Marino Institute of Education

Title: Can the dialogic story reading approach enhance language, communication and relationships' in children with autism?

Thesis

By

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Declaration

I hereby declare that this dissertation is a presentation of my original research work. Wherever contributions of others are involved, every effort is made to indicate this clearly. This work has not been submitted previously at this or any other educational institution. The work was done under the guidance of Dr. Marian Farrelly and Dr. Patrick McCormack at the Marino Institute of Education, Dublin. I agree that the Library may lend or copy this dissertation upon request.

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Abstract

Autism (ASD) is a developmental disorder which is characterised by challenges in social, emotional, language and communication skills. According to Irish legislation pertaining to the education for persons with special needs (2004), children with ASD have a right to receive an education that enables them to reach their full potential. Additionally the legislation states that children with ASD should be taught alongside their peers in mainstream classes where possible.

The increase in numbers of children with ASD in mainstream classes has an impact on educators and students alike. Teachers are required to modify their educational practice to suit the individual needs of students with ASD.

The dialogic story reading approach is cited as an effective literacy intervention for children who are typically developing and children with ASD. Furthermore, research has shown that this reading can be an effective tool to develop and enhance relationships between teacher and student.

A living theory approach of action research is used to explore this issue with a view to improving and reflecting on current practice. The research took place with two children with ASD that are from the researcher's class. Data was obtained from recording the sessions and analysing the reflection diaries and revision cast recordings.

This research found that the dialogic story reading approach was an effective intervention to promote language and communication with children with ASD. However, the strategy was more effective in a one to one setting. This is because the severity of ASD has an impact on a child's educational engagement and attainment.

"Reflective practice is a dialogue of thinking and doing through which I become more skilful."

(Schön, 1983, p. 31)

Table of contents

Abstract iii
Declaration iii
Table of contents vi
List of tables xi
Acknowledgements xiii
Chapter 1 1
Introduction 1
Aims of the research 1
Participants 1
Theoretical framework 1
The socio-cultural theory of learning 1
The interactive to independent model of literacy development 2
Play-based learning and relational pedagogy. 2
Joint attention 3
Organising the research framework 4
Chapter 2 6
Literature review 6
Defining autism 7
Asperger's syndrome 9
Diagnostic instruments 10
Impact of autism on educational engagement 12
Autism and educational interventions 15
Educational interventions to increase joint attention 15
Behavioural theory 19
Oral language development and literacy skills 21
Language development in neuro-typically developing children 21
Literacy development 24
Autism and play 25
Reading comprehension and autism 26
Dialogic story reading to promote reading comprehension 26

Shared reading 29
RECALL method 31
Impact on teachers teaching children with ASD 32
Conclusion 34
Chapter 3 35
Methodology 35
Introduction 35
The empirical and interpretive paradigms 36
The participants "Sarah" and "Jack" 37
Action research as a philosophical stance 39
Action research and transformation 41
The cycles of action research 43
Observational schedule 44
Stages of action research 45
The dialogic story reading approach: The PEER, CROWD and RECALL Methods 51
Validation groups 56
Ethical considerations 57
Anonymity 57
Limitations 58
Generalisability. 58
Conclusion 59
Chapter 4 61
Findings 61
Findings evident from the observational schedule 62
The cycles of action research 63
Cycle One 63
Cycle two 65
Cycle three and future recommendations for practice 66
Teacher values 67
Excerpts from the data 68
The types of responses 68
Wait Time 71

De-contextualised Language 72
Joint attention and reading style 75
Learning tensions and transformations 79
Relational pedagogy 82
Action rhymes 83
Validation group and change 83
Conclusion 84
Chapter 5 86
Discussion 86
Introduction 86
Claims to knowledge 86
An adapted dialogic story reading approach 87
The challenges of teaching children with ASD 89
The challenge of maintaining joint attention 90
The severity of ASD 90
The impact of ASD on educational engagement 90
Relational pedagogy 91
Practical school solutions 91
Staff collaboration and future recommendations for the improvement of practice 92
Conclusion 94
References 96
Appendix A 124
Lesson plan example, story; Tabby mc Tat (Julia Donaldson, 2009) 124
Appendix B 126
Level 1 the literacy model of Kadervek & Rabidoux (2004) 126
Appendix C 129
List of books selected for dialogic story reading sessions 129
Appendix D 130
Letter of consent (parents) 130
Appendix E 133
Letter of consent (children) 133
Appendix F 134
Consent form for validation group 134

Appendix G 135
Consent form BOM 135
Appendix H 137
Story-reading strategies (Kiely, 2017) 137
Appendix I 138
Work samples 138
Appendix J 139
Work samples 139
Appendix K 140
Work samples 140
Appendix L 141
Work samples 141
Appendix M 142
Work samples 142
Appendix N 143
Reading dramatically (R.J, 12) 143
Appendix O 144
Tension (R.J, 3) 144
Appendix P 145
Sarah using action rhymes (TR.12) 145
Appendix Q 146
Importance of action rhymes (R.J, 9) 146
Appendix R 147
The use of props during dialogic story reading 147
Appendix S 148
Teacher-student bond, reflection journal (R.J, 2) 148
Appendix T 149
Reflection journal 9, teacher-student bonds 149
Appendix U 150
Teacher learning, reflection journal, 9 150
Appendix V 151
Teacher learning, reflection journal 11 151
Appendix W 152
Continuum of expressive engagement, Sipe (2002) 152

Appendix X 153
Learning tensions (R.J, 5) 153
Appendix Y 154
Validation group and collaboration 154

List of tables

Table 1.Diagnostic Tools 11

Table 2.Impairments in Education 14

Table 3.Educational Interventions for Children with Autism 16

Table 4.Theories of Language Development Evident in the Literature 22

Table 5.Types of Action Research 42

Table 6.Observational Schedule 44

Table 7.List of Books Used for the Research 50

Table 8.The PEER Method, (Whitehurst & Lonigan 1998). 52

Table 9.Data Abbreviations 62

Table 10.Criteria Documented in the Data 62

Table 11.Excerpts from the Data, the Continuum of Expressive Engagement (Sipe, 2002) 69

Table 12.Excerpts from the Data, De-contextualised Language (Jack) 74

Table 13.Excerpts from the Data, De-contextualised Language (Sarah) 75

List of figures

Figure 1. A continuum from highly constrained to unconstrained skills (Stahl, 2011). 28

Figure 2. The action research cycles. Note. Adapted from McNiff &Whitehead, 2006. 43

Figure 4. Cycle 1, The Action Research Cycles. 47

Figure 5. Cycle 2, The action research cycles. 48

Figure 6. Cycle 3, action research cycles. .....**Error! Bookmark not defined.**

Figure 7. The cycles of action research adapted from McNiff (2017). 63

Figure 8. A typology of expressive engagement (Sipe, 2002). 69

Figure 9. Higher and lower level skills of oral language development (Hogan et al. 2011). **Error! Bookmark not defined.**

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Chapter 1

Introduction

Aims of the research

This thesis is an action research study trailing an intensive block of dialogic story reading with two children with autism (ASD). Autism refers to refers to a broad range of conditions characterised by challenges with social skills, repetitive behaviours, speech and communication.

The high level of children with ASD attending this school, and in mainstream classes inspired this research question. Murdoch and Wilson (2008), discuss a tension or imbalance that drives an investigation or enquiry. For this research, the tension was *"how can teachers in mainstream classes ensure that children with ASD are reaching their full potential?"* Another tension or wondering as a teacher was *"Is it possible as a mainstream teacher in a busy classroom to form a bond or relationship with children with ASD?"*

Participants

This small scale study recognised the participants using the full continuum of expressive engagement, from talking back to taking over (Sipe, 2002). The research demonstrated the participants using higher-order thinking and language skills referred to as de-contextualised language (Conn, 2014; Hogan, Bridges, Justice, & Cain, 2011, Kiely, 2017). This category of language is a significant challenge for children with autism as it is this ability to think about another's thoughts and feelings that is challenging for children with ASD.

Theoretical framework

The socio-cultural theory of learning

This study is grounded in the socio-cultural theory of learning. Vygotsky's theory resonates with Dewey's inquiry-based learning and understands that all children, have a natural

desire to learn. In the educational setting, the socio-cultural theory explains the importance of interactions between students and teachers, and the significance of teachers scaffolding learning through the zone of proximal development (Vygotsky, 1978).

The teacher's role in this theoretical paradigm is of a facilitator and guide (Good & Brophy, 2010; Kiely, 2017). Vygotsky's theory dictates that the child's learning is initiated through interactions with others first, then the learning is internalised.

The interactive to independent model of literacy development

As the participants in the research have ASD, the literacy model of Kadervek and Rabidoux (2004) provides an ideal theoretical background for the understanding of the progression of language skills in children with ASD and the adult's role in scaffolding learning. The interactive to independent literacy model focuses on the following levels:

(a) Social interaction between children and a teacher when engaging in reading.

(b) The role of adults who facilitate children's development in language and literacy.

(c) The need to maintain the joint attention with children with ASD.

This model is outlined in detail in Appendix B (The literacy model of Kadervek & Rabidoux, 2004).

Play-based learning and relational pedagogy.

This research is also embedded in a play based and relational-based pedagogy. Research shows that children, who feel a sense of belonging to a school and have positive relationships with their teachers, have more academic success (Bergin & Bergin, 2009; Bus, 1993; 2002; Buhs, Koziol, Rudasill & Crockett, 2018; Webster-Stratton & Bywater, 2015).

The implementation of Aistear (NCCA, 2009), the play-based curriculum framework, has provided many opportunities for playful learning experiences and has helped strengthen student-

teacher bonds in the classroom. Neylon (2012) writes that Aistear is informed by the theoretical perspective of relational pedagogy (RP). Additionally, reading to children strengthens the emotional attachment between child and adult (Bus, 1993).

Aistear states the following that outlines a focus on RP;

> *Early learning takes place through a reciprocal relationship between the adult and the child – sometimes the adult leads the learning and sometimes the child leads. The adult enhances learning through a respectful understanding of the child's uniqueness. He/she alters the type and amount of support as the child grows in confidence and competence, and achieves new things.* (Aistear: principles & themes, p.9)

Children with ASD encounter many challenges in participating in play activities. The benefits of play for language and communication are well documented in the literature (Barbarin & Wasik, 2009; Brown, 2014; Piaget, 2013; Vygotskij, Rieber & Carton, 1987). A child with a play difficulty will encounter language complications compared to his/her typically developing peers (Holmes & Willoughby, 2005; Lam & Yeung, 2012; Lee, Lo, & Lo, 2017; Lydon et al., 2011). Research documents that valid play-based interventions have positive outcomes for decreasing repetitive play activities and increasing communication and joint attention in children with ASD (Kordt-Thomas & Lee, 2006; Greenspan & Weider, 1998).

Joint attention

Joint attention is one of the most significant barriers to the literacy development of students with ASD (Kadervek & Rabidoux, 2004; Whalon et al., 2013). In the educational context, joint attention is where the adult and the child are attending to an educational activity together. Dialogic story reading enhances joint attention in a fun and relaxed way.

Organising the research framework

The research aimed to evaluate whether using an adapted dialogic story reading approach to meet the needs of children with ASD could enhance communication and language skills**.** The literature review discusses the question of *"What is autism?"* definitions and diagnostic tools. Current literature shows that effective interventions are interventions that increase joint attention, if implemented early and are intensive in their approach. ABA was cited as being very useful for teaching and managing behavioural issues.

The literature points to the importance of oral language development for all children. Studies show the benefits of dialogic story reading for enhancing oral language skills. This chapter investigates an international adapted method of dialogic story reading as a useful intervention to use with children with ASD.

Chapter three examines the research methodology used to complete this project. As the participants are from the researcher's class with the overall aim to improve practice, the researcher is exceptionally involved in the study. Therefore, both the empirical and interpretive research methods were deemed inappropriate as research methodologies. The educational/living theory approach to action research was the chosen research methodology as it is essentially an investigation of values that drive practice with the aim to improve teaching for the good of others.

The three cycles of action research that permeated throughout this study are documented in this chapter. The validation group collaborated on the learning cycles, enhanced and challenged the learning of the teacher. This chapter discusses the importance of reflection entries as essential tools for narrative research and for building pedagogic knowledge. The chapter outlines the limitations and generalisability of completing a small scale research project along

with the ethical issues of working and learning alongside children with ASD.

Chapter four discusses the findings generated by the data. The data demonstrated the participants using the full continuum of expressive engagement and demonstrates the use of de-contextualised language. The necessity for appropriate teacher "*Wait Time"* for responses is evident in the study and will be continued as part of daily practice. The study highlights the challenge of maintaining joint attention with children with ASD. The data demonstrates the teacher acting as a reflective practitioner and documents change and transformation on many levels during the research process.

Finally, chapter five concludes with a discussion of the findings generated from this research, with recommendations for future research and practice. Future recommendations for practice would be to continue the dialogic story reading approach and to introduce play-based interventions to children with ASD in the school. Finally, providing time and support for mainstream teachers to work one to one with ASD children that are in their classes would allow for the enhancement of teacher-student bonds. This relational aspect of teaching and learning has an overall positive effect on education and behaviour.

Chapter 2

Literature review

This literature review investigates the question of *"what is autism?"* along with the impact of autism on children's educational attainment and engagement. The review outlines some of the educational interventions available for children with Autism Spectrum Disorder (ASD). Furthermore, the chapter discusses the importance of oral language development for all children and investigates a dialogic story reading approach for children with ASD. Finally, the review finishes with an analysis of the impact and views of teachers teaching and working with children with autism.

The term "autism", has generated much debate (Bailey, 2014; Baron- Cohen, Hoekstra, Knickmeyer & Wheelwright, 2006; Drudy, 2001) from being referred to as a "disturbance" (Kanner, 1943) to an understanding of the many behavioural and biological aspects that contribute to the diagnosis (Booth, Gallagher & Keenan, 2018; Department of Health, 2018). Language has the power to reflect and to shape people's perceptions of autism. With this in mind, this paper uses the term "child with autism", recognising the child as a person first, with the diagnosis second.

This "person-first" language is language that refers to people first as individuals and then to their disability only if necessary (Bailey, 2014; Balint, 2007). Some researchers suggest that this "person-first" terminology indicates the growing prominence of disability rights and neurodiversity movements (Kim et al., 2011; Kite, Gullifer & Tyson, 2012). However, this researcher recognises that not all agree with these 'person-first' terms, suggesting that it might belittle the experience of those who live with the disability (Ladd, 2003; Lane, 2000). For example, Sinclair (2010) objects to such language on the basis that an autistic person can never

and should never be separated from their ASD as it defines a person and marks their inclusion in that community. It is never this researcher's intention to use exclusionary language. Rather, this 'person-first' phrasing is the principle term used in the Irish literature (Department of Education, 2001; Health Service Executive, 2018; National Council for Special Education, 2016). As this paper is being written in the Irish context, and the use of 'person-first' language that is evident in the professional literature (Kenny et al., 2015), this is the term that will be used.

Defining autism

Research examining the impact of autism on education highlights the difficulties children with autism face with regards to social interaction and communication. Alongside these challenges children with autism present with fixations on a narrow range of interests and activities that impact on their social and emotional development (Autism Task Force, 2003; Bent, Barbaro & Dissanayake, 2016; National Council of Special Education (NCSE), 2016; National Health Service (NHS), 2016). Autism is cited in the literature as a developmental disorder which is characterised by these challenges in social, language, communication skills, and restrictive patterns of behaviour (Daly & Ring, 2016; DSM-V, 2013; Jiujias, Kelley & Hall, 2017).

These three main areas of difficulty children with ASD encounter are known as the "triad of impairments" (Bernardini, Porayska-Pomsta, & Smith 2014; Diagnostic and Statistical Manual of Mental Disorders (DSM–V), 2013; Van Wijngaarden-Cremers et al., 2013). The triad of impairments are outlined below and are adapted from the DSM-V (2013).

- **Communication:** Children with ASD have difficulties with both verbal and non-verbal language (for example, literal understanding of language, problems with turn-

taking in conversations, difficulties in interpreting facial expressions as well as gestures, and echolalia).

- **Social interaction:** Children with ASD have challenges with recognising and understanding other people's emotions as well as expressing their own emotions (for example, difficulties in understanding and following unwritten social rules, tendency to seem insensitive, preference to spend time alone, difficulties in seeking comfort from other people).
- **Patterns of restricted or repetitive behaviours:** Children with ASD may struggle with adapting to new environments (for example, presence of unusually strong narrow interests, difficulties in coping with unexpected change, restricted social imagination, difficulties in engaging in imaginative play and activities).

Autism is diagnosed four times more frequently in boys than girls (Rabbitte, Prendeville, & Kinsella, 2019; Rivet & Matson, 2011) with some research suggesting that girls, particularly for high functioning autism/Asperger's are able to mask their symptoms (Attwood, 2007; Budagovskaia, Dobrovskaia, & Kariagina, 2017; Dean, Harwood, & Kasari, 2017; Dworzynski, Ronald, Bolton, & Happé, 2012). In this study the participants are one girl and one boy with ASD.

Some repetitive or restrictive patterns of behaviour prevalent in children with ASD can be referred to as 'stimming'. These are self-stimulating behaviours often observed as hand flapping, spinning, rocking, or uttering repetitive words (Baron-Cohen, 2002; Conn, 2014, 2015; Masiran, 2018). These behaviours are evident in both the children participating in this study and can occur when the person with autism is excited, stressed, overwhelmed, anxious or happy (Baron-Cohen, 2002; Masiran, 2018).

Children with ASD face challenges with joint attention (JA), abstract social reasoning and introspective thought (Delbruck, Yang, Yassine, & Grossman, 2019; Dykstra & Watson, 2015; Hayes, 2007). These areas can present challenges for the child with ASD, and the teacher in educational settings. Joint attention (JA) in the educational context, is where the child and adult are attending to an activity together (Trautman, 2009). JA is discussed in detail later in this chapter.

The International Classification of Diseases (11th Edition) (ICD-11) is a system of medical coding created by the World Health Organisation (WHO) and functions to document and diagnose diseases and symptoms (World Health Organisation, 2018). It uses a levelled approach to diagnose ASD. This levelled approach determines the degree of support required. For example, level one; requiring support; level two; requiring substantial support and level three; requiring very substantial support. This coding of support is helpful to schools and parents in order to facilitate and plan for additional support systems. Overall, the ICD-11's consideration of ASD is similar to that of the DSM-V (2013) in that the DSM-V also uses this levelled approach to ascertain the severity of ASD and to highlight levels of support needed.

Asperger's syndrome

Asperger's syndrome is relevant to this literature review as there are several children in the school where this research is being conducted that have a diagnosis of Asperger's syndrome. The removal of Asperger's syndrome as a separate diagnosis and incorporated under the umbrella of autism in the DSM-V and subsequently the ICD -11 sparked considerable debate among researchers, clinicians, people and parents living with Asperger's syndrome (Germundsson, Heimann & Danermark, 2015; Kite, Gullifer & Tyson, 2012; Linton, Volkmar & Reichow, 2013). According to the research, the removal of the term Asperger's syndrome as a separate

diagnosis can lead to a loss of identity for many, and overall understanding of Asperger's syndrome (Linton et al., 2013). In contrast, other researchers such as Roberson (2019) feel that encompassing Asperger's syndrome into the umbrella of ASD is a positive advancement. It acknowledges the plight and challenges children and adults with Asperger's encounter. Roberson (2019) states that the ICD-11 is a form of ASD severity scale in that it functions to clarify the currently vague and misused ideas of high functioning autism (previously known as Asperger's syndrome) and low functioning ASD. Current research from Garralda (2016) acknowledges that the ICD-11 diagnostic severity scale is a more consistent means of demonstrating the different ways in which autism impact people's lives.

Diagnostic instruments

In the Irish context, ASD is generally diagnosed by a psychologist, psychiatrist or a multidisciplinary team (Rabbitte et al., 2019; Ware et al., 2009). This team consists of clinical, educational psychologists, speech and language therapists and occupational therapists. The table below outlines the diagnostic tools available in Ireland and the EU for early diagnosis of ASD. According to Bölte et al. (2018), there is considerable variation in the availability, standardisation, and formal distribution of the instruments used in the diagnosis of children. The absence of country-specific standardisation is a predicament and adds to the dilemma and challenges of diagnosis (Bölte et al., 2018).

Table 1

Diagnostic tools

- Diagnostic and Statistical Manual of Mental Disorders (DSMV, 2015)
- Diagnostic Interview for Social and Communication Disorders (DISCO)
- ADI-R (Autism Diagnostic Interview-Revised)
- The Autism Diagnostic Observation Schedule (ADOS)
- Social Communication Questionnaire (SCR)
- Checklist for Autism in Toddlers (CHAT)
- Autism Spectrum Quotient (AQ)
- ICD-11 (2018)

The ADOS assessment was the diagnostic tool used in the diagnosis of both the children in this research and is a popular tool used in the diagnosis of ASD (Randall, 2018.). The ADOS is a semi-structured assessment of communication, social interaction, and play (or imaginative use of materials). However, other works of literature question the standardisation of the ADOS and other diagnostic tools used in the diagnosis of autism in children (Hedley, Nevill, Uljarević, Butter & Mulick, 2016).

Hedley et al., (2016) found that raw scores in the ADOS assessment are affected by age, developmental and language level of the children presented with the assessment. Similarly, screening instruments such as the autism spectrum quotients (AQ), a form of a questionnaire completed by parents, have been challenged by researchers in recent times (Lundqvist & Lindner, 2017). The AQ is used to predict performance on cognitive tasks, social cognition, and

auditory speech perception (Baron-Cohen et al., 2006). Lundqvist & Lindner (2017) state that the AQ score is best regarded as an index rather than a diagnostic instrument because of variables in standardisation.

Research states that it is crucial to ascertain an accurate cognitive profile for a diagnosis of ASD (Itzchak, Lahat, Burgin, & Zachor, 2008; Matson, Nebel-Schwalm, & Matson, 2007). The cognitive profile distinguishes which aspects of behaviour are characteristic of an Autistic Spectrum Disorder and which may be due to intellectual or developmental ability (ADOS Manual, 2019; DSM-V, 2013; ICD-11, 2018; psychological society of Ireland, 2010).

However, debates in the literature around the effectiveness of using a cognitive function as a measure of autistic traits are apparent (Matson et al., 2007; Gardner & Dunkin, 2018). These debates manifest because the Intelligence Quotient test itself was developed for neuro-typical children. Sensory processing challenges can impact students with ASD, and this can affect test results (Bruner, 2015; Gardner & Dunkin, 2018; Matson et al., 2007). Furthermore, the IQ test does not test executive functioning or internal motivation; thus it can be challenging to ascertain an accurate result (Bruner, 2015). Despite these debates around the necessity or efficiency of cognitive profiling, the most recent diagnostic instrument the ICD-11 (WHO, 2018) uses cognitive profiling to ascertain the severity of autism. The following section of this literature review discusses in-depth the impact of autism on educational attainment, along with educational interventions available for children with ASD.

Impact of autism on educational engagement

Approximately 1% of the Irish population is reported to have autism (Sweeney & Staines, 2017). Similarly, the department of health report (2019) found that there is an estimated prevalence rate of 1- 1.5% for the purpose of planning policy and services. This figure is in line

with the United Kingdom ("Autism facts and history - National Autistic Society", 2019; Fombonne, 2003; Nicolaidis, 2019).

The WHO (2018) estimated that one child in 160 has an Autism Spectrum Disorder. Higher prevalence rates have been reported globally, with the estimated prevalence of ASD in children in the USA as 1.5%, and rates of 2.5 in South Korea (Centre for Disease Control, (CDCP), 2012; Kim et al., 2011). These higher rates have resulted in the CDCP, considering ASD as "a public health concern" (CDCP, 2016). However, these higher rates of ASD diagnoses are refuted by researchers as they debate as to whether this reflects a real increase in prevalence, or increased public and professional awareness of autism (Kenny et al., 2015; Pantelis & Kennedy, 2015). Likewise, Soke et al. (2017) attributed the inflated rates of ASD to the recent changes in diagnostic practices. Despite these debates around the prevalence of ASD in society, there are more children with ASD now in mainstream classes than ever before (DES, 2017, 2018; NCSE, 2016; NHS, 2016). This has implications for teachers and students alike.

The Irish Autism Task Force conducted a report entitled *"Educational Provision and Support for Persons with Autistic Spectrum Disorders (2001)".* This report states that all persons with ASD will likely have special needs, which will require additional and special educational provision (p. 27, Autism Taskforce, 2001). Similarly, the ICD-11 (2018) estimated that approximately 50% of persons with ASD also have an intellectual disability that will require support. Below are some of the most common struggles children with autism have concerning learning. These difficulties are in addition to the core impairments of social interaction, communication, social imagination and thinking style (Arunachalam & Luyster, 2018; Drudy, 2001; NCSE, 2016). The following table is adapted from the Autism Taskforce Report (2001).

Table 2

Impairments in education

- Abnormal patterns of social understanding and language expression.
- Oversensitivity to different sensations. Feeding and sleep peculiarities often interrupt the individual's ability to concentrate in school and participate effectively in an educational curriculum or programme.
- The triad is associated with ability ranging from superior to profound learning abilities, with susceptibility towards dyslexia and dyspraxia, and with varying degrees of sensory impairments, this effects joint attention.
- Seizures may present in adulthood.
- Problems may occur as a result of self-conscious, unusual, or in some cases, challenging behaviours.
- Peer rejection and social isolation may contribute to learning difficulties.

The Irish Autism Task Force (2001) suggests that students with ASD benefit in settings that are well-structured, task-oriented, with goals that are clear to both teachers and students. This does not suggest segregation but requires teachers and practitioners to be aware of how to facilitate learning with children with autism. Children may need to be taught skills which come more naturally to their typically developing peers. It is therefore imperative that a teacher working with children with autism has awareness around these issues outlined above and that professional training is offered to teachers in primary schools to help children with ASD achieve success and equality in education.

Autism and educational interventions

Many educational intervention programmes for children with ASD are evident in the literature. They are outlined in Table 3 and are discussed in the following section. Applied Behaviour Analysis (ABA) programmes are deemed the most effective according to research (Caron, Bérubé & Paquet, 2017; Kates-McElrath & Axelrod, 2006; Lydon, Healy & Leader, 2011; Mesibov & Shea, 2009). However, a recent report by the DES (2006) calls for a balanced approach to educating children with ASD with more integration of the elements of the Primary School Curriculum. Brinton & Fujiki (2010) state that intervention programs often underestimate the amount of time required to develop social communication behaviours to a socially acceptable level. The literature points to a need for ongoing teacher education to facilitate robust educational intervention.

Educational interventions to increase joint attention

In the educational context, the severity of autism impacts on educational engagement. This is evident in the literature, with researchers finding that the more severe the level of ASD the more difficulties the child has with attention, specifically joint attention and communication

(Delbruck, Yang, Yassine, & Grossman, 2019; Dykstra, 2013; Dykstra & Watson, 2015; Ho, Gadke, Henington, Evans-McCleon & Justice, 2019).

