, empowered and ready for the more challenging tasks that are ahead (ibid). Repetition is a central feature of the work cycle and concentration is always the hallmark of true work (as opposed to task completion) (Cossentino, 2006). During these work cycles practitioners will endeavour to make themselves present but invisible and the children will be encouraged to persist independently in their own work cycles. The practitioner will also make observations as to how they feel the child is working at certain points during each work cycle (ibid). In Example 4.5-6 we can see instances of both repetition (the shells) and prolonged periods of concentration, producing the fish.

However, after the initial series of familiar tasks the children can become unsettled, if only briefly and this is more commonly known within the Montessori approach as 'false fatigue'. False fatigue is when children become restless, begin to wander, and are less focused (Friesen, 2018). This is evident in the case of L in Example 4.5-6. The noise level increases and the room hums with an energy that feels less productive. If children are allowed to work through this time, greater and more challenging work occurs afterwards (ibid, Langford, 2014). The relative chaos of 'false fatigue' is suddenly followed by a moment when suddenly the children settle back into purposeful work (Langford, 2014). Some children work on elaborate cooperative activity with a few friends, as in the case of L in Example 4.5-6, others focus diligently on an individual task, while others accept invitations from teachers to participate in new, challenging lessons (ibid). The work that happens during this period tends to involve tasks that involve long drawn out processes and a great deal of cognitive stimulation. This is a time when practitioners present lessons that require a child to be feeling confident to face a challenge and be ready to focus for a prolonged period of concentration (ibid). As School A was a supplemented Montessori environment, the external work cycle was limited to two hours, followed by a whole class activity. As a consequence, many children were interrupted in their Montessori activities and did not, in my view, get the full Montessori experience.

As is evident from the explanation of the Montessori three-hour work cycle and the examples given below, although the children have a great deal of freedom in what they do, their freedom is not unlimited. The teacher's role is to guide children who are finding it hard

to select materials or who are disturbing others, to introduce new materials to children who are ready for the challenge and to conduct small group lessons (Marshall, 2017). Another point of consideration is made by Kayılı (2018) as they believe that the materials that Marshall talks about in her study help a child reflect upon different solutions when dealing with a problem and decide on the right one. At School A I observed the introduction of new and more complex materials which would challenge the children on two occasions, as shown in the examples above. In addition, in her questionnaire a practitioner, Sophie, stated that the approach "...uses different methods resulting in it becoming suitable and applicable for all children who learn in different ways," and that "[the children] develop self-sufficiency and can become the teacher themselves" (Ratner & Efimova, 2016; İman *et al*, 2017). She added that by engaging with the resources either by themselves or with a member of staff "they learn how to select activities and to recognise when to ask for help when they need it".

There was limited evidence of independent learning in School B, due to the children's SEND, however the children were involved in activities that will make them more independent as they progress through childhood. Similarly, the support staff who work alongside the children on a daily basis also believed that independent learning is very important. According to Carol "[independent learning allows the children to] take ownership and use the equipment to reduce any sensory overload". Furthermore, according to Beth "...the resources that [the children engage with] in the classroom can be used for group work [or with an individual child].

The main focus at School B was on the development of life skills. At the early years level, functional life skills include walking, self-feeding, self-toileting and making simple requests (Webster, 2019). Students with developmental disabilities, such as Autism Spectrum Disorders, and significant cognitive or multiple disabilities often need to have these skills taught through modelling, breaking them down; the teaching of life skills also requires that the teacher/practitioner complete appropriate task analyses in order to teach the specific skills (*ibid*). Many examples have been cited in this chapter that demonstrate the acquisition of these basic skills by the children at School B, including Example 5.1.5-3, 5.4-2 and 5.4-7 (Case Study – School B). Children with SEND often acquire life skills later than their neurotypical peers, as demonstrated by Example 4.5-11 (Case Study – School A).

Again, as has become clear in this section of the thesis, for children with and without disabilities, independent learning is an essential part of the two play-based approaches examined. However the importance of such learning for children with SEND became

particularly clear during my time at School B as these skills are essential for their future after leaving school.

6.6 Physical Development

The previous section of this chapter dealt with how the School B and School B curricula advocate independent learning within each learning environment. Linked to this is how each setting promotes physical development. Physical development was evident in both settings but there were some differences linked the developmental needs of the children. I will firstly discuss School B. The School B website states that the school is

... extremely fortunate to have a very large outdoor area providing opportunities for your children to develop control over their bodies through physical activity. Carefully chosen equipment and activities help to develop fine motor skills within the classrooms.

Fine motor skills involve a refined use of the small muscles which control the hand, fingers and thumb. In School B activities focused on the development of fine motor skills in line with the guide to Montessori early years foundation stage (Montessori St Nicholas Charity, 2012). The examples presented in this section reflect the above statement and demonstrate how the Montessori activities promote fine motor skill development. The fine motor skills demonstrated in the examples above were in line with normal developmental parameters for the child's age group. With the development of these skills, a child is able to complete important tasks such as writing, feeding oneself, buttoning and zipping (Bunce, n.d.). These abilities gradually develop through experience and exposure to a variety of toys, materials and even foods (ibid), as shown in Examples 4.6-1 through to 4.6-3 and in 4.6-4 (Case Study – School A). By concentrating on fine motor skills, young children will develop manual dexterity and strength. These skills are the first step in learning to colour, draw and ultimately write. Furthermore, Roebbers and Jäger (2014) suggest that early fine motor skills may be considered to be an indicator of executive functions that will be needed later for the cognitive demands of formal learning, including literacy and mathematics. The Montessori method allows children to refine their motor skills as the environment is prepared in such a way that children are provided with opportunities to carry out real work with a practical objective (Bhatia *et al*, 2015), as seen in Example 4.6-1 and 4.6-3. Moving or washing child-sized furniture, polishing shoes or silverware and cutting foods are examples of tasks involving gross and fine motor skills. Other fine motor skill activities employ instruments that we use on a daily basis such as spoons, tongs, ladles and tweezers (ibid), as again seen in the examples above. Another set of activities that Montessori developed to assist children in the acquisition of fine motor skills is the dressing frames, some of which are shown in Example 4.6-4.

Rule and Stewart (2002) suggest that young children can struggle to coordinate the small muscle groups in their hands meaning that they can have difficulty dressing, feeding themselves and manipulating pencils, crayons and scissors. The dressing frame set is part of a set of activities known to those who choose to work in early years settings that ascribe to the Montessori approach as Practical Life activities and as with examples presented earlier in this thesis (section 6.1.3, p.151) would come under the category of self-care (Elcombe, 2017). They are therefore directly designed to facilitate the children's independence. Stewart *et al* (2007) explored the effect of fine motor skill activities on the development of attention in kindergarteners and found a significant group-sex interaction, with females positively responding to the treatment applied, suggesting that fine motor skill activities are effective in increasing female kindergarteners' attention. According to these authors, "when watching children at play one cannot help but notice that their movement engages their total energy and their full attention is focused on the movements they need to perform the task". If the task is pleasurable the child will often choose to engage with it repeatedly, becoming absorbed in the movements and sustaining attention for long periods (*ibid*). Historical studies have shown that voluntary repetition of movement is important for mental development (Standing (1984, cited in Rule *et al*, 2007))

In contrast to School B, School A focused on physical development as a whole. In terms of physical development, School B's website states:

In this curriculum area, pupils are learning to respect their own body through ... exercise ... Pupils are supported to develop their strength and movement in order to explore the world around them. They will also be given opportunities to learn about others around them and how to interact appropriately with each other ...

When I completed my data collection at School B the children's physical competence was very much in evidence (mainly from observations and interviews) in relation to gross motor skills, while the development of fine motor skills was slower, as shown in Examples 5.6-1 and 5.6-2. It was evident from all the examples above, however, that the promotion of overall physical development led in turn to the development of fine motor skills. Due to the slower development of their fine motor skills, children at School B would not have been able to manipulate the Montessori resources used at School B, therefore the teachers and support staff at School B made use of resources that would be found in a mainstream educational environment, supplemented with toys such as Etch-a-Sketch (mega-sketcher) that the children could manipulate (Example 5.6-2).

Physical competence has been studied in the past; these studies indicate that the prevalence of overweight and obese children has increased in recent decades, including very young children (Robinson, 2011). Many experts believe that low levels of physical activity have contributed to the increase in obesity prevalence (Dehghan *et al*, 2005; Sahoo *et al*, 2015). Montessori education has been in existence for over 100 years; it is therefore no surprise that when Pate *et al* (2014) undertook their comparative study they found that because the children who attend Montessori settings learn through action and self-discovery as they choose activities and move freely during the course of the day, they by default undertake more physical activity than in a state-funded setting. On the other hand, Memari *et al* (2015) found that children with SEND (ASC) did not have adequate physical activity participation since only a few children met the minimum physical activity criteria, but such low participation was due to financial constraints and lack of resources. Furthermore, the authors also found that children from low-income families displayed lower levels of physical activity, were more likely to live a sedentary lifestyle and experience more health problems compared to children from higher income families. Furthermore, Pan *et al* (2017) also believe that the physical development of children with SEND (specifically ASC) is frequently overlooked. Having said this, motor skills including locomotor, object control, gross motor and fine motor skills are necessary for engaging in physical activities related to the development of healthy lifestyles (*ibid*).

The findings of Memari *et al*'s (2015) and Pan *et al* (2017) are not reflected in the current study - as the above examples indicate, and in line with the statement on their website quoted above, the staff at School B assist the children to become aware of what is going on around them through developing their physical skills. Research has shown that children with autism may be delayed in their physical development, lose movement skills, show motor clumsiness and score poorly on fitness measures (see Example 4.6-5) (Reid & Collier, 2002; cited in Zhang & Griffin, 2007, p.34). The children at School B have access to a spacious outdoor area with several large and small pieces of equipment that as well as promoting the individual child's physical development, also helps them to become more aware of their body and their presence within the world (also known as interoception), also illustrated in Example 4.6-10. There has been very little research on interoception therefore it cannot be assumed that C&YP with ASC process internal information in the same way as they process external information (Fiene & Brownlow, 2015). Interoception can be broadly defined as the conscious perception of internal bodily cues such as heartbeat and breathing (Craig, 2003 cited in Shauder *et al*, 2015 p.194) and is related to empathic abilities (Fukushima *et al*, 2011) and emotional experiences (Wiens, 2015 cited in Schauder *et al*, 2015 p.194). As such it is considered central to the development and organisation of higher-level cognition - (see Example 4.6-3) (Nicholson *et al*, 2019).

As the website states, the children are also given opportunities to learn about others around them and how to interact appropriately with each other. In her study, Rau (2019) discusses the fact that many children with disabilities tend to lack skills in social awareness not least those with ASC as in Example 4.6-7 (Case Study – School B). This said it is also evident from the above example that the children had been observing what goes on around them. As such, the children at School B have to some extent learnt to imitate and reproduce actions they see or have seen in the past (ibid). Moreover, the staff facilitate this further with interventions - sensory integration discussed later in this thesis

6.7 Concluding Thoughts

When looking at documentation from both settings with respect to learning and achievement, there appear to be major similarities, however, when I was analysing my data I found that there were also many subtle differences between the two settings. These are summarised in the table overleaf.

Table 6.2 - Similarities and Differences: Learning and Achievement

Similarities	Differences
<p>Both settings/In both settings:</p> <ul style="list-style-type: none"> • Recognised the need for space both indoors and outdoors, and provided this; • Provided a wide of resources appropriate to the developmental needs of the children; • Used facilitative methods of teaching, incorporating guided play and involving autonomy supportive teaching and freedom of choice; • Also encouraged free play which allowed the children to learn basic skills, including those relating to their personal and social development; • Knowledge acquisition was a reciprocal process between pupil and practitioner, and progressed from concrete to abstract; • Curriculum adaptability was evident; • Verbal, non-verbal, peer-to-peer and peer-to-practitioner communication was evident though to differing extents; • Home-school communication was vital to ensure that all parties worked towards the same goals for the children; • Encouraged independent learning and the development of life skills through the activities and resources made available to the children, though, as to be expected, independent learning and life skills were more evident in School B; • Opportunities for physical development (involving both gross and fine motor skills) were evident, however in School B they were more personalised to each child. 	<ul style="list-style-type: none"> • School B offered a larger classroom to meet the particular needs of the children. • There were significantly fewer children per class at School B. • School B employed specific techniques to promote a relaxed environment, while School B was relatively busy and noisy. • School B employed a much higher staff to pupil ratio than School B. • The multi-age grouping at School B allowed for the developmental needs of the individual children. Multi-age grouping was not used at School B. • Teachers at School B organised the environment and resources to ensure that they were developmentally appropriate, and guided the selection of activities accordingly. At School B children were allowed the freedom to choose their own activity. • At School B practitioners aimed to encourage more verbal communication through the use of augmentative technology and resources. • Technology was used at School B but not observed in School B. • Unlike School B, School B offered a highly personalised pathway for each child. • Hierarchical sequencing in the acquisition of knowledge was evident at School B but not at School B.

CHAPTER SEVEN – RESULTS AND DISCUSSION:

PEDAGOGICAL APPROACHES TO LEARNING

In this chapter I will present and discuss my findings in relation to Pedagogical Approaches to Learning, looking at the following sub themes, as listed in Table 1 of Chapter Four:

- Pedagogical Theories of Learning and their Impact on Children’s Learning and Development
- Interventions that Facilitate Positive Relationships between Staff and Children
- Peer-Teacher and Peer-Peer Interactions
- Learning Concepts and Children with SEND
- Turn-Taking and Sharing

7.1 Theories of Learning and their Impact on the Play-based Pedagogy at School A and School B

In this section I will discuss the learning theories that strongly influence the teaching and learning that took place in School A and School B, using examples to demonstrate the application of these theories of learning in both settings.

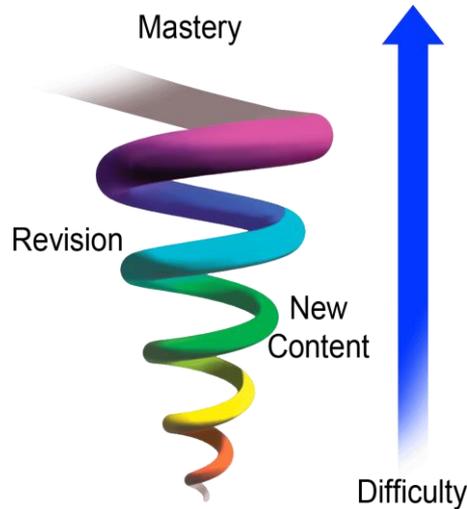
It was clear that constructivism underpinned the play-based approaches advocated in both settings. The constructivist paradigm emphasises the need for children to engage in hands-on and collaborative learning as a means of fostering conceptual development and deep understanding, therefore a balance between child-initiated and teacher-initiated activities is considered important (Ültanir, 2012). Thus, while children are encouraged to make choices regarding materials and activities teachers should actively guide and support their learning efforts. Furthermore, cooperation between teachers and children and among children themselves is highly valued because collaboration is viewed as necessary to obtain new information from different perspectives (Walsh *et al*, 2019; Lillard, 2007). Elements of social constructivism were also present: smaller group sizes, teacher modelling and questioning (TES, 2018). Furthermore, Dahlin-Ivanoff (2015, cited in Andersson, 2015: p.8) states that social constructivism means that people’s knowledge is socially constructed through social interaction. This knowledge is constantly updated through new experiences and it must be understood in its context. Within social constructivism the interaction between the people is considered a learning process (Andersson, 2015).

Several of the elements described in the constructivist and the social constructivist theories were evident at School B, as shown in Examples 4.7-1 and 4.7-2 (Case Study – School A).

The constructivist paradigm of engagement in hands-on and collaborative learning runs through all my observations in School A and is clearly evident in Example 4.7-1 (Case Study – School A). The application to conceptual development is discussed in greater detail in section 7.4. The Montessori educational approach is in line with that of Bruner, who suggested that ‘the prevailing view of certain disciplines being too difficult for younger children results in our missing important educational opportunities’, and thus developed a learning structure known as the Spiral Curriculum (Cam, 2014). The Spiral Curriculum is therefore based on a child’s intuitive understanding of the fundamentals and then returns to the basic concepts, themes, issues and problems at increasingly elaborate and more abstract or formal levels over the years. Repeatedly returning to the same concepts, themes and issues during a child’s learning journey is crucial to developing a deeper understanding (Gibbs, 2014). This is demonstrated in Example 5.7-1. The towers allowed were used to develop the children’s understanding of mathematical concepts such as number and size. As the towers reduced in size in the sequence, they also allowed the children to refine their manual dexterity and further develop their fine motor skills, as discussed in section 6.6.

Efland (1995) suggests that the spiral formation is a useful way of representing the effect of prior learning on later learning in that with each recurrence of a specific feature of content the spiral is seen to widen and become more encompassing. Moreover, the model is a useful tool to explain how the cognitive consequences of deficits in early learning inhibit the development and elaboration of later learning. Bruner believed that efficacy of later knowledge acquisition is more or less set for life by early learning experiences (Bruner, 1969). Should these be inadequate it would be difficult if not impossible to overcome such deficits. Bruner also suggested that learning and the process of instruction are undertaken in an effort to assist or to shape growth. Therefore, a theory of instruction is in effect a theory of growth and development assisted by diverse means and has the potential to have a positive impact upon a child’s overall development and learning (ibid). Both play-based settings understood the importance of ensuring that the children did not, as far as possible, experience the deficits that would inhibit their later learning (see Examples 4.1.3-1: Case Study – School A and 5.1.3-2: Case Study – School B).

Figure 7.1: Representation of Jerome Bruner's Spiral Curriculum



(Ali and Ibrahim, 2017)

The Montessori curriculum mirrors Bruner's Spiral Curriculum as the children are allowed to spend as much time as they need on one activity without interruption until they master it, as in Example 4.1-3, the observation extract in Appendix 2. Throughout that period all the children involved in the activity worked at it in turn, and each child was allowed to master the activity before the next child could start.

There was a balance between child-initiated and teacher-initiated activities. Children made choices while the practitioners guided, as can be seen from example 4.7-2 (Case Study – School A). The post-modern view of education believes that children should be encouraged to decide for themselves which activities to engage in and which profession to pursue, such that excessive guidance by teachers amounted to interference and was to be avoided when children were playing independently as this type of play was thought to be the most beneficial (Brown & Freeman, 2001; Bennett, Wood, and Rogers, 1997; both cited in Tsai, 2015, p.1028). The Montessori approach reflects this belief and as such was very much ahead of its time. Another feature of the social constructivist paradigm, that of teacher modelling, can also be seen in Example 4.7-1 (Case Study School A), where the practitioner demonstrates the activity prior to the children attempting it.

Some elements of the social constructivist paradigm were also evident at School B. Similar to School A, the play-based approach at School B aimed to be hands-on within the limited capabilities of the children in terms of fine motor skills. Hands-on activities involved collaboration between teachers and pupils, as can be seen from Example 5.7-1 and the earlier Example 5.1.4-3 (Case Study – School B). Example 5.7-2 shows the development of understanding of right and wrong and the resultant consequences of their actions.

As pointed out earlier in this section whilst the play-based approaches discussed in this thesis are underpinned in the main by the constructivist pedagogy there is a very important element of social-cultural theory in evidence in Examples 4.7-3, 4.7-4, 5.7-3 and 5.7-4 – that of scaffolding (Topçiu & Myftiu, 2015).

