Student Article

An Action Research Project using the Dialogic Story Reading Approach with Children with Autism Spectrum Disorder

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I teach in a small, school in North County Dublin. Like many schools in the area, there are many children with Autism Spectrum Disorders (ASD) integrated into mainstream classes. My interest in ASD and play-based learning sparked my Masters' journey in Early Education at the Marino Institute Education. The course gave me opportunities to reflect on my teaching and learning. It helped me to see what practice was working and what was not working in my classroom. My thesis focuses on using a particular story reading method to enhance oral language and relationships' in children with ASD.

KEYWORDS: Dialogic Story Reading, Language Development, Joint Attention, ASD

INTRODUCTION

In 2018, the World Health Organisation estimated that one child in 160 has an Autism Spectrum Disorder. In Ireland, an estimated prevalence rate of 1-1.5% is used for the purpose of planning policy and services (DOH, 2019). Changing diagnostics and education policy has resulted in more inclusive approaches to education, resulting in more children with ASD now being taught in mainstream classes (DES, 2017, 2018; NCSE, 2016; NHS, 2016). This is a welcomed and positive advance but has implications for teachers and students alike. The many challenges of working with children with autism, obtaining diagnosis and indeed raising a daughter with ASD inspired this research.

Murdoch and Wilson (2008), suggest that all investigation or enquiry is driven by a tension or imbalance within the researcher. In this study, the tension was *"how can teachers in mainstream classes ensure that children with ASD are reaching their full potential?"* As a teacher, is it possible in a busy, sometimes overcrowded classroom, to form an adequate bond with children with ASD? This question led to an exploration of the dialogic story reading method with children with ASD. Research has shown that this method is an effective literacy intervention for children who are typically developing, and also for children with ASD (Whalon et al., 2013).

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 (Kiely, 2017; Whitehurst & Lonigan, 1998). Developing oral language skills is critical for children with ASD (Whalon, Delano, & Hanline, 2013). Furthermore, the dialogic story reading approach has shown to deepen bonds between typically developing children and their adult reader (Kiely, 2017; Whitehurst & Lonigan, 1988) and similar findings were found with children with ASD (Golloher, 2017; Kim et al., 2011). This article highlights some of the key findings of trialling this approach, which are not generalisable but may be of interest to other teachers supporting students with ASD.

CONTEXT

Children with ASD vary in their behaviour, but communication and language skills along with social skill deficits, are considered to be the most significant concerns. Children with ASD face challenges with joint attention (JA) (Delbruck, Yang, Yassine, & Grossman, 2019). Joint attention is where the adult and child learn together in a reciprocal relationship (Hayes, 2007; NCSE, 2017; Trautman, 2009) attending focus on a particular task, in this case dialogic story reading. The dialogic story reading approach allows parents and teachers to provide support for developing joint attention, social interactions and communication skills (Kim & Rispoli, 2018; Plattos, 2012).

The behavioural difficulties associated with children with ASD and encountered by the researcher are well documented in the literature (Kelly, Carey, McCarthy & Coyle, 2007; Lindsay et al., 2013; McTiernan et al., 2011; Westling, 2010). In a classroom setting, and in this particular research, children with ASD present with various difficulties such as emotional regulation, joint attention, social communication, social imagination, social interaction and sensory processing. Taking turns, listening, communicating and moving on from tasks were the main behavioral challenges during this research.

THE ADAPTED DIALOGIC STORY METHOD

Dialogic story reading uses specific prompts to allow the child to immerse themselves in the story. The aim is that the child will take over the story and insert his/her own ideas, storyline, opinions and creative imaginings, thus increasing oral language development. When using the dialogic story method in practice, the teacher can use several approaches:

(a) The adult prompts responses from the child. This is called the **PEER** sequence (**P**rompt, **E**valuate, **E**xpand, **R**epeat).

(b) The adult uses more extended language prompts using the **CROWD** method (**C**ompletion prompts, **R**ecall prompts, **O**pen-ended prompts, **d**istancing prompts) (Whitehurst & Lonnigan, 1998); (Kiely, 2017).

The dialogic storytelling method has been adapted several times. In 2013, a modified form of the dialogic story reading approach for children with ASD was developed in the USA. The approach was called '*Reading to Engage Children with Autism in Language and Learning'* (RECALL). It draws on the dialogic story reading approach by paying particular attention to directing questions to enhance oral language in children with autism. 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). When using the RECALL method with children with ASD, the teacher can use the above approaches, and additional instructional prompts and props where appropriate. These acronyms and adaptations outlined below, were very useful for planning the lessons for this research.

(c) The modified **RECALL** method for children with ASD uses additional instructional prompts, props, visuals and appropriate wait time. The acronym used is **PEEP**, meaning **P**rompt, **E**valuate, **E**xpand, and **P**raise (Whalon, et al., 2013).

METHODOLOGY

An action research approach guided this research study. Action research begins with values (McNiff, 2017). 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). The value of teacher-as-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, the importance of the child's

autonomy, and the concept of teaching through a relational pedagogy have motivated this study.

The research trialled the dialogic story reading approach in 12 sessions across three learning cycles with two children with ASD. Six hours of recorded data were collected and transcribed. Reflection is at the heart of action research and consolidates practical theories and practices (Noffke & Zeichner, 1987; Palak, 2013). For that reason, the researcher's reflective journals and revision cast recordings, along with children's work samples were used as data.