Table 3

Educational interventions for children with ASD.

- Augmentative and Alternative Communication Strategies (AACs)
- Interactive, Communicative Approaches
- Voice output communication aids (VOCAs)
- LEAP programme, Learning Experiences and Alternative Programme
- Stay, Play and Talk Initiative
- Floor Time
- The Lovaas scheme.
- Comprehensive Application of Behaviour Analysis to Schooling (CABAS1)
- TEACCH (The Treatment and Education of Autistic and related Communication handicapped Children)
- Use of Timers, Video Modelling, Pivotal Response Training (PRT)
- Lego therapy®
- Aqua therapy and yoga therapy
- Computer-assisted programmes

Joint attention is significant in the educational context; as it is attending to the practitioner and the educational event that improves language and learning outcomes (Mucchetti, 2013; Trautman, 2009). Joint attention is where the adult and child learn together in a reciprocal

relationship (Hayes, 2007). Similarly, the National Council for Special Education states that joint attention has the most beneficial educational gains when achieved (NCSE, 2016).

The impact of ASD severity on joint attention was evident in this particular research study and is discussed in chapter four. Joint attention is the most significant barrier for educational attainment for children with autism (Justice, Logan, Isitan & Sackes, 2016). Therefore, approaches that seek to enable children with ASD to attend to an educational activity, initiate communicative acts for their social ends and promote and develop their communication skills are the most beneficial for educational attainment. Educational interventions that are intensive in their approach introduced early in the child's education are the most advantageous for educational attainment (DES, 2001, NCSE, report 21, 2016). The following section of the review investigates the best educational interventions for children that promote joint attention.

Interventions such as Augmentative and Alternative Communication Strategies (AACs) and Interactive, Communicative Approaches have been successful for many individuals with ASD (Duffy & Healy, 2011). AAC encompass a range of aided and unaided systems. Aided systems involve the use of external aids or equipment, e.g. objects, photos, symbols and voice output communication aids. Unaided systems do not require the use of external aids or equipment (Dolly, 2018). Voice output communication aids (VOCAs) are another popular aided AAC system. VOCAs are portable electronic devices that produce synthetic or digitised speech output (Duffy & Healy, 2011). More specifically; the electronic devices translate a nonverbal behaviour, such as pressing a picture on a device board, into synthesised or digitised verbal messages. Other researchers have criticised the effectiveness of VOCA's due to lack of sufficient research to support claims of its effectiveness (Sigafoos, Drasgow & Schlosser, 2003). Furthermore, the lack of sufficient funding and training available for schools to implement these

communication strategies is a contemporary issue in today's educational system. According to McMahon & Cullinan (2014), schools and school districts frequently seem unwilling or unable to utilise evidence-based practices to provide quality treatment.

Other approaches such as video recordings for communication and creating warm classroom environments are effective interventions for joint attention for children who are non-verbal and children who may have Selective Mutism (SM) (Kotrba, 2015; Kovac &Furr, 2018). SM is where a child is unable to speak and communicate effectively in select social settings, such as a school environment. This is relevant to this research as one of the children participating in the study is suspected as having SM, although the diagnoses is not confirmed by the speech and language therapist at the time of this research. SM is said to be prevalent in 0.18% of children in Ireland (Sharkey & McNicholas, 2012). Contemporary literature suggests that ASD may be a "co-morbid" condition in selective mutism (Muris, Hendriks & Bot, 2015; Steffenburg, Steffenburg, Gillberg & Billstedt, 2018).

Integration approaches that use integration as the learning medium have positive effects on joint attention. This is where children are directly taught to participate in activities with their typically developing peers. However, a report by the DES (2006) states that direct teaching of skills must always occur in integrated settings.

Successful integration approaches such as the LEAP programme (Learning Experiences and Alternative Programme) and the Stay, Play and Talk Initiative have positive effects on educational attainment for children with autism. These programmes have shown positive improvements in cognitive, language, social, and challenging behaviours in children with autism (Mach, Hall & Squires, 2018; Osonoff & Cathcart, 1988; Strain & Bovey, 2011).

The LEAP programme is targeted at pre-schoolers and their parents and has three components: an integrated pre-school, a behaviour skills training programme for parents, and a National outreach training activities. The Stay, Play, and Talk is based on the Buddy Skills Program (English, Goldstein, Shafer & Kaczmarek, 1997) and has promising effects for increasing social opportunities, social interactions and joint attention with children with ASD. Mach, Hall and Squires (2018), state that the Stay, Play and Talk programme demonstrated increased levels of play interactions and decreased play disconnections for children with ASD.

"Floor Time" is another successful intervention for children with ASD that promotes joint attention. It is a play-based approach that helps children develop relationships, language, and thinking (Kordt-Thomas & Lee, 2006). Floor time is child-directed and adult supported (Greenspan & Weider, 1998). According to Kordt-Thomas & Lee (2006), this method has proven to decrease avoidant, self-stimulatory, or restrictive, repetitive play activities and increase communication and joint attention in children with ASD. Some disadvantages of floor time according to Greenspan & Weider (1998), may be that children are playing with Adults: not their peers. It would be crucial that during floor time the play is always child-directed (Greenspan & Weider, 1998).

Behavioural theory

Behavioural theory is a prevalent theme in the research as a method of increasing joint attention, managing behaviour and educating children with autism. This approach was effective in this particular research study to develop and enhance joint activity with children with ASD.

According to research educational interventions that use Applied Behavioural Analysis (ABA) are the most effective for children with autism (Caron et al., 2017; McPhilemy & Dillenburger, 2013). Behavioural approaches originate from Skinner's work in the 1950s and

have been widely used to meet the needs of children with ASD. Behaviourism focuses on the linking of stimuli and response and uses reinforcement as a predictor of motivation to learn with language acquired through imitation and reinforcement (Skinner, 1968).

ABA in an early educational setting may seem too strict and controlling. According to some researchers, there is an urgent need to re-educate professionals regarding the principles of ABA. A recent study by Fennell and Dillenburger (2018) showed that teachers' views and knowledge about ABA are often misinformed, inadequate and misleading.

Programmes that are based on the ABA approach to education such as The Lovaas scheme developed by Dr Ivar Lovaas (1973), the Comprehensive Application of Behaviour Analysis to Schooling (CABAS1) system and the TEACCH (The Treatment and Education of Autistic and related Communication handicapped Children) have shown positive outcomes for the education of children with ASD (Greer, 1997; Hamdan, 2018; Harris & Weiss, 1988; Leaf et al., 2018; Magiati & Howlin, 2001; Selinske, Greer & Lodhi, 1991).

The above behavioural approaches to educating children with ASD have proven to be evidence-based practice (Kates-McElrath & Axelrod, 2006; Mesibov & Shea, 2009) however; they do require specialist teacher education and training (McMahon & Cullinan, 2014; Reed, 2016; Selinskeet et al., 1991).

The next section of the literature review focuses on oral language development, play challenges evident in children with autism and an overview of the dialogic story reading approach.

Oral language development and literacy skills

Language development in neuro-typically developing children

Educational theorists tend to agree that no single theory of learning is sufficient to capture the intricacies of how individuals learn language (Kiely, 2017; Wood & Attfield, 2005). Language acquisition is a product of active, repetitive, and complex learning. The child's brain is learning and changing more during language acquisition in the first six years of life than during any other cognitive ability he/she is working to acquire (Barbarin & Wasik, 2009).

There are, however, learning theories of language development evident in the literature. These are the behavioural, cognitive, constructivist, socio-constructivist, socio-cultural and emergentist theories of language development (Barbarin & Wasik, 2009; Clay, 1991; Cohen, 2008; Harris, Golinkoff, & Hirsh-Pasek, 2011; Kiely, 2017; Leonard, 2002; Neuman, 2011). These theories are briefly summarised in the table below. Most researchers now agree that language acquisition occurs as a result of the interplay between biological and environmental factors (Kiely, 2017).

Table 4

Theories of Language Development Evident in the Literature

Theory	**Theorist**	**Summary**
Behavioural theory	Skinner (1968).	Behaviourism focuses on the linking of stimuli and response and uses reinforcement as a predictor of motivation to learn. Language is acquired through imitation and reinforcement (Skinner, 1957 as cited in, Kiely, 2017). Children imitate the language style they hear around them and make associations between words and objects.
Cognitive approach	Chomsky (1999)	Cognitivism focuses on how the brain receives, internalises and recalls information (Leonard, 2002). Language is innate, and humans have a language acquisition device (LAD) as part of their cognitive structure.
Constructivist	Piaget (1923)	Language development is part of cognitive development and occurs at various developmental stages. Children learn language through play.
Socio-Constructivist	Bruner (1996)	A social constructivist emphasises culture as a significant factor in language learning.
Socio-Cultural theory	Vygotsky (1978)	The socio-cultural theory suggests that human learning is mostly a social process. Play is an essential tool for learning language. The role of culture is vital to a child's language development (Vygotsky 1978, as cited in, Kiely 2017).

Emergentist theory	Hollich, Hirsh-Pasek et al., (2000).	Emergentist theory views language development as both innate and the result of environmental influences.

Language difficulties are an area that impacts a child's learning and development. Language impairments in children with autism can have a devastating effect on a child's learning and development (Avramidis & Norwich, 2002; DSMV, 2013; ICD-11, 2018). Children with ASD will often display language and communication problems such as difficulties with verbal and non-verbal gestures. Additionally, children with ASD have challenges in participating in play activities. Play activities are an effective and natural way for a child to learn language and communication skills (Bernardini, Porayska-Pomsta, & Smith, 2014; Hartley & Allen, 2014). The challenges children with ASD have regarding play are discussed later in this review.

The literature states that children with ASD have complications in normal language development due to delays in language uptake, meaning that children with ASD have challenges with understanding or receptive language (Baron-Cohen et al., 2006; Booth, Gallagher & Keenan, 2018). Similarly, current research by Arunachalam & Luyster (2018) into the area of language delay and autism states that significant language delays in children with ASD are due to impairments in other areas of development such as memory, attention, and nonverbal cognition. These related areas affect language development by altering how children attend to and process the linguistic and extra-linguistic input in their environment. However, other researchers suggest, that the role of the environment in language acquisition with children with ASD requires further research (Krieger et al., 2018; Nicolaidis, 2019).

In the educational context, providing children with ASD opportunities to hear, talk and have conversations with their peers and teachers can enhance language development (Cohly et al., 2010; Conn, 2014). The challenge for the early childhood teacher is to endeavour to provide children with ASD many developmentally appropriate language activities to enhance verbal communication and linguistic skills. The dialogic story reading approach is one of these activities that can improve language outcomes for children with ASD.

Literacy development

According to the literature, children with ASD generally demonstrate well-developed word recognition skills (Nation, Clarke & Snowling, 2002; Nation, Clarke, Wright & Williams, 2006; Newman et al., 2007), though this may be dependent on the severity and level of autism. Further research indicates that many school-age children with autism have trouble understanding inferences made in stories and struggle with class material unless supplemented by solid visual supports and social scaffolding (Rapp, 2005; Whalon & Hanline, 2008).

Additionally, research has indicated a relationship between early oral language abilities and later reading proficiency, (Clay, 1991; N.C.C.A, 2012; Strickland, 2010; The Primary Language Curriculum, 2015; Whitehurst & Lonigan, 2002). This connection is evident in children who are typically developing, reading-delayed, and language-delayed (NCSE, 2016; Weikle & Hadadian, 2004). This is why as mentioned previously; children with ASD with a language delay require intensive educational interventions. Furthermore, children learn language skills through play, and play difficulties are another challenge for children with ASD. Language is enhanced during meaningful, playful interactions (McGee, 1987) and is essential for the overall development of the child (Barbarin & Wasik, 2009; Vygotsky, 1968, as cited in Reznitskaya, 2012).

The benefits of play for language and communication are well documented (Barbarin, Wasik, 2009; Brown, 2014; Piaget, 2013; Stacey, 2014; Vygotskij, Rieber & Carton, 1987). A child with a play deficit will encounter language difficulties compared to his/her typically developing peers (Holmes & Willoughby, 2005; Lam & Yeung, 2012; Lee, Lo, & Lo, 2017; Lydon et al., 2011; Wood, 1998).

Autism and play

Children with ASD demonstrate limited appropriate use of toys and have specific impairments in symbolic and socio-dramatic play (Lydon et al., 2011; Hillman, 2018). Unlike typically developing children, children with ASD often lack age-appropriate play skills (Lee & Lo, 2017). Children with ASD tend to engage in more immature play (e.g., prolonged sensor motor play stage), they may also use toys and objects in a more rigid or restrictive manner (e.g., spinning tires of a toy car repeatedly), and have more inferior quality in their play skills (e.g., lack of spontaneous, symbolic play) than same-age typically developing children (Jung & Sainato, 2012; Holmes & Willoughby, 2005; Lee & Lo, 2017; Stagnitti et al., 2016).

The DSM-V (2013) states that children with autism tend to have difficulties in sharing imaginative play or in making friends. It also states that children with autism can display an absence of interest in peers and display pretend play challenges. In contrast, the ICD-11(2018) places less importance on the type of play observed for diagnostic purposes. This may be since play varies depending on the country or culture. The ICD-11 focuses more on whether children follow or impose strict rules when they play, a behaviour that can be perceived in any culture and is a common characteristic among children with autism. Many play behaviours observed by clinicians may be culture-specific. For example, in some Eastern Societies, such as Chinese Communities, direct eye-contact and using the index finger to point is regarded as impolite, so it

would be entirely reasonable for a child or adult not to engage in these behaviours (Freeth, Sheppard, Ramachandran & Milne, 2013). Hence, lack of eye-contact and pointing would not necessarily be indicators of ASD in these particular societies.

Reading comprehension and autism

Reading comprehension can be severely impaired in children with autism and is often an area overlooked by educational practitioners (Burd & Kerbishian, 1985; Fisher & Taylor, 2015; Whalon et al., 2013). This may be due to a term called hyperlexia. Hyperlexia is a condition where a person, often a young child, has word-reading skills that are far above his or her reading comprehension skills, verbal functioning level, or general cognitive function (Kerbishian, 1985; Sharkey & McNicholas, 2012). New research states that 84% of children diagnosed with hyperlexia are on the autism spectrum (Ostrolenk, Forgeotd'Arc, Jelenic, Samson & Mottron, 2017). In typically developing children, single-word reading and reading comprehension often grow together, although this is not always the case. Newman et al., (2007) deemed hyperlexia as ASD-specific, and some researchers see hyperlexia as a possible indicator for ASD (Fisher & Taylor, 2015).

Dialogic story reading to promote reading comprehension

Dialogic story reading develops informal literacy skills (Kiely, 2017; Reznitskaya, 2012), the skills with which most children with autism struggle (Westerveld et al., 2016). Paris (2005) describes these informal literacy skills as unconstrained skills. Unconstrained skills are harder to assess and consist of vocabulary, comprehension and fluency. They develop over a lifetime, not like constrained skills such as name writing, alphabet knowledge and high-frequency words, which are easily assessed, and one might argue, more accessible to teach.

Researchers such as Hogan et al., (2011) refer to language skills as lower-level skills and higher-level skills; both are necessary for language development. For example, vocabulary and grammar are considered lower-level skills, and inference making, monitoring, analysis, and comprehensions are higher-level skills. For the harmonious development of oral language skills, both lower and higher-level skills need to be well developed. Many children with autism use functional or lower level language skills; however, this depends on the severity of autism (King, 2018).

It is a challenge to promote higher level skills in children, especially children with autism. Research by Westerveld et al., (2016) found that children with autism have difficulty with oral narrative comprehension. In contrast, receptive vocabulary and code-related skills were often areas of strength. These lower level skills or constrained skills (Stahl, 2011) although essential components in literacy development are only a small indicator of later literacy success (National Early Literacy Report, (NELP), 2008). It is the higher level of skills or the unconstrained skills that are a better predictor of literacy success (Whitehurst & Lonigan, 2002; Strickland, 2010). Furthermore, these higher-level skills or unconstrained skills can be developed through dialogic story reading (Kiely, 2014; 2017; Whitehurst & Lonigan, 2002; Saracho, 2017).

Below Stahl's continuum of constrained and unconstrained skills highlight how it is the unconstrained skills such as comprehension, vocabulary development and fluency that are essential for lifetime literacy development. These unconstrained skills are challenging to teach and facilitate, and especially demanding for children with autism.

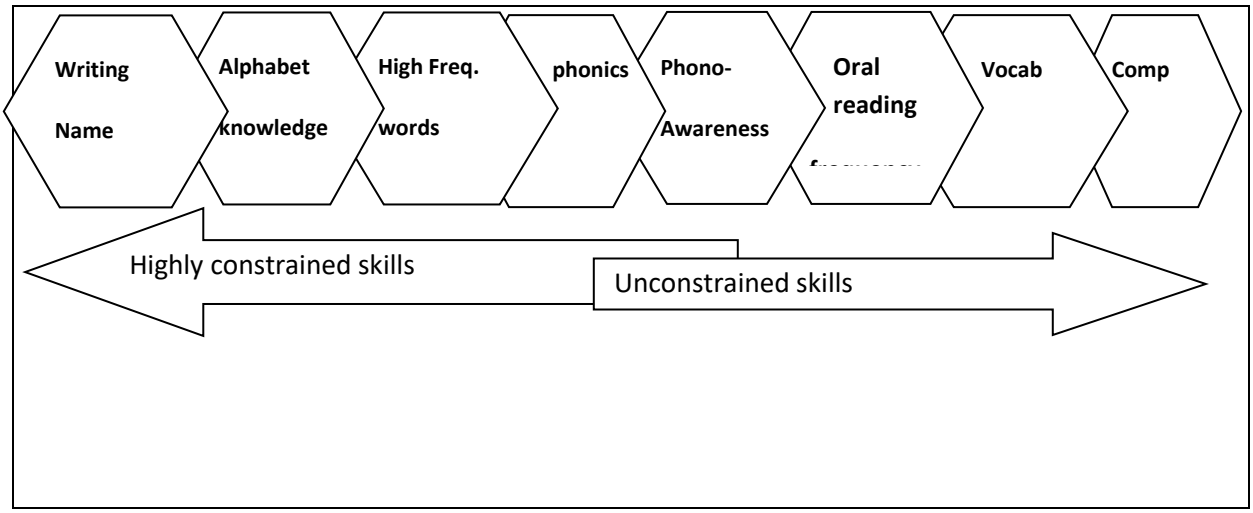


Figure 1.

A continuum from highly constrained to unconstrained skills (Stahl, 2011).

However, a balanced approach is called for in a recent review of the literature examining literacy (NCCA, 2012). The report states that there is a reciprocal relationship between listening, speaking, reading and writing and development in that one supports growth in the other. Constrained skills such as alphabet knowledge and high-frequency words have importance. The problem is that in recent years, teachers have over-focused on restricted skills, leaving unconstrained skills such as phonological awareness, oral language development, vocabulary and comprehension teaching to the wayside (Kiely, 2017). The introduction of the new language curriculum emphasises unconstrained skills and acknowledges the importance of oral language development for literacy development. This is a welcome addition to classrooms around Ireland. For children with autism, it can be a challenge to teach higher level skills, such as inference-making, monitoring, analysis and comprehension. Conversations through and around books may be more accessible than general discussions. This leads on to the next section of the review which focuses on the benefits of shared reading.

Shared reading

Shared reading can be modified to meet the needs of students with mild to moderate disabilities by emphasising the collaborative nature of the activity (pausing for students to respond, allowing the students to manipulate the book, choosing books with interactive parts and repeated text and having the teacher interact with the book by commenting, questioning, and tracking the version during reading (Justice & Kaderavek, 2002). It is this modification that encourages language and communication in children with ASD and promotes language gains (Golloher, 2017; Kim & Rispoli, 2018).

Shared reading is reading to a child and asking comprehension questions whereas dialogic story reading is allowing the child to take over the "reading" and becoming the storyteller (Kiely, 2017). Shared book reading and dialogic reading incorporates the relationship aspect of a joint activity, which as mentioned previously, is identified as the most challenging for children with autism yet has the most beneficial educational gains when achieved (NCSE, 2016; Mucchetti, 2013).

According to one meta-analysis (Mol, Bus, De Jong & Smeets, 2008), the benefits of shared book reading depends upon the quality of the social context between the adult and the child. As this social aspect is problematic for children with autism, prompts and cues may need to be used to elicit language exchange (Justice & Kaderavek, 2002; Whalon, Delano & Hanline, 2013). The NCCA's review on oral language development (Shiel et al., 2012), highlights the significance of this social context of language development. Fruitful discussions of stories increase children's vocabulary, understanding of story events, recall of stories, and knowledge of print conventions (Neuman, 1996).

The dialogic story reading approach may be especially critical to children with ASD because it allows parents and teachers to provide support for developing social interaction and communication skills (Kim & Rispoli, 2018; Plattos, 2012). Children with ASD vary in their behaviour, but social skill deficits are considered to be the most significant concerns to most parents (Lord & Risi, 1998; Tipton, Blache & Eisenhower, 2017). The dialogic story reading approach has shown to deepen bonds between typically developing children and their adult reader (Kiely, 2017) and similar findings were found with children with ASD (Golloher, 2017; Kim & Rispoli, 2018).

It is clear from the research that shared storybook reading enhances oral language development and has positive outcomes for relationship development (Kiely, 2017; Lonigan & Shanahan, 2010; Mol, Bus & Jong, 2008; Schickedanz & McGee, 2010). In particular, dialogic story reading, where the adult helps the child to become the storyteller of the story, has shown to be the most effective method to increase oral language rates (Kennedy, 2012; Kiely, 2017; Trivette & Dunst, 2007; Whitehurst, 1993). In a study by Lonigan, Purpura, Wilson, Walker and Clancy-Menchetti (2013) it was found that children, who received small group dialogic reading sessions, experienced more oral language growth than children who received only their classroom curriculum. There is not a lot of Irish based research examining the effectiveness of dialogic story reading approach as a useful educational intervention for children with ASD. This area warrants further research and this paper will endeavour to add a small piece to that literature. There is some international research that cites positive outcomes for an adapted approach to dialogic story reading for children with autism. This approach is investigated next in the review.

RECALL method

This adapted method of dialogic story reading was developed in the USA. *Reading to Engage Children with Autism in Language and Learning* (RECALL) draws on the dialogic story reading approach. It pays particular attention to directing questions to enhance oral language in children with autism. A detailed outline of the RECALL approach is in Appendix A, sample lesson plan. RECALL incorporates questions that focus the child on joint attention, social reciprocity, and language/communication skills. These are the skills children with ASD need to develop to enhance future opportunities for learning and success in school (Justice, Logan, Isitan & Sackes, 2016; Whalon et al., 2013).

As outlined above the literature states that there is a need for robust oral language intervention for children with ASD as they are more likely to have specific language difficulties, especially in the areas of joint attention, social reciprocity, and language/communication skills (American speech-language-hearing association, 2006; NCSE, 2009; 2011, 2016; Whalon et al., 2013).

Whalon et al., (2013) modified the current dialogic reading approach by integrating systematic instruction with the hierarchy level of prompting and visual supports. This method showed significant and positive differences in supporting communication and comprehension of children with ASD (Plattos, 2012; Westerveld et al., 2017; Whalon et al., 2013).

However, it cannot be ignored that children with autism can display challenging behaviours that may impact on educational engagement. These may, in turn, impact on teachers trying out new interventions. Similarly, the constant striving for joint attention with children with ASD can cause burn-out with teachers working in educational settings. This challenge was evident in this research project and is echoed in findings in a study by Dykstra (2013). Dykstra

(2013) found that teachers working in educational settings with children with ASD were more likely to experience burnout than their colleagues working with typically developing children.

Impact on teachers teaching children with ASD

Behavioural difficulties and joint attention are significant challenges in conducting research and educating children with ASD. McTiernan, Leader, Healy & Mannion, (2011) found that children with autism are more likely to display challenging behaviours than their typically developing children. This perhaps is unsurprising given the social and communicative challenges which are core to ASD. In this study lower IQ predicted higher frequencies of aggression and self-injurious behaviour. However, as stated previously in the chapter, IQ may not be a good measure of autism function.

Challenging behaviour affects teachers, principals and students. Lindsay, Proulx, Thomson & Scott (2013) documented teacher interviews about their experiences and views of having children with ASD in their classrooms. The study found that the majority of teachers were apprehensive and lacked confidence at the first prospect of teaching a child with ASD. The majority of the teachers interviewed also described feelings of uncertainty in managing the behaviour of a child with ASD (Lindsay et al., 2013). Further studies document that teachers need more resources, training and support to enhance the education and inclusion of children with ASD (Avramidis & Norwich, 2002; Kelly, Carey, McCarthy & Coyle, 2007; Westling, 2010).

A report from the National Council of Curriculum and Assessment (NCCA, 2009) on teacher perspectives about inclusive learning found that most teachers interviewed were positive about the inherent value of inclusion. Similarly, research into inclusive education and provision in Ireland by Meegan & MacPhail (2006) found that teachers have overall positive attitudes

regarding the concept of inclusion. Likewise, an international review of literature on teachers' attitudes towards integration and inclusion conducted by Avramidis & Norwich (2002) found similar affirmative educator- attitudes towards inclusive education. However, the literature above all alludes to the following constraints on inclusion:

1. The need for adequate on-going support for teachers (professional development and training).
2. Adequate training is a necessity to cope with challenging behaviours.
3. Time constraints on the day. The effect of managing challenging issues has on mainstream education.
4. The need for funding.
5. Curriculum issues.

In the Irish context, interviewees believed that greater access to psychological services for assessment, liaising with their special educational needs organiser (SENO) concerning accommodations and support/advice on educational interventions would assist them in creating a more inclusive learning environment (NCCA, 2009). Continued teacher education and support programmes are a necessity in order for teachers to have the tools to teach children with ASD and to cope with challenging behaviours in classrooms (Murphy, Healy & Leader, 2009; Fennell & Dillenburger, 2018). An additional Irish study surveying teachers working with children with ASD cited that 68% of teachers felt feelings of isolation and lacked support in their daily practice (Balfe, 2001). If teachers have adequate training and support, they may be more likely to try out new educational interventions for children with ASD, benefiting both the educators and the children.

Conclusion

This literature review looked at the question of *"What is autism?"* definitions and diagnostic tools. The impact of ASD on educational attainment and engagement was examined in the literature. The various educational interventions were discussed with the best interventions cited as interventions that increased joint attention, were early interventions and were intensive in their approach. ABA was cited as being very useful for teaching and managing behavioural issues with children with ASD.

The review discussed the impact difficulties in play and language development have on children with ASD along with the importance of oral language development for all children. Oral language development is a good predictor of later literacy skills, and studies show the benefits of dialogic story reading for enhancing oral language skills.

This chapter investigated an international adapted method of dialogic story reading as a useful intervention to use with children with ASD. Further research is needed to ascertain the effectiveness of this approach. The overall aim of this research study is to add to that body of knowledge concerning effective interventions for children with ASD.