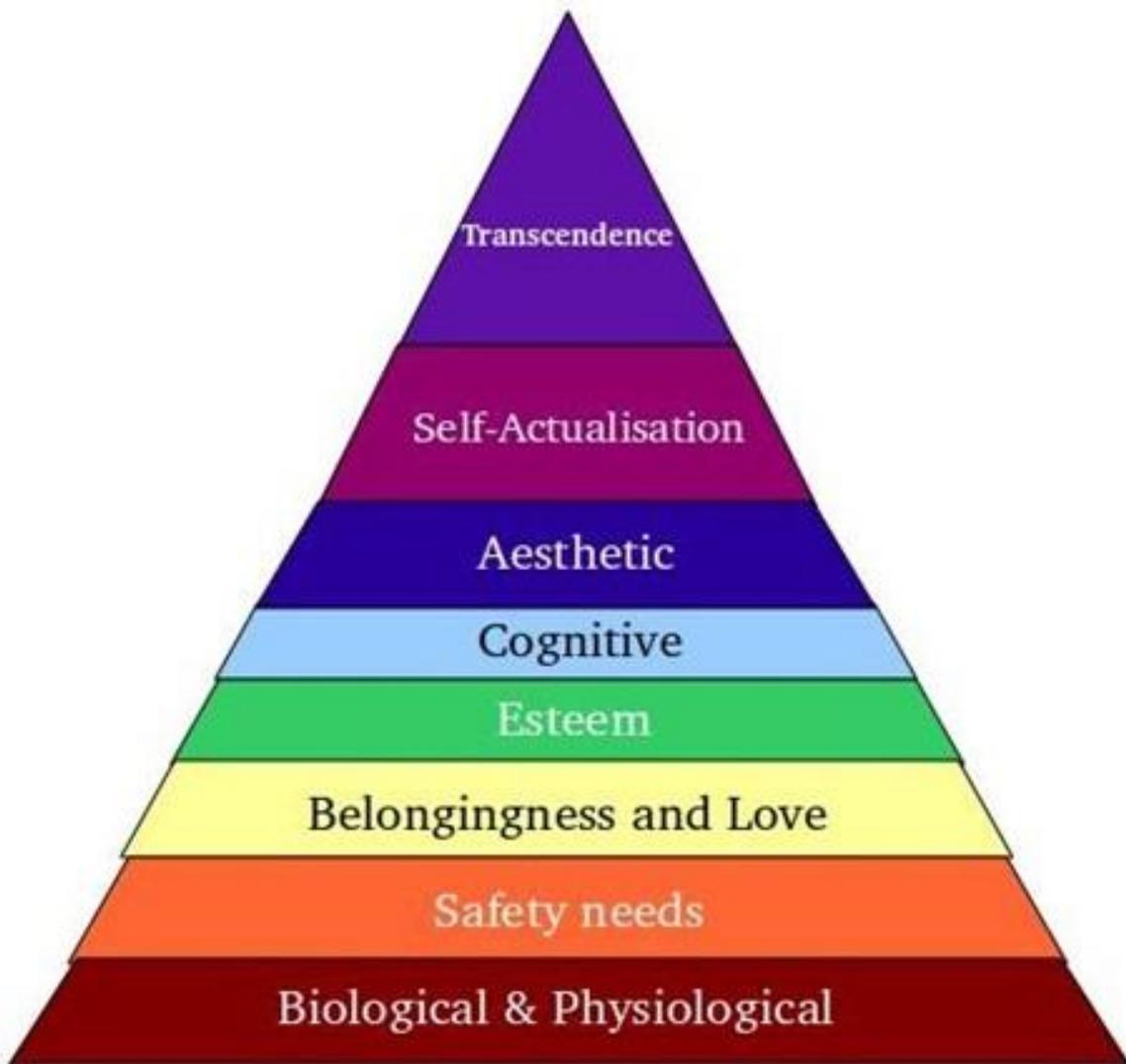
Vygotsky understood learning to be a social interactive process in which children are active participants rather than passive recipients. He developed the idea of the 'zone of proximal development' which is the prime area between what children can currently achieve on their own and what they can potentially learn with support (Bowles *et al*, 2018). Furthermore, because scaffolding is such a dynamic intervention finely tuned to the learner's ongoing progress, the support given by the teacher during scaffolding depends upon the characteristics of the situation like the type of task and the responses of the student. This said, no consensus exists with respect to the definition of scaffolding however across all the definitions that do exist there are some common traits these being responsiveness i.e. the teacher's support must be adapted to the current level of the student's performance - it should either be at the same or a slightly higher level (Van de Pol *et al*, 2010). Another way of looking at this is that the teacher takes over parts of the task with the goal of transferring responsibility for the task back to the student at a later point in time (Van de Pol *et al*, 2011).

Another element of Vygotsky's learning theory is the Zone of Proximal Development (ZPD). Application of the ZPD is evident in Example 4.7-4 Parts A and B (Case Study – School A). In this example it is clear that the children employ the practitioner as a way to extend their learning. This corroborates the findings of Çakiroğlu (2019) who suggests that activities that are carried out with the children under the guidance of a practitioner allow them to solve the small problems they could not solve initially. The more subtle but very effective application of Vygotsky's learning theory was also evident in School B and is shown in the interview extracts below. It is obvious that Hannah believes that there are various factors that influence the extension of the children's learning not least the play-based approach advocated by School B (as seen in Example 5.7-3) and physical exercise (as seen in Example 5.7-4). The point made by Van de Pol *et al* (2011) (p.143) was very much in evidence at School B but as Webster *et al* (2010) suggest, if TAs are to have a pedagogical role in the classroom it should be limited to delivering structured and well planned interventions to pupils of lower ability and those with SEND, as was also the case at School B.

Since the publication of the Webster *et al* (2010) study there has been debate about the appropriate pedagogical role of TAs especially as they continue to be missing from policy and practice. The idea behind having TAs in the classroom is that tasks are delegated by the teacher and specific training is given in specific instruction as well as in behaviour management. However, the reality is that the TAs role is primarily oral conducted on a moment by moment basis and often involves verbal differentiation of teacher talk or printed material. Therefore, it is no surprise that whilst TAs are ideally placed to provide optimum contingent support for the learner, all too often their interactions with pupils tend to focus on task completion rather than developing understanding (Radford *et al*, 2015).

Another learning theory that evidently influenced both play-based approaches discussed in this thesis is Maslow's hierarchy of needs (see Figure 5.2 below). It was clear from my observations in particular that the staff working at both settings endeavoured to ensure that the needs presented in Maslow's hierarchy of needs were met, so that deeper learning could take place. Within both settings practitioners and staff nurtured children's curiosity and interest in learning for its own sake (Gonzalez-DeHass & Willems, 2013). By emphasising the process of learning over its product, they highlighted the broader goal of personal mastery over the more immediate tendency to focus on the letter or grade, ultimately allowing the children to develop a healthy and adaptive attitude toward learning (*ibid*). In fact, it is explicitly stated on the School B website that 'it is important that every pupil feels safe, happy, respected, cared for and has a sense of belonging' (school website). In meeting these needs, the teachers at School B are doing their best to ensure the children's success for the future.

Figure 7.2: Maslow's Hierarchy of Needs, 1970



(Tulane VISTA Blog, n.d.)

In addition, in line with the findings of Lillard (2007) and Walsh *et al* (2019), there was cooperation between teachers and children, as exemplified in Example 4.5-2, (Case Study School A) and Example 4.1-1, (Case Study - School B). However, there was much more cooperation between the children at School B as they were positively encouraged to play together in order to develop their social skills. This was in contrast to School B, where self-directed (independent) learning was encouraged. Cooperation, in terms of turn-taking and collaboration, are further discussed in Section 7.5.

.A subtle difference between the two settings was that in School B it was not expected that a particular skill would be mastered by a child within that class, so the development of the skill continued as the child moved up the school.

7.2 Methods that facilitate positive relationships between staff and children

By default, the activities available to the children in both settings facilitated positive relationships between staff and children. School B encouraged individual rather than group learning, therefore the main interaction was between the teacher and the child.

As seen in Example 4.8-1, even when the practitioner had a group of children, she worked with them on a 1:1 basis in turn. At School B, as already indicated, the curriculum is more personalised to each child and necessitated a high level of 1:1 intervention, as will become clear later on in this section. All the methods discussed in this section enable functional communication between children and staff, which in turn facilitates positive relationships between them.

Being able to communicate is one of the most important skills we need in life. Almost everything in life involves communication: everyday tasks such as learning at school, asking for food and drink, sorting out problems, making friends and having fun. These all rely on our ability to communicate with each other (The Makaton Charity, 2018). Play in language learning is composed by two ends of one spectrum; patterned sound at one end and pragmatic contextualised meaning at the other. The patterned end contains verse, speech and semantic meaning. The pragmatic end resembles the interaction which takes place between interlocutors. Historical studies such as that undertaken by Butzkamm (1980, cited in Pym and Ayzvazyan, 2016 p.10) argue that verbal play also provides children with the training phases necessary for developing new verbal skills. Types of language play vary widely from vocabulary games to talking to one's self as well as unregulated rules and enjoyment.

Sharing and exchanging thoughts and ideas, emotions, needs, likes and dislikes can occur through many different forms of communication. However, in a phonocentric society in which spoken language is generally valued above all other forms of communication (Bauman, 2008) there are significant barriers to the inclusion in the education system of children who use Augmentative and Alternative Communication (AAC) (van Santen & Black, 2009 cited in Chuileann & Quigley, 2016 p.141) such as PECS in Example 5.8-1 (PECS is described and discussed later in this section). A research report by Johnson, Carroll and Bradley (2017) found that the most common action to support students with communication and language difficulties was to make a referral to a Speech and Language therapist. Across all settings staff also indicated that they employed techniques to modify their language to make it easier for students to understand and these strategies differed depending on the type of setting. Children with these difficulties may achieve improved functional communication by using augmentative and alternative communication (AAC) strategies. These strategies rely on the multimodality of communication and the premise that communication can be attained through more channels than speech (Rombouts *et al*, 2018). Of these AAC methods of communication Makaton is the most popular system of communication for individuals with communication difficulties and is used in over 40 countries (Sheehy & Duffy, 2009; Sheehy & Budiyanto, 2014). It is a pedagogical approach which began in an era of segregated institutional provision for severe learning difficulties therefore it is no surprise that the use of Makaton spread rapidly throughout the UK (Drew, 2018).

Within the fields of clinical and developmental autism studies the treatment approaches that are employed tend to focus on the deficits of communicating verbally (with an emphasis on speaking) and non-verbally understanding social cues (Murray *et al*, 2019). As such verbal communication is prioritised and even fetishised as individuals with ASC who cannot speak are often considered incapable of complex communication and are often dismissed as low-functioning because they type and use their bodies in other ways to communicate (*ibid*). In contrast, as stated in the 'My Communications Policy' on School B's website,

Within Lower School, adults working with the learner need to observe closely to find the students' own means of communication and then find ways of repeating them to support their development. Over time, learners are supported to develop those skills which underpin basic communication, such as shared attention, responding, turn-taking, anticipating, showing preferences and making choices.

One of the main ways in which the staff: Hannah, Carol, Beth and Hayley, have done this is by implementing Makaton and the Picture Exchange Communication System (PECS) on an everyday basis so that the children are able to communicate their wants and needs to those around them.

Makaton is a language programme that uses signs and symbols to help people to communicate; it is designed to support spoken language and the signs and symbols are used with speech in spoken word order. For those who have experienced the frustration of being unable to communicate meaningfully or effectively. Makaton takes away that frustration (see Example 5.8-2) and enables individuals to connect with other people and the world around them (Makaton Charity, 2018). Furthermore, when people speak, they often use non-verbal cues to help the person they are communicating with understand what we are saying (ibid). Therefore, the use of signs by individuals with disabilities such as ASC may be shaped not only by the signs that the staff use but also the type of activity (Rombouts *et al*, 2018).

According to Bercow (2008), approximately 7% of all five-year olds within the school population had some sort of Speech, Language and Communication Need (SLCN) (Bercow, 2008) with later estimates suggesting that almost 21% of all pupils with a statement of SEND had Speech, Language and Communication difficulties (National Statistics, 2014). Furthermore, as of 2016, the Council for Disabled Children offered a very narrow estimate of the number of children with complex needs in schools in England. The total was 73,000, made up of 10,900 children with profound and multiple learning difficulties (PMLD), 32,300 children with severe learning difficulties (SLD), 27,500 children with autistic spectrum disorder (ASD) attending special schools and 2,300 children with multi-sensory impairments. All of these attended special schools and together represented a significant increase on the equivalent figure in 2004, which was 49,300 (Council for Disabled Children, 2017). This suggests that the number of schoolchildren with complex needs (narrowly defined, as above) in England has risen by nearly 50 per cent since then. The actual number is certainly higher, as children with other primary needs may have complex needs and because there are some important gaps in School Census data (the fullest data set available on children with SEND) (ibid). The children at School B that I observed would fall into the categories of PMLD or ASC.

Educators help children develop good oral language skills both directly through their language interaction with them and indirectly by creating an environment rich in learning stimuli (Mousena & Sidiropoulou, 2017). As discussed in Chapter Six, section 6.1.4, such stimuli were present in both School A and School B – see Examples 4.1.4-2 (Case Study – School A) and 5.1.4-2 (Case Study – School B), including access to the outdoor environment – see Examples 4.1.2-1 and 5.1.2-2. Teachers' oral communication skills are capable of actively supporting curriculum implementation and meeting its goals (ibid). In Example 5.8-1 the teacher is using verbal communication to reinforce the child's acquisition

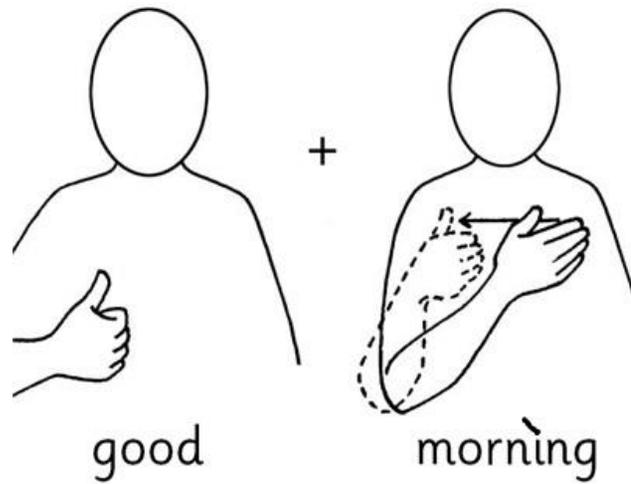
of verbal communication. According to Murphy (2010), the debate around the mechanisms of child language acquisition and development revolves around a central dichotomy:

- Human language development is a form of behaviour and, like the behaviours of all living organisms, including human beings, is learned through a process of stimulus, response and reinforcement.
- The capacity to develop language is a unique human competence which is inbuilt or innate in the human mind and takes the form of a language acquisition device (LAD). Once triggered by minimal and limited environmental input, the LAD uses this input, mostly unconsciously, to work out the rules or parameters of a specific language in relation to its embedded set of principles or universal grammar.

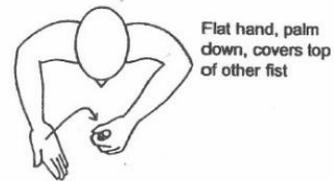
Most linguists and psychologists today would assert that language development is a combination of both innate structures and environmental input (ibid). The process of stimulus, response and reinforcement can be seen in Example 5.8-2, leading to the development of basic verbal communication skills. In School B however, the children's verbal communication was in line with normal developmental parameters – see Example 4.8-1.

Non-verbal communication was very important to the children at School B. In an effort to understand the complex processes surrounding the language development of children with ASC much attention has been given to the skills that precede and predict the emergence of language such as intentional communication (Sandbank *et al*, 2017). Intentional communication describes the purposeful use of both verbal and non-verbal acts such as gestures, sign language, pre-linguistic vocalisations or words to convey a message to other people. For example, a child may point towards an item, vocalise and gaze towards their communication partner to indicate their desire to request or comment on an item. Alternatively, the child may bring their hand to their mouth in an exaggerated motion to request food (ibid). In line with Sandbank *et al*'s points, there were several occasions when I observed the use of Makaton to facilitate communication between the pupils and the teaching staff, one of which is illustrated in the case study for School B in Example 5.8-2. There were also many other occasions when I witnessed the use of Makaton between the students and the teaching staff. The most common signs that were used are shown overleaf.

Figure 7.3 – Makaton Signs Commonly Used at School B



(Acorns Primary School, n.d.)



More

Remember - Always sign and say together

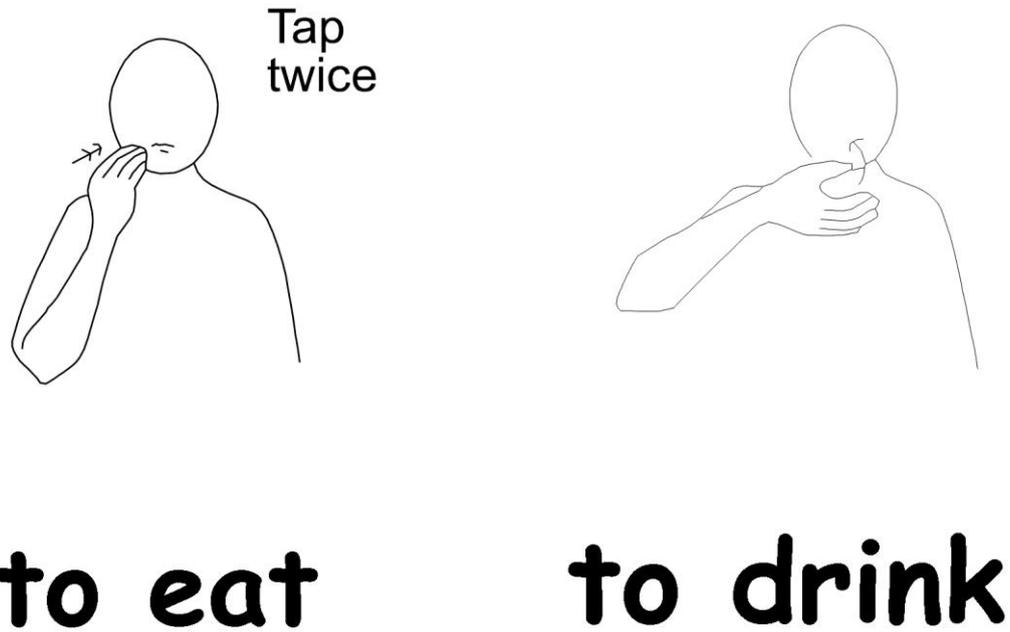
Go slow and show

(Sunny Days Nursery, 2015)



(Mommie Ventures, 2010)

Figure 7.3 – Makaton Signs Commonly Used at School B (con'd)



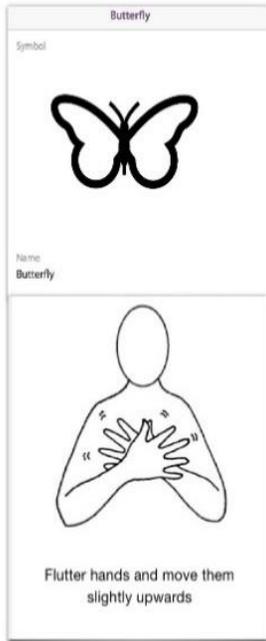
(Shacklewell Hackney School, 2018)

(Constable, n.d.)