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 received from the study participant's parents and the children before each practice session. To ensure that the data was gathered and analysed appropriately, a validation group was also set up to discuss the process and challenges with the researcher. Validation groups are groups of professionals or colleagues who seek to collaborate an all phases of the cycles (McNiff, 2017). A validation group is described as self-critical communities with the aim of critically reviewing the action research (Kemmis & Taggart, 1998; McNiff, 2017). These professionals helped, advised and listened throughout the research process.

Generalisability is a limitation of this particular research because it is a small-scale study and each child's diagnosis and experience of ASD is unique, the researcher cannot say that these methods will work for all children with ASD. Furthermore, the learning derived from the study is personal to the researcher, who's learning journey cannot be replicated. While this can be considered a limitation, researching education is not about studying something static. The truth of this particular research is dependent on a social dynamic between the researcher and participants. Action researchers embrace this social dynamic (Kemmis & McTaggart, 1988; McNiff, 1988; 2017) this social interaction and in-depth understanding of individual children's experiences is what made this worthwhile.

FINDINGS AND DISCUSSION

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. When using the dialogic story reading approach, participants communicated more with the researcher and used the full continuum of expressive engagement, from talking back about the story to taking over the story (Sipe, 2002). Using Sipe's (2002) typology of expressive engagement (figure 1), the researcher monitored the types of responses that storybook reading elicited from the child participants. This study highlighted where the two

participants fell on the continuum of expressive engagement. This varied depending on the book, the mood of the child, and how dramatic the teacher read it!

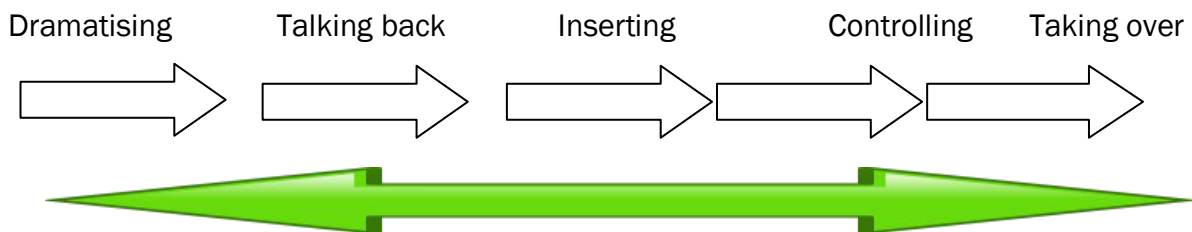Dramatising   Talking back   Inserting   Controlling   Taking over

Figure 1: A typology of expressive engagement (Sipe, 2002).

This research found that the dialogic story approach helped the children use de-contextualised language. That is, they demonstrated that they were thinking about what a character might be thinking or feeling (Kiely, 2017). Asking questions and pointing to pictures of the characters in the story aided de-contextualised language. For example, "How do you think the boy/girl is feeling here? "What do you think he/she is feeling or might say next?" This higher order thinking can be challenging for some children. The necessity for appropriate teacher, "*Wait Time"* for responses, was evident in the study.

The study highlighted the challenge of maintaining joint attention with children with ASD. The more severe the level of autism, the more challenging it is to maintain joint attention. Autism affects each child differently, and thus requires an individualised approach for best results. In this study the researcher found that using action rhymes, songs and props allowed one of the participants engage more in the story. The other child enjoyed drawing characters from the stories, creating puppets and making them "talk".

The approach deepened student-teacher bonds and interactions. For example, the researcher documents many times when the children interacted positively and expressed enjoyment. The increase in the children's communication with the researcher was evident. At the beginning of the study the participants did not interact with the researcher, whereas at the end of the 12 sessions, the children had built up a good repoire with the researcher. Input from the children's SNAs and parents was essential in helping the researcher understand the positive impact the sessions were having on the children. These findings were recorded in the reflective journals and post session recordings.

Successfully implementing a dialogic storytelling approach within a group setting is

extremely challenging. Whalon et al., (2013), completed their adapted dialogic RECALL method in a small group of children with ASD and found positive outcomes for language and communication. This particular research demonstrates that language and communication did not improve as much in a group setting when compared to using the approach in the one-to-one sessions.

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 action research documented the researcher's professional development in terms of change and transformation of current practice and understanding of children with ASD. Transformation is evident in the enhancement of relationships with the participants, the validation group, parents and staff of the school. The data demonstrates the teacher acting as a reflective practitioner. For example, in reflective journal 9, *Teacher-Student bonds*, the researcher recorded that one of the participants wanted to stay longer and read more stories after the session, because "he was having fun". The researcher recorded that "It was nice to see him enjoying himself and having fun" (Research Journal, 9, 2019).

McTiernan et al., (2011) and Westling (2010) have demonstrated that deficits in supports for teachers can cause stress, fatigue and burn-out. This small-scale research project did acknowledge the teacher's learning and challenges of working closely with children with ASD. The fatigue felt by the researcher in terms of endeavoring to maintain joint attention, 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). These findings outline the need for continuous support and training for teachers working with children with ASD.

CONCLUSION

This research demonstrates that the dialogic story reading approach elicited better results in a one-to-one setting with children with ASD. 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). Working on a language intervention such as the dialogic story reading should be done 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 peer integration.

The claims to knowledge generated in this study will form the basis of future practice and planning in the school. 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. The consensus from the validation group was that this approach would be continued as part of the children's resource hours, on a one-to-one basis, which is how it worked best. Future recommendations for practice would be to continue the dialogic story reading approach and to introduce play-based interventions to children with ASD. Finally, it is important that mainstream teachers have opportunities to work one-to-one with ASD children that are in their classes. This allows for the enhancement of teacher-student bonds and overall learning.

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