The increase in the numbers of children with ASD in mainstream classes impacts on teachers and students alike. Recent Irish reports show that there is a need for additional teacher education programmes in order to allow children with ASD to reach their full potential. Further research into the impact of increasing support and education of teachers has on the educational attainment of children with ASD would be essential to continue raising educational standards for all.

Chapter 3

Methodology

Introduction

"Children don't remember what you teach them, they remember what you are", (Henson, 2005). Living values through daily practice is what makes teaching a rewarding and fulfilling job. The desire for authentic living is what inspired the decision to use the living theory approach of action research.

Whitehead (2018), states that everyone, irrespective of age, stage, context or field of practice, has an influence, for better or worse, in their own lives and learning of others. This research study aims to improve the researcher's practice for the good of the children in her class and school.

This chapter investigates the lines of enquiry and cycles of action research that directed this study. The empirical and interpretive paradigms' are outlined to highlight how these particular paradigms do not fit into the ontological and epistemology view-points of the researcher. This chapter discusses action research as a philosophical stance that is driven by values. Furthermore, the chapter outlines teacher reflections as valid data in learning, critical thinking and educational/living theory. Finally, the chapter concludes with the limitations, ethical considerations and generalisability of this research project.

Action research takes the form of cycles. These are cycles of planning, implementing, observing, and reflecting (Anderson & Arsenault, 1988; Basit, 2010; Cohen, Manion, & Morrison, 2007; McNiff, 2017). Other research questions, tensions and challenges emerged in this study as the cycles of action research progressed. They were the following and are discussed later in the cycles of action research.

1. What books elicited language responses and communication from the two participants?
2. What was the best way to maintain joint attention during a dialogic story reading session?
3. Was working one to one more beneficial for language outcomes and joint attention?

The empirical and interpretive paradigms

A paradigm in research terms is a set of assumptions about the nature of reality, the status of human knowledge, and the kinds of methods that can be used to answer research questions. Calfee and Chambliss (2003) define empirical research as "the systematic approach for answering certain types of questions" (p. 152). The ideas behind empirical research are based upon epistemology, a branch of philosophy that investigates the origin, nature, methods, and limits of human knowledge (Anderson, 1998; Basit, 2010; Bell, 2005; Punch & Oancea, 2014; Smith, 2017). An empirical researcher gathers evidence in the form of measurements or data through direct observation or experimentation (Basit, 2010). Dryer (1995), states that the truth of an idea can be measured when the situation is observed by a competent person, to the exclusion of all bias. This indicates that the teacher researching from an empiricalist paradigm in the classroom is detached and uninvolved in the process. This detachment does not fit into the researcher's paradigm.

Science is involved in explaining why things in nature are the way they are (Popper, 1963). Therefore empirical researchers are "able to develop powerful explanations for a wide range of "natural phenomena" (Dyer, 1995, p.10). In the educational context, the researcher working from this paradigm has a clear idea of what he/she is looking for, conducts an enquiry and proves or disproves a hypothesis (Roche, 2000). The analysis is value-free and the

experiment replicable using other participants (Punch & Oancea, 2014; Roche, 2000; Smith, 2017). This paradigm does not fit into this research as this research project cannot be replicated. The participants and their surroundings are unique. This is one of the research limitations which are discussed later in the chapter. This research also documents the teacher's learning process, which is inimitable and cannot be duplicated.

Furthermore, the issue of doing research "*on*" children and using a control group has moral implications for teachers. Teachers are obliged to give children the best possible education, not exclude a group for "control" purposes. Using a control group as part of research is deliberately excluding a cohort from the best educational pedagogy (Bournot & Belanger, 2000; Punch & Oancea, 2014; Roche, 2000).

In contrast, interpretivism concentrates on the meaning people bring to situations and behaviours (Anderson & Arsenault, 1998; O' Donoghue, 2007; Roche, 2000). There is an understanding that studies cannot be exactly replicated, and that people are unique; however, as in empirical research, the teacher is passive and neutral in this paradigm. This is not the case in this study, as the teacher is very involved in the research process of learning and transformation. This involvement of the teacher in the research, therefore, excludes an interpretative and empiricalist research methodology.

The participants "Sarah" and "Jack"

The participant's names used for this study are pseudonyms to ensure anonymity.

Sarah did not communicate much in her first year of school. This year in senior infants she has started to communicate more. Sarah's language is functional, taking the form of asking for certain books, and requesting certain characters to be drawn by her SNA. Sarah loves stories and recites texts she reads and hears over and over. She is starting to respond more verbally

every day to her teacher. Sarah still does not communicate much in class, compared to Jack (the other participant), and her classmates. Sarah does not play or engage with her peers. Her parent's and speech therapist, report that she has a photographic memory. This is why she often recites books to herself.

Sarah presents with echolalia, repeating words and phrases over and over however, echolalia can be an essential first step towards more spoken language (Cohly, Kostyuk & Isokpehi, 2010). The resource teacher, speech and language therapist and special needs assistant have concerns regarding selective mutism (SM). SM is where a child is unable to speak and communicate effectively in select social settings and is prevalent in 0.18% of children in Ireland (Sharkey &McNicholas, 2012).

Sarah reads exceptionally well for her age, above average compared to her peers. Standardised testing has not been completed yet to get a sense of her reading age, as at the moment Sarah would find this too distressing thus compromising the results. It has been documented in previous school reports that Sarah may have hyperlexia, a term used to describe a child reading fluently but not comprehending what is read (Burd & Kerbishian, 1985; Grigorenko & Klin, 2003; Ostrolenk, Forgeot & Jelenic et al., 2017) although this is hard to assess due to her limited verbal communication.

The aim of the research for Sarah was to see if dialogic story reading could help her communicate more, provide more expressive language, lessen the echolalia and engage with the process through joint attention.

Jack is more verbal than Sarah and also enjoys listening to stories. His language and communication skills are more expressive than Sarah. He engages more in the class and plays with peers. School observations would see Jack engaging in parallel play that is, playing

alongside his friends rather than with his friends, a common trait in children with ASD (Francis, Farr, Mareva & Gibson, 2019; Overley, Snow, Mossing, Degges-White & Holmes, 2018). However, in recent weeks Jack has been observed engaging in socio-dramatic play on the yard and the classroom. Jack's parents report that he has two specific friends that frequently come for play dates.

Class observations show that Jack would like to participate more in the whole class storybook reading sessions. Jack enjoys shouting out ideas and expressions. He is very eager to learn. Unfortunately, he has been told numerous times not to interrupt teacher, to put his is hand up to respond, thus curbing his spontaneity. This wait time is a necessity at times, in a class of twenty-eight children. However, Jack becomes frustrated during story time. The aim of this research for Jack would be to determine if dialogic story reading in a smaller group would encourage him to join in and express himself more, in a more socially acceptable and effective manner.

Developing good relationships with two children with autism was an optimistic aim of this research. Children with ASD have problems negotiating relationships and social conventions (Autism Task Force, 2003; Daly & Ring, 2016; DSMV, 2013; ICD-11, 2018; NCSE, 2016). However, there was substantial evidence of teacher-student bonds during the research timeframe (Appendix S, Reflection Journal R.J, 2). This is examined in detail in the data analysis and discussion chapters.

Action research as a philosophical stance

Action research is a philosophical stance in that it is referred to as a self-reflective enquiry, to improve practice in order to maximise social justice (Kemmis & Taggart, 1988). Action research begins with values. As a self- reflective practitioner one needs to be aware of

what drives one's life and work (McNiff, 2017). The value of teacher as a lifelong learner is at the heart of this study, along with the belief that all children deserve the best possible education available. Among others, the values of inclusion and the importance of the child's autonomy drive this action research. The concept of teaching through a relational pedagogy is a significant value that motivated this study. Relational pedagogy is the systematic construction of appropriate relationships embedded within the schooling process (Crownover & Jones, 2018). Such relationships develop organically through social interactions and are also formed through deliberate instructional methods. This adapted story reading approach was a deliberate instructional method that aimed to create teacher/scholar bonds, language and communication skills with the two participants with the overall aim to improve practice.

The primary criterion for analysing the data was; "Was there an improvement of practice and learning?" McNiff (2017) states the following about data analysis in action research;

"You judge whether you are improving your practice in relation to whether or not you are living more fully in the direction of your values"(p. 106).

Action research in education comes from a paradigm that believes in the teacher as a competent and capable practitioner that can add to educational theory and practice (Whitehead, & Huxtable, 2016; McNiff & Whitehead, 2002, 2006, 2009). The teacher is extremely engaged in the research, with the overall aim to improve pedagogy. Furthermore, completing research in one's classroom brings about change. The idea of "teacher as researcher" suggests that action research should contribute not only to practice but to a theory of education and teaching which is accessible to other teachers, making educational practice more effective (McNiff & Whitehead 2005; Norton, 2018; Stenhouse, 1979).

Action Research as a research approach has grown in popularity as it claims to increase

confidence in practice and can be extremely rewarding for teachers (Farren, 2006; Glenn, 2006; McNiff, 2017; Noffke & Zeichner, 1987; Palak, 2013; "Research-Teaching Council", 2019).Action research is a powerful tool for teachers because teachers work best on problems they have identified themselves (Cohen, et al., 2007; McNiff, 2017; Palak, 2013). Studies have shown that action research improves teacher's dispositions towards reflection and consolidates practical theories and practices (Noffke & Zeichner, 1987; Palak, 2013).

A lot of educational research is conducted by outside researchers, not teachers working in classrooms (Punch & Oancea, 2014; Kelly & Sloane, 2003). This adds to the disconnection between theory and practice (McNiff, 2006). The essence of action research is essentially reflecting and documenting how the teacher learns and grows throughout the process (McNiff, 2017, 1998, 1993; McNiff & Whitehead, 2006).

Action research and transformation

Action research is about transformation and change on many levels, from the local to the National and even perhaps International (McNiff, 2017; Roche, 2000). Action research is about changing individuals, the culture of the group, institutions and societies to which they belong. Its epistemological bases are rooted in critical theory (Kemmis & Taggart, 1988). Action research is a political process because it involves making changes that will affect others (Kemmis & Taggart, 1988; Punch & Oancea, 2000; McNiff, 2017).

However, using action research solely for change has its dilemmas. Action research with its emphasis on social change and emancipation of a particular group has been cited as too utopian and unrealizable (McNiff & Whitehead, 2006; Kemmis & Taggart, 1988; Roche, 2000). Action research for change comes from a critical theory perspective. Critical action research seems too controlling, seeking to place action research in a particular mould, with a specific

agenda; therefore, it can become biased towards fulfilling that agenda (Roche, 2000). When the sole focus of action research is change, it loses its fluidity and its cyclical nature of reflection and adaptation (Bell, 2010; McNiff, 2017; Zeichner, 2005).

This research, therefore, was best situated within the living educational theory approach of action research (Whitehead, 1989; Whitehead & McNiff, 2006). A living theory is studying and evaluating one's practice. Research is transformed from that of an observer of students to an observer of oneself-in-relationship-with-students (Barry, 2018). This strand of action research fits in with the teacher's values of a lifelong learner and the importance of relational pedagogy. Living theory is a form of enquiry that can include aspects of the many types of action research outlined in the table below.

Table 5

Types of Action Research

Types of Action Research:
• Collaborative Action Research • Critical Action Research • Self-study • Participatory Action research • Classroom Research • Narrative inquiry • Critical pedagogy • Action learning • Reflective practice

Note. Adapted from Barry, 2018; McNiff, 2017; Roche, 2000.

The cycles of action research

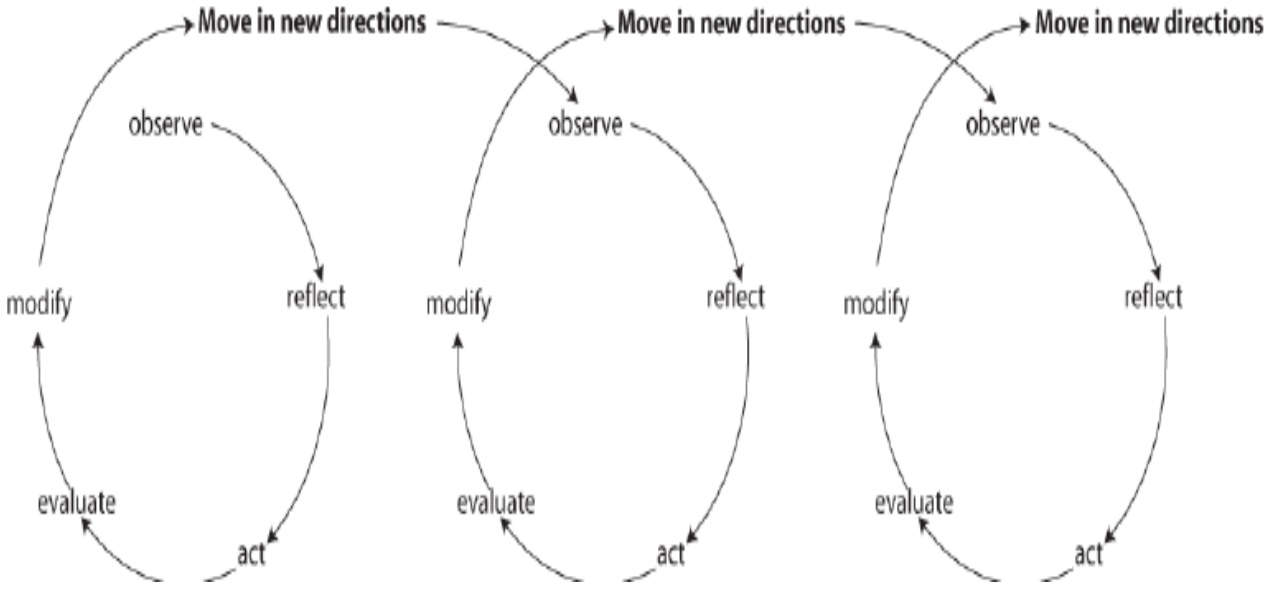
The main action principles underpinning action research involves identifying a problematic issue, imagining a possible solution, trying it out, evaluating it, then changing practice in the light of the evaluation (McNiff, 1995; 1997). Action research is a self- reflective spiral (Kemmis & Taggart, 1988). It involves cycles of planning, acting, observing systematically, reflecting and then re-planning (McNiff, Lomax &Whitehead, 1996). An action research project may have many cycles within it, as outlined in Figure 2.

These cycles, like the cycles of inquiry and learning (Kolb, 1984; Murdoch & Wilson, 2008; Short, 2007), require self-reflection and a learning commitment.

Figure 2.

The action research cycles.

Note. Adapted from McNiff & Whitehead (2006).



Observational schedule

The research involved withdrawing the participants daily for thirty minutes for two and a half weeks. The children were presented with an adapted dialogic story reading approach. The sessions were recorded, a total of 6 hours for data analysis. Table three outlines the unstructured observational schedule (DeWalk & DeWalk, 2002; Foster, 1996) used during the research. It is called an unstructured observational schedule as the observational criteria became apparent as the research progressed. Below, in Table 6, the unstructured observational schedule demonstrates what language, behaviours and learning emerged from the data.

Table 6

Observational schedule

Observation Schedule
Responses: Wait time for response to teacher's questions
Types of responses:
Dramatising Response
Talking back
Taking over
Critiquing
Inserting
Taking over
De-contextualised Language
Joint Attention
Relational Pedagogy
Types of Books that developed language and enhanced J.A

Teacher Learning and Teacher reflections
Collaboration and learning with Staff
Questioning strategies and reading style

Along with the recorded data, the teacher documented field notes, journal entries and revision casts. A revision cast (Bacon, 2017) is a short audio, summarising the teacher learning after the sessions. These dialogue and diary methods for building pedagogic knowledge are forms of narrative research (Bashan & Holsblat, 2017; Connelly & Clandinin, 1990; McNiff, 2017; Nind & Lewthwaite, 2018). Reflection entries have the potential to facilitate personal growth in teachers which leads to new ways of thinking and doing (DeWalt & DeWalk, 2002; Devenny & Duffy, 2014; Playdon, 2000).

The practice of reflection leads to the development of critical thinking, affective and transformative learning (Ryan &Ryan, 2013). Reflecting on practice draws on critical thinking and self-assessment (Bolton, 2006; Playdon, 2000). Through reflection, researchers become aware of their thoughts, positions, and feelings concerning learning and relationships (Norton, 2018; Reeves & Le Mare, 2017). This is documented in the research (Appendices, N-Y, reflection journal entries).

Stages of action research

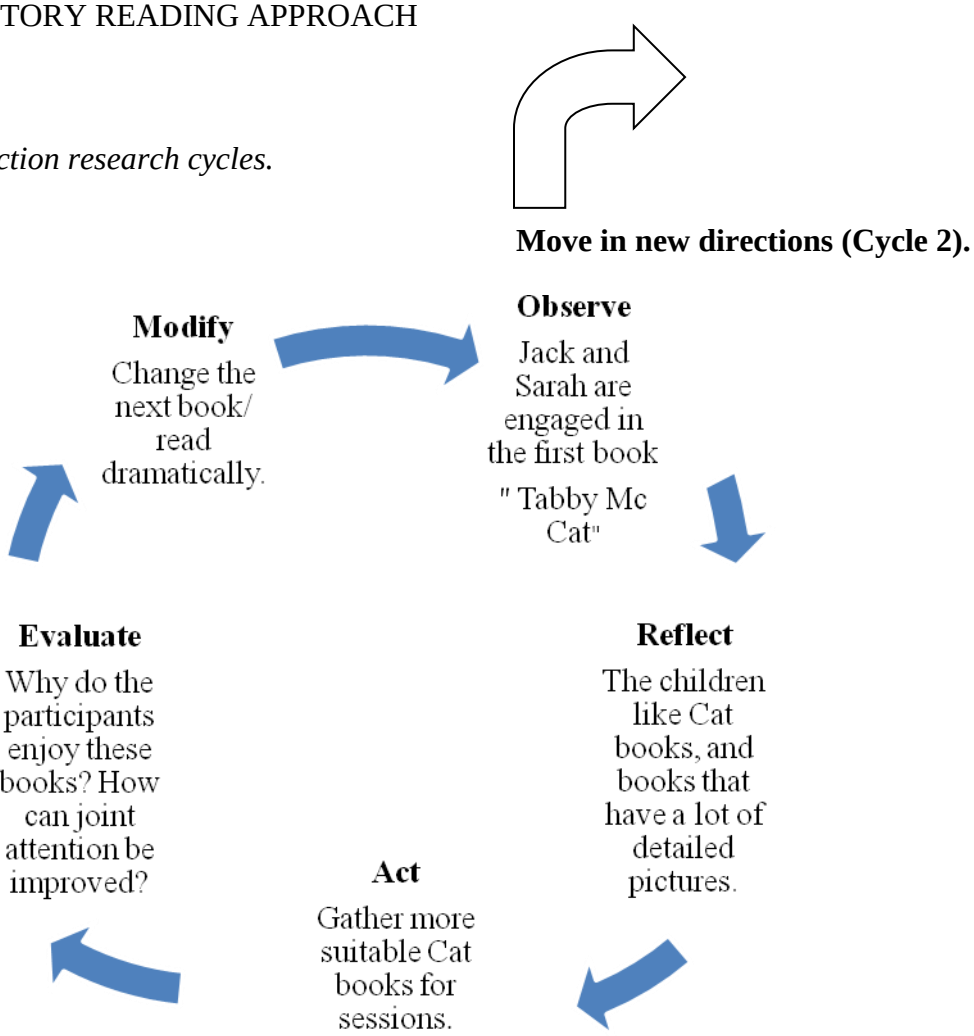
Investigation and inquiry begin with a learning tension or curiosity (Engel, 2011; Murdoch & Wilson, 2008; Short, 2002; Stacey, 2014). The tension driving this research stemmed from inadequate student-teacher bonds with the two participants. Many factors contributed to this tension, twenty-eight children with various needs in a mainstream class, an overloaded curriculum, and the practice of withdrawing the children from class as part of their

resource hours. There was a feeling of disconnection with these two students. The question that arose from the above tension was *"Can the dialogic story reading approach enhance language and communication with children with autism?"* Reading stories seemed to be the one activity that the two children enjoyed in the mainstream classroom.

The tension within cycle one was *"How can joint attention be maintained for the sessions, especially for Sarah?".* Cycle one as summarised in figure 4, observed that cat books achieved joint attention with both the participants. These were times when the two children attended to the activity of reading together, showed interest and responded to questions Reading in an exaggerated performance style increased joint attention (J.A). The more severe the autism the harder it was to maintain J.A in the small group. The outcome of cycle one was to gather more books that were cat related and to read more dramatically to maintain Sarah's attention. Joint attention was maintained on average for fifteen minutes for Jack and eight minutes for Sarah in the first five sessions.

Figure 4.

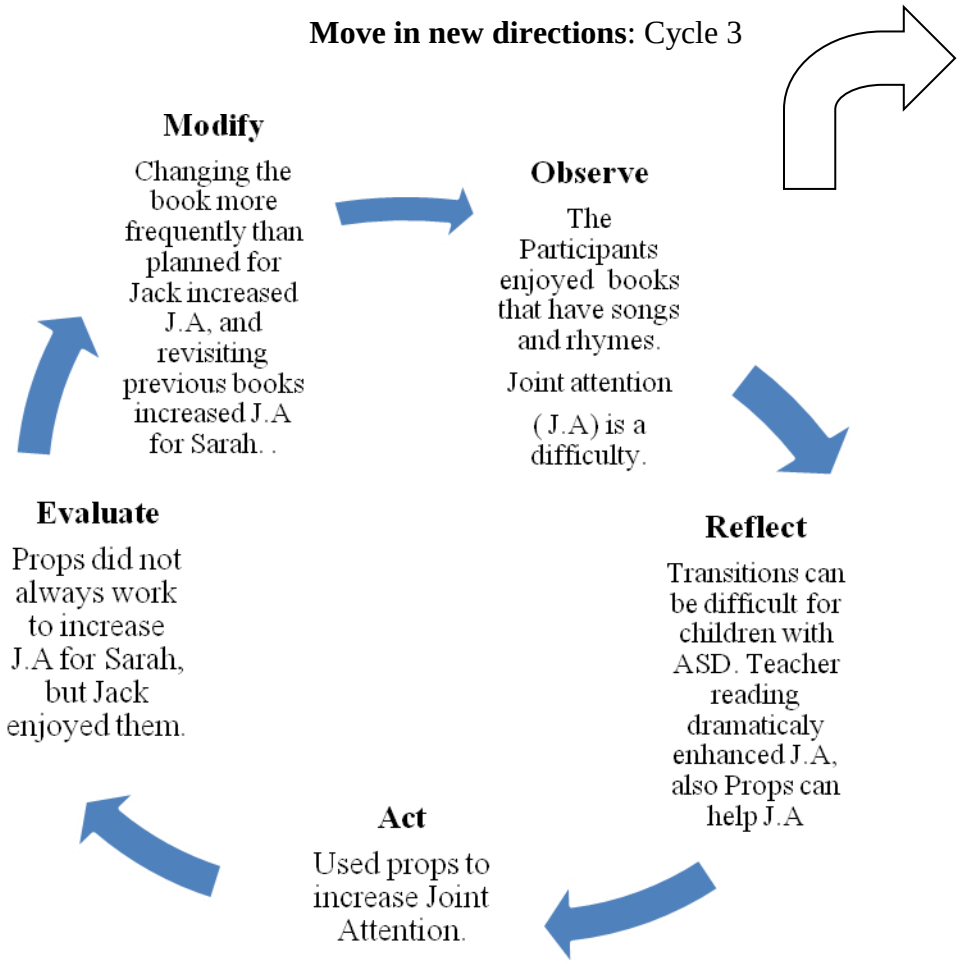
Cycle 1, the action research cycles.



Cycle two's central tension and learning was around book selection and the introduction of new stories. Sarah did not want to move on to a new story, yet Jack did. After a consultation with the validation group, we introduced props which Jack liked and which Sarah did not fully engage with. In the one to one sessions, Sarah enjoyed the props. In this cycle, Sarah wanted to return to the previous book and repeat the rhymes, while Jack was eager to move on to new stories.

Figure 5.

Cycle 2, the action research cycles.

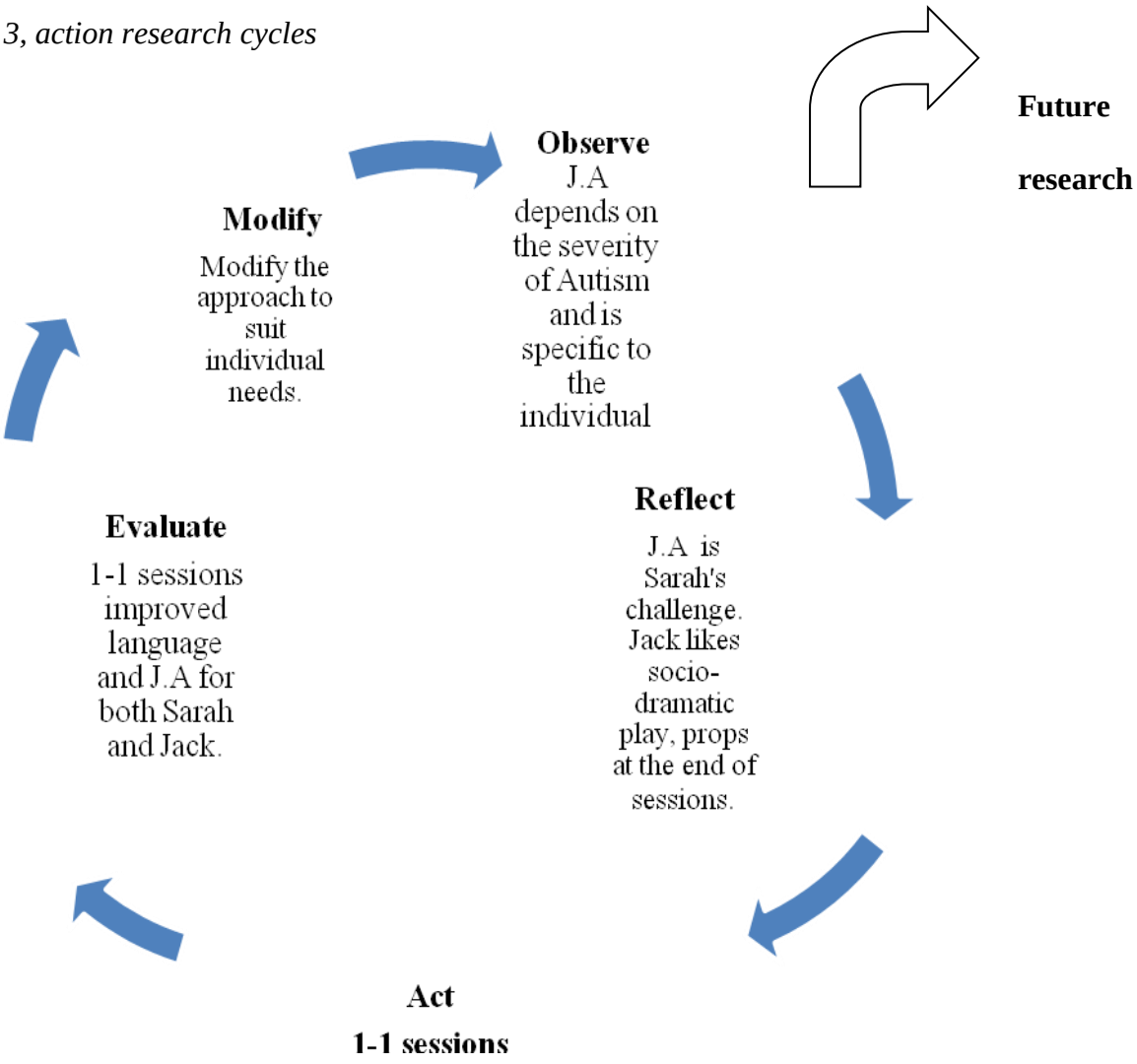


Cycle three's central learning tension was regarding the differences between the two children. Although they both enjoyed the dialogic story reading sessions and both were expressing and communicating more, different strategies worked for the two children. For example, as mentioned above, Jack liked to move on to new stories, whereas Sarah enjoyed taking her time with one story before moving on to the next story. Jack enjoyed the props, socio-dramatic play and drawing activities more than Sarah. Sarah enjoyed repeating the songs and rhymes in the stories and reciting action rhymes. The third cycle separated Jack and Sarah and

split up the remainder of the session's time. This was very successful and showed that the dialogic story method worked better in a one to one session, for these two particular children.