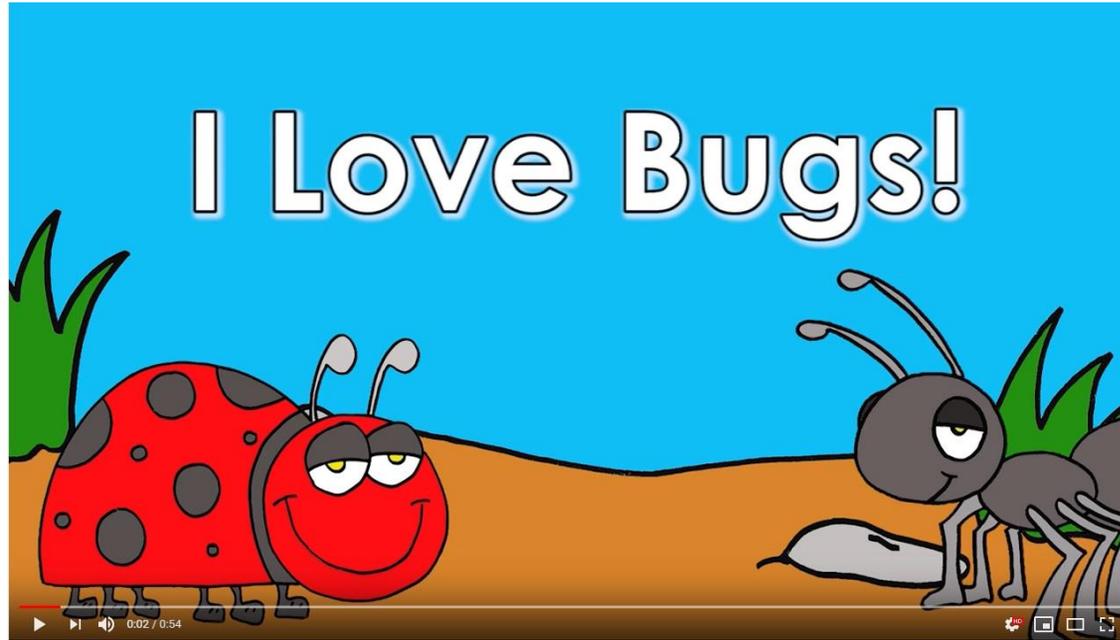
The signs 'to eat' and 'to drink' were also used on a regular basis by the children at School B to indicate when they were hungry or thirsty.

As well as 'command and request' signs Makaton was also used to widen their knowledge of the world around them as in the song demonstrated below from Example 5.1.4-1 (Case Study – School B).

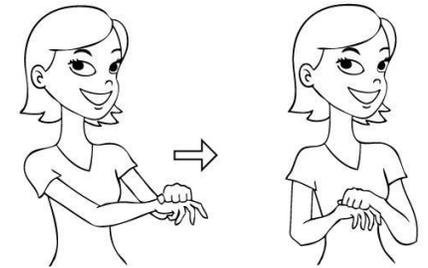
Figure 7.4 - Makaton signs used in a song



(Makaton sign for Butterfly, n.d.)

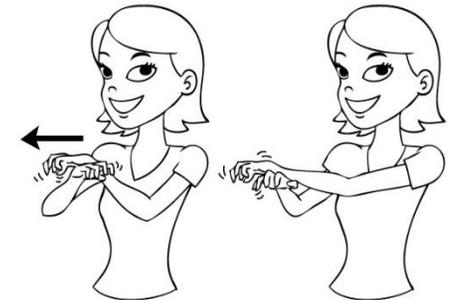


(Maple Leaf Learning, 2011)



(Sign for Ant, n.d.)

Sign for 'ant'



(Sign for Spider, n.d.)

Sign for 'spider'

In an age of integration, Makaton is seen as a remedial technique to support the education of children with severe learning difficulties (Norburn *et al*, 2016). As is illustrated earlier in this chapter, Makaton is a series of hand movements (which are sometimes accompanied by a visual prompt) each depicting a concept or idea, therefore the communicating partner makes these hand movements when expressing ideas or concepts to the child. In a study undertaken by Tan *et al* (2014) which comprised three phases found that all three children who participated in the study acquired signs during the study and generalised the use of some core signs across play activities. In addition, the introduction of Makaton was associated with a neural or positive change in the children's production of spoken words and gestures. This is in line with what I observed at School B.

I will now turn my attention to another pedagogical approach that was utilised at School B and children with SEND – the Picture Exchange Communication System. I have already provided an overview of how the PECS system can facilitate functional communication between teachers and peers (see Examples 5.4-1 and 5.4-2 in Case Study – School B). Further examples of its use and impact are given in Case Study – School B.

The Picture Exchange Communication System (PECS) is a frequently recommended AAC intervention however much of the research to date has examined PECS when it is implemented by a highly trained researcher (McCoy & McNaughton, 2018). It was developed to teach children with ASC a rapidly acquired, self-initiated functional communication system (Bondy & Frost, 1998 cited in Bondy and Frost, 2001 p.727). It combines the theory and practices of both behavioural, developmental and interactional perspectives and relies on the principles of applied behaviour analysis (Bondy & Frost, 2001). The overall protocol is divided into six phases that progress from teaching children how to communicate using the pictures in a manner that is important to the child (Example 5.8-6), to the use of multi-picture sentences and then to the use of a variety of communicative functions (Pyramid Educational Consultants, 2019). The distinct prompting, reinforcement and error correction strategies are specified at each training phase in order to teach spontaneous, functional communication (*ibid*). In phase one of the PECS system, individuals learn to exchange single pictures for items or activities they really want (Example 5.8-6); in phase two, still using single pictures individuals learn to generalise this skill by using it in different places with different people and across distances (*ibid*) – Examples 5.8-7, 5.8-8 and 5.8-9. They are also taught to be more persistent communicators – Example 5.8-8. In phase three individuals learn to select from two or more pictures to ask for their favourite things; in phase four individuals learn to construct simple sentences using the 'I want' picture followed by a picture of the item being requested (*ibid*) – this was seen in Example 5.4-1 (Case Study – School B). In phase five individuals learn to use PECS to

answer questions such as “What do you want?” and in phase six individuals are taught to comment in response to questions such as, “What do you see?” “What do you hear?” and “What is it?”. They also learn how to make up sentences starting with “I see” “I hear” “I feel” and “It is a” (ibid).

Examples 5.8-6 to 5.8-9 demonstrate the effectiveness of PECS as a pedagogical approach to facilitate communication between staff and pupils, and the pupils’ overall learning and behaviour. This is in line with the findings of several studies (Alsayedhassan *et al*, 2016; Bond *et al*, 2016; Mahoney *et al*, 2018).

Figure 7.5 - Examples of PECS symbols used in the School B Classroom



(The Bender Bunch, 2014)



(Shrem Arts and Crafts, n.d.)

7.3 Peer-Teacher and Peer-Peer Interactions

According to Moritz Rudasill and Rimm-Kauffman (2009), Longobardi *et al* (2016) and Rhoad-Drogalis *et al* (2018), positive teacher-child relationships operate as protective factors for children's social and academic development. Additionally, they are marked by respect and care, with children seeing their teachers as sources of security. In contrast, negative teacher-child relationships, characterised by high conflict and dependency and low closeness appear to operate as risk factors for school success. In negative relationships there is friction between children and teachers, with teachers perceiving children as excessively combative or clingy (*ibid*). For some children though, behavioural adjustment is a significant risk factor for later maladjustment including academic failure, decreased motivation, antisocial behaviour and delinquency although, as I believe the findings of the present study show, play-based educational approaches appear to negate negative externalising behaviours. This will be discussed in more detail in Chapter Six.

In the context of this study, peer-teacher interactions and interventions that facilitate positive relationships (see Section 7.2) between staff and children are interlinked. The question is what makes an effective teacher-pupil relationship? In a study undertaken by Korthagen *et al* (2014) teachers suggested that when trying to establish good teacher-pupil relationships they try to make eye contact with the children when talking to them; work with the children to make connections – Example 5.9-1; show empathy towards them – Example 5.9-3; make an effort to be there for them – Example 5.9-2; and provide positive feedback. Whilst Korthagen *et al* (2014) suggest a number of personal characteristics that promote effective teacher-child relationships. Bergman (2018) goes a step further by suggesting that effective teachers use various assessment tools to measure both what students learn and how they learn; organise activities and instruction based on a student's developmental levels; engage students in active learning; conveys expectations for high-quality work; and provide constant feedback for student improvement. Examples 5.2-2 and 5.2-3 demonstrate the application of these principles at School B. For neuro-typical children the preschool years constitute a period of rapid growth and development in the domain of peer-teacher relationships. However, this is not the case for children with SEND and is very much evident in unstructured settings such as organised play-groups or during free-play sessions (Guralnick *et al*, 2006; Solish *et al*, 2010; Higley, 2017). At School B, because of the nature of the SEND, the positive relationships were built through trial and error and working out what interested the children, whereas in School A the children could communicate their wishes verbally.

The quality of infant-teacher interactions has an important role to play in children's learning and development but is especially relevant for infants (Mortensen & Barnett, 2015). Early

nurturing relationships between young children and caregivers have the potential to provide a strong foundation for future development in all domains (Hamre & Pianta, 2001; Shonkoff, 2017). Furthermore, it is also evident that for children to develop quickly in all domains (physical, cognitive, social and emotional) during infancy they require positive responsive, stimulating and stable relationships (Thomason & La Paro, 2009). These relationships are particularly important for developing several competencies such as self-awareness, social competence and emotional regulation (Cadima *et al*, 2016). Though most of the current evidence is based on the parent-child relationship, some studies suggest that as children make the transition from home to a childcare setting, teachers play a critical and unique role in shaping infants' development and learning (Pessanha *et al*, 2017). As is evident from the examples above for both School A and School B, secure pupil-practitioner attachment is essential for learning in early childhood and all teachers and practitioners alike must ensure they meet the basic needs (psychological and biological and making sure the child feels safe), as dictated by Maslow's hierarchy of needs before children with or without disabilities are able to engage with learning activities for any length of time (Katz *et al*, 2017; Lundqvist *et al*, 2018). Whilst the first half of this section has dealt with the importance of children feeling secure with the caregivers when in the preschool educational setting, peer-peer interactions are also essential to the learning process for both children with and without disabilities. Early peer interactions are important experiences that contribute to the development of children's adaptive behaviours (Brooks *et al*, 2015). As mentioned at the beginning of Section 7.2, School A encouraged individual rather than group learning.

The traditional Montessori approach advocates working with children on an individual basis as can be seen in Example 4.8-4 and 4.8-5. However, the approach has had to adapt and change to take account of the current education landscape. As a result, even though individual learning still underpins the approach as can be seen from the examples already mentioned, if a situation arises whereby the children do work together on an activity the practitioners do not prevent it. They also speak about the fact that some children are stronger in some areas than others and vice versa and can therefore support each other in the learning process (Example 4.8-6: Case Study – School A). I also observed various levels of peer-peer interaction at School B.

Children with intellectual disability and specific learning disabilities often lack appropriate social skills to fully participate in the social world of their peers (Brooks *et al*, 2015). Of particular interest are those children with intellectual disabilities as they tend to exhibit relatively low levels of involvement with other children during play even under facilitative play conditions (*ibid*), as observed with Robert, Example 5.9-4 Part A. However, there were those children who were aware that there were other children in the room but would not

participate in social activity unless it was adult led (Dueñas *et al*, 2019), as in Example 5.9-4 Part B, and those children who would actively engage with their peers (Reinders *et al*, 2019) as in Example 5.9-4 Part C. Children also showed sensitivity to the emotional state of others and an awareness of how it could affect themselves, as seen in Example 5.9-4 Part D. The level of social interaction displayed by the children depended upon their level of cognitive development and Theory of Mind (ToM). The application of ToM and its impact on behaviour is discussed in Chapter Eight.

Frankel *et al* (2011) also found that, whilst parents were willing to organise play dates for their neurotypical child with other neurotypical children, they were less willing to organise them with children with specific disabilities such as ASC. However, when I undertook my observations at School B, on one occasion, I witnessed how the children from School B interacted with their non-disabled peers from the school next door (Bankmere) during free-play. What became clear to me is that the staff at School B and Bankmere had chosen to implement what Zercher *et al* (2001) describe as the integrated play model to facilitate play experiences between C&YP with disabilities and those without. It is a comprehensive intervention designed for children with SEND (specifically ASC) to facilitate engagement in symbolic play with peers as well as improve social communication and reciprocity, ultimately expanding their play repertoire. Another equally important aim is for their non-disabled peers to gain knowledge empathy and the skills to be accepting and responsive to the unique differences of their peers with ASC. Therefore, the major intention of this intervention is for the children to spontaneously play, socialise and form friendships. It is characterised by the following major features: natural integrated settings; well-designed play spaces; selection of play materials based on interactive potential; establishment of consistent schedule and routine. In fact, the overall findings of Frankel *et al*'s (2011) study point towards the fact that children with ASC spend more time engaged in positive play behaviours such as turn-taking and conversing, and such behaviours are subsequently reflected in their behaviour at school (ibid).

7.4 Learning Concepts and Children with SEND

As stated earlier in this thesis (Section 1.12), Maria Montessori advocated moving learning from the concrete to the abstract. This was very much in evidence both in School B and School B. In both settings the practitioners, teachers and support staff used materials that were available to them and the children's interests to engage the children in the learning of concepts. In terms of my observations for this study I saw several Montessori resources being offered by the Montessori practitioners at School A and the children using them from the very first observation visit and the visits thereafter.

The concepts that early childhood children develop through giving new meaning to objects, through moving in and out of reality, and through playing with roles to understand societal rules, means that it is easier for children to engage with academic concepts when they start school (Fleer, 2011). Early advocates of manipulatives (broad stairs, cylinders, pink tower, rods, etc) posited that concrete objects that resemble everyday objects help children draw on their practical knowledge for understanding concepts, even though there are those that say that manipulatives may actually impede learning (Laski *et al*, 2015). One such advocate was Maria Montessori. She believed that children have mathematical minds, and she revolutionised the way in which mathematics was taught. She developed a set of materials which have been copied by educators around the world (Montessori St. Nicholas Charity, n.d.). Within the Montessori context mathematical concepts are introduced in a very concrete form followed by the abstract written version. They introduce the concept of quantity and the symbols one through to ten (see Example 4.9-1: Case Study – School A). Then using a variety of beads and symbol cards the child becomes familiar with the numbers as a decimal system by means of including concrete experiences with the operation of addition, subtraction, multiplication and division. These operations not only teach the child to calculate but they provide a deep understanding of how numbers function (ibid). Furthermore, there can be, and often is (as you will see from the examples given above and below), some overlap with the sensorial materials (McKenzie & Zascavage, 2012). Often these are in a different area of the classroom but due to the supplemented nature of School A (discussed in more detail in Chapter Six) they were stored together in the one area thus allowing the children the opportunity to engage in activities that indirectly support preparations for later mathematics and language work as they enable the child to order, classify, seriate and describe sensory impressions in relation to length, width, temperature, mass and colour (Lillard, 2011; Lillard, 2013).

The Montessori mathematics manipulatives are basic representations of mathematical entities that do not resemble real objects or possess irrelevant perceptual features (Laski *et al*, 2015). The red rods for example (see Example 4.9-1) are used for representing number, quantity and counting and have no connection with everyday objects. These rods range in length and instantiate the quantity of units associated with each number, the overall magnitude of number and the relative magnitude of number. Also, when the children order the rods they see a concrete representation of the successor rule i.e. the fact that each subsequent number is exactly one more unit than the previous number. Because the rods are all perceptually identical except for the relevant attributes, the children's attention is drawn to the relevant features of the rods and there are no irrelevant features to distract them. The simplicity of Montessori materials means that, though they are superficially less interesting or appealing than more broadly used manipulatives, they are designed in ways

that are more likely to focus children's attention on the attributes that represent the mathematical concept and increase learning (Laski *et al*, 2015).

Preverbal number knowledge which allows young children to represent quantity appears to develop without verbal input or instruction (Gunderson *et al*, 2015). Developmental theory suggests that infants have a natural capacity to represent number in a nonverbal manner (*ibid*). According to one version of this view infants begin with two core systems for representing number 1) an object file system for the precise representation of small numbers of individual objects and 2) an analogue magnitude system for capturing approximate representations of larger sets (Jordan & Levine, 2009) The first core number system that the aforementioned authors described was very much in evidence at School A, as can be seen from examples 4.9-1 and 4.9-3 (Case Study – School A).

I did not initially think about the ideas surrounding the importance of learning concepts and the language used when assisting the children to recognise how the same objects can be used to facilitate the acquisition of different mathematical concepts. However, as you can see from my observations and the interview extracts below the Montessori approach considers the learning of mathematical and other concepts in the early years of the highest importance if the children are to make the above average progression in their later learning that Montessori talks about in her early writings. Similarly, as you will see from the examples given below, teachers and support staff at School B also considered the learning of early mathematical concepts to be very important for the children. Part of my observation during the example above was that Alex was picking only red and yellow links and throwing away other colours. He could obviously identify different colours. Furthermore, he demonstrated that he understood the concept of increasing number.

This section has dealt with how children within the chosen play-based environments use different materials to acquire early mathematical concepts such as weight and number sequencing. I have also mentioned briefly the ideas surrounding how the resources used in the play-based approaches examined in this thesis facilitate children's learning, so that the concepts can move from the concrete to the abstract. Children give new meaning to objects, thus providing them with valuable experience in consciously considering their concrete world. With this background play experience, as shown above, children can engage with the materials deliberately introduced to them as representations of ideas that teachers wish children to examine. Therefore, it is no surprise that children who attend an early years setting that has its roots in a play-based approach can deal with the social process of working with abstract symbols, content knowledge and thinking that pre-literacy and pre-numeracy demand (Fleer, 2011).

7.5 Turn-Taking, Sharing and Collaborative Learning

Turn-taking as a pedagogical approach is at the core of teaching and learning in any subject. It comprises instructional and regulative components as it takes into account what kind of knowledge is to be exchanged and how it should be transmitted (Singh, Nicolson & Exley, 2001 cited in Nomlomo, 2010 p.51). In addition, it is a form of reciprocal engagement between one communicative partner and another for the purpose of sharing social interest (Lee & Schertz, 2019). Turn-taking and sharing are principles that were being clearly taught in both settings. The children at School A, though younger than those at School B, were more advanced in these skill areas.

Pro-social behaviours or actions that benefit others are ubiquitous and constitute the foundation for human cooperation and morality. In particular sharing behaviour, defined as willingly giving resources to others, is an important form of pro-sociality in adults (Benson, 2011 cited in Xu *et al*, 2016 p.1). Example 5.5-2 shows that the children at School A are aware of and familiar with the concept of turn-taking. As children grow up, they become increasingly aware of the norms of giving and correspondingly become more sensitive to the neediness of prospective recipients and its causes. Several studies have demonstrated that the degree to which individuals consider the relative needs of recipients in their sharing decisions develops during childhood (Paulus, 2014a; Kogut *et al*, 2016). To this end helping needy others is a common norm in most societies (Paulus, 2014b). From eight years of age children are expected to comply with it as part of their increased conformity to social norms and internalisation of their society's values. Furthermore, pro-social behaviours and synchronicity appear to be inextricably linked, as the social bonds that infants and young children form with their primary caregivers and peers are characterised by feelings of emotional closeness and connectedness and they enable reciprocal cooperative relationships (Tunçgenç and Cohen, 2018).

This said, I only witnessed turn-taking or sharing behaviours at School B on a few occasions and as you will see from the examples 4.10-3 and 4.10-4 tended to be between the children and the practitioners and not between the children themselves. Whilst the examples in Se above do indicate that turn-taking and sharing do take place within the Montessori context, the interview extracts in Case Study – School A gives an indication as to how infrequent sharing is between the children themselves.

According to Long (2017), within the Montessori approach children learn how to resolve conflicts, work together and develop independence as they adapt to the environment. It becomes embedded in their experiences as they learn to navigate relationships and situations with other children. Conflict in the classroom is something that usually exists each

day and many times involves an adult stepping in to help find a resolution. Example 4.10-5 is not only an example of practitioner-imposed turn-taking at School A, it is also an example of how intervention by the practitioner prevented conflict.

All children respond in different ways to certain situations and may need guidance or suggestions as to the language to use when working through or resolving conflicts in a mutually agreeable way (Majorano *et al*, 2015). Scenarios can be practised beforehand such as how to get a glass of water one child at a time or how to offer and receive help from others. As such, the goal of these lessons is for children to be able to draw on that practice when the situation naturally occurs and use that experience to be successful in their interactions (Gregoire, 2017). Furthermore, through grace and courtesy lessons their sense of dignity is protected and the need to reprimand or correct behaviours lessens (Friesen, 2018).

At School B, due to the nature of their disabilities, the children were very introspective and introverted (Grimes, 2010). They were less likely to recognise when to turn-take and share. They became frustrated more easily and then tended to snatch at items. Another feature observed was parallel play, where individual children were happier to play alongside each other but without interacting. This will be discussed in much more detail in Chapter Eight but I will now present examples of how the children at School B are encouraged to share and turn take. Example 5.11-1 demonstrates the effectiveness and consequent success of the methods implemented at School B. The preschool years are particularly important in terms of developing reciprocal relationships as this is the time when many children begin to leave home for part of the day to visit friends or attend preschool (Zhang & Sun, 2011). This transition comes more easily to some children but can be quite challenging for others as they must adjust to new social settings and new social relationships (Curby *et al*, 2015). Children who are socially competent succeed in social interactions and display effective problem-solving, emotional regulation, communication skills, psychological wellbeing, sensitivity and empathy towards peers, friendship formation and social problem solving. Play, therefore, serves as an appropriate context in which to examine social competencies as they involve shared play activities (*ibid*). Practitioner intervention to prevent conflict was also observed at School B. However, a situation was also observed where a child removed himself from the immediate situation to prevent conflict – see Example 5.9-4 Part D.

7.6 Concluding Thoughts

The similarities and differences observed between the two settings in the area of pedagogical approaches to learning, are summarised in the table below.

Table 7.1 - Similarities and Differences: Pedagogical Approaches to Learning

Similarities	Differences
<p>In both settings:</p> <ul style="list-style-type: none"> • There was a balance between child-initiated and teacher-initiated activities. • There was cooperation between teachers and children. • Children were allowed to spend as much time as they needed on one activity without interruption. • Scaffolding was evident. • Activities available facilitated positive relationships between staff and children. • Peer-teacher interactions contributed to those positive relationships. • The materials that were used allowed learning concepts to be embedded, moving from concrete to abstract. • Turn-taking was encouraged in both settings. 	<ul style="list-style-type: none"> • At School B, the balance between child-initiated and teacher-initiated activities was more influenced by the teachers. • There was greater encouragement of cooperation between the children at School B while independent learning was encouraged at School B. • At School B the children are not necessarily expected to master a skill during their time in one class – learning continues throughout the school. • Assistive technology (switches, ipads) are used at School B but not School A. The latter adheres to traditional methods prior to the age where technology is introduced under the EYFS. • AAC such as PECS and Makaton were used at School B, but obviously not at School A. • Scaffolding at School B is linked to formal curriculum subjects; it is more holistic and child-centered at School B. • School B offers a more personalised curriculum with high levels of 1:1 intervention. • Peer-to-peer interactions are encouraged at School B to facilitate the acquisition of social skills. • Sharing was encouraged at School B even though it was more difficult for the children given the nature of their SEND. It was not a priority at School B due to the focus on independent learning.

CHAPTER EIGHT – MANAGING CHALLENGING BEHAVIOUR

In the previous chapters, the similarities and differences between the two settings were discussed in terms of learning and achievement and pedagogical approaches to learning for children with and without SEND. In contrast, this chapter will discuss in detail the overall impact of play-based approaches on the specific SEND that I observed in School B, which is ASC. My hope is that in doing so I will highlight and raise awareness of the impact that alternative educational methods can have on the learning and development of children with SEND. As has been made clear throughout the last two chapters School B did not have any children with a diagnosis of ASC on their roll, therefore any behavioural issues observed there were within normal developmental parameters. In contrast, challenging behaviour was observed at School B due the children's ASC. As a consequence, behaviour management as a theme was based mainly on data from School B.

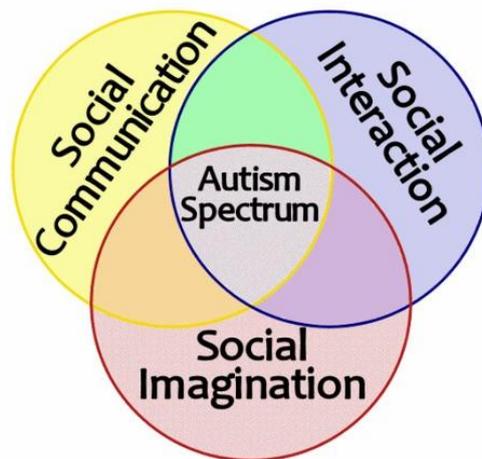
In this chapter I will present and discuss my findings under the following sub themes, as listed in Table 6.1 of Chapter Six:

- Autism Manifestation Profile
- Behaviour
- Sensory Processing and Self-Regulation
- Self-Awareness

8.1 Autism Manifestation Profile and Behaviour

The term Autism Spectrum Condition is defined as a spectrum of presentations and not as a continuum of severity (Harris, 2016). The phrase autism literally means “self-ism” and originates from the Greek word *autos* (Baron-Cohen, 2005; Elmore *et al*, 2016). It is a neurodevelopmental disorder (NDD) and is characterised by the ‘triad of impairments’ with onset early in life. The idea that the symptoms of ASC fall along a continuum or spectrum has long been in existence (Ousley & Cermak, 2014). Research (Leekam *et al*, 2002; Mordre *et al*, 2012; Lord *et al*, 2012; de Giambattista *et al*, 2019) suggests that there is an overlap between Asperger’s syndrome, PDD-NOS and “high functioning autism”, that these subgroups are not identified reliably across clinicians and that the outcomes for Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS) and autism are indistinguishable.

Figure 8.1 - Triad of Impairments



(Amin, 2018)

Brain growth curves have indicated that there is brain overgrowth in both young males and females with ASC followed by slowed growth during later childhood when the normal brain catches up with autistic brain volumes (Sample, 2017). Thereafter brain volumes decrease in size in ASC at a faster rate than normal, so that by later adulthood the brain is slightly smaller than average (Esser *et al*, 2010; Courchesne *et al*, 2011; Hazlett *et al*, 2017). It is generally accepted that the time of an ASC diagnosis may be much later than the time of onset of the disorder. The time it takes for parents to acknowledge that their child is exhibiting the early signs of abnormal development or symptoms of ASC and obtaining a diagnosis may be lengthy (Lauritsen, 2013).

As has been made clear throughout the last two chapters School B did not have any children with a diagnosis of ASC on their roll therefore most of the data that will be presented is related to School B. The characteristics that encapsulate the triad of impairments were very much in evidence at every stage of the data collection process at School B (see Example 5.12-1: Case Study – School B).

The proposed revision of autism spectrum disorders in the Diagnostic and Statistical Manual 5th Edition represents a shift from the Diagnostic and Statistical Manual of Mental Disorders - Fourth Edition, Text Revision (DSM-IV-TR) (Gibbs *et al*, 2012). Released in May 2013, changes included major alterations in criteria for developmental disorders in particular the DSM IV criteria for Pervasive Developmental Disorder (PDD). Key among these changes were: the creation of a new diagnostic category of ASC that would be adapted to the individual's clinical presentation by inclusion of clinical specifiers and associated features;

changing the three domain criteria for PDD which included social reciprocity, communication and Restrictive and Repetitive Behaviours (RRB) to two ASC domain criteria composed of social communication/interaction and RRB; and narrowing the parameters of “age of onset” from “age three” to “early childhood”. Robert (see Example 5.12-1) displayed both of these new criteria. His RRB was demonstrated in his continual use of a “V” sign (see Example 5.3-3) which acted as a point of focus for him. However, “If you meet one person with autism, you’ve met one person with autism,” (Silberman, 2015 p.14); this is a quote I have come across on numerous occasions during this research project. It reflects the diverse nature of the condition. School B educates a population of children with a variety of additional and complex needs. Therefore, there were plenty of examples of how ASC as a condition manifests itself in each stage of the study (see Examples 5.12-2 and 5.12-3: Case Study – School B).

As mentioned above, ASC is characterised by deficits in social communication, social interactions and social imagination. For any child, the first phase of play consists of manipulating toys, however children with autism display atypical features, such as limiting their play to a small selection of toys or an isolated part of a toy (Mensink, 2010). They can become preoccupied for long periods with one object or they will choose toys which will help them to develop their senses including taste, touch, and smell. They will also play with normal everyday objects such as pots and pans, paper and pens and other household items – see Example 5.12-4 (ibid). School B educates a population of children with a variety of additional and complex needs. Therefore, there were plenty of examples of how ASC as a condition manifests itself in each stage of the study, and of how staff dealt with these. Example 5.12-5 above is one such instance. As you can gather, the situation occurred during lunchtime. Familiarisation with food involves gradually introducing toddlers to table food of the adult diet. The child referred to in the example above [Tom] is learning to self-feed (Grogan, 2012). He is putting his hands in his food and bringing them to his mouth. In doing so, he is learning that he will get some food. The above description, in typical developmental parameters, is a precursor to children developing the ability to spoon feed themselves (ibid). However, given the severity of SEND at School B, at that point it was unclear how long it would take for Tom to transition to being able to feed himself with a spoon (or more advanced cutlery) therefore as can be seen from 5.12-5 the welfare assistant was ensuring that he ate his meal. Another example of staff dealing with ASC manifestation can be seen in Example 5.12-4, where they simply follow the child’s lead and enter their world (Hess, 2013).

Behaviour and autism manifestation profile are closely linked. Anxiety is one such trait that can cause problems for C&YP with autism. According to Rodgers *et al* (2012) children with high anxiety are more likely to display repetitive behaviours. Challenging behaviour discourse is framed by the dynamics of a relation; 'it', that is, the behaviour or the person displaying it, becomes challenging when 'it' exerts itself on an other; this exertion is often itself framed within embodied emotional terms: causing harm, distress, hurting another, shouting, hitting, losing control (Pluquaillec, 2018). Within such a discourse, behaviour is a manifestation of an emotional state, most commonly understood as an excess of a negative (undesirable) emotion; distress, anxiety, confusion, frustration or anger. Behaviour, in these terms, is an externalising of an internal emotional state (*ibid*). However, what would be seen in a mainstream School Bs adverse behaviour that needed to be corrected or sanctioned, was understood at School B to be the child's way of expressing a particular need, as seen in Example 5.12-7.

Another factor that may affect individuals with autism is sleep deprivation. Individuals diagnosed with autism often have reduced levels of serotonin in their brain, which in turn causes late sleep onset, discontinuity in sleep organisation, and early morning awakening (Canitano, 2007). This can have a detrimental effect on their behaviour and subsequent ability to engage in the learning process. On one occasion, the teachers at School B were made aware via the home-school diary that Tom (another child) had not slept very well and as a result had missed his breakfast. Therefore, when he displayed adverse behaviour, the TAs realised that he was hungry and offered him a cereal bar. On another occasion, a child (Alex) fell asleep in the afternoon while watching Postman Pat, which he had requested during free time. After trying to gain his attention and realising that he was asleep, the teachers left him, assuming he would wake up by himself. Therefore, at School B, teaching is more organic than it is in either a mainstream environment or at School B, as demonstrated by these instances. As stated in section 6.2, p.160, teachers require sophisticated understandings of development, learning and teaching in order to be intentional and responsive. Subclinical absences, for instance, can be mistaken for other childhood behaviours such as failing to respond to one's name or participating in an activity that has been suggested by someone else (Tuchman & Rapin, 2002; Levisohn, 2007). In many cases, the use of early intervention techniques can adequately support a child (Gore *et al*, 2014; Jellett *et al*, 2015) and reduce or negate the incidence of adverse behaviour.

During the interviews, when I had the opportunity to ask about the impact of their play-based approach on the boys' other areas of development, I also asked a more specific question about the adverse behaviour that can come about as a result of ASC and what the teachers It can be seen from the examples above that the responsive nature of the School B

curriculum has allowed the staff to adapt the learning process to suit the needs of the children, as detailed in the statement made by Hannah in Example 5.3-1, p.128.

As has been indicated earlier in this section there were no children with ASC attending the Montessori nursery, however, Montessori environments are designed in such a way as to facilitate calm behaviour and better engagement in the learning process, as discussed in Section 6.1.3 p.151. However, due to the Montessori method being adapted over the years to take account of EYFS – see Section 7.5, p.200 – the environment can be very busy as at School B, meaning that at times individual children could become upset or disruptive.

As examples show, when the children displayed adverse behaviours practitioners were able to intervene and engage them in other activities. Therefore, there is a similarity between School A and School B in the fact that staff in both settings used similar distraction techniques to calm a child down and minimise adverse behaviour. Further, School B also used other techniques, as shown throughout these chapters, to manage the children's behaviour.

8.2 Sensory Processing and Self-Regulation

Whilst the main clinical deficits (discussed earlier in this section) are referred to as the “triad of impairments” and as such are the established set of symptoms that clinicians will look for when diagnosing ASC, it is important to remember that there are less obvious signs and symptoms that a child may display if they have ASC. Research has also shown that individuals with autism have a defective orientating response resulting in sounds reaching one ear before the other. As such, this could explain the speech defects that are associated with ASC, and in turn the reasons why individuals with ASC have problems holding a conversation with their peers (Grandin, 1992). Individuals with ASC also have auditory problems - they have no filter on their auditory sense, meaning that they can become overwhelmed and distressed. A child with ASC may display said emotions by covering his/her ears when in noisy or crowded environments. To an outsider this can give the impression of an excessive startle reaction.

In her paper, Grandin (1992) also discusses the fact that some children may experience tactile problems, involving a severe adverse reaction to having certain materials next to their skin. However, some forms of tactile sensitivity can be desensitised by placing different materials against the skin. C&YP with ASC can also have an adverse reaction to close contact with those around them but crave deep pressure stimulation (ibid). Studies undertaken by Edelson *et al* (1999) and Mullen *et al* (2008) appear to corroborate Grandin's findings published in 1992. Mullen *et al*'s (2008) paper also found that deep pressure

stimulation was beneficial for individuals diagnosed with conditions associated with ASC such as Pervasive Development Disorder (PDD) and Attention Deficit Hyperactivity Disorder (ADHD), as it can reduce anxiety and arousal as well as increase their ability to focus on fine motor tasks. Everyday objects that can be found in the home, such as a blanket, can be used to apply deep pressure stimulation, as seen in example 5.13-3 (Case Study – School B). However, in contrast to Edelson *et al* (1999) and Mullen *et al* (2008) more recent studies have found that weighted vests do not reduce stereotypical motoric behaviours – therefore if this treatment is recommended a functional analysis of the targeted behaviour should occur, desired outcomes should be defined, and outcomes should be systematically analysed (Hodgetts *et al*, 2011; Watkins & Sparling, 2014).

As the aforementioned paragraphs indicate, despite wide recognition of sensory processing problems and their effects on life participation for individuals with ASC, sensory interventions have been inconsistently defined and refer to widely varied practices (Case-Smith *et al*, 2015). As found in the literature and in practice, sensory interventions use a variety of sensory modalities (e.g. vestibular, somatosensory, and auditory), target behaviours that may or may not be associated with sensory processing disorder, involve a continuum of passive to active child participation, and are applied in different contexts (*ibid*). These interventions arise from different conceptualisations about sensory integration and sensory processing as neurological and physiological functions that influence behaviour. Furthermore, they use a variety of methods (e.g. sensory integration therapy (SIT) (Ayres, 1972 cited in Watling & Dietz, 2007, p.575), massage (Field *et al*, 1997; Nalini and Chitra, 2016) and auditory integration training (Bettison, 1996; Al-Ayadhi *et al*, 2019). This variation in sensory interventions combined with inconsistent use of terminology has resulted in considerable confusion for parents, practitioners, and researchers (Watling & Hauer, 2015).

Sensory processing issues were very much in evidence when I went into School B, but I was also surprised at how quickly the children calmed down when the teachers and support staff intervened and engaged them in activities that they knew would help in this regard. As is shown below all children were engaged in sensory integration activities at the beginning of, and throughout the school day (see Examples 5.13-4 and 5.13-5: Case Study – School B). Sensory integration could occur at any time and involve materials that were not necessarily available in the school on a regular basis (see Example 5.13-6: Case Study – School B). Whilst I was able to witness for myself how engaging the boys in sensory integration activities made a significant difference to how the boys behaved on a daily basis, the importance of such activities on the children's overall development and academic achievement was strengthened when I was analysing my data (see Example 5.13-7: Case Study – School B). Within their questionnaires Carol and Hannah also make reference to

the fact that the majority of classrooms are not equipped to support the sensory needs of a child with ASC (see Examples 5.13-8 and 5.13-9: Case Study – School B). As is clear from the examples given in this section sensory overload is very much a problem for children with ASC and settings that advocate a play-based approach appear to negate these issues by being more responsive to the individual needs of each child. Furthermore, the sensory integration activities helped the children to self-regulate which in turn improved their ability to engage with the world around them (See Examples 5.13-10, 5.13-11 and 5.13-12: Case Study – School B).

This section has presented and discussed data in relation to the range of sensory processing issues that children with ASC can experience on a daily basis. The teachers and support staff at School B deliver a curriculum that is responsive to each individual – see Section 8.3. As a result of this, combined with a greater awareness of the effectiveness of alternative approaches, they are able to significantly reduce or even negate the above issues. Both the School A and School B learning environments were spacious, however due to the small class cohorts in School B there was a lot of space available, including outdoor space, so that if children were having a melt-down, staff could intervene, move them away from other children (so as not to cause further meltdowns) and distract them. Obviously, all examples are from School B. Nevertheless, in School B I could see that the materials and resources would be effective in calming a child down because they would be fully focused on the task in hand.

8.3 Self-Awareness

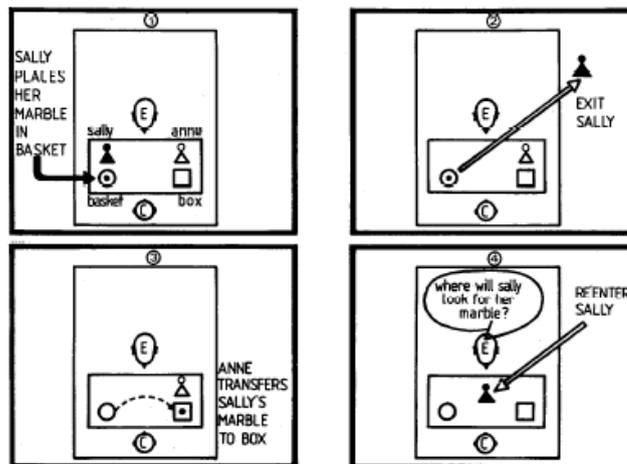
Sensory processing and self-regulation are linked to a child's self-awareness. In this last section I will examine how children with ASC develop self-awareness, and its impact on their ability to engage with the world around them.

Baron-Cohen (2008:57) defines Theory of Mind (ToM) as the ability to put oneself into somebody else's shoes, to imagine their thoughts and feelings so as to be able make sense of and predict their behaviour. It is in this sense, according to Baron-Cohen, that ToM can be thought of as a theory: it explains and predicts others' behaviour. People with autism or Asperger's syndrome may be puzzled by other people's actions or anxious because other people's behaviour seems unpredictable, precisely because they cannot use a ToM to interpret or anticipate what others are doing or are going to do (ibid).

In a study undertaken by Baron-Cohen *et al* in 1985, the hypothesis that children diagnosed with ASC lacked "theory of mind" was tested. To do this the researchers set up a scenario whereby there were two dolls, Sally and Anne, and a marble. Each doll has a basket and

the first doll places the marble in her basket; she then places the basket on the floor and leaves the scenario for a short time. When she returns the second doll has hidden the marble in another location.