Figure 6.

Cycle 3, action research cycles



The books selected for the study were read repeatedly for up to three sessions. Repeated reading of the same book increases meaning-making (Biemiller & Boote, 2006; Hoffman, 2011). However, the children's preferences were taken into account. There was flexibility, i.e. if the participants grew tired of one book, or wanted to revisit a previous book; the book was exchanged. There were a total of ten books carefully selected for this project. Books selected,

took into consideration the children's preferences and indicators from research of which books are best to use with this approach (Hoffman, 2011; Kiely, 2017). Below, is a list of selected books with an indicator (a tick, or an X) of which ones were successful at maintaining joint attention, and enhanced oral language and communication in this particular study. Lesson planning tools were used to map out each lesson using research from Cohen (2008). A sample of a lesson plan used is submitted in Appendix A. The Appendices also document some of the personal reflections and evaluations. Work samples were also used as data (Appendix I-M, work samples).

Table 7

List of books used for the research

Name of the book	**Author**	**Sarah**	**Jack**
1. Tabby McCat	Julia Donaldson	✓	✓
2. Peace at Last	Jill Murphy	✓	X
3. A Squash and a Squeeze.	Julia Donaldson	✓	✓
4. The ugly five	Julia Donaldson	✓	✓
5. My Cat's weird	Lydis Monks	X	✓
6. Dogs	Emily Gravette (n.d).	X	✓

(Tick=worked well, X=did did not work well).

This study adopted the following criteria for choosing books for dialogic reading from research (Hargrave & Senechal, 2000; Lonigan, Purpura, Wilson, Walker & Clancy-Menchetti, 2013). The books were;

- Age –appropriate, with illustrations, and new vocabulary.
- They enhanced emergent literacy skills and higher level skills such as phonological awareness, alphabetic knowledge, listening comprehension strategies (retelling, answering questions), oral language skills, vocabulary outcomes, and De-contextualised language).
- Were easy to obtain.

The dialogic story reading approach:

The PEER, CROWD and RECALL Methods

The **PEER** sequence (**P**rompt, **E**valuate, **E**xpand, **R**epeat), is an acronym for the adult to prompt responses from the child, (Whitehurst & Lonnigan, 1998). For more extended language prompts the **CROWD** method is used (**C**ompletion prompts, **R**ecall prompts, **O**pen-ended prompts, **d**istancing prompts), (Kiely, 2017). The following tables outline the PEER and CROWD methods in more detail and give examples of how it was used during the research.

Table 8

The PEER Method, (Whitehurst & Lonigan 1998).

P	**P**rompt	Prompt the child to say something about the book, e.g., The adult points to a cat in the story "What is that?"
E	**E**valuate	Evaluate the response, e.g., The child says a cat, “Yes, you are right”, (evaluate)”it is a cat”.
E	**E**xpand	Expand the response, e.g.,” It is a brown, small cat”.
R	**R**epeat	Repeat the prompt to make sure the child has learned from the expansion. “What is it again?”

Relating the story to Jack and Sarah’s life helped elicit language “Do you have a cat? Who do you know that has a cat?”

For more extended language prompts the CROWD method was helpful. Whitehurst (1992) calls these prompts distancing prompts below is a table outlining the CROWD method used in the sessions along with the adapted RECALL approach (Reading to engage children with autism in language and learning). A sample of a lesson plan using these prompts is found in Appendix A (sample lesson plan).

Table 9

CROWD Method

C	**C**ompletion prompts	The child asked to finish the sentence
R	**R**ecall prompts	When repeating a story, the child was asked to remember characters names, or what happened next in the story.
O	**O**pen-ended prompts	This was used with the pictures from the story; they encouraged the children to talk freely (Kiely, 2017). For example, “I wonder what this girl in the picture is thinking”.
W	**Wh**- prompts	These prompts encouraged the child to expand his/her narrative, for example, "Where is this animal going? or what is he doing, why is he happy/sad?"
D	**D**istancing prompts	These required the child to link the book to their lives (Kiely, 2017), to what they already know. For example, the boy in the story lost his dog, “Have you ever lost something you loved?”

RECALL prompting hierarchy Modified Dialogic Reading Instructional Prompts PEEP=prompt, evaluate, expand, and praise (Whalon, et al., 2015).	**Prompt:** the child to say something about the book. **Evaluate:** Evaluate the child's response **Expand:** Expand the child's response by	**Level 1:** Correct response: Continue through the PEEP (Prompt, evaluate, expand and praise) sequence (i.e., Step 3 expand). No response within 5 or incorrect response. Provide three visual responses (e.g., "What happened? It snowed, the wind blew, it rained? Pointing the visuals.) **Level 2:** Correct response: Return to Step 3 in the PEEP sequence, expand. No response within 5 or incorrect response: Provide a binary choice (e.g., "What happened? It snowed, or the wind blew? Pointing to the visuals. **Level 3:** Correct response: Step 3 in the

	rephrasing and adding more information.	PEEP sequence, expand. No response within 5s or incorrect response: Provide a direct model (e.g., "The wind blew") and ask the child to repeat.
RECALL prompting hierarchy Modified Dialogic Reading Instructional Prompts PEEP=prompt, evaluate, expand, and praise	**Praise**: Praise the Child for the correct response.	**Level 4:** Correct response: Step 3 in the PEEP sequence, expand. If the child does not intimate within 5 s: Physically guide the child to point to the picture representing the correct response, state the correct response, and ask the child to repeat it ("The wind blew." Guide the child to point to the visual representing wind blew and ask him or her to repeat the full or partial response.

Note. Whitehurst and Longman (1998) and the RECALL methods (Whalon, et al., 2015) used during the sessions.

Trivette and Dunst, (2007) found that *how* one reads to children matters a great deal. This finding is echoed by Schickedanz & McGee (2010). Beck, McKeown & Kucan (2013) found that children whose teachers were identified as using a performance style had the best vocabulary outcomes. Choosing books that were relevant to the two participant's lives was more successful in enhancing language and communication, along with when the researcher was very dramatic in the delivery of the story (Appendix, N, reading dramatically). Books about cats and animals, in general, elicited the most language responses and Joint Attention activities. Books that allowed the children to experience the emotions of others, with illustrations that reflected the text (Saracho, 2017) were successful in prompting de-contextualised language.

A meta-analysis found that the optimal time for dialogic story reading sessions was 15 minutes (Trivette, Dunst & Gorman, 2010). With this in mind, the sessions were 15 minutes for the dialogic reading, with 15 minutes spent settling the children in and debriefing/ playing or singing after the session. This brought the meetings up to a total of thirty minutes. Young children benefit from repeated exposure to the same book (Sénéchal, 2001). Rereading a text helps children make sense of de-contextualised language (Beck et al., 2013; Kiely, 2017). Although, as previously mentioned cycle three was completed on a one to one basis as joint attention was easier to maintain. Additionally, Sarah enjoyed re-reading the texts more than Jack.

Validation groups

These are groups of colleagues who seek to collaborate an all phases of the cycles (McNiff, 2017). These critical friends make up a group called a validation group. A validation group is described as self-critical communities with the aim of critically reviewing the action research (Kemmis & Taggart, 1998; McNiff, 2017).

The validation group was consulted regularly during the action research. These four members of staff included the principal; an experienced special educational needs teacher and the participant's two special needs assistants. These four colleagues have experience and knowledge of working with children with autism. They knew the participants well and had good working relationships with them and their parents. These critical friends were consulted after every session and when issues emerged during the research. Collaboration and reflecting with colleague's kept the study on track. According to Devenny & Duffy (2014) and Walsh, Rutherford & Sears (2010) collaboration helps the researcher to avoid bias and enhances learning through collaboration.

Ethical considerations

The vital question that undulated through the process is *"how does my research affect the children who are participating?"* The research demanded a reflective approach, and the revising of questions and forming new lines of inquiry were essential elements of the research process (Agee, 2009). Consent was requested before each session, and when the participants withdrew consent, in the form of opting out, that was respected. In researching this area the researcher took a reflexive position, acknowledging her relationship and place within the research (Greenberg, 2003; Roche, 2002).

Anonymity

Guarantees around anonymity are an issue with this research, as the children are in the researcher's class. It is almost impossible to keep this anonymity, mainly as the investigation was discussed with a validation group, who also work within the school. This is a limitation of conducting action research in one's own classroom and setting. When discussing the research findings with outside agencies or schools, anonymity will be guaranteed and further consent

obtained. However, for this study consent was obtained from the parents of the two participants, the validation group and the BOM (Appendix D, parent's consent form; Appendix, F, consent form validation group; Appendix F, BOM consent form). Further consent was obtained from the children (Appendix E, child's consent form).

Limitations

As the researcher is the participant's mainstream teacher, this caused some friction, bias and tension at the beginning of the research. This tension was evident in the reflection journals (Appendix O, R.J, 2). It was crucial to explain the aim of the research in a child-friendly manner to the participants and to inform them when we were conducting the research. All transcriptions were recorded using a recording device and transferred to a secure personal computer. These files will be destroyed thirteen months after the thesis is submitted for grading.

As the two children are particularly vulnerable due to their age and their diagnosis of autism, one of their special needs assistants was present during the research. As she was part of the validation group, anonymity was guaranteed. The principal was also informed of when and where the sessions took place. The meetings took place in a room, with a window. It was located opposite their main classroom.

After the research sessions, the children provided feedback on their experience in the form of a picture, drama and action rhymes (Appendix, I-M, work samples). The findings from the study will be explained to the children in a child-friendly way, and some of the recordings will be played back to the participants.

Generalisability.

There are issues of generalisability at stake in all small scale research projects. Generalisability is a significant limitation of this research. Each child is unique, and one cannot

say that these methods will work for all children with ASD. The learning of the teacher is documented, and this learning journey cannot be replicated, which is another limitation of this study.

It is, however, hoped that this research provided an indication of what prompts and strategies work with these two children, and will be incorporated into their individual educational plan (I.E.P). This dialogic reading approach may be used with other children with autism in the school. Perhaps the dialogic story reading method will be introduced into the other classes in the school as an approach to enhance oral language skills.

Researching education is not about studying something static. The truth of this particular research is dependent on a social dynamic between the researcher and the two participants. Action researchers embrace this social dynamic (Kemmis & McTaggart, 1988; McNiff, 1988; 2017); this social aspect of this study is what made it worthwhile.

Conclusion

As this research is an investigation of values made visible in current practice, the educational/living theory approach to action research was the chosen research methodology. This action research trailed an adapted dialogic story reading approach with two children with ASD. The learning curve was steep for the teacher as researcher and is outlined in the three cycles of action research. The validation group collaborated on the learning cycles, enhanced and challenged the learning of the teacher.

The chapter discussed the importance of reflection entries as essential tools for narrative research and for building pedagogic knowledge. As the researcher is extremely involved in the research both the empirical and interpretive research methods were deemed inappropriate as research methodologies for this study. The chapter outlines the limitations and generalisability

of completing a small scale research project along with the ethical issues of working and learning alongside two children with autism.

Chapter 4

Findings

Living theory was the approach of the action research used in this study. A living theory focuses attention on the experiences and the implications of living values that carry hope for the improvement of humanity (Whitehead, 2018). This research shows that working closer to one's values benefits the teacher, children and staff.

The research trialled the dialogic story reading approach in 12 sessions with two participants with ASD. Six hours of recorded data were collected and transcribed. This action research had three learning cycles. The researcher's reflective journals and revision cast recordings along with children's work samples were also used as data.

The aim was to ascertain whether a dialogic story reading method could elicit more communication and expressive language from the ASD participants. In particular, the researcher looked for the use of de-contextualised language use in the data.

De-contextualised language uses higher order thinking, to essentially think about what another person is thinking or feeling. Furthermore, the study investigated whether using this approach to reading could improve teacher-student relationships.

The research brought about change and learning on many levels; it enhanced relationships, language and communication with the two participants. It allowed for reflection of current practice and teaching styles, and it promoted collaboration between teachers, SNAs and parents. These changes took place as the researcher reflected on values and practice.

The following table outlines the data abbreviations used in this chapter.

Table 9

Data abbreviations

Reflection journal/ research diary	R.F	
Transcriptions	T.R	000. (Time on the recording).
Sessions	S	000. (Time on the recording)
Revision-cast	R.C	000. (Time on the recording)
Validation group	V.G	
Lesson plans	L.P	

Findings evident from the observational schedule

Below, the table outlines the criteria observed in the data and observational schedule.

Table 10

Criteria documented in the data

Criteria documented in the data and observational schedule.
• The types of responses dialogic story reading can develop. • The necessity for appropriate teacher "*wait time"* for responses. • Evidence of de-contextualised language. • The challenge of joint attention with children with ASD.

- Relational pedagogy: The dialogic story reading approach enhances relationships.
- The challenges and learning tensions documented in the cycles of action research.

The value of teacher collaboration and learning with staff.

The cycles of action research

Cycle One

- The tension of teacher versus researcher.
- Modifying the lesson plans and books to suit the participants.

Figure 7.

The cycles of action research adapted from McNiff (2017).

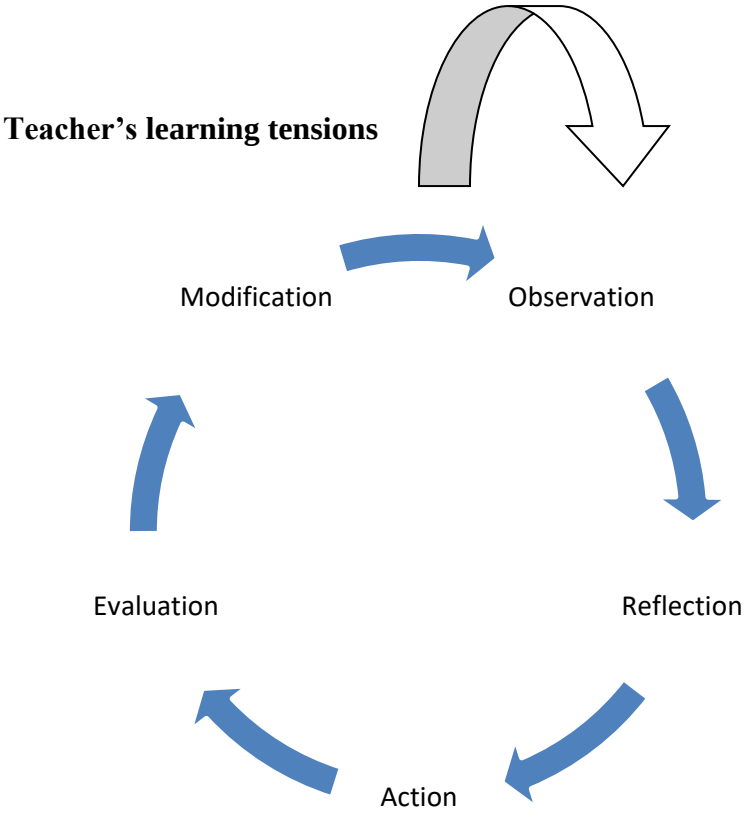


Figure 7, depicts the cycles of action research. The cycle is adapted from the relevant literatures regarding educational action research (McNiff, 2017; McNiff & Whitehead, 2002, 2006, 2009). This cycle outlines the process of reflection, action, evaluation and change that occurred in each cycle of this small-scale action research. Another stage is inserted at the beginning of the cycle and was helpful to the researcher to reflect on the learning process. The amended stage is a learning tension stage, as it is this tension or imbalance in practice that motivated the researcher to embark on this journey of action research.

The challenge or tension motivating this research was regarding the teaching of two children with ASD. The researcher felt that there were little opportunities or time to work directly with these children. They have two full-time SNAs and a resource teacher who withdraws them for resource hours daily. This disconnection did not sit well with the practitioner. Thus, creating this research allowed time and space to work closely with these children. The research provided an opportunity to attempt an approach to develop communication and language skills and ultimately transform and improve practice and relationships.

The learning in cycle one was to realise that the participants enjoyed books about cats and books that had lots of rhyming and repetition. Sarah especially would enjoy repeating the rhymes in the cat-themed books. The action of finding more books with cats that also had rhymes and songs was a result of teacher reflection and collaboration with parents and SNAs. It was determined that repeated reading of familiar stories, rhymes and songs helped to maintain joint attention with both Sarah and Jack. The teacher modified the lessons plans based on these findings, using more suitable books for the participants.

The tension of the teacher versus the researcher is evident in cycle one. The teacher desired the research and sessions to go "well" and "work". Statements such as *"I hope they will like the sessions and enjoy the books"* (R.J, 2) are evident in the journals. The aspirations for the method to succeed in the beginning perhaps added to the stress and tension during cycle one.

The challenges of maintaining joint attention and consent are evident towards the end of cycle one with statements from the validation group meetings such as "*Jack and Sarah don't listen to me"* (V.G, 3) and *"Sarah just does her own thing"* (V.G, 3). These excerpts highlight the stress and challenge of conducting research on one's own practice. The battle of teacher versus researcher in terms of discipline and consent is evident, "*I felt a bit conflicted as I had just to let her (Sarah) go and not be like the teacher"* (R.J, 2). Learning to let go and not be rigid with the approach and results was the first learning curve for the practitioner as researcher.

Cycle two

- The teacher introduces props to aid joint attention.
- The challenges of working with children with ASD.

The tensions and learning that are evident in cycle two were regarding the differences in the two participants. For example, Jack was happy to move on to new stories, but Sarah wanted to keep repeating the first two stories. The teacher modified the dialogic story reading approach by introducing props, which worked well to enhance joint attention. This change in practice occurred after a meeting with the validation group (V.G, 3).

An additional teacher reflection evident in cycle two was concerning the impact of autism on educational attainment and joint attention. These reflections were apparent in the data with statements such as " *I feel that I am being pulled in two different directions, Jack wants to read one story, and Sarah wants to re-read another story"*(R.J, 7). Sarah having more severe ASD

traits (such as restrictive patterns of repetitive behaviour, selective mutism and echolalia) than Jack found moving on to new stories a challenge, whereas Jack enjoyed progressing on with new books.

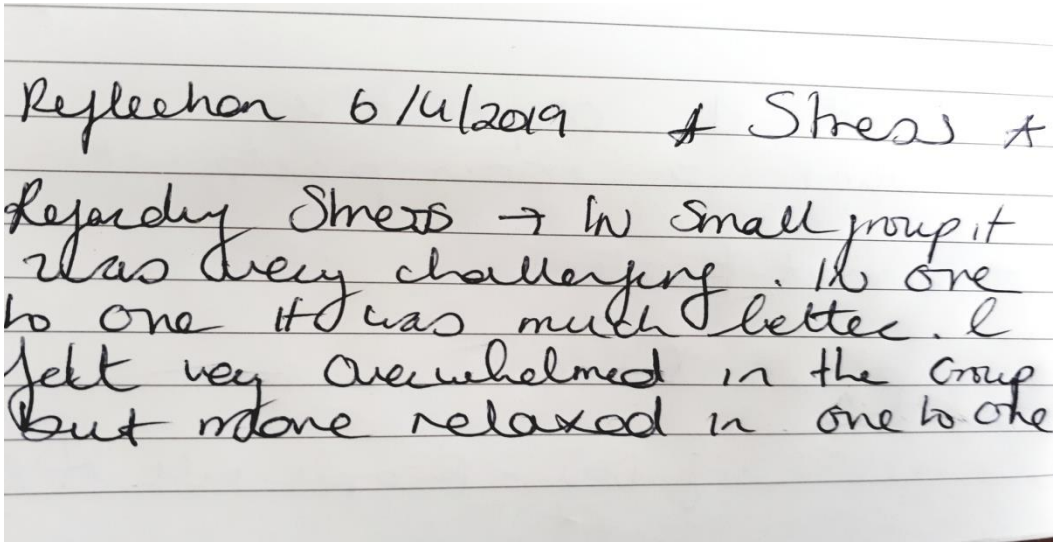
The stress of maintaining J.A for both the children in the sessions was evident in the data. This was noticeable when Jack got frustrated when Sarah started to get involved in the reading activity. Jack liked his voice to be heard and preferred Sarah to be uninvolved in the stories. Working with the two children together was extremely demanding. The following excerpt from the data outlines some of the behavioural challenges.

"Jack had a fit and stomped on the book when Sarah joined in... I'm wondering if one to one would suit better as Jack seems upset when Sarah joins in now"(R.J, 7)

The action and modification of practice occurred after a meeting with the validation group. This was regarding the completion of the remainder of the research on a one to one basis to individualise the reading approach to suit the participant's needs.

Cycle three and future recommendations for practice

This cycle began with a validation group meeting discussing teacher stress and the possibility of an individualised approach to teaching children who have more severe ASD traits.



The resource teacher reported similar stresses and challenges of working with children with ASD in this validation group meeting. The importance of support is outlined in the following validation group excerpt, where the resource teacher states that when she does not have an SNA, *"little or no work gets done"* (V.G, 7). This highlights the need for adequate support when teaching children with ASD.

This modification of the research in cycle three worked well and is documented in the reflection journal entry below. It was from using an individual approach to suit the needs of the child that the researcher was able to evaluate the responses more effectively.

"Felt amazing; we had such fun. Sarah started providing lots of language, words such as "trombone". Lots of action rhymes using the props and lots of de-contextualised language" (R.J, 8).

As the one to one sessions worked much more effectively than the group lessons, it was decided to complete more dialogic story reading one to one with the children in the future.

Teacher values

The value of the teacher as a lifelong learner is evident in the many entries in the reflection journals and revision cast audio recordings. The value of the child's autonomy and authentic voice is evident in the approach to reading that was chosen, where the child is encouraged to take over and lead the story.

Teaching through a relational pedagogy is apparent as it is only through spending time with these children, that we can understand their uniqueness and their talents. This learning was evident throughout the three cycles but consolidated in cycle three with the one to one sessions. This relationship development helped the teacher as a researcher to individualise the dialogic reading approach to suit the individual needs of the participants.

The value of inclusion is apparent in the fact that this approach was aimed at two children who have ASD and struggle with language and communication. The research was designed to allow space and time for these two children to improve their language and communication and hopefully start developing skills that will allow them to make friends in the future.

The research demonstrated that there is a time and a place for a more individualised approach to educating children with ASD. There is a learning tension apparent in the reflection journals towards the end of cycle two, and one might argue a distancing from the values of inclusion. The teacher apprehension is regarding inclusive, collaborative education versus the positive educational gains that can be achieved in a one to one approach.

Excerpts from the data

The types of responses

Sipe's research on monitoring the types of responses, storybook reading can elicit from children is outlined in figure seven below (Sipe, 2002). This study highlighted where the two participants fell on the continuum of expressive engagement.

However, the types of responses depended on the book and the mood the children were in on a particular day. It also depended on how dramatically the story was read. It was predicted that during the sessions Sarah might fall on the dramatising stage, but she managed to use the full range of the continuum in the one to one sessions. Jack reached these higher levels in all the sessions. Assessing where the children fell on the continuum of expressive engagement below was documented in the reflection journals, (Appendix W, where the children are on the continuum of expressive engagement, R.J, D.2).

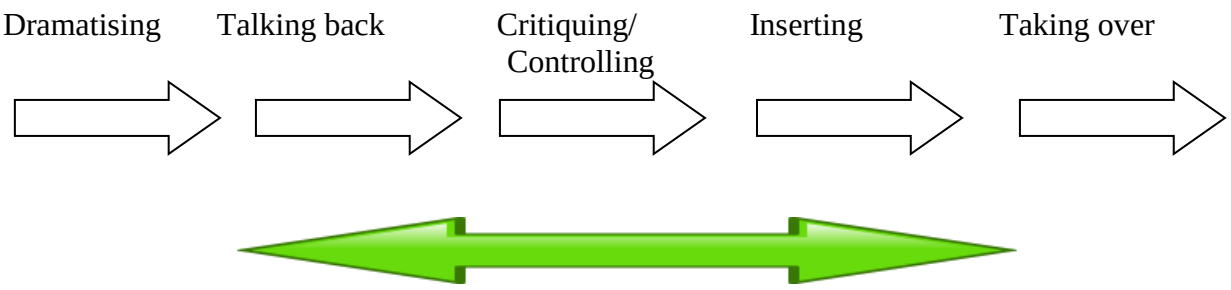


Figure 8

A typology of expressive engagement (Sipe, 2002).

Next, are some examples from the data documenting where the children responses correlate to Sipe's continuum of expressive engagement.

Table 11

Excerpts from the data, the continuum of expressive engagement (Sipe, 2002).

Stage	**Context**	**Excerpt from Data**
Dramatising	**Jack**: Jack loved to mime out the characters from the stories. **Sarah** liked to use props to mime out the story (little frogs). She also loved dramatically saying "No busking!" a phrase from the first book. She also loved to mime "Pick out the nits!" in the story Ugly Five.	**Jack: "**Who could be uglier, who could be meaner, SOOOO SCARY...ROOOOOaaaaar!"(Tr. 3, 00:03:07). **Sarah:** "Oh hey, Sorry. No busking! No busking! No busking! (Tr. 8, 00:22:43). **Sarah: "**Pick out the nits."(said and dramatised over and over, with laughter), (Tr, 3, 00:15:45).