Figure 8.2 - Procedure for the Theory of Mind Test



(Baron-Cohen *et al*, 1985)

If the children point to the new location, then they will pass the test. However, all sixteen children that were involved in this experiment pointed to the original location of the marble, thus failing the test. The failure to correctly identify where the marble had been hidden, Baron-Cohen believed, showed a cognitive deficit which could not be attributed to intellectual capacity and had the potential to explain why children on the autism spectrum do not engage in pretend play or indeed socialise with their peers (Baron-Cohen *et al*, 1985).

In contrast to Baron-Cohen's findings, Elmore *et al* (2016) suggested that due to the heterogeneous nature of the condition, self-awareness can be a unique experience for each person on the autism spectrum. Taking Elmore's view into consideration, it was obvious to me that individual children at School B had made noticeable progress in developing their theory of mind and self-awareness. Both self-awareness and self-regulation are shown in Example 5.13-11 Part B and Example 5.14-1 (Case Study – School B).

The absence of a theory of mind in autism has been discussed in several papers over the intervening years between the 1980s and the noughties. Two such examples include Tager-Flusberg (2007) and Moran *et al* (2011). Tager-Flusberg's findings mirrored those of the Baron-Cohen *et al* (1985) paper in that both studies suggested that children with autism have problems with executive functioning - more specifically in planning flexibility and working memory as well as inhibitory control (see Example 5.14-2) (Ozonoff *et al*, 2004

cited in Tager-Flusberg, 2007 p.312). Moran *et al* (2011) suggested that children with ASC develop their ToM more slowly than their neuro-typical peers do and are unable to “infer the contents of other people’s minds including beliefs and intentions”. Both the Baron-Cohen *et al* and Tager-Flusberg studies have shown that children with ASC experience and encounter various issues on a daily basis. Researchers (Tager-Flusberg, 2007; Brooks and Meltzoff, 2015) point out that language is important for the development of a consciously mediated explicit theory of mind. Some more able children with autism develop a linguistically mediated theory of mind that provides them with the facility to reason correctly about the social world, but their theory of mind is not based on the same foundational social insights that are provided by a domain-specific theory-of-mind mechanism (Tager-Flusberg, 2007). Many researchers believe that there *are* impairments in the psychological (but not physical) self in individuals with ASC (Williams, 2010), such as theory of mind deficits due to social and communicative impairments. On the other hand, some researchers argue that individuals with ASC have *selective* rather than *global* impairments in the self (Zahavi, 2010). In other words, the impairment usually lies in a specific aspect of functioning in individuals with ASC (Huang *et al*, 2017) - see Example 5.14-1 and 5.14-3 in Case Study – School B). As can be seen in section 8.2 and this section, managing challenging behaviour is not solely carried out by the staff; it is a process in which the children themselves participate. As the children grow in self-awareness, they become more able to self-regulate (see Example 5.13-11 Part B). When this happens, they themselves contribute to the management of their own adverse behaviour.

In order to develop the self, memory is required, and these two entities are bi-directionally related (Lind, 2010). On the one hand the ability to encode and retrieve personally significant memories arguably presupposes a sense of self (Howe and Courage, 1993 cited in Lind, 2010 p.430). On the other hand one’s sense of self is composed of one’s memories of past personal experiences as well as knowledge of one’s traits and other personally relevant information (Conway and Pleydell-Pearce, 2000; Wilson and Ross, 2003; both cited in Lind, 2010 p.430). Episodic memories are memories of personally experienced events that occurred in a particular place at a particular time, and are related to auto-noetic (self-knowing) awareness. By contrast, semantic memories are memories of timeless, decontextualised facts, and are characterised by noetic (knowing) awareness (Wheeler *et al*, 1997). Example 5.14-4 shows an instance of episodic memory in an individual child at School B.

A human being with a normal capacity for learning can perform many learned actions automatically without conscious control (Frith & Happé, 1999). The individual would run into trouble only in novel situations when action schemata are in conflict and in this case might

act catastrophically for instance by freezing or by violent outbursts. If low-functioning individuals with autism are unable to reflect on their inner experiences, then they would be unable to develop over time the richly connected semantic and experiential associations which normally pervade our reflective consciousness (ibid). Therefore, it stands to reason that for children with ASC self-awareness and knowledge are not something that can simply be taught through direct instruction, instead students acquire this knowledge by interacting with their environment and the people around them (Wehmeyer *et al*, 2010; Huang *et al*, 2017). Yet again this was very much evident in School B as you will see from the examples that have been given throughout this section.

CHAPTER NINE - CONCLUSIONS AND RECOMMENDATIONS

When I began writing this thesis, I wanted to find out whether play-based approaches were more suitable for children with and without SEND in terms of their overall learning and development. In order to do this, I devised the following research questions:

- 1) What are the main similarities and differences between the Montessori approach and that of a special school that has implemented a play-based approach?
- 2) How do these approaches impact on the learning and development of children with and without SEND?

I will now present the conclusions and recommendations from this study.

9.1 Conclusions Arising from this Thesis

As has been made clear throughout this thesis the play-based approaches examined permit students to engage in purposeful activities that allow for the simulation of experiences they are likely to encounter (Ali *et al*, 2018). According to Ofsted (2015) play provides the natural, imaginative and motivating contexts for children to learn about themselves, one another and the world around them. In play educators often end up switching between instructing directly and stepping into the background. This is why equipping educators and caregivers with the knowledge and skills necessary to foster children's playful learning is needed. Moreover, as pointed out by Lerkkanen *et al* (2016), a high level of child-centered teaching practices is beneficial for children's academic skill development, while teacher-directed approaches were found to be negatively associated with the same. However, educational institutions are highly influenced by the culture the children are developing within (Ali *et al*, 2018). These influences include, but are not limited to, cultural norms and biases, societal structures and national changes. Each influence is carried into the classroom to create a unique blend within the child's academic setting (ibid) and this applies to children with or without SEND.

In view of the changing environment of the UK, educational assessment within mainstream schools and the increasing number of pupils diagnosed with SEND associated with autism, it is important to consider how well the proposed strategies meet the needs of these pupils and what considerations need to be made during strategy development and implementation (Wilkinson & Twist, 2010). In line with education policy, children with SEND are educated in mainstream classrooms, although their educational attainment is somewhat poorer than their neuro-typical peers (Roberts & Simpson, 2016). This could be for several reasons, the

most likely of which being that the child/children are working at any educational level including National Curriculum (NC) and P-Scales, thus resulting in inconsistent attainment as well as an atypical or uneven learner profile (Carpenter *et al*, 2011). McIntosh (2015) suggests that “too often levels become viewed as thresholds and teaching becomes focused on getting pupils across the next threshold instead of ensuring that they are secure in the knowledge and understanding defined in the programmes of study”.

The fact that teachers have reverted to teacher-centred practices is of no surprise to me given that in recent times successive governments have focused on the achievement gap in education. In 2013, Schools Minister David Laws (Laws, 2013) delivered a speech which stated that Britain had one of the widest achievement gaps in the world. Therefore, one of the key objectives of the Coalition government was ‘to dramatically narrow that gap’. As a result, that government introduced the ‘Pupil Premium’ which allocated money to schools with the most disadvantaged pupils. However, there were still two problems that schools needed to confront. Firstly, too many children were failing to reach an acceptable standard at Key Stage 2 – with four in ten failing to achieve basic levels in English and Maths. Thus, if pupils are to achieve success at Key Stage Four and Five schools needs to ensure that children leave primary school properly prepared for secondary school (*ibid*). The former situation has not improved. In their 2018 annual report the Education Policy Institute (EPI) stated pupils with SEND have significantly lower attainment than their peers (Hutchinson *et al*, 2018). This is particularly the case for those with an EHCP or statement. At the age of five children with an EHCP or statement begin school on average 15 months behind those without SEND and rather than reducing over the course of schooling, by the end of secondary school the gap currently stands at over three years (*ibid*).

The introduction of the new NC in 2014 meant that the old levels were replaced with a set of standards for both English and Mathematics that each pupil is expected to master by the end of each Key Stage. However, even with these new standards a school may not enter a pupil until they are deemed ready from an academic linguistic and/or emotional perspective. Until then it is the responsibility of the school to demonstrate that they are making every effort to minimise the negative impact of learning barriers on a pupil’s academic progress (Aird, 2016). As has already been stated, individuals with ASC often struggle with social interaction, social communication and social imagination. In placing children with ASC in mainstream school environments, it is hoped that they are able to learn the skills required to interact appropriately with their peers, and also their peers can become more accepting of children who are “different” (Humphrey & Symes, 2011). According to Ashburner *et al* (2010) intellectual capacities of students with Asperger’s syndrome and high-functioning autism are usually within the average range and, as such, the challenging behaviours of

these individuals are misunderstood (The Students of Limpsfield Grange School & Martin, 2017). Whilst this type of behaviour is of particular concern at a micro-management level with Local Authorities (LAs), it is thought that there could be several reasons why such behaviour is displayed on a regular basis by C&YP with ASC. One viable reason is that the contemporary school curriculum embraces a wide range of subjects of such a diverse nature, and taught within a wide range of settings, meaning that any sudden changes to routine could lead to a child becoming distressed and displaying negative behaviours (ibid).

According to Hodkinson and Burch (2019), the developments and regressions in SEND policy are chaotically sketched detailing a journey that has no definitive beginning or end. A recent article published in the Guardian suggests that children with SEND are being failed by the system as councils across England are failing to meet their legal obligations (Weale & McIntyre, 2018). This despite the Education Secretary, in December 2018, pledging an extra £250 million over and above the £6 billion already in place so that local councils can ensure that children with SEND are provided with the most appropriate support. Families will also benefit from an extra £100 million investment which the Education Secretary states will be used to create more specialist places in mainstream schools, colleges and specialist schools giving more C&YP access to a good school or college place that meets their individual needs (The Department for Education and the Right Hon Damian Hinds MP, 2018). I believe that the government needs to look more carefully at the approaches that are actually effective in educating children with and without SEND, so that the investments promised are properly targeted.

The pedagogy that underpins the two play-based approaches discussed in this thesis puts the focus firmly back on the wellbeing of the child and how having a happy child can have a positive impact on their overall learning and development. These approaches can be seen to incorporate the principles of both Maslow and Bruner. For example, in line with Bruner's Spiral Curriculum, both approaches build on a child's prior knowledge of a resource or activity in order to extend their overall learning of the associated concepts, and thus facilitate the process of moving the concrete to abstract. Furthermore, Maslow's hierarchy of needs allows children to develop the nuanced skills (such as transcendence) needed to be able to navigate through life successfully.

The centrality of positive peer-teacher relationships within play-based approaches was also evident and stands in marked contrast to mainstream schools, where teachers often do not have the time to facilitate such relationships with children, *let alone* children with SEND, due to the pressures of meeting the demands of the NC. Linked to this, of the two settings, School A encouraged peer-peer interactions whereas School B did not. I consider this to be

a key limitation of the Montessori approach given that studies in the recent past - Lillard (2013) and Lynch (2015) - recognise the Montessori method as a play-based approach and that play is one of the key ways for children to develop and facilitate social interaction. Another key element of the EYFS is imaginative play but Montessori herself was not an advocate of this. However, her theories and practices have had to be adapted to take account of changes in our understanding of childhood (Lillard & Taggart, 2019) and the requirements of the EYFS. Hence, School B (a supplemented Montessori setting) had an imaginative play corner which would not have been present in a traditional Montessori setting. It was not possible to assess to what extent the children at School B engaged in imaginative play, as they were unable to communicate to a level which would have made such an assessment possible. Further, both settings were effective in teaching concepts and encouraging turn-taking and sharing.

There would have been some degree of interchangeability between School A and a traditional Montessori environment, but not between School A (a supplemented Montessori environment) and School B (a supplemented Montessori environment) with respect to pedagogical approaches and resources. In other words, a number of the resources found in either setting could have been utilised in the other. As an example, I believe that the intensive interaction used in School B to facilitate children's concentration and alleviate adverse behaviours could be used in a traditional Montessori setting with children with a diagnosis of SEND. It is difficult to tell how successful they would be in a supplemented Montessori setting such as School B because the nature of the supplemented environment would be too overwhelming for children with, for example, ASC. When I undertook data collection at School B I was able to see for myself how resources that, for non-disabled children, are just toys (although the majority of these do have educational benefits) are utilised by teachers and support staff to facilitate the children's overall engagement with learning and the world around them as well as their overall development. In this chapter I have demonstrated the impact that alternative educational methods can have on the learning and development of children with SEND. As mentioned at the beginning of the chapter, most of the data presented relates to School B as it specifically discusses the impact of their play-based approach on children with SEND, specifically ASC.

Nevertheless, when conducting my data collection and analysis, I identified the following similarities and differences between the two settings:

- Staff in both settings were aware of the needs of each individual child because they worked with them individually; however the curriculum was not individualised at School A as it was at School B.

- As mentioned at the end of Section 6.2 (p.185), when the children displayed adverse behaviours in both settings practitioners were able to intervene and engage them in other activities.
- The staff in both settings used similar distraction techniques to calm a child down and minimise adverse behaviour. Further, School B also used other techniques, as shown throughout these chapters, to manage the children's behaviour, due to their SEND.

The School B Curriculum was developed as a result of the School Becoming aware that a traditional approach to teaching and learning would not be effective when teaching children with ASC. It is obvious from the data that the curriculum that they have devised fulfils the pupil-centered principles detailed in their Vision and Mission statement:

- Education should meet individual needs
- The holistic development of our children and young people will be nurtured
- We will make a positive difference to the lives of children and their families
- Planning and decision making will be open, honest, transparent and person-centred
- Pupils will be enabled to reach their full potential within the context of their individual needs
- Pupils will be actively encouraged to exercise control over their lives
- All children and young adults will be treated with dignity and all contributions are celebrated
- Individual differences will be recognised, respected and celebrated and equality of opportunities recognised

I close by referring back to a quote from Carol, who had been a special needs adviser in mainstream schools before coming to School B:

“I think mainly because we started in September with a more traditional approach and we quickly realised that it wasn't going to work for the children and ... so we decluttered the classroom, we made everything in there appropriate and we started the sensory integration and intensive interaction and the way those boys have blossomed it's just wonderful...

The way I look at it is in mainstream I was trying to fit a square peg into a round hole. At School B we make the hole round and we say how big is it and deep would you like it. We make the curriculum fit the child rather than trying to get the child to fit into a box.”

9.2 Similarities and Differences between the Two Play Based Approaches

My conclusions suggest that there are as many differences as there are similarities between the two play-based approaches, but the differences relate to the School B children's specific SEND and in many cases are subtle. Both environments were adapted to meet the needs of their cohort of children in terms of space, layout, resources, class sizes and staffing levels. Bruner's Spiral Curriculum and Maslow's Revised Hierarchy of Needs were both evident in both settings when examining how staff furthered the children's learning of particular concepts whilst taking a holistic approach to their development. In addition, the two approaches permit students to engage in purposeful activities that allow for the simulation and/or reality of experiences they are likely to encounter.

Although the two approaches were based on the same child-centered principles, School B has had to adapt its approach to take into account the government-defined EYFS requirements, whereas elements of the School B curriculum were based on the traditional Montessori approach even though this was not explicitly stated or perhaps even realised. For example, the use of resources in both environments was effective in moving the children's learning forward from concrete to abstract concepts. Home-school communication was a key component of both settings and had a positive effect on the development and learning of the children. Overall, the two play-based approaches had a positive impact upon the learning and development of children.

9.3 Impact on the Education of Children with and without SEND

In relation to Research Question 2, my conclusions, based on the evidence presented in this thesis, are that play-based approaches can be highly effective in facilitating children's overall learning and development. They allow children to work at their own pace and not feel pressured to achieve learning that is beyond their capability to grasp at any particular stage. Therefore, it can be deduced that this will result in children being happier and less stressed, in line with Maria Montessori's founding principles. In addition, based on the evidence presented, including the views of staff who have worked in both mainstream and School B, play-based approaches are better for children with SEND, specifically ASC, as they can be personalised to take account of individual needs. In this context, the high staff:child ratio was necessary to ensure that each child could access the individual curriculum appropriate to their need. I conclude that play-based approaches need to be embedded as a primary pedagogical approach in the education of children. The majority of Montessori nurseries in Britain (as well as worldwide) are set up as private endeavours and thus are beyond the financial means of the average family. Although school mission statements and visions may promote play-based approaches, there needs to be a concerted effort to ensure that these are implemented.

9.4 Reflections on this Thesis

Prior to commencing this piece of research, I undertook a search of the literature via Google Scholar using the search term “Autism Spectrum Condition and the Early Years”; approximately 132,000 results were generated making reference to this particular topic in one way or another. In contrast when I entered the search term “Autism Spectrum Condition and Montessori” approximately 992 results were generated, indicating that there is a significant gap in educational research regarding the effectiveness of alternative education approaches for children with SEND, in particular, those which have been developed using a play-based ethos such as Maria Montessori’s in helping children with Autism Spectrum Condition (ASC) to achieve their full potential in terms of learning and their overall development. Of those 992 search results, only a select few actually referred to Montessori in the title and most of the papers that had Montessori in the title had been published by individuals who work on behalf of organisations that have an interest in the work of Maria Montessori or the organisations themselves.

It was when undertaking this search that I came to realise that there was a significant difference in the choices available to parents when it comes to choosing the type of early-years setting they want their child to attend. This is evident when looking at the map in section 1.10 (p28), mentioned earlier. There are fewer than 200 Montessori schools in the UK compared with thousands internationally. This again indicates a lack of awareness of the Montessori approach in the U.K. especially as internationally the Montessori approach can be implemented up to the age of 19. Not only is the North/South divide evident in terms of alternative early-years education, it is also evident in terms of the mainstream education system both in terms of the type and quality of education available (Jopling, 2019) therefore, as with early years provision there is less parental choice in the north. It became clear to me when undertaking initial research for this project and writing the first two chapters (Context of Study and Review of the Literature) of this thesis that whilst there is a plethora of research advocating play-based approaches for children with SEND within an international context there was a dearth of research that examined the value of such approaches within a British context. This only strengthened my belief that this type of approach needed to be investigated further in order to make an informed assessment of whether these approaches would indeed be a more suitable approach to educating children with SEND compared to the top-down didactic approach that is advocated by the NC. Although successive UK governments have produced several papers and reports as to the benefits of play within the education system for children, my research has produced conclusive evidence of the impact of play-based approaches on the overall learning and development of children with and without SEND. Therefore, I hope that this thesis will pave

the way for the implementation of play-based approaches within the education system in the UK.

One limitation of this study was the geographical range of the nurseries open to me for research. As explained in Chapter Three of this thesis I have a disability which restricted my ability to travel long distances and as such I had to limit my search for potential research sites to the Liverpool/Merseyside area. As mentioned in Section 1.10 (pp.22-23), there are fewer Montessori nurseries in the north than in the south, and I was only able to identify seven in the northwest. Of those seven, only School B agreed to participate. The second limitation is the fact that I was not able to study children with SEND in mainstream or Montessori nurseries, which would have broadened the scope of this thesis. None of the Montessori nurseries I contacted had children with SEND. As a result I was not able to make a direct comparison between the two schools in terms of their target cohort. My original idea for the research was to compare the effectiveness of play-based approaches with that of the NC in helping children to achieve their full potential in terms of learning and overall development. In the end I was unable to undertake observations in any of the mainstream primary schools, so again this limited the scope of my research. My research was also limited to one pre-school group in each setting, partly due to physical access difficulties for me. This limited the range of activities on which I could collect data. The time for collecting data for this research was also curtailed because the process of finding willing research sites and gaining permission for access took a considerable amount of time. I will indicate how the limitations of this study can be addressed in my recommendations for further study below.

In recent times the U.K. government has implemented a strategy so called 'The Northern Powerhouse' with the hope of reducing regional disparities. By bringing together the cities in the North to create a functional economy, it is anticipated that they will form an agglomeration with the scale to counterbalance London (Lee, 2017). Whilst government rhetoric focuses on what the strategy would mean for health and policing (Nurse, 2015), what it would mean for education is somewhat lacking, this despite knowing the importance of education for building a stronger economy. According to Clifton *et al* (2016) in London 59 percent of children who are eligible for free school meals achieve a good level of development when they complete Reception class at age five, whilst in the North of England only 49 percent of similar pupils do so. What is more, the 'early years gap' between children from poorer and wealthier homes is almost twice as large in the North as it is in London, and given that there is a strong correlation between early education and outcomes later in life any efforts to tackle this must start before children reach School Bge (*ibid*). Furthermore, schools in the North are allocated far fewer resources than those in London, with primary

schools in the North receiving £4,900 which on average amounts to £900 less than those in London. The resource gap widens further when taking into consideration secondary schools, with those in the North receiving £5,700 which equates to £1,300 less than in London.

The 'early years gap' that Clifton *et al* (2016) refer to in their paper is discussed in more detail by Lewis and West (2017). In their paper the authors discuss how the changes in government administrations since 2010 have impacted government rhetoric on employment and more widely the way in which Early Childhood Education and Care is now funded and the quality of said provision. The quality of provision tends to conflict with ensuring a rapid expansion of places and making provision more affordable within a market system, as well as highlighting the tension between the needs of employed parents and their children. Childcare provision had been subject to regulation; however, with the election of the Coalition government in 2010, the removal of such stringent regulation became a priority.

Consequently, the inspection regime that providers had previously been subjected to was relaxed meaning that childminders were no longer expected to gain as many qualifications as those who worked in private settings. Also, the inspection standards were relaxed (Lewis & West, 2018). Furthermore, the powers of LAs were curtailed (Local Government Association, 2014) meaning that they were no longer permitted to use their own assessments or standards when deciding which early-years providers received funding - Ofsted were instead tasked with doing this. The implications of this are two-fold: firstly, councils now make the decision as to how many free early-years places they can fund based on providers' inspection results. Secondly, whereas prior to 2014, a council could effectively close down an early-years provider based on the outcome of their inspection report, now they can only place conditions on a provider based upon any concerns raised (*ibid*). Furthermore, the government sparked debate around staff:child ratios with a key government document setting out the Ministers' wish to relax ratios for all ages of pre-school children and to encourage providers to employ a qualified teacher, all of which was to serve to improve the standard of early childhood education (DFE, 2013), but which inadvertently drove up the cost of childcare (Bourne & Shackleton, 2017). Whilst the government's intentions were honourable in reducing the amount of red-tape that early years providers were to face going forward, the fact that early-years providers are now subject to the same type of inspection as primary and secondary schools has inevitably led to many early-years settings formally assessing children's overall learning and development according to the standards set out in the EYFS (Bradbury, 2019), which has in turn led to children finding the learning process tedious rather than joyful (Haslip & Gullo, 2018).

9.5 Recommendations

Moving forward, taking in to consideration the points made by Clifton, I believe first of all that as well as investing money in the transport system and economy there also needs to be further significant investment in the education system as a whole but especially in the early years as the children of today are the workforce of tomorrow; if the government does not continue to invest in the education of C&YP we risk losing the knowledge and skills society needs in order to innovate and keep moving forward in the 21st century.

Secondly, at present, government investment in education tends to be wide-ranging, rather than focusing on children with SEND (House of Commons Library, 2019). Therefore, the children still appear to be regarded as second-class citizens, unable to make a meaningful contribution to the economy. The fact that the NC is very much focused on academic attainment indicates a lack of understanding or appreciation of the benefits associated with play-based approaches. As it stands the play-based approaches examined in this thesis put children at the centre of the educational process. This has a positive impact on their outlook and their view of themselves. They are given life skills and the confidence to integrate into society, thus allowing them to make a positive contribution. If the government persists in ignoring play-based approaches for children with SEND, they will be doing them a disservice. These children deserve to be valued as much as their non-disabled peers.

Studies have shown that the play experiences of children with ASC develop differently (Kasari *et al*, 2013) and are often skewed by restricted interests and stereotypic and repetitive behaviours (Jung & Sainato, 2013). This means that many children with ASC miss out on opportunities to interact with their peers, to develop appropriate play behaviours and also other critical skills for their overall development; this can in turn exacerbate their disability (Wolfberg & Schuler, 1999). Bearing this in mind, teachers and support staff should help young children with ASC to engage in a meaningful way with play materials and their peers. This allows them to acquire the critical development skills mentioned above via naturally occurring learning opportunities, as, according to Chevallier *et al* (2012), incorporating play into the treatment plan of children with ASC is very important because the play skills of this particular group of children are very different from typically developing children. Kelly (2009) in her thesis states that play and social development for this particular group of children “goes hand in hand – one is the vehicle for the other”.

Thirdly, without schools ring-fencing the money set aside to support the children with SEND it could be amalgamated with other School Budgets and as such be spent on resources which are viewed as being of higher priority – this decision being made by the Senior Management Team (Attwood, 2013). Children with SEND will therefore not receive the

support they should in terms of resources and time. The government, as part of its responsibility to children with SEND, needs to find some way of ensuring that this does not happen. One way to do this would be to ensure adequate funding for schools (Busby, 2018). According to Damian Hinds, Secretary of State for Education, “All schools and colleges – along with central and local government, have a level of responsibility here. It cannot just be left to a few.” (ibid).

Finally, any institution educating children with SEND needs to have adequate levels of staff, and these staff need to be well-trained in identifying children with these needs. They should also have the human and financial resources to ensure that the children are given the appropriate levels of specialist support.

In view of all the above, my recommendations for further study are as follows:

1. The impact of the Montessori approach at primary and secondary levels should be examined.
2. The current study should be widened to more early years settings in order to produce more evidence of the efficacy of play-based approaches. These should include traditional Montessori settings, as opposed to supplemented Montessori settings.
3. A scoping study should be carried out that examines a wider range of SEND as a proven positive outcome may encourage the government to introduce such approaches into the mainstream educational offer.

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APPENDICES

Appendix 1 – The Leuven Scale of Involvement

The Leuven Scale for Well-being (in learning)

It's time for an honest observation of your students

Based on: <http://www.plymouth.gov.uk/documents-ldtoolkitleuven.pdf>

Let's hope teachers are designing and evaluating classroom activities with an aim that every learner might reach a state of **flow**.



Extremely low

The child clearly shows signs of discomfort such as crying or screaming. They may look dejected, sad, frightened or angry. The child does not respond to the environment, avoids contact and is withdrawn. The child may behave aggressively, hurting him/herself or others.



Low

The posture, facial expression and actions indicate that the child does not feel at ease. However, the signals are less explicit than under level 1 or the sense of discomfort is not expressed the whole time.



Moderate

The child has a neutral posture. Facial expression and posture show little or no emotion. There are no signs indicating sadness or pleasure, comfort or discomfort.



High

The child shows obvious signs of satisfaction (as listed under level 5). However, these signals are not constantly present with the same intensity.



Extremely High

The child looks happy and cheerful, smiles, cries out with pleasure. They may be lively and full of energy. Actions can be spontaneous and expressive. The child may:

- talk to him/herself,
- play with sounds,
- hum, sing.

The child appears relaxed. The child expresses self-confidence and self-assurance.

By Richard Wells
Twitter: @EduWells
EduWells.com

**Appendix 2 – Observation at
School A (Example 4.1-3)**

When we want to get a tray, what do we do first? You get your mat, well done, get your mat out and place it on the floor... that's it place it on the floor, here that's it place it out oh, the other way, that's it well done, excellent, well done and then you and then you go and choose then what you want to play with L2, that's it you take the tray and take it to your mat. Put your tray on your mat. That's it, that's it well done what about this one as well, take it to your mat, well done right, lets sort it now, let's sort it now, there are lots of different ones in here, lots of different colours can you tell me all the different colours? What colour is this one? Why don't we put them all back in there when we have finished, blue, what's the other colours? What's that one? Well done.. yellow what other colours can we find? Pink, well done, what else, well done green, that's it, well done that is red well done, orange well done excellent, red well done, you have got a few there what colours have you got there? Black, well done, purple, well done, black well done, blue well done, 21- put them in there, yeah, in there — well done, green, put the green in put the green one in, put the green one in that's it 1.2 well done. Now we can sort the buttons out we can sort the buttons out into colours and sizes can't we? Put them in there L good boy and then we can sort them into colour and size can't we? The buttons when we have done these. What col.. .hang on what colours have you got there? You have got... what colours have you got? Say what colours. ...good boy, put it into your pot then, and what's that one? Pink good boy, white, purple, well done and green good boy, you have sorted them into colours. Let's sort the buttons out now they are all different colours and sizes, shall I open them for you? Right, put that one in there, so we are going to tip some of them out onto the carpet and then we can sort them out can't we? Put them into there, ok. That's it so put them in there for me then we can sort them out can't we? We can sort them into sizes and colours. Shall we tip them out onto the mat and then we can sort them out can't we?

Yeah so let's tip them out onto the mat and let's sort them. ...we will have a pot here and a pot here and a pot here so let's sort them out, shall we sort them out by size first? So where's the big one, can you find a big button, where's the big button? Is that a big one or is that a little one? You find a big one. The (Montessori practitioner) R, speaks to another child; 1.2 is just doing this, but if you want to get a mat and a tray, you can. The big one, put all the big buttons in there and al/ the little buttons, is that a little button? Put al/ the little buttons in there, you put all the little buttons in there for me, you put all the big ones in this one and all the little ones in that one. That's awell done, the littles ones in this one, the little ones in this one, that's it, and the big ones in that one and the little ones in that one, well done 1.2 you are sorting them by size, well done excellent, keep going all the big ones in there and the little ones in that one. Two are the same sizes, they are the same sizes and are the big or little, big and what colour were they then? Well done, excellent. All the big ones in there and the small ones in here. You have put all the small ones in...all the small ones in excellent 1.2, well done. Any more big ones? I can see some more big ones, well done, excellent

what about the little ones? Where do the little ones go? Where do the little ones go? That's it, excellent put the big ones in there....oh hang on, hang on what's that one? Is that a big one? We have to put the big ones in there dont we and the littles in that one. When we have sorted them into size we can put them in the jug yeah. So can we find some more big ones... well done any more little ones? That's a big one, well done. That's big isnt it? That's a big button is there any more small buttons? Two that's right you have two in your hands haven't you? Two big buttons, any more small ones? Any more small ones? Can you see any more small buttons? That's it put it in there in the right..... well done, that goes in that pot, well done, very good at sorting out your sizes of buttons, that is well done, it is any more small ones? Any more small ones can you see any more small ones? Any more small ones? I can see lots....yeah can you see, lots of small ones...that goes in that pot well done 1.2 that's it there's a lot of buttons to sort out 1.2, 1.2, 1.2 you can have your snack in a bit when we have sorted these buttons out. Any more, any more big ones to go in there? Or little ones? That's it what about these ones L2? Sit up 1.2 good boy, what about these ones, these little ones, you put these little ones in the pot. Oh which pot do they go in? Do they go in.....are they the big ones or the little ones? Big ones, you need to put the little ones in there, put the little ones in there.... That's it, any more little ones in there. ...any more little ones? Any more big ones? I can see some big ones to fit in here can you do the big ones, these are big ones.....hang on, hang on...where do the big ones go 1.2?1.2 the big ones go in here dont they? Put the big ones in there. The big ones in there and the little ones in that one, and all the little ones in. ...all the little ones go in there.. ..all the little ones go in there that's it. What about these ones in my hand 21- are they big or little? Little so where...? So they go in that pot, now let me get some more in my hand. Oh no, we are sorting them arent we? We have got all the big ones in there and all the small ones in there, are these big ones? Are these big ones or little ones 1.2? Have you finished 1.2? Right what do we do when we have finished? What do we do, we put them all back in the tub and then we put the mat away, don't we they all go back in there, that's it we put them all back in there, that's it we put them all back in there don't we? Put them back on the tray and the roll the mat up and put it away. Good boy.

APPENDIX 3 – Documentation Related To Ethical Approval

- 3.1 University Ethical Approval Certificate
- 3.2 Letter to Gatekeeper
- 3.3 Letter to Headteacher
- 3.4 Letter to Parent or Guardian
- 3.5 Consent Form for Parent
- 3.6 Consent Form for Gatekeeper
- 3.7 Consent Form for Teachers and Support Staff
- 3.8 Participant Information Sheet for Staff
- 3.9 Participant Information Sheet for Manager
- 3.10 Participant Information Sheet for Parent
- 3.11 Interview Question Protocol
- 3.12a Questionnaire (Shawcross)
- 3.12b Questionnaire (Riverside)

Appendix 3.1 – University Ethical Approval Certificate

Marks, Laura

From: Williams, Mandy
Sent: 20 February 2015 10:18
To: Marks, Laura
Cc: Vickerman, Philip
Subject: Ethical Approval

Dear Laura,

With reference to your application for Ethical approval

15/EHC/072 – Laura Marks, PGR - National Curriculum versus the alternative play based curriculums: Exploring Montessori in the teaching of English language to children with Autism Spectrum Disorder (Phil Vickerman)

Liverpool John Moores University Research Ethics Committee (REC) has reviewed the above application and I am pleased to inform you that ethical approval has been granted and the study can now commence.

Approval is given on the understanding that:

- any adverse reactions/events which take place during the course of the project are reported to the Committee immediately;
- any unforeseen ethical issues arising during the course of the project will be reported to the Committee immediately;
- the LJMU logo is used for all documentation relating to participant recruitment and participation eg poster, information sheets, consent forms, questionnaires. The LJMU logo can be accessed at <http://www.ljmu.ac.uk/corporatecommunications/60486.htm>

Where any substantive amendments are proposed to the protocol or study procedures further ethical approval must be sought.

Applicants should note that where relevant appropriate gatekeeper / management permission must be obtained prior to the study commencing at the study site concerned.

For details on how to report adverse events or request ethical approval of major amendments please refer to the information provided at http://www.ljmu.ac.uk/RGSO/RGSO_Docs/EC8Adverse.pdf

Please note that ethical approval is given for a period of five years from the date granted and therefore the expiry date for this project will be February 2020. An application for extension of approval must be submitted if the project continues after this date.



Mandy Williams, Research Support Officer
(Research Ethics and Governance)
Research and Innovation Services
Kingsway House, Hatton Garden, Liverpool L3 2AJ
t: 01519046467 e: a.f.williams@ljmu.ac.uk

Appendix 3.2 – Letter to Gatekeeper



To: [insert school details]

Dear [insert Headteacher/Manager name],

My name is Laura Marks and I am currently studying for a PhD in Education at the above institution. The research project is entitled "National Curriculum versus the alternative play-based curriculums: Exploring Montessori in the teaching of the English language to children with Autism Spectrum Disorder."

My interest in this particular area of educational research has its roots in past experience of working with children on the autism spectrum and also having attended a nursery where the educational ethos was underpinned by Montessori values.

I am writing to ask whether you would be interested in being part of what I consider to be a very important research project. At present many children on the autism spectrum either attend a mainstream or special School. Both of which make use of the National Curriculum as a guide to assess the educational attainment of children with Special Educational Needs. Some children with specific needs such as those diagnosed with autism spectrum disorder often struggle both academically and in forming meaningful relationships with their peers. Governments past and present have stressed the importance of parental choice when choosing the right school for their child to attend, but parents of children with Special Needs can often struggle to find a school that is prepared to enrol their child – therefore the overall aim of this project is to assess the impact of the Montessori education system on the learning outcomes of all children, particularly those with Special Educational Needs.

If you are interested in taking part in this study please read the enclosed participant information sheet and sign the consent form. If whilst, reading the participant information sheet you have any questions, please do not hesitate to contact me as detailed on the participant information sheet provided.

Yours Sincerely

Laura Marks BA (Hons), M.Res

Appendix 3.3 – Letter to Headteacher



To: [insert school details]

Dear [Insert Name of Headteacher]

My name is Laura Marks and I am studying for a PhD at the above institution. You may have received a few letters from myself in the past few months but the reason for writing to again is because I have Cerebral Palsy and make use of a large power wheelchair when I am at university and because of this I am having great difficulty in finding a school that is willing to assist me and cannot move forward with my research.

The aim of my research project initially, was to investigate the impact of the Montessori educational ethos on children with a diagnosis of Autism Spectrum Condition (ASC) however my research in the past few months has taken a slightly different turn due to the fact that there are very few Montessori nurseries within the local area and I have now expanded my research to include schools. I also primarily wanted to focus on children between the ages of 0-4 however as I go further into the research process I have come to the realisation that the majority of such children will not be diagnosed until the start attending School Bt the age of four. However, due to the difficulties experienced by children that are yet to be diagnosed within the traditional early years sector children with the staff who teach and support children with ASC are starting from the very beginning and therefore children with ASC are still within the Early Years Framework at a later stage than their non-disabled peers.

Thank you for taking time to consider this

Yours Sincerely

Laura Marks BA (Hons), M.Res

Appendix 3.4 – Letter to Parent/Guardian



Dear Parent/Guardian

My name is Laura Marks and I am currently studying for a PhD in Education at the above institution. The research project is entitled “National Curriculum versus the alternative play-based curriculums: Exploring Montessori in the teaching of the English language to children with Autism Spectrum Disorder.

My interest in this particular area of educational research has its roots in past experience of working with children on the autism spectrum and also having attended a nursery where the educational ethos was underpinned by Montessori values.

I am writing to ask whether you would be willing for your child to take part in what I consider to be a very important study as I hope that by completing this research project it will raise parental awareness how alternative educational paradigms such as Montessori can benefit the learning process of all children but particularly those with Special Educational Needs.

If you are happy for your child to take part in this study please read the enclosed participant information sheet and sign the consent form. If whilst reading the participant information sheet you have any questions please do not hesitate to contact me as detailed on the participant information sheet provided.

Yours Faithfully

Laura Marks BA (Hons), M.Res

Appendix 3.5 – Parent Consent Form



LIVERPOOL JOHN MOORES UNIVERSITY

PARENT CONSENT FORM

National Curriculum versus the alternative play based curriculums: Exploring Montessori in the teaching of English language to children with Autism Spectrum Disorder.

Laura Marks Faculty of Education, Health and Community

1. I confirm that I have read and understood the information provided for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily
2. I understand that my child's participation is voluntary and that I am free to withdraw such consent at any time, without giving a reason and that this will not affect my legal rights.
3. I understand that though I may choose to withdraw my child at any time, information I may have already collected during this study will remain anonymous and be stored for use when writing-up researcher's thesis
4.
5. I understand that any personal information collected during the study by the researcher with reference to my child will remain confidential
6. I give consent for the activity logs that the nursery use to assess the overall development of my child to be accessed in a controlled manner and that all information collected will be anonymized and kept confidential

Parent Signature

Date

Name of Researcher

Date

Signature

Note: When completed 1 copy for participant and 1 copy for researcher

Appendix 3.6 – Consent Form for Gatekeepers



LIVERPOOL JOHN MOORES UNIVERSITY MANAGER CONSENT FORM

National Curriculum versus the alternative play based curriculums: Exploring Montessori in the teaching of English language to children with Autism Spectrum Disorder.

Laura Marks Faculty of Education, Health and Community

7. I confirm that I have read and understand the information provided for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily

8. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and that this will not affect my legal rights.