Talking back	Evident when talking about characters in the stories. The Teacher used Wh-word questions, such as "Who is this?" Jack talked back on all occasions, Sarah on some occasions.	**Jack: "**It's the wildebeest", (Tr. 3, 00:01:30). **Sarah: "**A baby monkey, A Zoo!" (Tr. 3, 00:04:33). **Sarah: "**The chicken laid egg", (Tr.10, 00:03:54)
Critiquing/Controlling	**Jack:** Evident when reading to Jack, he would often relate the story to his life experience and funds of Knowledge (Katz, 2002). **Sarah** would often look at the pictures and pick out something she found interesting.	**Jack: "**He looks like an eagle!" (Tr.3, 00:05:16). **Sarah: "**One two, three, four, plus one, five" (Counting the animals in the picture, unprompted (Tr. 10, 00:07:13).
Inserting	**Jack** would enjoy getting involved in the pictures in the story, looking at them for long periods and asking questions. **Sarah** would physically use her props to insert into the pictures and sing songs from the stories and other Action Rhymes (Five little Speckled frogs, ten little Monkeys).	**Jack: "**Oh they're here to surprise you" (talking about the baby animals hiding in the story). "I will surprise you! BOO!" (Tr. 3, 00:10:13). **Sarah: "**And everything on that", (putting the frog toys into the picture in the story). "Now frogs, Now frogs, Sing speckled frog song", (Tr. 8, 00:28:03).
Taking over	**Jack** interjected to take over the story and to relate the characters to each other. He enjoyed using play to extend the story. **Sarah** enjoyed taking over by	**Jack: "**Hey wait, Hey wait. "Something I wanted to do to change one, two, three (Jack counting characters'), So where are the ugly five mommies going? Can

	using props and the pictures in the story to mime and sing songs; the songs were often from the first story we read (Tabby Mc Tat). This would happen at the end of the sessions.	we put them here?" Jack was interjecting and taking over. (Tr. 3, 00:04:06). **Sarah:** "Meeeowww and the old guitar, how are perfectly, perfectly happy we are, me you and the old guitar... How perfectly happy are" (Tr. 8, 00:20:46]

NOTE: Tr=Transcription

Wait Time

"Wait time", is where the teacher pauses after a question or prompts and allows the child time to respond and think. This "wait time" is often overlooked in the whole class environment as there is less time, space and opportunities for children to think respond and use their authentic voice (Roche, 2000b). Working with these two participants in a small group and in the last cycle one to one; allowed them time and space to think about their answers before responding. These two children needed this extra time as their verbal communication skills are not as developed as their peers due to their ASD.

Both participants were able to respond more efficiently and with less wait time with the lower level questions (plot, character, and vocabulary). Sarah needed more wait time on average than Jack, with higher level questions (questions about inference, prediction, and analysis). This may be because Sarah found joint attention more challenging than Jack.

Below, the data demonstrate that the teacher waited almost 37 seconds before Sarah responded to a lower level question and 30 seconds for Jack. The following excerpt is from a dialogic session using the book the "The Ugly Five",(Julia Donaldson, 2017).

Teacher: "*Oh what a picture of beauty. But...Wait...Who is this creature so ugly? (Pointing to the picture) and weird with her spindly legs and her gingery beard ?"*(Tr. 3, 00:01:00)

Jack: *It's the Wildebeest.* (Tr. 3, 00:01:30).

Teacher: "*We're the Ugly Five, We're the Ugly*" (Teacher pauses waiting for a response) (Tr. 3, 00:09:14).No response, the teacher prompts further.

Teacher: "*We're the ugly...* "(Tr. 3, 00:09:34). **Sarah: "**FIVE" (Tr. 3, 00:09:47).

De-contextualised Language

De-contextualised language is where the child "reading "the story is thinking about what a character is thinking and feeling. Primarily, de-contextualised language is thinking about thinking and would fall within Bruner's deeper consciousness level on the Landscape Model (Bruner, 1996).

The landscape model, (Bruner, 1996), divides questions that promote responses into two categories; "action level" (plot, character) and the deeper "consciousness level" (thoughts and beliefs). This model frames the types of questions that were used during the lesson plans (Appendix A-F, lesson plans). De-contextualised language develops higher level thinking and language skills (Hogan, Bridges, Justice, & Cain, 2011). De-contextualised language goes beyond labelling and talking about what is happening in the story. It focuses on inference, prediction and developing a hypothesis.

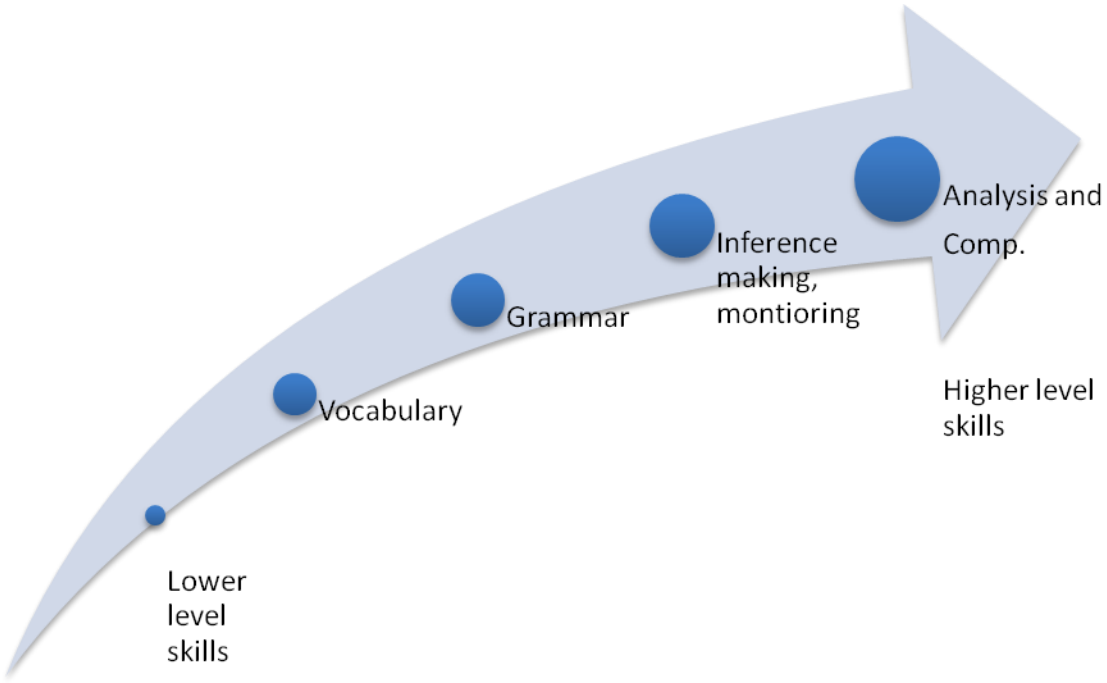
This category of language is a significant challenge for children with autism as it is this ability to think about another's thoughts and feelings that is a difficulty (Conn, 2014). Dialogic story-book reading enhances de-contextualised language (Kiely, 2017), and as mentioned before has been successful in promoting language in children with ASD (Whalon, Delano et al., 2013).

Focusing on questions that promote de-contextualised language allowed the two participants to have opportunities to think and respond to the stories on a deeper level.

Below is a figure outlining lower and higher level language and thinking skills (Hogan et al., 2011).

Figure 9.

Higher and lower level skills of oral language development (Hogan et al., 2011).



The following section focuses on excerpts from the data showing the participants using de-contextualised language. The higher level questioning such as; *"I wonder how the boy is feeling?"* or *"I wonder what he is thinking of here?"* promoted deeper thinking in the participants. Sarah provided de-contextualised language in the 1-1 sessions, but not in the sessions shared with Jack, where her attention was compromised. Jack was able to maintain joint attention in a group with Sarah, whereas Sarah could not. She was much better able to attend to

the story and provide more language and communication in the 1-1 sessions. It is evident from the following excerpts that Jack's language and communication is more developed than Sarah's.

Table 12

Excerpts from the data, de-contextualised language (Jack).

Context	**Example**
De-contextualised language, thinking about what the animals are thinking. Jack is thinking about why baby animals are hiding in the trees (Ugly Five).	**Jack: "**Oh they're here to surprise you" (TR. S. 3, 00:10:13).
Using de-contextualised language when discussing the Warthogs and why they like to sit in mud.	**Jack: "**Well Warthogs think mud is their baths. Is that true?" (TR. S. 3, 00:14:28).
When asked about why did Dad have a bad day?	**Jack:** "Because it was a rainy day. Yeah. Could've been a rainy day? Or maybe Dad got dumped?"(TR. S.7, 00:02:42).
When asked about why the dog was in the tent.	**Jack:"** He thought it was his tent. He's like (pointing to picture) No! It's my tent". (TR. S, 7, 00:06:02)
When asked why the boy was proud of his Cat at the end of the story	**Jack:** Because he is (the cat) clever and weird (TR. S. 7, 00:16:32).

Table 13

Excerpts from the data, de-contextualised language (Sarah).

Context	Example
When asking about what happened to Jack after the break.	**Sarah:** "What happened to Jack? Yes. Are you OK? Are you OK? You sad? Hurt?"(TR. S. 10,00:25:42)
Pointing to Jack when Jack was sad.	**Sarah:"** Oh he hurts", (TR. S. 10, 00:25:14).
When asked about the Cat in the story that misses his friend.	**Sarah: "**Sad he's so sad", (TR. S. 12, 00:16:13).
Pointing to the character in the hospital and asked what he is feeling.	**Sarah: "**He's sick in the hospital, sad", (TR. S.8, 00:22:25).
When asked about the cat in the story.	**Sarah:"** Oh he hurts", (TR.S.8, 00:25:14).

Joint attention and reading style

There is a body of research indicating that reading stories to children with autism increases joint attention (where the children and teacher are attending to the activity together), and social reciprocity (Justice & Kaderavek, 2002; Kim, & Rispoli, 2018; Golloher, 2017; Whalon et al., 2013).Joint attention is significant in the dialogic story reading context as it is this joint attention to the event that improves positive language outcomes (Mucchetti, 2013). Joint attention has the most beneficial educational gains when achieved (NCSE, 2016). This action research highlighted the difficulty children with ASD have with joint attention.

The time spent in J.A was calculated by examining the transcripts to see how much time each child was listening to the teacher and attending the story. The average over the 12 sessions

was fifteen minutes of J.A for Jack and eight minutes for Sarah. Joint attention was harder to maintain for Sarah, in the group sessions but was maintained easier and for more extended periods in the one to one sessions in cycle three (9 minutes on average). Sarah would present as being more severe in terms of autism than Jack, especially in a group setting where she is more likely to be anxious and revert to repetitive behaviours called Stimming (Baron-Cohen, 2002; Conn, 2014, 2015; Masiran, 2018).

It was found that an ABA approach helped the children listen and focus more than a non-ABA approach. This approach was especially evident in cycle two and three. For example, the use of the following phrase *"First we do this* (read the story), *then we will do that*" (Play a game/ talk about special interests/ do action rhymes). This worked well as shown in the following excerpt from the data and fits in with current literature stating that ABA works well with children with ASD (Caron et al., 2017; Fennell & Dillenburger, 2018; Magiati & Howlin, 2001; McPhilemy & Dillenburger, 2013).

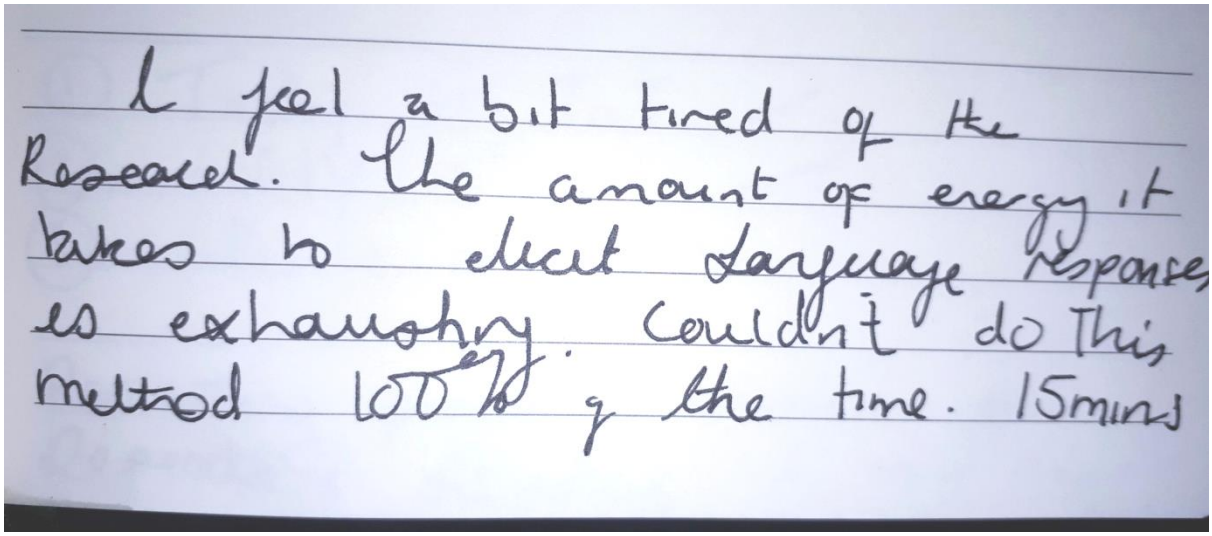
Teacher: "*After we do this* (Points to the story), *we will do that* (Points to the frog props), *this first than that. Can we have a look at this first now?" (Tr. 12, 00:00:04).*

Reading dramatically increased joint attention for both of the participants, although it was extremely tiring to do all the time (R.J, S4). This challenge of maintaining a performance style of reading was evident in cycle two. When the reading was not completed overly dramatically, the children tended to divert from the story. This learning tension is highlighted in the following excerpt below.

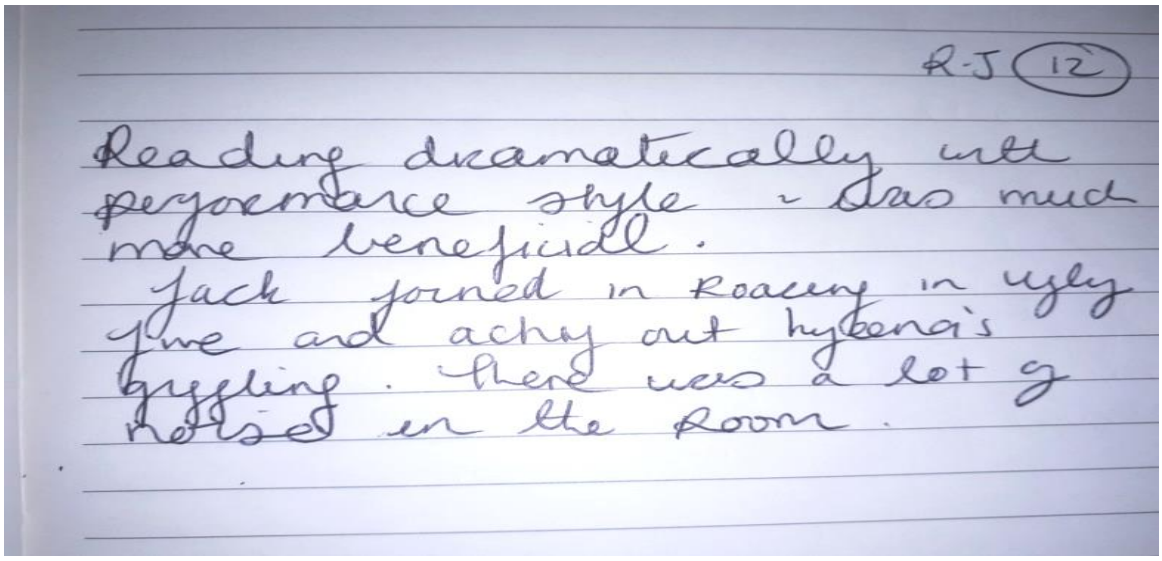
> *"Reading dramatically, helped achieve joint attention, and kept the children listening. A performance style was used. Very exhausting!"(R.J, S4)*

The research diary entry after session six, in cycle two, shows the researcher struggling with maintaining this performance style with the two children. The maximum time spent reading dramatically was fifteen minutes. This connects well with the meta-analysis by Trivette, Dunst & Gorman (2010), who state that the optimal time for dialogic story reading sessions is fifteen minutes. This research was not concerning children with ASD; however, the findings in this study were similar. It would be interesting to research similar studies regarding optimal time for reading sessions with children with ASD in the future. In the one to one sessions in cycle three, it was much easier to maintain joint attention and an overly dramatic reading style was not needed as much as in the small group sessions.

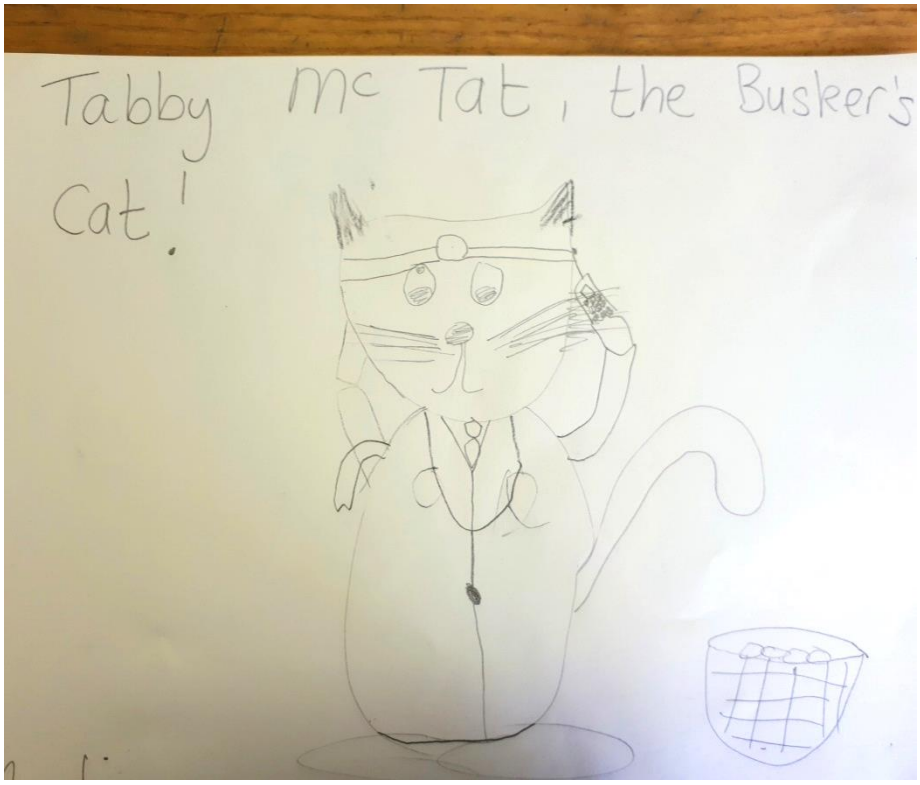
(R.D, S.6).



The positive outcomes of reading dramatically are outlined in Reflection Journal 12 (R.J, 12). This session was in cycle three and conducted one to one with Jack.



Work samples (Appendix, J-M, Work samples), show evidence of the children's J.A and engagement in the process. The children drew pictures depicting the characters in the stories. Sarah surprised us withdrawing "Tabby McTat" with a stethoscope around his neck and repeating the word "*Stethoscope".* The validation group established that this spontaneous language was very positive (VG, S,3).

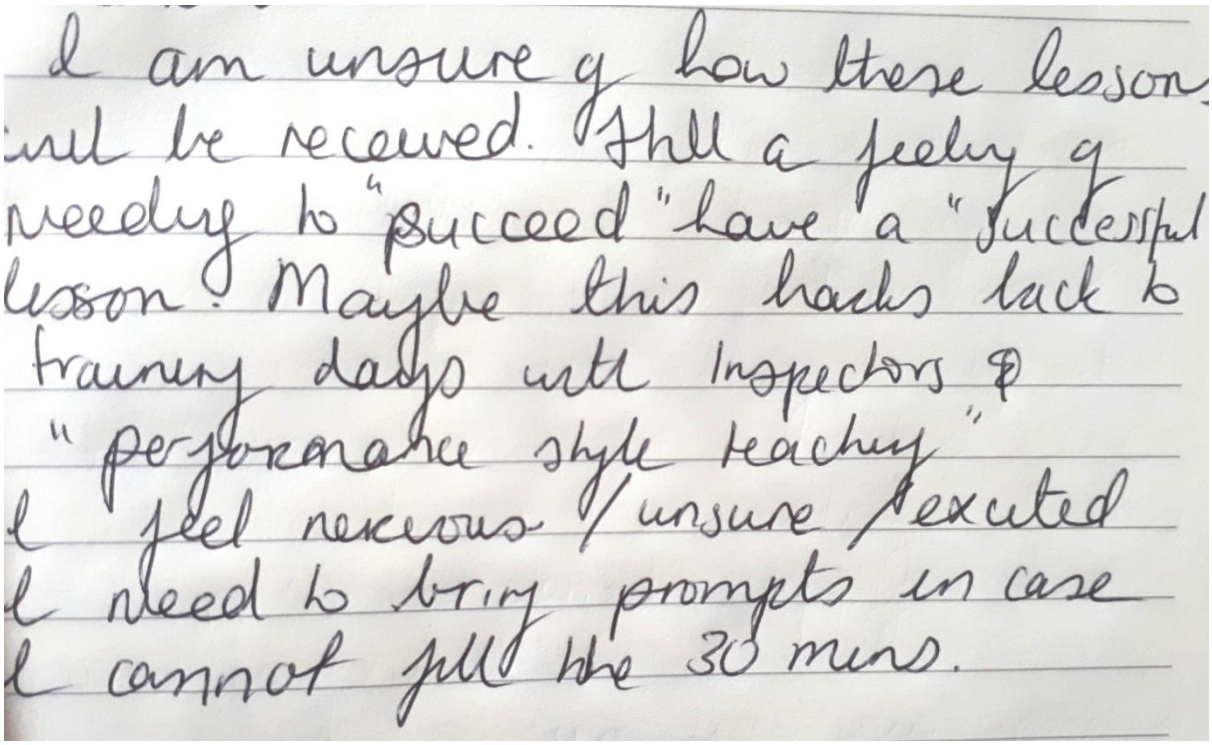


The picture above shows that Sarah is thinking on a more profound "consciousness level" level (Bruner, 1996). The picture and spontaneous language demonstrate that Sarah was able to relate the story to her life experiences, also referred to her "*funds of knowledge*" (Katz, 2002). Jack highlighted examples of "*funds of knowledge*" (Katz, 2002) when he related the cat story to his pet cats at home, and mimed the way real cats eat their food, (Tr. 7,00:15:51).

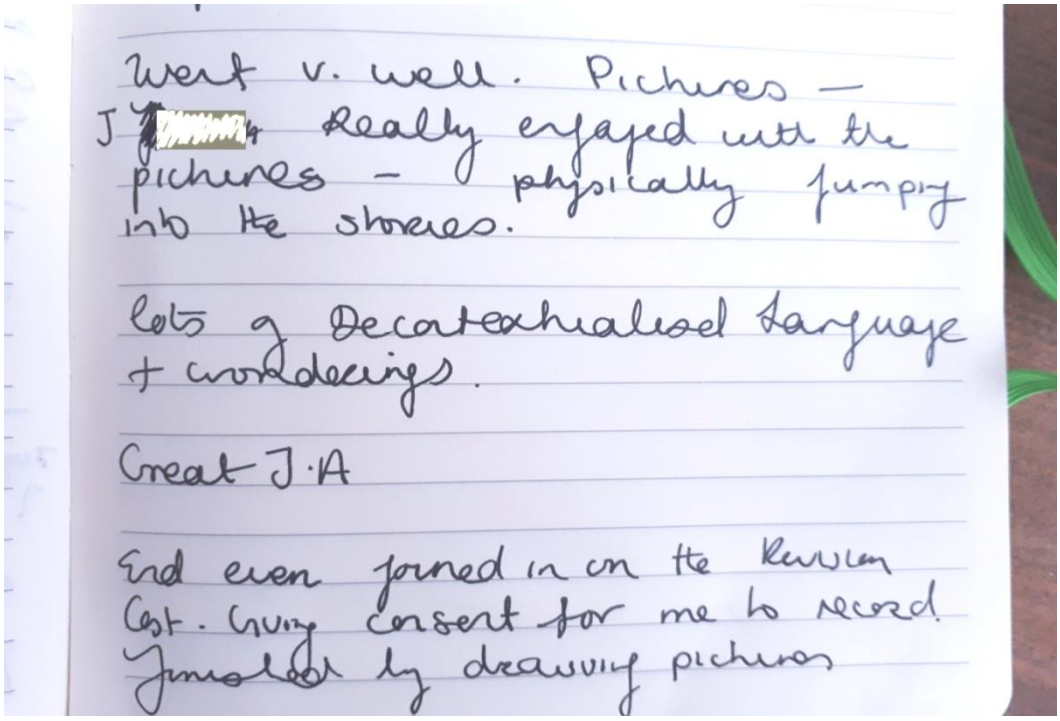
Jack: "*They don't eat these foods, would you like to sit down beside a lion and have some cake? Cats eat food like this (*Miming), *not like this, NOOOOOO!"*(Tr. 7,00:15:51).

Learning tensions and transformations

Some of the learning tensions are outlined below in the following excerpt from the reflection journal (R.J. S.1) and in Appendix V (reflection journal 11, teacher learning).


I am unsure of how these lesson
will be received. Will a feeling of
needing to "succeed" have a "successful
lesson? Maybe this harks back to
training days with Inspectors &
"performance style teaching"
I feel nervous / unsure / excited
I need to bring prompts in case
I cannot fill the 30 mins.

As the research and the cycles of action research proceeded the children and researcher became familiar with each other, trust was built, and the forming of teacher-student bonds was evident from the data. The more the participants got to know the researcher the more language and communication was produced. The diary entry below shows the participants enjoying the sessions and getting involved in the post revision cast recordings. This demonstrates the ethical stance of the researcher in that the participants were involved in the research process. The research was done *with* the children, not *on* the children and fits into the researcher's paradigm.



(R.J, S.9).

The data extract below documents Sarah opting out of the sessions; this was in cycle one of the research and can be seen in the following notes from the transcriptions and in Appendix O, Tension, (R.J, 3). The issue of consent with Sarah was a challenge during the research.

Notes: Sarah very upset coming in. No consent from Sarah at first but then she joins in at the end. Jack gets upset when Sarah joins in Move to 1-1 after this session (Tr. 7).

Teacher*: "**Or will we do?"*** (Giving a choice of a book).

Sarah: "*No book, No Tabby Mc Tat, No Hop on Pop. No ugly five. NO. IT'S OK".* (Tr. 7, 00:00:03).

When the researcher and validation group decided to complete the last cycle of the research on a one to one basis, Sarah was happier to join in, listen and respond. This is shown below in the notes from the transcriptions which describe Sarah laughing and joining in the story dramatically.

Sarah: "*Pick out the nits!"* (Sarah laughing and giggling and miming the gesture of the animals grooming each other) (Tr. 3, 00:10:31).

As previously mentioned, waiting for the children to respond was the essential learning of this research, and was apparent in the reflections during cycle two. Jack took a long time to think about what he wanted to say, and when he was ready, he had some exciting ideas and insights that showed he was thinking on a deeper level (Bruner, 1986). If the researcher had not waited for his response this deeper thinking and communicating may not have happened.