9. I understand that though my employees may choose to withdraw at any time, information they may have already shared during this study will remain anonymous but will remain stored for use when writing-up the researcher's thesis

10. I understand that any personal information collected during the study will remain confidential

11. I agree for employees to complete questionnaires and take part in interviews as outlined in the participant information sheet distributed for this study once informed consent has been obtained from parents/guardians of the children who attend this nursery

Name of Gatekeeper

Date

Signature

Name of Researcher

Date

Signature

Note: When completed 1 copy for participant and 1 copy for researcher

Appendix 3.7 – Teachers and Support Staff Consent Form



LIVERPOOL JOHN MOORES UNIVERSITY CONSENT FORM FOR TEACHERS AND SUPPORT STAFF

National Curriculum versus the alternative play based curriculums: Exploring Montessori in the teaching of English language to children with Autism Spectrum Disorder.

Laura Marks Faculty of Education, Health and Community

1. I confirm that I have read and understood the information provided for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and that this will not affect my legal rights.

3. I understand that though I may choose to withdraw at any time, information I may have already shared during this study will remain anonymous but will remain stored for use when writing-up researcher's thesis

4. I understand that any personal information collected during the study will remain confidential

5. I agree to complete questionnaires and take part in interviews as outlined in the participant information sheet distributed for this study

6. I understand that the interview/focus group will be audio recorded and I am happy to proceed

7. I understand that parts of our conversation may be used verbatim in future publications or presentations but that such quotes will be anonymised.

Name of Participant

Date

Signature

Name of Researcher

Date

Signature

Note: When completed 1 copy for participant and 1 copy for researcher

Appendix 3.8 – Participant Information Sheet for Staff



LIVERPOOL JOHN MOORES UNIVERSITY STAFF PARTICIPANT INFORMATION SHEET

Title of Project *National Curriculum versus the alternative play-based curriculums: Exploring Montessori in the teaching of English language to children with Autism Spectrum Disorder.*

Laura Marks: Faculty of Education, Health and Community

I am a PhD student and you are being invited to take part in this important study. Please read the information given below very carefully and sign the consent form also enclosed if you would like to take part. If you have any questions about the research project after you have read the information that follows, please do not hesitate to contact me using the contact information given at the foot of this form.

1. What is the purpose of the study?

The main purpose of this study is to explore whether alternative play-based curriculums, such as Montessori, are more successful at improving the learning outcomes and aspirations of children diagnosed with Autism Spectrum Disorder, as opposed to the National Curriculum which is the primary resource that teachers refer to when they work within the state education system.

2. Do I have to take part?

As a member of staff you are under no obligation to take part in this study. If however, you are interested in taking part in this research project please make yourself known to the principle researcher and they will give you a participant information sheet which explains the reasons for embarking on this study and what she hopes to achieve through your participation in the research. If, however you initially consent to taking part in this study but decide for whatever reason that you wish to withdraw from the study then the data that has already been gathered will still be used unless the researcher receives a request to the contrary.

3. What will happen to me if I take part?

The researcher who is undertaking this research is planning on carrying out her research in two phases over a four month period. The first phase will involve completing questionnaires. The questionnaires will cover topics such as the overall development of the children in your class with particular focus on those children with a diagnosis of Autism Spectrum Disorder or autistic tendencies, and the perceived differences between the teaching methods employed in mainstream

schools and the teaching methods employed in Montessori nurseries. Once all the questionnaires have been completed and analysed, those individuals who have indicated that they would be willing to be interviewed will be contacted and a time convenient for them will be arranged.

The interview phase of this project will take place after the questionnaires distributed during the first phase of this study have been analysed. The second phase will involve the members of staff who have indicated that they are willing to be interviewed taking part in a 45 minute semi-structured interview. A list of topics to be covered during the interview will be compiled after a detailed analysis of the findings from the first phase of this research project has been completed and will be given to you in advance of the interview. Also, as part of this study I have gained parental consent to access the activity logs that are utilised to assess and a child's overall development and learning. However, the children of parents who have not consented to their involvement in the study will be disclosed prior to interviews to ensure that staff are aware not to include them in their discussion.

4. Are there any risks / benefits involved?

The overall aim of this project is to assess the overall impact of the Montessori education on the development and learning outcomes of all children, especially those with ASD or autistic tendencies. I hope that on completion of this research to have raised parental awareness of alternative educational paradigms in order that their child/children with SEN can reach their full potential. It will also help assess whether the values that underpin the Montessori education system i.e. learning at their own pace is more effective than the Early Years Foundation Stage (EYFS) used in state-funded nurseries at helping them to overcome the difficulties they encounter due to their disability. There may be a small risk that in the presence of a researcher the children may become uncomfortable. If any signs of distress are observed then the researcher will withdraw from the room immediately

5. Will my taking part in the study be kept confidential?

All data collected during the research project will be kept confidential. In the first phase of the study each questionnaire will be assigned a reference number and therefore you will not be personally identifiable. All information shared will be stored in a database on a password-protected computer. During the second phase of this study, where interviews are due to take place, the interviews will be recorded using a suitable audio device. A pseudonym will be utilised, again so that you are not personally identifiable.

This study has received ethical approval from LJMU's Research Ethics Committee (*insert REC reference number and date of approval*)

Contact Details of Researcher Laura Marks

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Appendix 3.9 – Participant Information Sheet for Managers



LIVERPOOL JOHN MOORES UNIVERSITY MANAGERS PARTICIPANT INFORMATION SHEET

Title of Project *National Curriculum versus the alternative play based curriculums: Exploring Montessori in the teaching of English language to children with Autism Spectrum Disorder.*

Laura Marks: Faculty of Education, Health and Community

I am a PhD student and you are being invited to take part in this important study. Please read the information given below very carefully and sign the consent form also enclosed if you would like to take part. If you have any questions about the research project after you have read the information that follows, please do not hesitate to contact me using the contact information given at the foot of this form.

1. What is the purpose of the study?

The main purpose of this study is to explore whether alternative play-based curriculums, such as Montessori, are more successful at improving the learning outcomes and aspirations of children diagnosed with Autism Spectrum Disorder, as opposed to the National Curriculum which is the primary resource that teachers refer to when they work within the state education system.

2. Do I have to take part?

You are under no obligation to agree for your nursery to take part in this study. If, however you are interested in taking part in this study please read the following information and sign the enclosed consent form

3. What will happen to me if I take part?

The researcher who is undertaking this research is planning on carrying out her research in two phases over a four month period. The first phase will involve completing questionnaires. The questionnaires will cover topics such as the overall development of the children in your class with particular focus on those children with a diagnosis of Autism Spectrum Disorder or autistic tendencies, and the perceived differences between the teaching methods employed in mainstream schools and the teaching methods employed in Montessori nurseries. The main aim of this study is to assess the overall impact of the Montessori education system on the development and learning outcomes of all children, especially those with ASD and autistic tendencies. In order for to assess this fully there are four research questions which I hope to answer. These include:

- How does the National Curriculum impact upon the educational outcomes of children between the ages of 0-4 with ASD?

- What are the key differences between the National Curriculum and the Montessori Curriculum in the way subjects are taught
- ***Do the teaching methods advocated by Montessori significantly improve the educational outcomes of children with ASD?
- Do play-based curriculums help to improve the social interaction and communication skills of children with ASD when working and playing alongside their non-autistic peers?

There are two phases to this study throughout which I hope to be able to answer the above questions. One of the phases will involve observing groups of children at the nursery and also be permitted access to the activity logs that are utilised within Montessori nurseries following consent from the parents in a controlled manner. This will be one of the main tools I will use to assess the children's overall development and the effectiveness of the Montessori education system in helping children with ASD and autistic tendencies to achieve their full potential. The second way I will do this is to observe the children whose parents have given consent for their child to be part of the study to explore whether children with ASD or autistic tendencies are more successful in terms of achieving their development milestones and appropriate learning outcomes when attending a Montessori nursery.

During the second phase of the study I would like to distribute questionnaires to the staff who express an interest to gain a deeper understanding of the differences between the teaching methods used in Montessori nurseries and those used in state-funded nurseries. As the title of this research project suggests I would also like to undertake interviews with staff to ascertain whether the methods that are used within Montessori nurseries are more effective at helping children with ASD or autistic tendencies to achieve their full potential.

4. Are there any risks / benefits involved?

The overall aim of this project is to assess the overall impact of the Montessori education on the development and learning outcomes of all children, especially those with ASD or autistic tendencies. I hope that on completion of this research to have raised parental awareness of alternative educational paradigms in order that their child/children with SEN can reach their full potential. It will also help assess whether the values that underpin the Montessori education system i.e. learning at their own pace is more effective than the Early Years Foundation Stage (EYFS) used in state-funded nurseries at helping them to overcome the difficulties they encounter due to their disability. There may be a small risk that in the presence of a researcher the children may become uncomfortable. If any signs of distress are observed then the researcher will withdraw from the room immediately

5. Will my taking part in the study be kept confidential?

All data collected during the research project will be kept confidential. Staff who wish to take part in the study will be asked to sign a consent form and they will also be informed of the children whose parents have not consented to their child not taking part in the research so that when they are completing a questionnaire or being interviewed they do not refer to these children in their answers. All the questionnaires that are distributed will be assigned a reference number so that the information contained within the questionnaire cannot be traced back to people who have agreed to complete a questionnaire. As detailed above staff will also be asked if they wish to take part in

an interview - all data from the interviews will be stored on a recordable device until the interviews have been transcribed and then the data will be erased.

This study has received ethical approval from LJMU's Research Ethics Committee (*insert REC reference number and date of approval*)

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Appendix 3.10 – Participant Information Sheet for Parents



LIVERPOOL JOHN MOORES UNIVERSITY PARENT PARTICIPANT INFORMATION SHEET

Title of Project

National Curriculum versus the alternative play based curriculums: Exploring Montessori in the teaching of English language to children with Autism Spectrum Disorder.

Laura Marks: Faculty of Education, Health and Community

I am a PhD student and you are being invited to take part in this important study. Please read the information given below very carefully and sign the consent form also enclosed if you would like to take part. If you have any questions about the research project after you have read the information that follows, please do not hesitate to contact me using the contact information given at the foot of this form.

1. What is the purpose of the study?

The main purpose of this study is to explore whether alternative play-based curriculums such as Montessori are more successful at improving the learning outcomes and aspirations of children diagnosed with Autism Spectrum Disorder as opposed to the National Curriculum which is the primary resource that teachers refer to when they work within the state education system.

2. Does my child have to take part?

As a parent of a child who attends this nursery you and your child are under no obligation to take part in this study. If however, you are interested in taking part in this research project, please read the following information very carefully which explains the reasons for embarking on this study and what the principal researcher hopes to achieve through your participation in the research, and sign the enclosed consent form. Phase two of this research study will involve practitioners being interviewed about the methods employed to assess the overall development of children and how adverse behaviour is dealt with. During the interview process questions may relate to specific children, but when data is analysed and discussed a pseudonym will be used to protect children's identity.

3. What will happen to my child if I agree to them taking part in this study?

The main focus of this study is to assess the impact that Montessori teaching methods have on the overall learning and development outcomes of the children in their care. To do this I will observe

the teaching practices that are used by such practitioners to engage the children in the learning process and thus how the children respond to such methods. The type of observational procedure the principal researcher intends to use will allow the researcher to observe child-initiated activities which enhance a child's sense of ownership and responsibility for their own learning. The researcher who is undertaking this study will mainly focus on your child's social interaction and levels of communication with their peers.

Also, as part of this research project your child's teacher will be given a questionnaire to complete about the differences between the Montessori education system and the National Curriculum which is the statutory framework utilised within the state education system. Following the completion of the questionnaire I hope to undertake more in-depth interviews with a self-selected group of staff which I hope will help me to build up an overall picture of how children who attend Montessori early – years settings develop both academically and personally with particular focus on those children either diagnosed with autism spectrum disorder or displaying autistic tendencies. The principle researcher also hopes to gain access to daily activity logs to establish the differences between the ways in which children in state funded nurseries are assessed in terms of physical, social and emotional development as opposed to the way in which this is done in Montessori early-years settings.

4. What will happen if I do not agree for my child to take part in this study?

If you do not wish your child to take part in this study then please do not sign the enclosed consent form. In doing this it will allow me to be able to limit the number children I focus on when undertaking the initial observation phase of this study wherein I will be focussing upon the teaching methods employed within Montessori nurseries (and not the children) and how they impact upon the learning outcomes of the children who attend the nursery

5. Are there any risks / benefits involved?

The overall aim of this project is to assess the overall impact of the Montessori education on the development and learning outcomes of all children, especially those with ASD or autistic tendencies. I hope that on completion of this research to have raised parental awareness of alternative educational paradigms in order that their child/children with SEN can reach their full potential. It will also help assess whether the values that underpin the Montessori education system i.e. learning at their own pace is more effective than the Early Years Foundation Stage (EYFS) used in state-funded nurseries at helping them to overcome the difficulties they encounter due to their disability. There may be a small risk that in the presence of a researcher the children may become uncomfortable. If any signs of distress are observed then the researcher will withdraw from the room immediately

6. Will my taking part in the study be kept confidential?

All data collected during this study will be kept anonymous and confidential. The observational framework I am planning to utilise during the research looks at specific events within a given setting

– in this case a Montessori early years setting. During staff interviews if a teacher mentions a particular child a pseudonym will be used when transcribing the interview so that the child remains anonymous. If the principle researcher obtains permission to access the daily activity logs of children, any potential information that may be of use when writing the final thesis that is deemed personal such as a child's name, this will be kept anonymous by using a pseudonym

This study has received ethical approval from LJMU's Research Ethics Committee (*insert REC reference number and date of approval*)

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Appendix 3.11 – Interview Question Protocol

Interview Question Protocol

1. From when the children first started at this nursery what differences, if any, have you observed in terms of their overall development and how have they adapted to the learning methods advocated by the Montessori ethos?
2. What changes, if any, have you observed in terms of (insert name here) physical development?
3. What changes, if any, have you noticed in terms of (insert name here) communication skills?
4. What changes, if any, have you observed in terms of (insert name here) social development?
5. In your view what difference, if any, will attending a Montessori nursery have on (insert name here) academic attainment in the future?
6. Which pieces of equipment have you found to be of most use when teaching a child on the autism spectrum?
7. What can trigger some of the more challenging behaviours that are characteristic of children diagnosed with autism spectrum disorder? How do you distract (*insert name here*) or alleviate the distress caused by the situation?
8. In your opinion what makes Montessori home-education different from that of state-funded early-years settings and in your view has this helped (insert name here) in developing their overall independence?

Appendix 3.12a – Questionnaire (School B)



QUESTIONNAIRE

Thank you for agreeing to take part in Phase 2 of this study. Please Note: If parents do not consent for their child/children to take part in this study then they must not be referred to when completing certain sections of this questionnaire. Please see list attached which details the children who are not eligible for consideration when completing this phase of the study.

About You:

1. What age are you:

- Under 30 31-40 41-50 51-60 Over 60

2. Are you:

- Female Male Prefer Not to Say

About your career so far:

3. How long have you worked as a Montessori practitioner?

- Less than 1 Year 2-5 years 5-10 years 10-15 years 15-20 years
- Over 20 years

4. How long have you worked at this school?

- Under 5 Years 5-10 years 10-15 years 15-20 years Over 20 years

5. Have you worked within the state education system before becoming a Montessori practitioner?

Yes No

If you have answered **yes** to question 5 please answer question 6, if you have answered **no** to question 5, please ignore question 6 and continue to question 7.

6. (a) Explain the reason behind your decision to transfer from a state-funded early childhood setting to a Montessori play-based environment?

6. (b) Are there any differences between the way in which a state-funded early years practitioner is trained and the way in which a Montessori early years practitioner is trained? If so please state in what way.

7. The ethos that underpins the Montessori education system, both in the past and at present, is that every child is entitled to, and capable of, contributing to society in a meaningful way including those with Special Educational Needs. Given the nature of society in the 21st century do you believe that this is the case in the state education system?

Yes No

8. If you have answered either **yes** or **no** to question 7, please can you explain your answer?

Your Teaching Career

9. Had you ever come into contact with a child diagnosed with Autism Spectrum Disorder (ASD) or displaying autistic tendencies at any point during your career in education prior to working at this school?

Yes No

10. Often children with ASD have social and communication difficulties. Do you think employing a play based curriculum alongside the EYFS has benefited the children that you teach/support If so, please explain how.

11. The Early Years Foundation Stage (EYFS) that is utilised in state-funded early years settings is different from that which is used in Montessori early-years settings. How do

you think the EYFS that is utilised in the state –funded education system affects the learning outcomes of a child with ASD

12. As a trained SEN teacher/teaching assistant do you make use of a wide range of teaching resources that are available to you?

Yes No

13. In your opinion, as a trained SEN teacher/teaching assistant can these resources help enhance both the academic, personal and social development of children with Special Needs?

Yes No

14. Having answered either **yes** or **no** to question 12, can you explain how these resources might be of benefit for a child with Autism Spectrum Disorder?

Academic Learning and Life Skills

15. As a trained SEN teacher/teaching assistant, in what ways are the children in your care equipped with the basic skills needed to be able to function independently in everyday life?

Thank you for taking the time to complete this questionnaire. If you have any other comments please write them in the box below.

Appendix 3.12b – Questionnaire (School B)



QUESTIONNAIRE

Thank you for agreeing to take part in Phase 2 of this study. Please Note: If parents do not consent for their child/children to take part in this study then they must not be referred to when completing certain sections of this questionnaire. Please see list attached which details the children who are not eligible for consideration when completing this phase of the study.

About You:

1. What age are you:

- Under 30 31-40 41-50 51-60 Over 60

2. Are you:

- Female Male Prefer Not to Say

About your career so far:

3. How long have you worked as a School B practitioner?

- Less than 1 Year 2-5 years 5-10 years 10-15 years 15-20 years
- Over 20 years

4. How long have you worked at this school?

- Under 5 Years 5-10 years 10-15 years 15-20 years Over 20 years

5. Have you worked within the state education system before becoming a School B practitioner?

Yes No

If you have answered **yes** to question 5 please answer question 6, if you have answered **no** to question 5, please ignore question 6 and continue to question 7.

6. (a) Explain the reason behind your decision to transfer from a state-funded early childhood setting to School B's play-based environment?

6. (b) Are there any differences between the way in which a state-funded early years practitioner is trained and the way in which a School B early years practitioner is trained? If so please state in what way.

7. The ethos that underpins School B's education system, both in the past and at present, is that every child is entitled to, and capable of, contributing to society in a meaningful way including those with Special Educational Needs. Given the nature of society in the 21st century do you believe that this is the case in the state education system?

Yes No

8. If you have answered either **yes** or **no** to question 7, please can you explain your answer?

Your Teaching Career

9. Had you ever come into contact with a child diagnosed with Autism Spectrum Disorder (ASD) or displaying autistic tendencies at any point during your career in education prior to working at this school?

Yes No

10. Often children with ASD have social and communication difficulties. Do you think employing a play-based curriculum alongside the EYFS has benefited the children that you teach/support If so, please explain how.

11. The Early Years Foundation Stage (EYFS) that is utilised in state-funded early years settings is different from that which is used in School B's early-years setting. How do you think the EYFS that is utilised in the state –funded education system affects the learning outcomes of a child with ASD

12. As a trained SEN teacher/teaching assistant do you make use of a wide range of teaching resources that are available to you?

Yes No

13. In your opinion, as a trained SEN teacher/teaching assistant can these resources help enhance both the academic, personal and social development of children with Special Needs?

Yes No

14. Having answered either **yes** or **no** to question 12, can you explain how these resources might be of benefit for a child with Autism Spectrum Disorder?

Academic Learning and Life Skills

15. As a trained SEN teacher/teaching assistant, in what ways are the children in your care equipped with the basic skills needed to be able to function independently in everyday life?

Thank you for taking the time to complete this questionnaire. If you have any other comments please write them in the box below.