The following excerpt from the data shows Jack thinking about death, and asking about the dead chicken in the story that the hyena was eating. He was inquiring whether it would come back to life.

Jack: "*Is the the chicken is dead?"* (Pointing to picture)(Tr. 3, 00:08:38)

Jack: "*Oh he likes put it".....Hoo. Hoohoohoo. Hoo* (Jack trying to get his words out, teacher waits) (Tr. 3, 00:08:47).

Jack: "*I mean his lunch",* (Jack is trying to tell the teacher about the picture, the picture of the hyena with the dead chicken, teacher waits (Tr. 3, 00:09:15).

Jack: "*Coming back to life?"* (Jack is talking about the dead chicken coming back to life in the story). "*You think you will go back to life? Yeah. You wait for this guy to come back to life?"*

Teacher: "*I don't know, what do you think?* "(Tr. 3, 00:09:22).

Jack: "*But you can't come back to life. I think it's pretty dead*"(Tr. 3, 00:09:36).

Relational pedagogy

Reading to children strengthens the emotional attachment between child and adult (Bus, 1993; Kiely, 2017). Similarly, research shows that children, who feel a sense of belonging to a

school and have positive relationships with their teachers, have more academic success (Bergin & Bergin, 2009; Webster-Stratton & Bywater, 2015). Building relationships was the most beneficial outcome of this research project. The research recorded incidences of Sarah holding hands and seeking out her teacher, and Jack wanted more stories to be read to him. These incidences were apparent towards the end of cycle three. The validation group reported a positive difference in Sarah's attitude towards her teacher. Jack and his Mother also reported that he enjoyed the reading sessions with his teacher (Appendix Q, R.J, 9).

Action rhymes

Another teacher learning that the study highlighted was the importance of action rhymes for language development. Diary entries, from cycle three, show the researcher thinking about the importance of rhyming for language development in all children (Appendix Q, The importance of action rhymes, R.J, 9). As a result of this learning reflection the researcher resolves to do more action rhyming as part of daily practice. The importance of action rhymes for children with ASD is apparent in the literature (Hudson, Sanders, Greenway, Xie; Smith et al., 2017). Action rhymes are an important practical tool for children who have ASD and language delay. Sarah particularly enjoyed reciting action rhymes, such as *five little speckled frogs* and *five little monkeys jumping on the bed* (Appendix P, Sarah using action rhymes, Tr. 12).

Validation group and change

The validation group played a significant role in the research process (Appendix Y, validation group and collaboration). It was the teacher and SNAs collaborations that helped keep the research on track. It was through conversations with other professionals that the decision to take the children in one to one sessions was made (Cycle 3). It was through collaboration that it

was determined that dialogic story reading would be continued after the twelve research sessions with Sarah and Jack and incorporated into their IEPs for the future.

The validation group gave the researcher a deeper understanding of the participants. Comments from Sarah's SNA throughout the sessions such as *"I have never heard her say that",* (Tr. S.10, 00:27:33) gave the researcher a deeper understanding of Sarah's language and communication skills. Requesting language such as "*Can I have*" is difficult for Sarah, she normally uses a functional language for example "*frogs"* and pointing to the frogs, indicating that she wanted them. The following excerpt from the data shows her nearly mastering the phrase "Can I". Without collaboration and feedback from her SNA, the researcher may have missed the significance of this learning.

Teacher: "*What's happening here?"* (Teacher points to the picture in the story) (Tr. S, 10, 00:27:08)

Sarah: "Had *a wife, the Cat. We can play frogs?* "(Tr. S. 10, 00:27:33).

Conclusion

The data demonstrated the participants using the full continuum of expressive engagement, from talking back to taking over (Sipe, 2002) and demonstrates the use of de-contextualised language. The necessity for appropriate teacher "*Wait Time"* for responses was evident in the study and will be continued as part of daily practice.

The study highlights the challenge of maintaining joint attention with children with ASD. The more severe the level of autism the more challenging it is to maintain J.A. Autism affects each child differently, and thus requires an individualised approach for best results.

The data demonstrates the teacher acting as a reflective practitioner. It outlines the teacher's values of the importance of relational pedagogy and supporting the child's uniqueness

and autonomy. The claims to knowledge are demonstrated in the data generated by this research and are validated by critical friends also known as the validation group.

This action research documented change and transformation of current practice and understandings of children with ASD. Transformation is evident in the enhancement of relationships with the participant's, the validation group, parents and staff of the school.

The living theory approach to action research requires evidence to validate that there was an improvement of practice and enhancement of educational leadership for the good of others (McNiff & Whitehead, 2009; Barry, 2018). This research documents that transformation and change. The dialogic story reading approach will be used as a method to enhance language and communication with children with ASD and also typically developing children in this school in the future.

Chapter 5

Discussion

Introduction

The enquiry that incited this action research was *"Can the dialogic story reading approach enhance language and communication with children with ASD?"* The data demonstrated the participants using the full continuum of expressive engagement, from talking back to taking over (Sipe, 2002) and reflects the use of de-contextualised language. This small scale action research found that the approach can make positive improvements in language expressions and interactions with children with ASD. This chapter will also discuss how this reading strategy is successful at improving student-teacher relationships, with recommendations for future research.

Claims to knowledge

Action Research inspired by Dewey (1933) attempts to expand the scientific attitudes of traditional research designs to local communities' workplaces and schools (Eikeland, 2007). The claims to knowledge made in this action research are value-laden, yet hold significant findings for the improvement of practice and the future teaching of children with ASD. According to Byers, Abdulsalam &Vvedenskiy (2018), these knowledge claims are descriptions of behaviours rather than descriptions of cognitive, brain, or other epistemic content. However, these particular claims to knowledge can be backed up by the data generated from this research, and validated by the critical friends or validation group consulted during this study.

An adapted dialogic story reading approach

This small scale action research demonstrated that an adapted approach to dialogic story reading to suit the needs of children with ASD had positive outcomes for language and communication. These findings correspond to recent research into the use of dialogic story reading with children with ASD (Golloher, 2017; Mucchetti, 2013; Plattos, 2012; Whalon, Delano & Hanline, 2013).

There was adequate evidence to suggest that the approach promoted language expressions, especially de-contextualised language with the participants. De-contextualised language is an essential element of language learning, for developing relationships and for educational attainment (Crain-Thoreson & Dale, 1992; Dickinson & Smith, 1994; Kiely, 2017; Senechal & LeFevre, 2001; Trivette, Dunst & Gorman, 2010; Wasik & Bond, 2001). This type of language is a difficulty with children with ASD as these children have specific problems in social interaction and communication (ICD-11, 2018). Children with ASD often have challenges communicating nonverbally, such as through hand gestures, eye contact, and facial expressions, which can make understanding and using expressive language and de-contextualised language a challenge.

The data showed that adapting the dialogic story reading approach by using props and books with detailed pictures, rhymes and songs was effective at producing language and J.A (Appendix R, the use of props during dialogic story reading). This correlates with literature indicating that books for dialogic story reading should include bright pictures, rhymes, repetition and good storylines that can develop and enhance de-contextualised language (Hargrave & Senechal, 2000; Kiely, 2017; Lonigan, Purpura, Wilson, Walker & Clancy-Menchetti, 2013).

Similarly, Whalon et al., (2013), found that adapting a dialogic story approach by introducing props, visual cues and appropriate wait time had positive outcomes for children with ASD.

An individualised approach

This research demonstrated that the dialogic story reading approach is more beneficial in a one to one setting with children with ASD. Whalon et al. (2013) completed their adapted dialogic RECALL method in a group of two children and found positive outcomes for language and communication. Completing the method in a group setting in this particular study was extremely challenging for the teacher and did not improve language and communication as much as when the approach was completed in the one to one sessions. There is evidence suggesting that the more severe the ASD, the more challenging the behaviour and educational difficulties (Justice et al., 2016; Whalon et al., 2013). The consensus from the validation group was that this approach would be continued in the future as part of the children's resource hours, on a one to one basis.

However, it would be crucial to outline that working on a language intervention such as the dialogic story reading approach, is completed alongside other integration approaches that encourage children with ASD to participate in activities with their typically developing peers. Strategies such as LEAP programme, Stay, Play and Talk Floor Time, and the TEACCH approach are effective interventions for children with ASD that encourage integration.

Additionally, Sarah and Jack would benefit from the introduction of play-based initiatives. Play challenges are evident in children with ASD (Jung & Sainato, 2012; Holmes & Willoughby, 2005; Lee & Lo, 2017) and present in the two participants in this study. The play activities observed in Sarah are repetitive, self-stimulatory, restrictive, and completed without

peer involvement. Jack interacts more with his peers and immerses himself at times in socio-dramatic play. Socio-dramatic play is the most beneficial for language and communication for typically developing children and children with ASD (Jung & Sainato, 2012; Kiely, 2014; Stagnitti, 2016).

The floor time model would be an appropriate intervention as it is child-directed and adult supported and would benefit the participant's language and communication skills, and ideally help them develop friendships in the future. Floor time has positive outcomes for decreasing repetitive play activities and increasing communication and joint attention in children with ASD (Kordt-Thomas & Lee, 2006; Greenspan & Weider, 1998).

The challenges of teaching children with ASD

The behavioural challenges associated with children with ASD and encountered by the researcher during the study is documented in the literature (Balfe, 2001; Kelly, Carey, McCarthy & Coyle, 2007; Lindsay et al., 2013; McTiernan et al., 2011; Westling, 2010). These studies demonstrate that deficits in supports for teachers can cause stress, fatigue and burn-out. This small scale research project did acknowledge the teachers learning and challenges of working with children with ASD. The fatigue felt by the researcher in terms of endeavouring to maintain J.A, manage challenging behaviours and maintaining a dramatic reading style, was evident in cycles one and two and documented in the reflection journals. An advantage of keeping a reflection journal as an action researcher is that it creates a connection between theory and practice and serves as an instrument for the improvement of learning (Perkins, 1996; McNiff, 2017).

The challenge of maintaining joint attention

The challenge of maintaining joint attention with children with ASD is evident in the literature and apparent in this particular research project. Researchers found that the more severe the level of ASD the more difficulties the child has with joint attention (Delbruck et al., 2019; Dykstra, 2013; Dykstra & Watson, 2015; Ho et al., 2019). This is perceptible in this action research with Sarah finding J.A much more challenging than Jack, especially in the group sessions.

The severity of ASD

The severity of ASD is based on social communication impairments and restricted, repetitive patterns of behaviour, and cognitive profiling (ICD-11, WHO, 2018). Some of these patterns of behaviour concerning severity were apparent in the participants, with Sarah displaying more severe patterns of behaviour than Jack. This labelling of ASD severity enables support to be established for children with ASD in mainstream classes. However, this research outlined the need for continued consistent support and collaboration with SNAs and other professional experts in the area.

The impact of ASD on educational engagement

The impact of ASD on educational engagement and especially J.A was palpable in the data with Sarah withdrawing consent and opting out of the sessions more often than Jack. The severity of ASD impacts on educational engagement as ASD presents as difficulties in other areas of development known as the triad of impairments. These are documented in the literature as challenges in communication, social interaction and patterns of restrictive, repetitive behaviours (Bernardini, Porayska-Pomsta & Smith 2014; DSM–V, 2013; Van Wijngaarden-Cremers et al., 2013). Other diagnosis such as Attention Deficit Hyperactive Disorder (ADHD),

Attention Deficit Disorder (ADD), anxiety and sensory processing disorders are often co-morbid with ASD (Drudy, 2001; DSM-V, 2013; ICD-11, 2018). Furthermore, other conditions evident in children with ASD that impact educational engagement and were relevant to Sarah's difficulties are Selective Mutism (SM) (Kotrba, 2015; Kovac & Furr, 2018) and hyperlexia (Ostrolenk et al., 2017; Kerbishian, 1985).

Relational pedagogy

High-quality teacher-student relationships can lead to more positive outcomes for children with challenging behaviours (Sabol & Pianta, 2012). The overall positive outcome for the reflective practitioner in this research project was the development of relationships with the two children. Before the research, there was little time afforded to develop bonds with the children, whereas now there is substantial evidence to suggest that the children feel comfortable and happy working with their teacher in class.

Although it is clear that positive teacher-student relationships are beneficial for students (Bergin & Bergin, 2009; Reeves & Le Mare, 2017; Webster-Stratton & Bywater, 2015) it is not clear how relational pedagogy can best be encouraged in teachers. Perhaps, giving more opportunities for teachers to work one to one with children with ASD could enhance relational pedagogy and practice.

Practical school solutions

When discussing challenging behaviours, teacher exhaustion and stress in terms of student behaviour, one could look for a solution at the local school level. Providing time and space for mainstream teachers to form bonds with ASD children outside of the mainstream classroom may ease the teacher's fear of challenging behaviour. A student-teacher bond has positive effects on educational attainment and reduces incidences of challenging behaviours

(Bergin & Bergin, 2009; Sabol &Pianta, 2012). This time could have positive outcomes for teachers and children with ASD, but would warrant further school based action research. Furthermore, this ethos and philosophical stance of teaching through a relational pedagogy would enhance the school's learning environment for all.

There was substantial evidence of teacher-student bonds during the research timeframe (Appendix S, reflection journal R.J, 2). At the end of the research, the journals document that the researcher will miss working with these two children on an individual basis and that the research process was an enjoyable experience (Appendix U, R.J, 9). Adequate support is the answer to encourage teachers working with children with ASD to value the importance of relational pedagogy. With sufficient support from SENOs, SNAs, staff members, funding, teacher education and continued research more advancement and improvements of educational interventions for children with ASD are possible.

Staff collaboration and future recommendations for the improvement of practice

Action research is a self- reflective spiral (Kemmis & Taggart, 1988). It involves cycles of planning, acting, observing systematically, reflecting and then re-planning (McNiff, Lomax &Whitehead, 1996). This self-reflection is evident during the three cycles of action research that permeated throughout this study. Action research and living theory are about transformation on many levels. The transformation was evident not only in the two participants and the researcher but also from the many conversations and meetings that took place throughout the research process. These conversations were with the participant's parents, SNAs, resource teacher and principal. These collaborations allowed for discussions around best practice and gave opportunities to all involved to voice their views on how best to teach children with ASD in the

school. This form of teacher collaboration may not have occurred if the research methodology was not the living theory approach to action research.

Rapp (2005) states that having an environment of inquiry benefits children with special needs. This approach encouraged the participants to use higher order thinking and de-contextualised language. Children developing and asking questions regarding stories is a central step to independent reading (Santori & Belfatti, 2016). With this in mind, space and opportunity, for children with ASD to experience the dialogic story reading approach in the school would be recommended for future planning.

Furthermore, the approach would benefit children in mainstream classrooms. This will be trailed in the future. Other teachers in the school have shown an interest in this method and are happy to receive some input and training on the dialogic story reading approach in the future. The parents of the two participants will be invited to a meeting to outline how this approach to reading could be beneficial for language and bonding time at home.

Meeting with resource teachers from nearby schools to discuss this approach is a future recommendation endorsed by the validation group. The value of collaborating with other like-minded professionals helps in creating caring relationships and supporting all students. These conversations may inspire other teachers and parents working and living with ASD to trail out the dialogic story reading method.

The positive outcomes from this research project for language and teacher-student bonds with the two children with ASD have spurred further action in the school. To ease transitions for next year, the new class teacher will be offered a period to work with the children, using this approach on a one to one basis. This may help the development of new bonds and relationships in the future.

It would be interesting to see if Jack would be able to work in a larger group using this approach, as he was able to manage J.A in a group with Sarah, although this was challenging. This may be the next step for encouraging him to join in and express himself more, in a more socially acceptable and effective manner. Eventually, with more interventions such as the dialogic story reading approach, Jack will be able to join in the sessions with the whole class.

This particular study worked better one to one, but it is essential that children with ASD are included and integrated with their class peers for most of their school day. It was the removal of these children from the classroom settings that created the tension and disconnect the practitioner was feeling at the beginning of this process. Perhaps, short blocks, of the approach would be warranted. Furthermore, as the children get older and used to this approach, it may be more successful in a group setting.

Conclusion

Action research empowers educators to improve their practice by offering as a gift the knowledge they generate in the process thus contributing to the creation of a profession of educators (Whitehead, 2018; Whitehead & Huxtable, 2016). This research found that the dialogic story reading approach is an effective intervention to use with children with ASD. The method enhances expressive language, especially de-contextualised language and communication. The approach deepens student-teacher bonds and interactions.

The claims to knowledge generated in this study will form the basis of future practice and planning in the school. Future recommendations for practice would be to continue the dialogic story reading approach and to introduce play-based interventions to children with ASD in the school. Finally, providing time and support for mainstream teachers to work one to one with ASD children that are in their classes would allow for the enhancement of teacher-student bonds.

This relational aspect of teaching and learning has an overall positive effect on education and behaviour.

These claims and transformations took place as the researcher reflected on values and practice during the three cycles of action research. These changes in practice and future recommendations would not have been possible without self-reflection and collaboration with other staff members. Living closer to one's values allows for an improvement in educational theory and practice (Agee, 2009; Barry, 2018; McNiff, 2017; Whitehead, 2018), this improvement of current practice is documented in this research.

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Appendix A

Lesson plan example, story; Tabby mc Tat (Julia Donaldson, 2009)

Prompt type	**Teacher prompts**	**Possible child responses**	**Evaluation of possible responses**	**Teacher Prompts to Expand the response**
Wh	Who is Tabby McTat?	A Cat	Child recognises the animal, expand the response with an attribute	Yes, it is a stripy cat; do we know what we call a stripy cat?
Completion prompt	Tabby McTat was a ..... Using the rhyme in the story to prompt further. "He talked of this and he talked of....."	A cat. That.	Child recalls the rhyme. Teacher prompts further using I wonder questions to develop de-contextualised language. "I wonder what they were talking about."	They might be talking about.... Teacher expands to see if the child can develop an idea of what they might be discussing in the story. Role-play may be used here.
Open-ended	What do you think the busker is feeling in this picture?	Possible responses relate to de-contextualised language	Expand by adding details, use basic vocabulary initially.	Maybe he is feeling... What do you think he should do next? Using inference, prediction to prompt higher level thinking.
Recall	Can you remember the name of the Busker, and what happened to him?	Child recalls details from the story, teacher uses picture details to prompt language.	Use prompts to develop language. Move to open-ended prompts.	What happened first? What happened next? Use sequencing prompts to develop story sequence.
Distancing	Do you have a	Child relates the	Encourage the	Develop higher

	cat or a toy cat? Introduce picture of cats and toy cats if needed to develop language. Have you ever heard a Busker play?	story to his/her life at home known as funds of knowledge (Katz, 2002).	child to relate the story to his/her life. Encourage the child to talk about different type of cats.	order thinking by asking questions beyond the story for example " What do you think the cat is feeling here when he saw the kittens?" Prompt for developing de-contextualised language.
Open ended? Recall	We have finished the story. What might happen next? What happened in the beginning and in the end?	Tabby McTat got lost and then found his owner.	Continue to prompt the child to get more details. Teacher fills in the gaps.	Introduce new vocabulary like adventure, a journey, discovery, investigation.
Making connections	How did Tabby McTat feel at the end of the story?	Happy Encourage more de-contextualised language.	Relate the responses to the child's life. Did you ever get lost?	Do you remember a time where you were very happy, excited?

Appendix B

Level 1 the literacy model of Kadervek & Rabidoux (2004)

Level of literacy development	Possible goals
Attention & responsiveness during literacy interactions.	a) Student maintains attention to a literacy artefact and the literacy partner for _ minutes. b) Student decreases off-task behaviours to no more than one per minute during a _ minute storybook interaction. c) Student directs gaze at pictures, turns pages, and interactively manipulates flaps in a lift-the-flap book for _ minutes. d) Student turn-takes during a shared storybook interaction _ times during a _ minute storybook interaction. e) Student uses emergent writing to tell a story or share an experience.

Appendix B (continued)

Level of literacy development	Possible goals
Balance & turn-taking in literacy interactions	(a) Student interacts with verbal, gestural, or signed communication within a shared literacy interaction. (b) Student initiates communication during a literacy interaction (c) Student demonstrates a range of pragmatic communication skills (describing, requesting, responding, topic initiation and maintenance, etc.

Appendix B (continued)

Goals Level of literacy development	**Possible goals. Level three.**
Symbolic understanding of written forms.	(a)Student uses sight words within the school or home setting in functional ways (recognizes own name, follows signs, picks out his own videos, etc.) (b) Student matches representational symbols (line drawings) to real objects within a communication exchange. Student uses symbols to communicate needs in functional ways (e.g., pick a lunch menu) (c) Student engages in communicative exchange in literacy interactions containing meaningful pictures and written words. (d) Student identifies written words with pictures within a communicative literacy exchange.

Appendix C

List of books selected for dialogic story reading sessions

Title	**Author**
A squash and a squeeze	Julia Donaldson & Alex Scheffler (2010).
Tabby McTat	Julia Donaldson & Alex Scheffler (2010).
My Cat's Weird	Lydis Monks (2002).
The Ugly Five	Julia Donaldson & Alex Scheffler (2017).
Dogs	Emily Gravette (n.d).
Fish don't play ball	Emma McCann (2004).
Stick Man	Julia Donaldson & Alex Scheffler (2008).
I love you, Muddy Bear	Jane Simmons (2010).

Appendix D

Letter of consent (parents)

Date 25/02/2019

Dear Parents,

I am writing to ask for your help with a study that investigates the effects of dialogic storybook reading as a method for oral language development. This is for my final thesis in a Masters in Early Childhood education. I am studying with Marino College and Trinity College Dublin.

Dialogic story reading is a method of shared storybook reading. It uses specific prompts that encourage oral language development and communication and is a fun and enjoyable way to develop verbal language skills. It is beneficial with children who have diagnoses of Autism, encouraging dialogue and expression, in a fun and pleasant way.

The research will involve **thirty-minute sessions daily for two and a half weeks**. Your child will be read to and encouraged to respond to stories that have been carefully selected. I will be recording the responses of your child to see how practical this approach is.

These sessions will take place with me, in school, in the resource room, during your child's resource time. Your child's special needs assistant will be present. The

research will take place in the third term, and I will contact you to let you know when we are starting.

To investigate whether this method of story reading can elicit more language responses, I would like permission to be able to use the tapes as data. Neither your child's name nor his/her geographic location will be revealed. All data will be destroyed sixteen months after the thesis is submitted for grading.

Your child is welcome to discontinue participation in the study at any time, should he/she wish to do so, or if you feel that he/she does not want to continue with the research. They can rejoin at any stage of the study. You will be asked to sign forms (below) indicating agreement for your child to participate in the study. If you could return the form as soon as possible, I would be very grateful.

Additional consent forms will be given to your child; as their consent in the research is vital, I have enclosed a copy of them with this letter. Your child's participation in this project is sincerely appreciated.

If you agree to participate or have any questions, please don't hesitate to contact me at the school 018490394, or email katslundy@gmail.com

Should you have further questions regarding your child's participation, you may also contact my advisor for the project Dr……at Marino Institute of Education.
This study has been considered from an ethical perspective by the Marino ethics in research committee. Should you have any questions or concerns about the ethical approval or conduct of this study, please contact MERC@mie.ie.

Yours faithfully,

_____

You will be given a copy of this information to keep for your records.

Statement of Consent:

Please read the questions below and indicate whether or not you would be willing to participate in the study as described. Please circle yes or no. Thank you.

Do you consent for your child to participate in the study? Yes No

Do you consent to have your child audiotaped? Yes No

May I use the videotapes to study other aspects of the dialogic story approach? Yes No

May I use the tapes to present at conferences to prompt discussion? Yes No

Signature: _____ Date: _____

Signature of Investigator: _____ Date: _____

Appendix E

Letter of consent (children)

Yes or No!

I _____ agree to join in the story book reading research.

I will draw a **happy face** or write **yes** to show my consent, or a **sad face** to say **no**. I understand that I can decide to withdraw from the research with teacher at any stage. I can rejoin the sessions with teacher at any stage.

Appendix F

Consent form for validation group

Date: 25/02/2019

I _____consent to participate in a validation group for Kathryn Lundy's research project.

I will withhold the anonymity and privacy of the two participants, and will adhere to the ethical guidelines of this research study. I consent to the use of my suggestions and ideas during the research project.

I can withdraw my participation in the validation group at any time.

Signed_____

Signed_____

Signed _____

Signed_____

Appendix G

Consent form BOM

Date: 25/02/2019

Dear Principal/Chairperson,

I am writing to ask for your help with a study that investigates the effects of dialogic storybook reading as a method for oral language development. This is for my final thesis in a Masters in Early Childhood Education. I am studying with Marino College and Trinity College Dublin.

Dialogic story reading is an effective method to enhance language and communication with children diagnosed with Autism. It is also very enjoyable approach to oral language development. This approach can be used in mainstream classes too.

To investigate this approach further, I would like permission to swap roles with the resource teacher who works with the two participants; for thirty minutes a day for a period of two and a half weeks.

The research will involve withdrawing the two participants for these sessions, and the sessions will be recorded for data. All data will be destroyed sixteen months after the thesis is submitted for grading. Additional consent forms have been given to the children and

parents; as their consent in the research is vital, I have enclosed a copy of them with this letter.

If you could sign the form indicating agreement for this research to be conducted, I would be very grateful. I am happy to discuss any questions you have regarding the study. You can contact me by email katslundy@gmail.com or by phone 0863481117.

Should you have further questions regarding this research you may also contact my advisor for the project Dr.Farrelly and Dr. McCormack at Marino Institute of Education.

This study has been considered from an ethical perspective by the Marino ethics in research committee. Should you have any questions or concerns about the ethical approval or conduct of this study, please contact MERC@mie.ie.

Kind regards,

_____

You will be given a copy of this information to keep for your records.

Statement of Consent:

I consent for the above research to be completed in St. Brendan's National school.

Signature: _____ Date: 25/02/2019

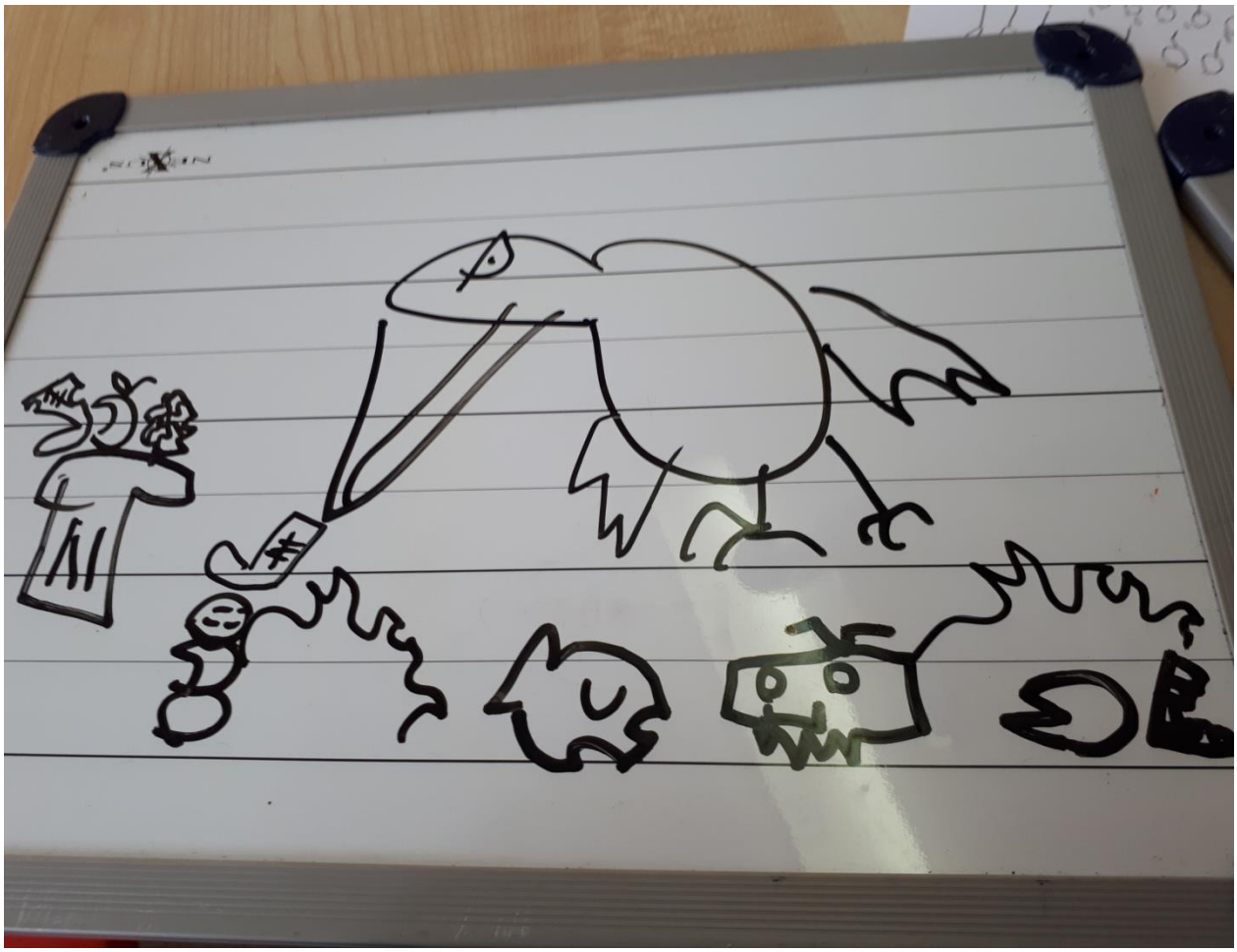
Appendix H

Story-reading strategies (Kiely, 2017)

1. Setting thescene	E.g. I wonder what this is about …. Look at author, illustrator…..
2. Checking the child is 'withyou'.	E.g. It's a beautiful blue sky and there are no cl----.
3. Connecting to lifeexperience	E.g. There's a cat. Do you have a cat?
4. Connecting picture totext.	E.g. It says "the clown was unhappy". There he is in the picture looking a bit sad all right….
5. Eliciting comments by questions, especially open-endedquestions	E.g. I wonder…….
6. Discussing new words, phrases	E.g. He's pulling my leg – what does that mean? Another word for 'fib'?
7. Supporting, echoing,sustaining	E.g. You're dead right! Oh, I see, and did he ……?
8. Listen to what your child says and build on that.Elaborate.	E.g.You think there might be a dinosaur in the story as well? Mmm. There could be. Why do you think that?
9. Pause to allow your child to offer a comment.	……
10. Recasting	E.g. Child: He thrun the ball Adult: Did he? He threw the ball?
11. Revoicing /Checking / Clarifying	E.g. I see…Let's see if I understand what you're saying…do you mean…?
12. Repeating what your child says	Did the wolf die in the end? I think he might have. Let's see if there are any hints in the pictures.
13. Re-read the story	
14. Child re-tells the story	
15. Summarising	E.g. So far Goldilocks has broken the chairs, eaten the porridge, slept in the beds……
16. Predicting	E.g. I wonder what will happen?
17. Speculating*	E.g. I wonder if the wolf will become a good wolf. He might change and turn into a kitten…
18. Make inferences/deducing/finding clues in the story to get answers*	E.g. Mmmm – he's getting red in the face there – he must be feeling annoyed or embarrassed or maybe he's just hot…
19. Projecting	E.g. What would you do if you were Red Riding Hood?
20. Informing,explaining	E.g. A pumpkin? It's a vegetable. You can eat it. It's round and orange. It grows in the ground.
21. Put on special voices for different characters	
22. Thinking outloud	
23. Draw attention to 'reading' by tracking	E.g. Those are the words. Will I read what it says?

Appendix I

Work samples



Appendix J

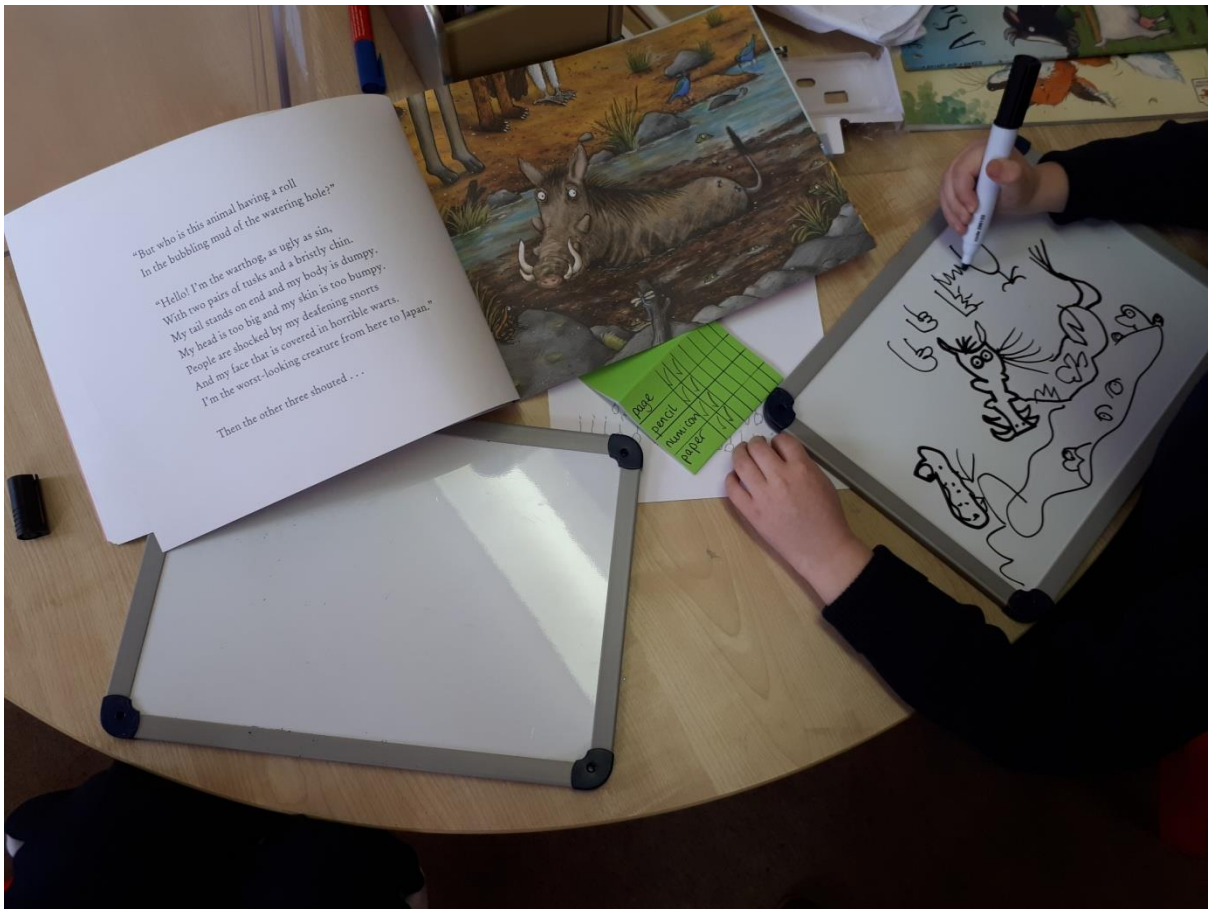
Work samples

Appendix K

Work samples

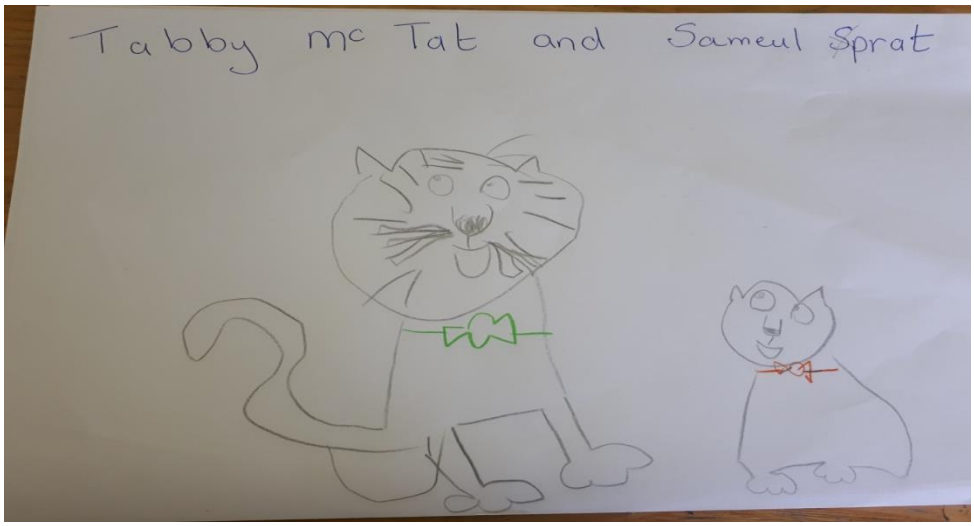
Appendix L

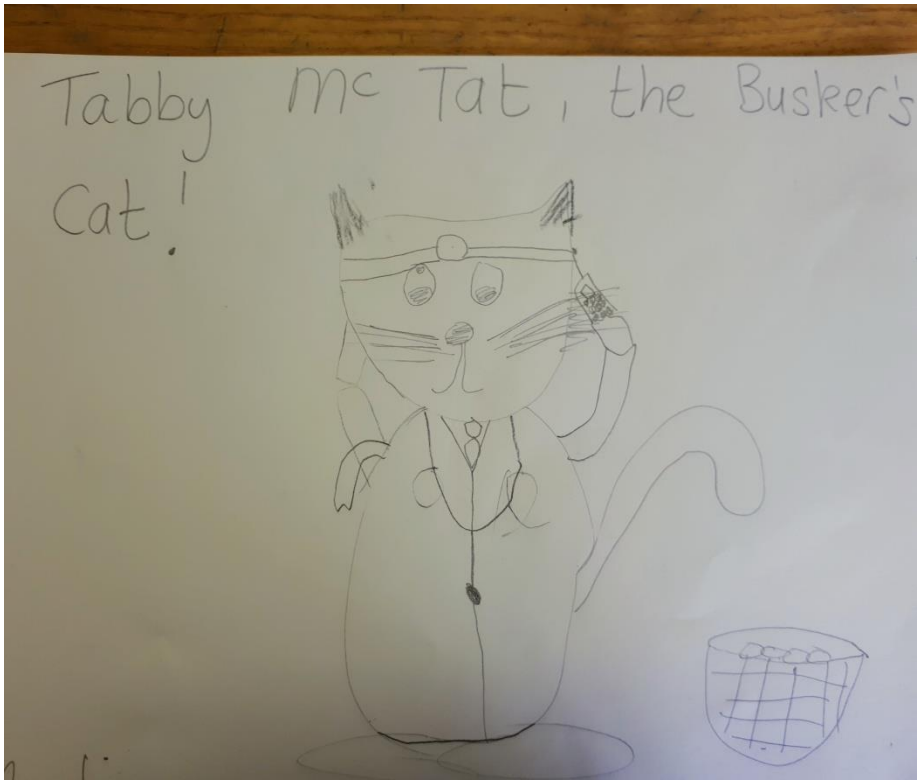
Work samples



Appendix M

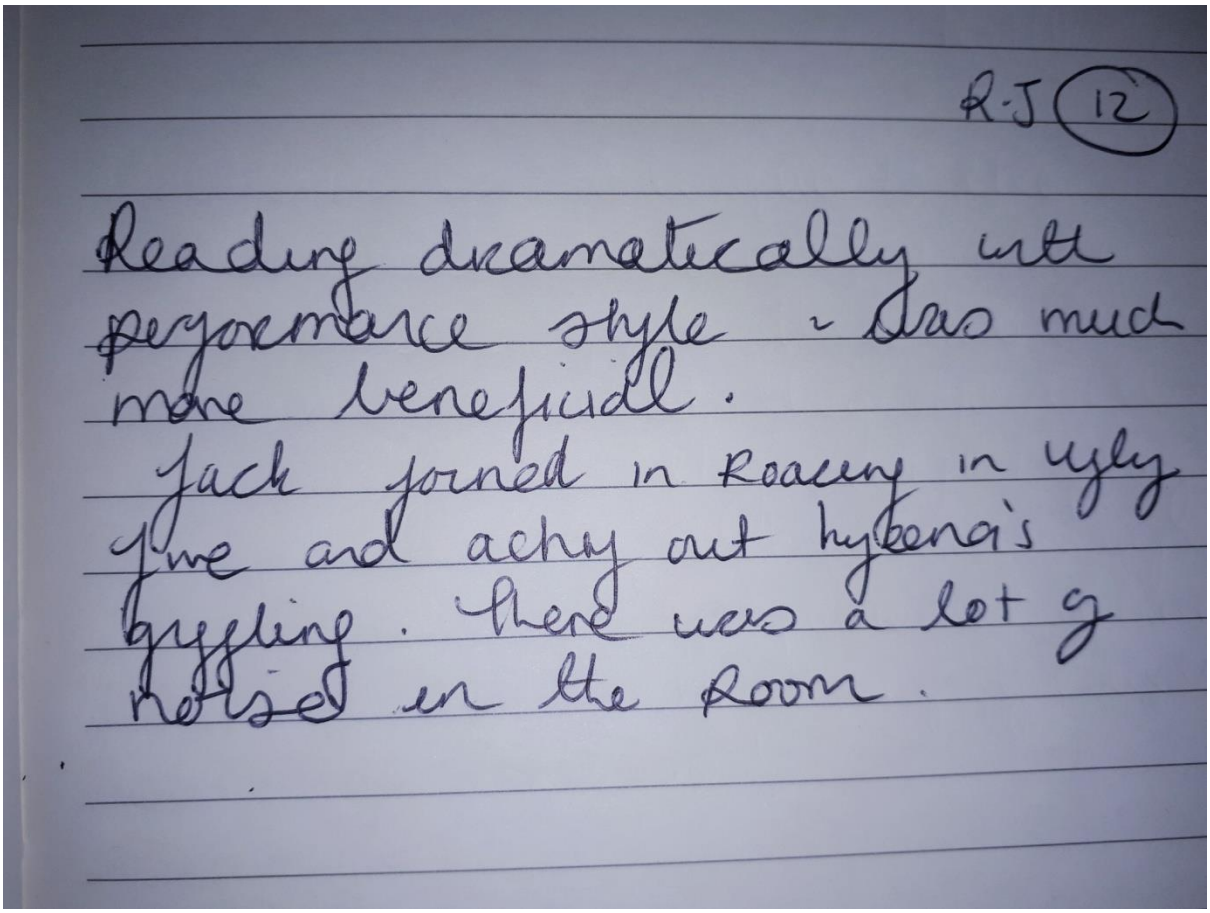
Work samples





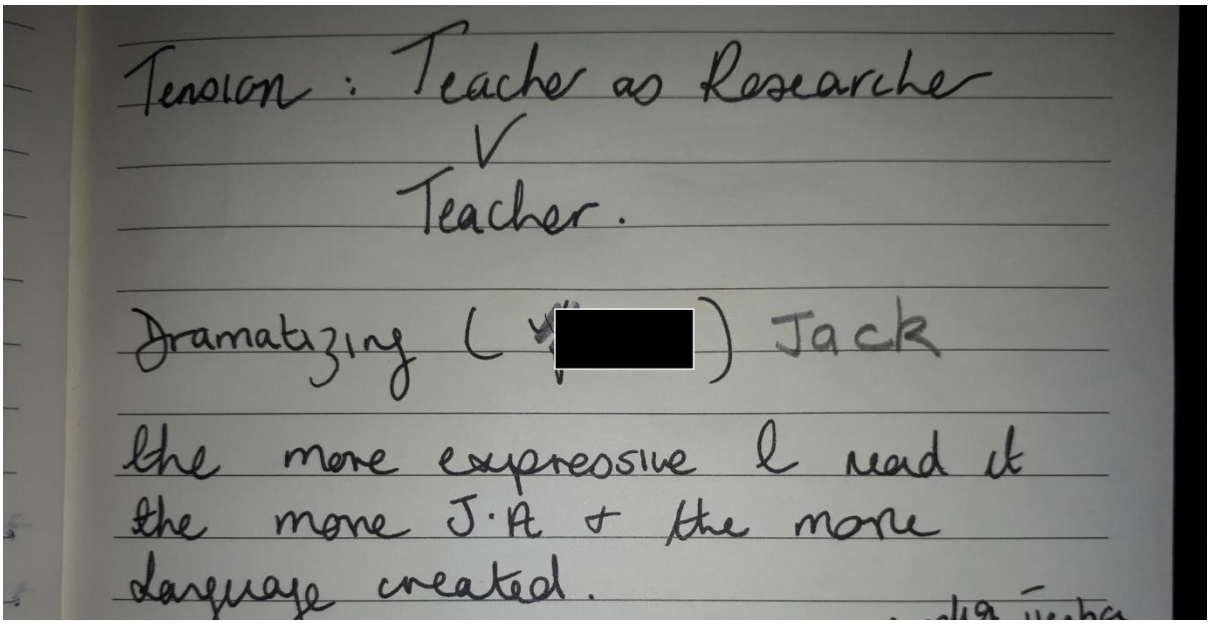
Appendix N

Reading dramatically (R.J, 12)



Appendix O

Tension (R.J, 3)



Appendix P

Sarah using action rhymes (TR.12)

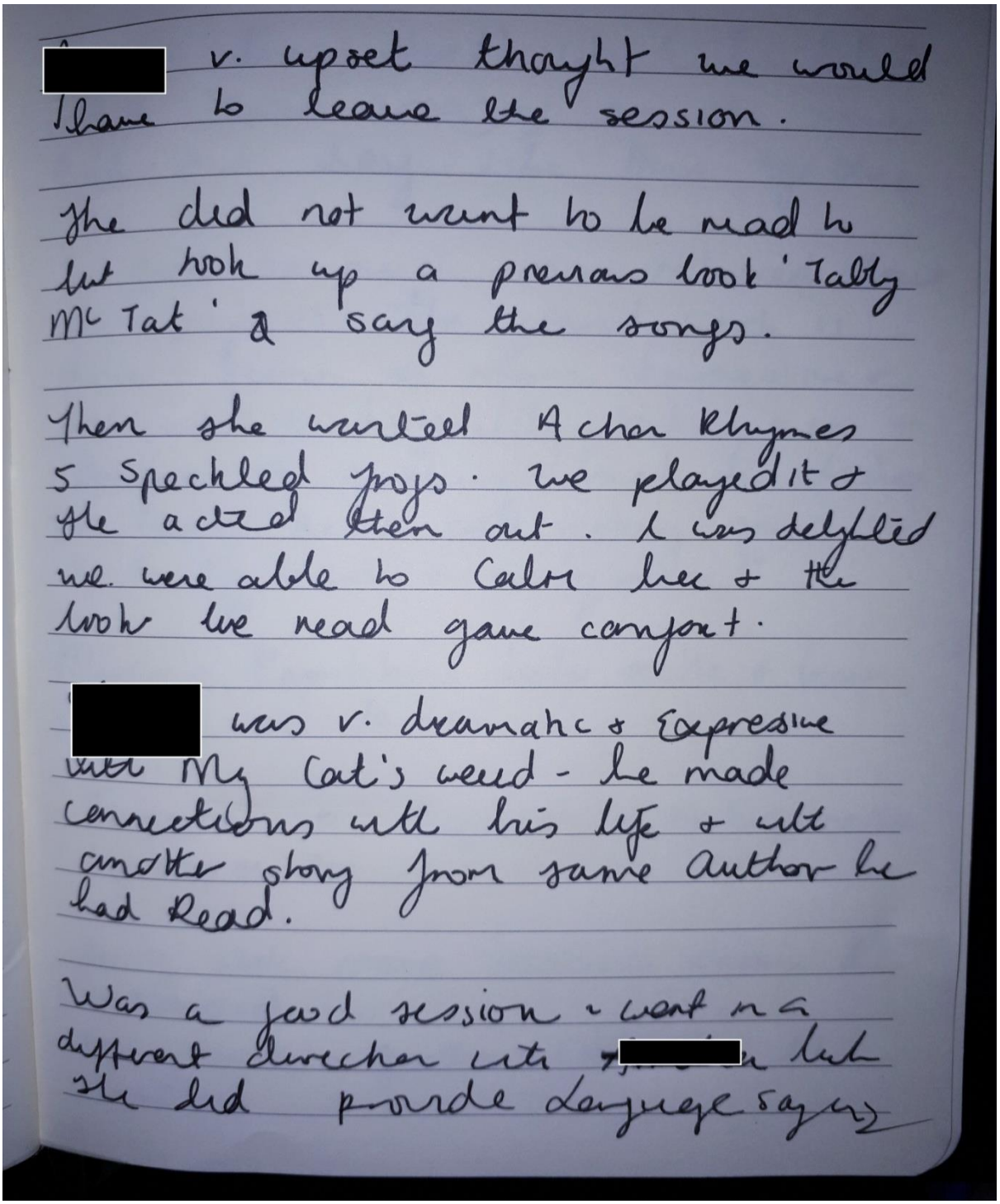
Teacher: "*You have a lovely voice. What are you using?"* [00:18:28].

Sarah: "*A little speckled frog*" [00:18:38]

" *One little speckled frog, sat on a speckled log, eating the most delicious grubs, YUM, YUM, One jumped into the Pool where it was nice and cool, then there were four speckled fogs, glug, glug."*[00:18:51

Appendix Q

Importance of action rhymes (R.J, 9)



[redacted] v. upset thought we would have to leave the session.

She did not want to be read to but took up a previous book 'Tabby Mc Tat' & sang the songs.

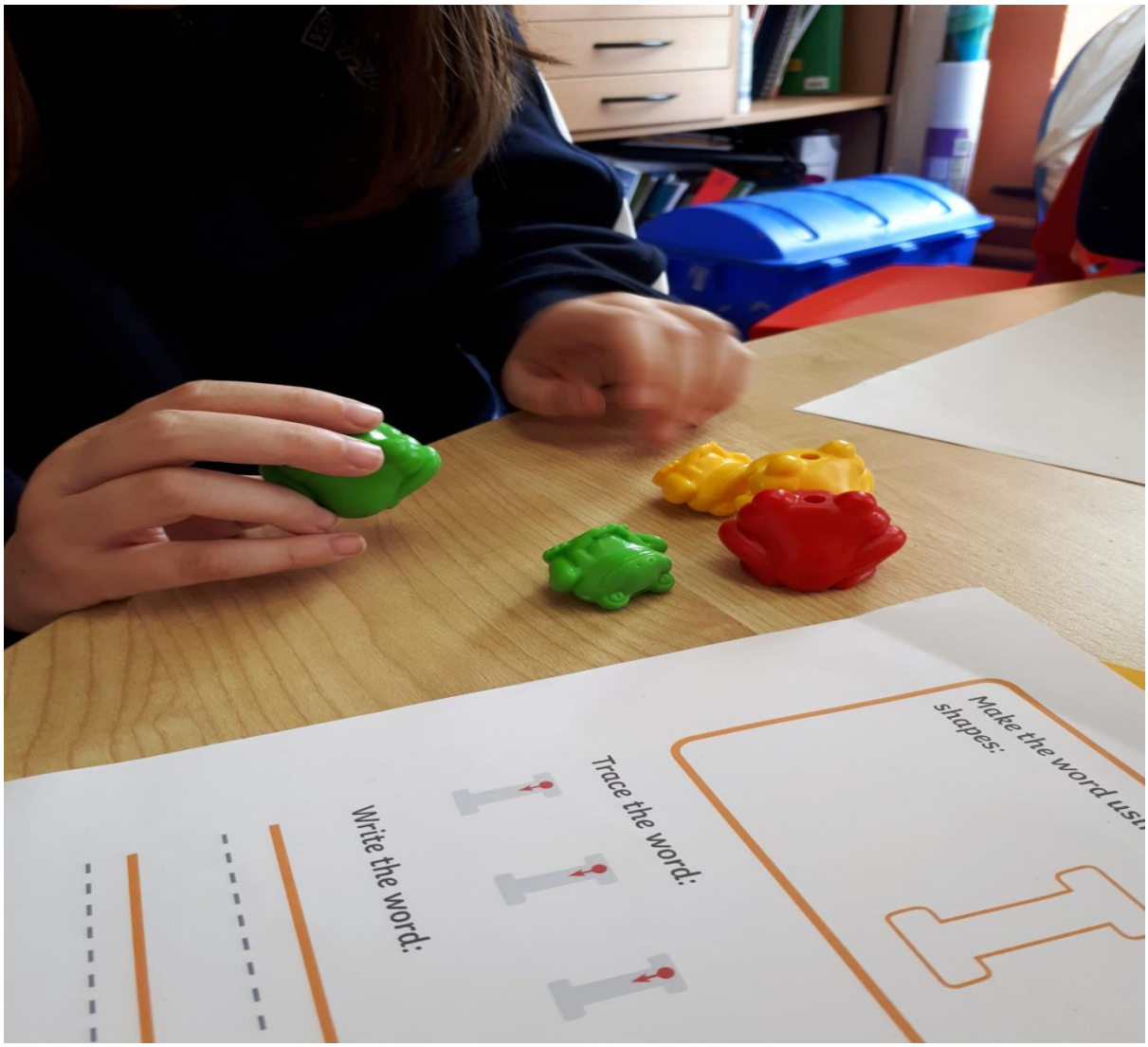
Then she wanted Achoo Rhymes 5 Speckled frogs. We played it & she acted them out. I was delighted we were able to Calm her & the book we read game comfort.

[redacted] was v. dramatic & Expressive with My Cat's weed - he made connections with his life & with another story from same Author he had Read.