Appendix 4: Published Article Arising From This Study

Playing to Learn: an overview of the Montessori Approach with pre-school children with Autism Spectrum Condition

LAURA MARKS

This article explores some of the literature concerning the effectiveness of the Montessori educational approach for children with ASC within an English school context. Firstly, there is a discussion, including a short historical review, regarding the ideology of inclusion and how it has impacted upon mainstream education. Also, how this can be facilitated using play-based approaches such as Montessori. Secondly, various models of disability are identified in order to highlight how they have informed societal attitudes towards people with disabilities. There is a brief history of ASC detailing how a child with this disability may be affected on a daily basis and the effectiveness of alternative play-based educational approaches such as Montessori in helping children with ASC to develop the appropriate skills they need in order to self-regulate and thus modify their behaviour. Furthermore, the value of play-based curriculums in supporting a child diagnosed with ASC throughout the learning process is also evaluated. The summary highlights the need for more evidence-based studies to be undertaken in order to assess whether the Montessori approach is a valid alternative in teaching pre-school children with ASC.

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Key words: early years, Montessori, autistic spectrum.

Historical overview of Special Educational Needs

In England the history of formal provision for children in schools who experience what are now referred to as Special Educational Needs (SEN) can be traced back to 1844 with the passing of an act of parliament. This established 'school districts' (the precursors of what were to become known as 'local education authorities'). This contributed towards removing the almost complete control of the landed class (landowners, farmers, merchants and so on) over formal educational provision in the country. During this period it should be noted that 'schooling' was typically viewed as a means of social control (Morris, 1983), aimed at producing well-behaved, biddable and productive members of society.

Such attitudes, based on the notion that certain groups within the population presented a threat to stability and social order, were not only directed towards the poorest children within society. Children with 'learning or social difficulties' were also viewed by many as needing to be controlled securely, and more often than not, isolated from others. Such attitudes prevailed until a series of reports were published in the mid-19th century, examining the perceived academic abilities of this group of children (Heward & Lloyd-Smith, 1990). Two of the most influential reports were the

Newcastle Commission (1861) (Hodkinson, 2016) and the Egerton Commission (1899) (Copeland, 1995; Mills Daniel, 1997). These bodies heralded the beginnings of an acknowledgement that formal education policy needed to respond to differences amongst learners.

About fifty years later, the Butler Act (National Archives, 1944) created a structure for the post-World War II education system in England. Amongst other things it established ten categories of so-called “handicap”: blind, partially sighted, deaf, partially hearing, delicate, physically handicapped, epileptic, maladjusted, children with speech defects and educationally subnormal (moderate). Subsequently these groups were significantly profiled within the Education (Handicapped Children) Act 1970.

The Warnock Report, arguably the defining piece of SEN legislation in England during the 20th century, was published in 1978. This was the cornerstone of subsequent legislation (the 1981 Education Act), which advocated that children with disabilities should be educated alongside (or ‘integrated with’) their nondisabled peers in mainstream settings. The Report made reference to three types of integration: locational, social and functional. Functional integration was seen as the most important, yet challenging, form of integration, as it was closer to what came to be known as ‘inclusive education’ (Britton, 1978) Whilst it allowed children with SEN to undertake activities alongside their non-disabled peers, it also involved a great deal of planning by teachers and other educational professionals – thus heralding major tensions regarding work-loads and resourcing amongst professional educators, which were to be a feature of late 20th century School Brrangements in England. Nevertheless, inclusive approaches to schooling became an increasingly important policy dimension in providing a suitable education for these children (Rose, 2002). This subsequently had a direct impact upon the Education Acts of 1988 and 1993. After the latter legislation, schools were required to implement an ‘SEN Code of Practice’. As a result, a single member of staff was to be appointed to ensure the smooth transition of children with learning difficulties and disabilities through their educational career – the ‘special educational needs coordinator (SENCo).

These policy shifts meant that children with a ‘statement of special needs’ (a process established following the 1981 legislation and which provided a formal, inter-disciplinary assessment, resulting in a legally-binding set of arrangements for the child) were not only entitled to specialist provision; they also had a right to be included in mainstream schools (although with the proviso that such actions were not regarded as detrimental to the learning of others (Warnock & Norwich, 2010). However, despite the admirable aims of the 1978 Warnock Report, there remained an on-going debate regarding the benefits of inclusion and the mechanisms that informed it (Feiler & Gibson, 1999). In 2005, for instance, Baroness Warnock’s personal views on the educational inclusion of children with SEN and disabilities changed considerably, describing the introduction of statements of special need as ‘disastrous’ and ‘the greatest obstacle to good provision’ (Shaw, 2003).

A further consequence of the policy shift towards a comprehensively applied approach to inclusive education has been the consistent call for the closure of special schools in many parts of England. As a direct result, children with SEN were transferred to often highly competitive mainstream environments, where they were ‘measured’ largely by the same assessment procedures that were devised for their non-disabled peers. They were often seen as negatively impacting on a school’s performance in so-called ‘league tables’, which have been used to compare the performance of schools since the early 1990s (Goldstein & Spiegelhalter, 1996; Goldstein & Thomas, 1996). The approach was also highly resource-intensive, requiring large teams of support staff (Tomlinson,

2012) at a time when education financing was under close audit. Despite Warnock's change of opinion (Shaw, 2005), recent government policy in England has brought a number of policy changes which have had a direct impact upon the way in which children with SEN are taught within mainstream schools.

The Equality Act (2010) led to the publication of a new SEN Code of Practice (2014) which superseded its predecessor from 2001. From a positive perspective, the 'new' Code extended the age range of children and young people covered by its guidance from 0-18 to 0-25, thus promoting increased communication and collaboration between education, health and social care services. However, on the negative side, prior to 2014, children with SEN attending a mainstream school were funded by the Dedicated Schools Grant (DSG). Following the introduction of the new SEN reforms, the amount of money that schools were able to access via this funding stream was significantly reduced (Gray *et al*, 2012), with a consequent threat to the resources available to meet the educational needs of those with SENs.

In 2011 a newly established Coalition government in England sought to take action regarding what they perceived to be an out-dated form of assessment. The 'statements' of SEN and Learning Disability Assessments (LDA) were replaced by Education, Health and Care Plans (EHCPs) (Department for Education, 2011). While still maintaining a strong focus on educational attainment, the new document placed a greater emphasis on what, for many young people, is the difficult transition period between adolescence and adulthood.

Societal Attitudes to Disability

Societal attitudes towards disability have changed over recent decades. Evidence suggests that the models of disability have significantly influenced attitudes towards those with disability (Barton, 1986; Rieser, 2004; Cameron, 2014; Hodkinson, 2016). Historically the most deeply rooted (although now out-dated) model is the so-called 'medical' model of disability. This views disability as a psychological impairment or disease needing medical treatment of some kind. It also focuses on individual pathology and attempts to find ways of preventing, curing, and caring for those with disabilities (Llewellyn & Hogan, 2000). A long-standing criticism of this model is that it does not incorporate any assessment of the potential for improvement (Marks, 1997). The terminology it utilised, which derived from that adopted by the medical profession, is now regarded as offensive and derogatory, because it implied that disabled people were weak, pathetic and in need of sympathy.

Societal attitudes towards disability have obviously changed considerably. The 'social model' has superseded the medical orientation to disability as a means of interpreting policy and provision for those with SENs. In direct contrast to its predecessor, the social model has been effective in promoting the social mobility of individuals with disabilities (Palmer & Harley, 2012; Oliver, 2013; Jones & Wass, 2013), as well as successfully improving their self-esteem, which in turn allows them to build a collective sense of identity (Shakespeare, 2010; Dunn & Burcaw, 2013).

As with the medical model, however, there are shortcomings to a social approach. It neglects consideration of the impact that impairment can have on the daily lives of those with disabilities. It also assumes that disabled people are oppressed, and is sometimes viewed as highlighting the crude distinction between impairment, disability, and the concept of a utopian barrier-free society. Writers such as Oliver (cited in Allan, 2012) have also expressed their disappointment that the social model of disability has been ineffective in changing the material circumstances, or

promoting the inclusion of people with disabilities. He observed that 'the social model was developed to counteract the formidable tragedy discourse that surrounds individuals with disabilities and therefore depicts disability as deficit, a tragedy, abnormal and something to be avoided at all costs' (p.77)

Both the medical and social models of disability are frequently discussed within the disability studies literature (Anastasiou & Kauffman, 2013; Barnes & Mercer, 2014). A more recent 'model', expressed in terms of 'capability', has been the focus of attention. This model was originally formulated to assess people's wellbeing and quality of life (Toboso, 2011) and to provide further insight into how disability is viewed by society. It maintains that impairment and disability are aspects of human diversity, thus shifting the focus away from the specificities of a disabling situation and examining how to establish equality in terms of possibilities and choices (Bakhishi & Trani, 2006). From the foregoing it is thus apparent that, over many years, several models of disability have been proposed to inform or explain the attitudes people have towards disability in England. However, despite a shift in attitudes towards a more positive regard shown to people with disabilities, stigmatisation and labelling still exist. Recent studies report that over a third of people (36%) tend to think of disabled persons as not being as productive as others, and a quarter of disabled people (25%) are reported to have experienced attitudes in which people expected less of them as a direct result of their disability (Aiden & McCarthy, 2014). Moreover, people who are diagnosed with mental health difficulties are also highly likely to encounter negative attitudes (Wright *et al*, 2011).

Stigmatisation and labelling are closely linked. The relatives of people with disabilities sometimes view labels positively. They are said to assist both parents and educational professionals to cope with and understand their child's condition, as well as to be able to recognise their strengths and weaknesses (Ho, 2004). Another view is that a label can also go some way towards absolving the guilt that a parent experiences when they have a child with a disability. From an educational point of view, a label derived from assessment is often necessary for a child or young person with a disability to receive the support they need when striving to achieve their full potential (Broomhead, 2013).

But although labels may be viewed as necessary for support purposes within education, they can also have an adverse effect. At the current time, there appears to be a 'one size fits all' approach within the education system, prompting some teachers and support staff to develop a negative attitude towards children with disabilities (Webster *et al.*, 2010; Boyle *et al.*, 2013; Varcoe & Boyle, 2014). Such attitudes seem to develop through concerns that children with disabilities will have a detrimental effect, not only on the learning of other children, but also on the teacher's own performance as an educator. In turn this can have a negative impact on the way that the overall performance of the school is determined and subsequently made public in 'league tables' (Burgess *et al.*, 2014). Furthermore, it is suggested that the negative attitudes of non-disabled peers towards their class-mates who have a disability make it difficult for children with disabilities to form meaningful friendships and relationships (Glazzard, 2011).

Autism Spectrum Disorder

The term 'Autism Spectrum Disorder' (ASD) was first used in its modern sense in 1943 by Kanner (cited in Wing & Gould, 1979) after he observed the traits professionals associate with ASD in eleven children who were referred to his clinic in Baltimore (Silberman, 2015; Donvan & Zucker,

2016). However, within Britain it was not until 1960 that the term autism was first mentioned in parliament after the passing of the Mental Health Act in 1959.

Although there is now considerable knowledge regarding the aetiology of autism, there is still uncertainty as to its causes. Prior to Kanner's use of the term, early clinical practitioners such as Itard and Bleuler had detailed some of the characteristic behaviours they associated with 'autism'. Itard, for example, became involved with 'Victor', a child characterised as *l'enfant sauvage* or the 'Wild Boy of Aveyron'; Itard realised that the Victor was inclined to become fixated on particular objects, and had difficulty expressing himself verbally and interacting with others (Itard, 1962).

The symptom profile is now more commonly known as the 'triad of impairments' (Wolff, 2004). The way in which autism is diagnosed has obviously changed in recent years in most countries. When diagnosing ASC, clinical professionals in both the United Kingdom (UK) and the United States of America (USA) will refer to the symptom profile currently provided in the Diagnostic and Statistical Manual (DSM) V. Children and adults with this condition certainly display the deficits described within the 'triad of impairments'; these symptoms however, will affect each child differently. Following the introduction of DSM V, it has now become more difficult for parents within the UK and USA who suspect that their child has this disability, to obtain a clinical diagnosis because the symptom profile has been narrowed considerably. This has meant that it has also become more difficult for parents in both countries to access the support their child may need when trying to achieve their full potential (Kreck, 2014; Lai *et al.*, 2013). Whilst parents of these children may encounter barriers when trying to access the mainstream system the Montessori approach aims to facilitate the successful integration and inclusion of children with ASC by encouraging the exploration of their natural abilities to achieve their full potential (Robinson, 2010)

The Importance of Play, the Montessori ethos and Autism Spectrum Disorder

If a child with ASC attends an educational setting the teaching methods need to be adapted to ensure that the child's needs are met. If parents choose to send their disabled child to a mainstream state-funded nursery, they may be putting their child at an immediate disadvantage, especially if they have been diagnosed with ASC. This is because the child is unlikely to reach the same educational level as their non-disabled peers. This could be due to several factors including the severity of the child's condition and/or lack of appropriate training for staff within the setting. This is an important consideration, given that the majority of ASC sufferers are diagnosed with ASC between the ages of three to five (Siegal *et al.*, 1988), although more recent studies have shown that parents tend to notice symptoms as early as 18 months (Tuchman, 2009).

In England, prior to a child's formal education, children under the age of four attend a nursery setting where they acquire basic skills in physical, social and emotional development (Summerbell *et al.*, 2012; Dowling, 2014; Harrinton & Brussoni, 2015). Awareness of the importance of play in early childhood can be traced back to Plato. Hanawalt (1995) believed that adults took responsibility for their children even though there was no church or civil law that expected them to do so. It was also around this time that the community started to play a more significant role in terms of *in loco parentis* when the child was older.

Philosophers such as Plato, Dewey, Rousseau and Locke wrote extensively about the importance of play in childhood and education (Madhawa Nair *et al.*, 2014) They believed that education

should begin early, due to the importance of initial impressions. However, whilst Plato believed that play is important in the early years, he also believed that the type of play young children engaged in should be done freely, and have structure and purpose (Livescu, 2003).

In the 21st century, there has been a conscious move away from the historical attitudes and theories of play with the re-emergence of two further narratives: liberal romanticism and psychological cognitive development (Manning, 2005). Whilst it is said that these two narratives do not reflect historical attitudes towards play, it may appear to those outside the early education field that this is not the case (Rogers & Lapping, 2012). Liberal romanticism seems to reflect the medieval views of childhood in that, to this day, play is still associated with innocence as well as being natural and innate. However, there were also those who believed that play was not valuable or indeed a topic for serious debate (Smith, 2012).

Many philosophers during the 18th century wrote about the importance of play throughout childhood, the most prominent being Rousseau (cited in Cohen, 2006). He believed that children should be able to roam freely through natural environments in order to broaden their imagination. This would then inspire their love for freedom and encourage them to undertake some form of physical exercise to explore the limitations of their body. Whilst Rousseau (cited in Cohen, 2006) sees the benefits of early years education, like his liberal romantic counterparts, he believed that engaging in a formal education system at such a young age potentially took away a child's innocence.

At the present time, authors such as Ginsburg (2007) and Wood (2010) believe that play is of central importance to a child's overall development. Furthermore, Wood (2010) believes that play is an essential part of the curriculum in Early Years settings particularly as it facilitates the development of children's personalities. Furthermore, it also ameliorates social and emotional development through the acquisition of the skills needed within group work and one-to-one interaction with their peers. These traits include humour, teasing, jokes, mimicry, riddles and rhymes, singing and chanting. It is also crucial that children learn to deal with disagreements, to cooperate with others, and to understand competition (Tannock, 2008).

In Early Years settings the planning of daily activities should be based on the Early Years Foundation Stage (EYFS) (Department for Education, 2014). However, the actual teaching practices that are employed by early years professionals should primarily be based on a mixture of direct instruction and Plato's philosophy of free play (Wood, 2014). Despite the fact that free play is very much part of the EYFS, in recent years international studies have shown that children between the ages of 0-4 years now spend an increasing amount of time undertaking academic tests (Nicolopoulou, 2010). Many children within this age bracket struggle to achieve what is expected of them, as the tests are developmentally inappropriate. As a consequence, early years professionals have undermined the primary tool utilised by all young children to combat stress, that of freely-chosen, child centred, intrinsically motivated play.

There are other educational approaches which are more focused on the importance of play, and how they can enhance the learning opportunities of all children including those with disabilities such as ASC. One such method is that of Maria Montessori (cited in O'Donnell, 2007), who advocates a staged approach to learning. Children with ASC need to be encouraged to play, shown how to play and how to expand their play routines which allows them to progress with their overall development (Wall, 2010).

On completing her medical degree, Montessori continued her training at a child psychiatric unit where many of the children had been diagnosed with a variety of learning disabilities. Unlike her more experienced colleagues, after observing these children over a period of time, Montessori realised that they also had the capacity to learn. Montessori (cited in O'Donnell, 2007) began to make her own learning resources for the children to use whilst at the unit. The resources that she designed were so successful, she believed that the children could achieve the same, if not better results, than their non-disabled counterparts (Montessori, 1967a) as the resources Montessori designed were developmentally appropriate for each "period of growth" (Montessori, 2009: pp. 16–17).

As she predicted, the children performed as well, if not better, than their nondisabled peers. As a result, Montessori (cited in O'Donnell, 2013) decided to set up her own preschool where the teaching methods were underpinned by the evidence she had gathered during her experiments. She opened the first Casa di Bambini (Children's House) in 1907 within the slums of Rome. From her initial research, Montessori (cited in O'Donnell, 2013) also realised that like their nondisabled counterparts, children with disabilities were capable of independence. As well as designing and making her own teaching resources, she also constructed the whole classroom environment in such a way that children could realise this independence. This involved furniture that was the right size and weight so that the children could change their environment as they wished. Montessori (cited in O'Donnell, 2013) also designed the more static classroom equipment such as shelving and pegs to hang coats on to further encourage independence (Montessori, 1967b).

Research on Montessori and ASC within the UK is limited. One of the few researchers to examine how the Montessori educational ethos is a more effective way of learning for children with ASC, and more generally with SEN, is Wendy Fidler (2006). In one article, Fidler (2006) explains that autism is a condition that affects each child differently. One of the primary characteristics of all children with this condition is the need for routine. The Montessori educational approach provides this via the traditional teaching and learning methods, specifically the activities the children engage in on a daily basis. Whilst the Montessori teaching and learning methods are beneficial to children with ASC, staff who utilise such methods need to be aware that some of the materials recommended for use by Montessori practitioners, may not be suitable for use with children with this condition. Therefore it may be more appropriate to source a range of alternatives e.g. silk as opposed to nylon, as many children with ASC have hypersensitive skin and therefore cannot tolerate certain materials against their skin.

In terms of the development of language, the materials that are used by Montessori practitioners are ideal for use with children diagnosed with ASC. The practitioner can write an instruction on a command card, read the instruction to the child, and then demonstrate the correct way to complete the task (Fidler, 2004). In so doing, young children with ASC can learn the nuances of social interaction by observing non-disabled peers who use appropriate actions to demonstrate and express what they understand by the words on the cards. Another advantage of Montessori education for children with ASC, is that all settings have rules which children and staff must adhere to, thus creating the structure and routines that complement children with ASC (Marshall, 2001; Fidler, 2006).

Concluding Comments

The intention of this article has been to examine whether or not the Montessori educational approach could be more appropriate than the National Curriculum (NC) in helping children with ASC, who are following the Early Years Foundation Stage, to learn. Whilst the evidence cited in this article is relatively outdated, it nevertheless suggests that the Montessori educational ethos is a suitable alternative. Indeed, numerous studies have examined the effectiveness of the Montessori approach in supporting children with ASC. The majority of these, however, are international, and therefore not generalisable to the UK. In conclusion, it is clear that further research is needed in order to investigate whether the Montessori educational ethos is a more appropriate educational ideology for children with ASC in the UK.

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