Was a good session - want on a different direction with [redacted] but she did provide Language sayings

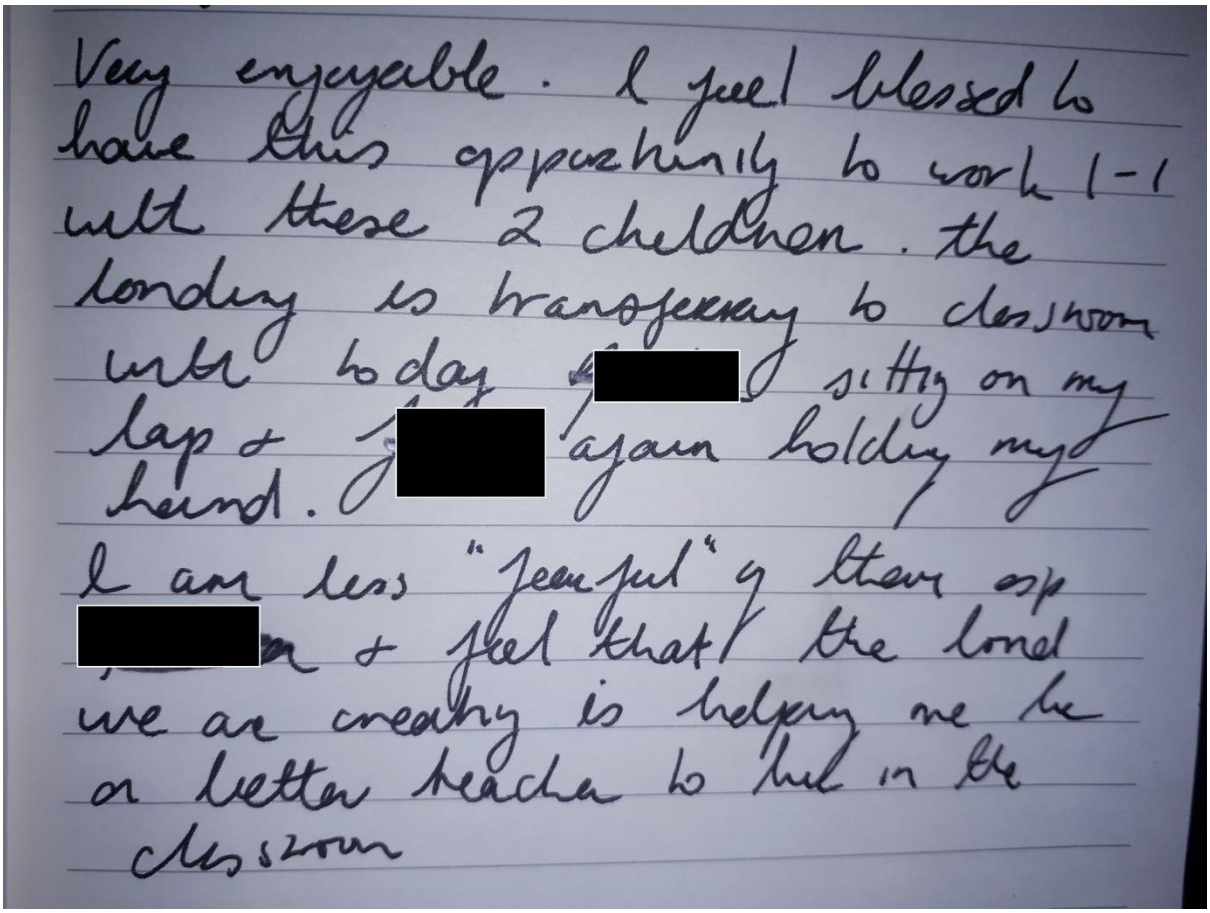
Appendix R

The use of props during dialogic story reading



Appendix S

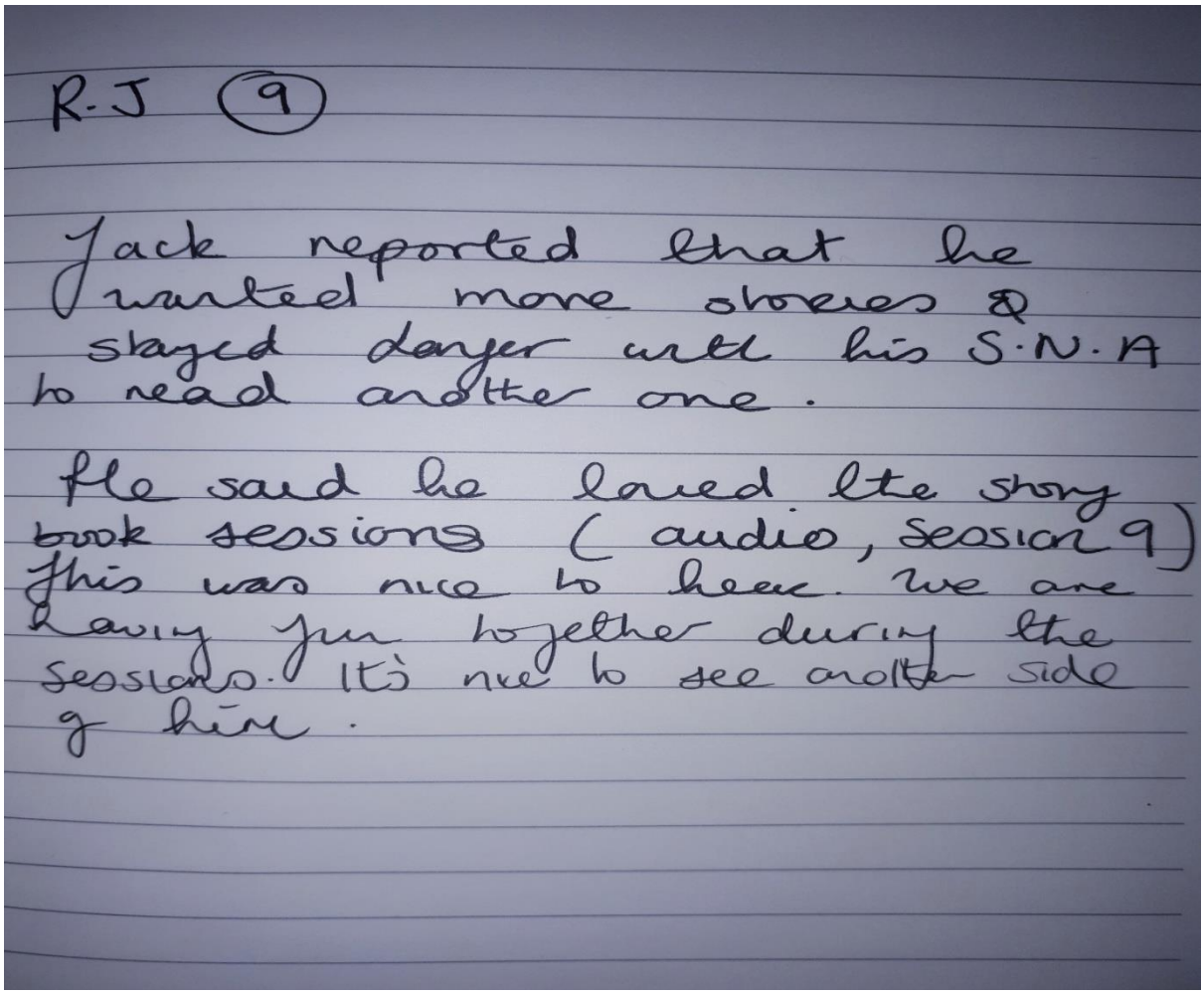
Teacher-student bond, reflection journal (R.J, 2)



Very enjoyable. I feel blessed to have this opportunity to work 1-1 with these 2 children. the bonding is transferring to classroom with today [redacted] sitting on my lap & [redacted] again holding my hand. I am less "fearful" of them esp [redacted] & feel that the bond we are creating is helping me be a better teacher to her in the classroom

Appendix T

Reflection journal 9, teacher-student bonds

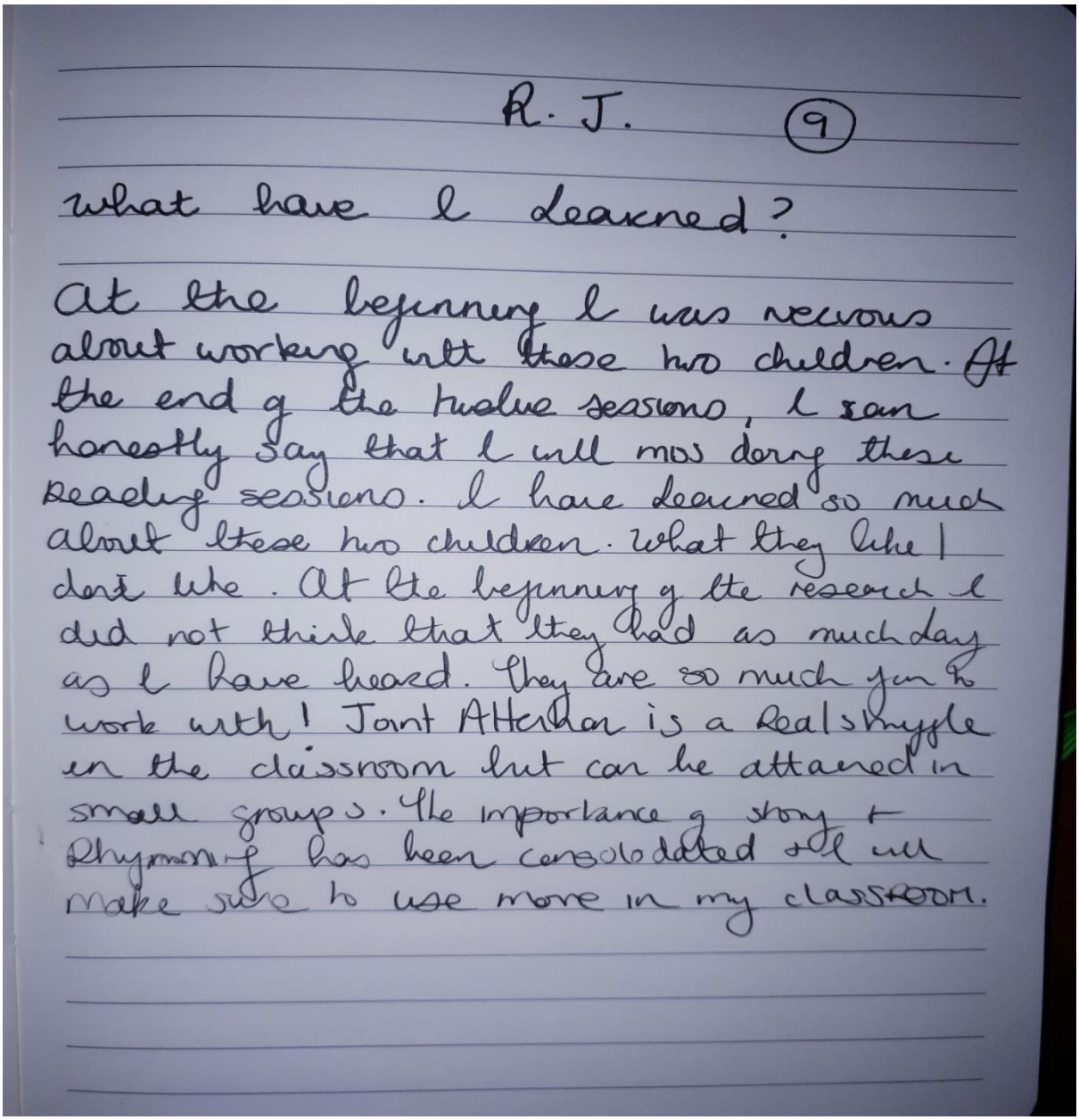

R.J (9)

Jack reported that he wanted more stories & stayed longer with his S.N.A to read another one.

He said he loved the story book sessions (audio, session 9) this was nice to hear. We are having fun together during the sessions. It's nice to see another side of him.

Appendix U

Teacher learning, reflection journal, 9



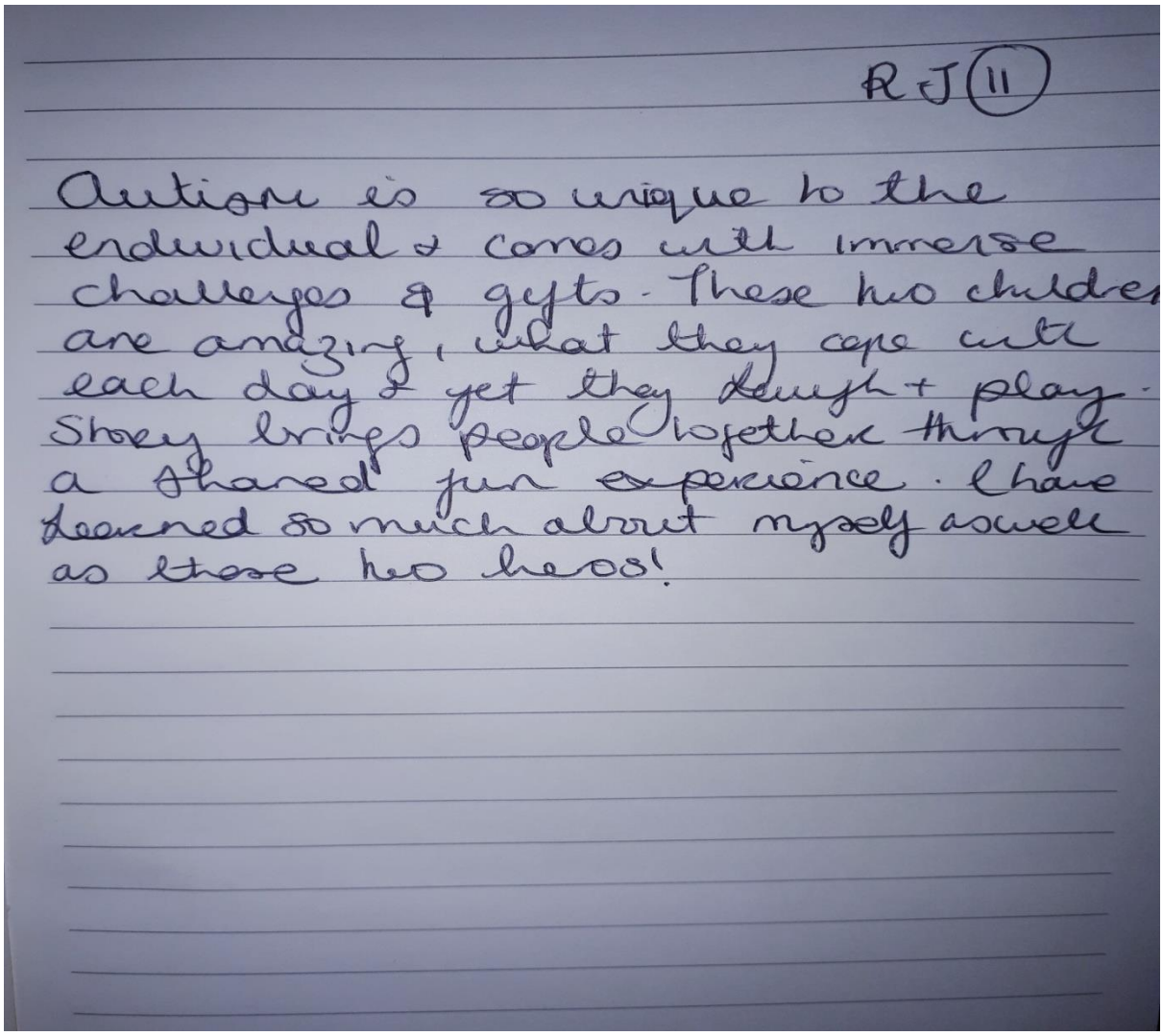
R. J. (9)

what have I learned?

At the beginning I was nervous about working with these two children. At the end of the twelve sessions, I can honestly say that I will miss doing these reading sessions. I have learned so much about these two children. What they like/ don't like. At the beginning of the research I did not think that they had as much day as I have heard. They are so much fun to work with! Joint Attention is a real struggle in the classroom but can be attained in small groups. The importance of story + Rhyming has been consolidated & I will make sure to use more in my classroom.

Appendix V

Teacher learning, reflection journal 11



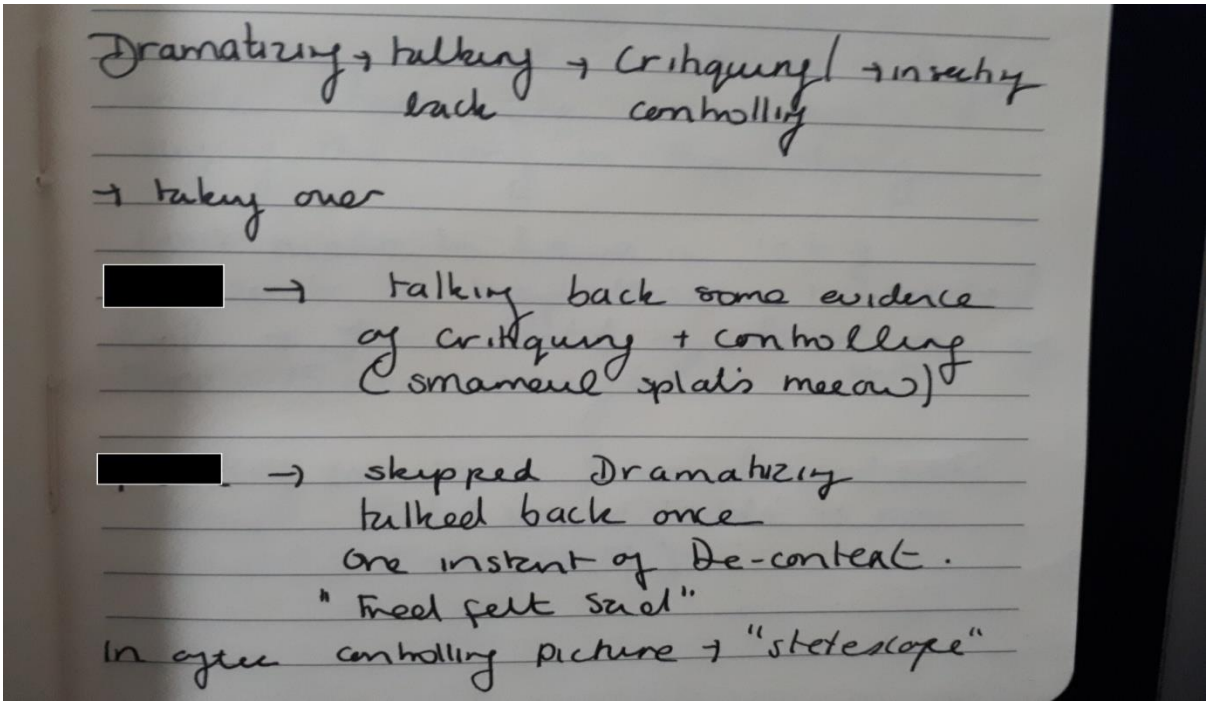
RJ (11)

Autism is so unique to the individual & comes with immense challenges & gifts. These two children are amazing, what they cope with each day & yet they laugh + play. Story brings people together through a shared fun experience. I have learned so much about myself as well as those two heros!

Appendix W

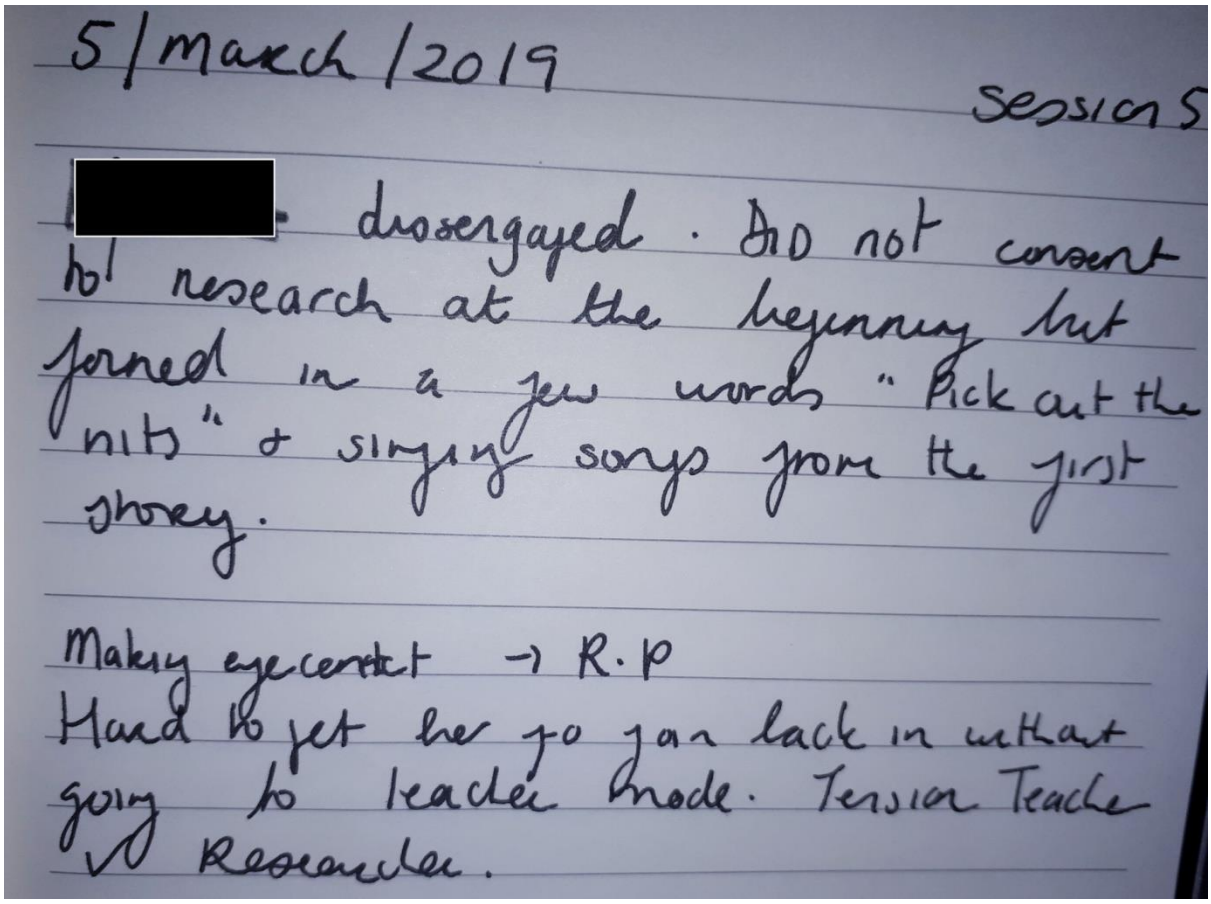
Continuum of expressive engagement, Sipe (2002)

Reflection Journal, Day 2, Where the children are on the above continuum.



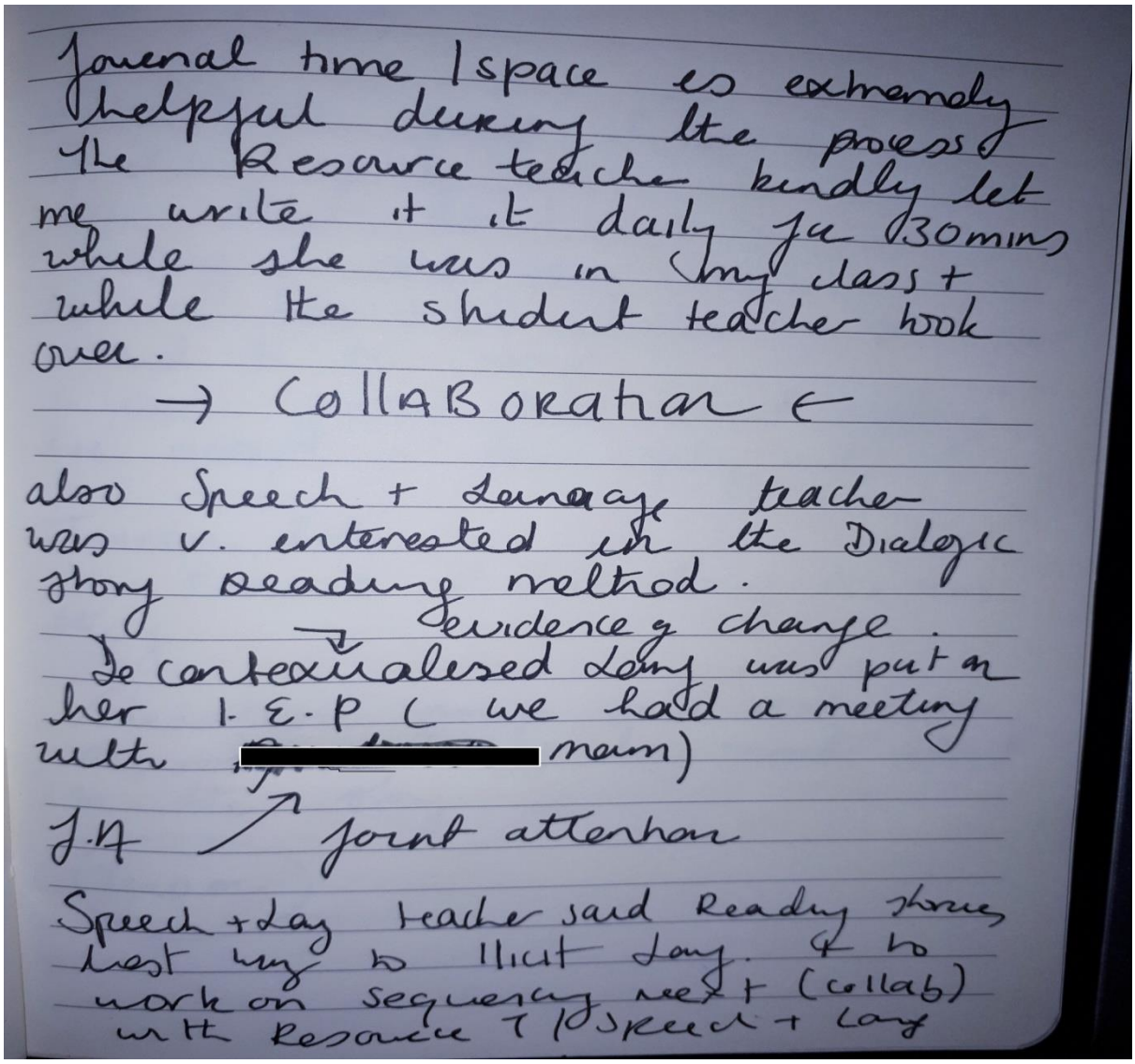
Appendix X

Learning tensions (R.J, 5)



Appendix Y

Validation group and collaboration



Journal time / space is extremely helpful during the process. The Resource teacher kindly let me write it it daily for 30mins while she was in (my class + while the student teacher took over.

→ COLLABORATION ←

also Speech + Language teacher was v. interested in the Dialogic Story Reading method.

→ evidence of change.

De contextualised Lang was put on her I.E.P (we had a meeting with [redacted] mam)

J.A ↗ joint attention

Speech + Lang teacher said Reading stories best way to elicit Lang. & to work on sequencing next + (collab) with Resource T / Speech + Lang