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Assessment, Narratives and Developmental Language Disorder: Learning from a Dynamic Approach

Gallagher Sterritt, Louise

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Assessment, Narratives and Developmental Language Disorder:

Learning from a Dynamic Approach

Volume 1 of 1

Louise Gallagher Sterritt

A thesis submitted for the degree of Professional Doctorate in Health

University of Bath

Department of Health

12th June 2022

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I am the author of this thesis, and the work described therein was carried out by myself personally.

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This thesis is dedicated to my beloved children

Theo, Arianne and Juliette.

Abstract

299 words

Background

Oral narration/storytelling is important to Irish children and the skill remains key across the lifespan. Narratives comprise a number of linguistic elements (e.g. syntax, morphology, semantics, pragmatics) and children who have Developmental Language Disorder (DLD) are particularly vulnerable to experiencing difficulties with storytelling. There is a lack of research, both in Ireland and internationally, examining complementary benefits of static and dynamic assessment practices, parent interview and naturalistic language elicitation as part of a multi-source functional, more panoramic narrative assessment battery.

Methodology

Action research encompassed three cycles.

In Cycle 1, ten Irish SLTs participated in focused group and semi-structured interviews: five specialised/experienced in DLD and five non-specialised from primary/community care. The aim of this cycle was to ascertain the elements of oral narrative assessment considered important to specialised and non-specialised SLTs.

In Cycle 2, three school-aged children with DLD, attending language classes, and their parents participated, illustrating the use of a multi-source assessment strategy comprising static and dynamic assessment, naturalistic language elicitation and parent interview.

In Cycle 3, SLTs were re-interviewed and asked to respond to data from each element of a narrative assessment profile. The aim of this cycle was to collaboratively evaluate and compare the importance and clinical utility of each assessment source.

Results

Irish SLTs consider narrative skills to have considerable real-life value, although they tend not to be directly assessed. The data analysed are used to discuss the contributions of various elements of assessment in the context of establishing tenets for future clinical practice.

Conclusions

The research offers unique insights into Irish SLT clinical practices in relation to narrative assessment, as well as valuable SLT commentary, and analysis, regarding static and dynamic assessment, parent interview, naturalistic language elicitation and teacher interview/collaboration. Envisaged benefits and potential challenges relating to more comprehensive, ecologically-valid assessment protocols are discussed.

List of Abbreviations

AR:	Action Research
ASHA:	American Speech-Language-Hearing Association
CATALISE:	Criteria and Terminology Applied to Language Impairments: Synthesising the Evidence
CELF-4-UK:	*Clinical Evaluation of Language Fundamentals - 4th UK Edition* (Semel, Wiig and Secord, 2003)
C-unit:	Clausal Unit
DA:	Dynamic Assessment
DES:	Department of Education and Science (Republic of Ireland)
DLD:	Developmental Language Disorder
ERRNI:	*Expression, Reception and Recall of Narrative Instrument* (Bishop, 2004b)
GDPR:	General Data Protection Regulation (EU Law)
HSE:	Health Service Executive (Ireland's public health system)
IASLT:	Irish Association of Speech and Language Therapists
ICF:	International Classification of Functioning, Disability and Health (WHO, 2001)
ICF-CY:	International Classification of Functioning, Disability and Health: Children and Youth (WHO, 2007)
IDEA:	Individuals with Disabilities Education Act (US Law)
LI:	Language Impairment / Language-impaired children (Peña et al., 2006)
MLE:	Mediated Learning Experience
MLU:	Mean Length of Utterance
NCCA:	National Council for Curriculum and Assessment (Ireland)
NCSE:	National Council for Special Education (Ireland)
NHS:	National Health Service (UK)
OECD:	Organisation for Economic Co-operation and Development
RADLD:	Raising Awareness of Developmental Language Disorder (International)
RCSLT :	Royal College of Speech and Language Therapists (UK)
RTI:	Responsiveness to Intervention

SIG:	Special Interest Group
SLI:	Specific Language Impairment
SLT:	Speech and Language Therapist
TD:	Typically-developing children (Peña et al., 2006)
UK:	United Kingdom of Great Britain and Northern Ireland
US:	United States of America
WHO:	World Health Organisation

Chapter 1: Introduction: Contextualising the Problem

This research is concerned with clinical practice situations that exist within the Republic of Ireland and relates to Speech and Language Therapists (SLTs) working in community and/or Language Class settings in Ireland, although it may have relevance to a wider group of SLTs working elsewhere. How do SLTs in the Republic of Ireland currently assess narratives with children who have Developmental Language Disorder (DLD)? How might these SLTs respond to less traditional forms of assessment with school-aged children? This action research (AR) thesis considered these questions. This first chapter will introduce the storytelling and language acquisition contexts of this AR thesis and will also contextualise DLD within the Irish setting. As part of the AR process, contexts and backgrounds specific to this project, and to the researcher, will be identified and acknowledged throughout the process.

In the Republic of Ireland, children with DLD typically receive speech and language therapy intervention from their local Health Service Executive (HSE) community-based primary care paediatric service, with children who have more severe profiles of need receiving intervention in a school as part of a two-year educational placement in a regional Department of Education and Science (DES) funded *Special Class for Children with Specific Speech and Language Disorder* (DES, 2007). These are the *language classes* referred to in this thesis, where intervention is delivered by a SLT who is employed by the HSE but allocated part-time to that particular school. The researcher is employed as a Senior SLT with the HSE and works with children who have DLD in both community-based primary care and language class settings. Storytelling is an area of particular clinical interest, given the many linguistic elements engaged during narration. The researcher is interested in understanding how storytelling is currently assessed by SLTs working in the Republic of Ireland and what these SLTs envisage a comprehensive

assessment battery of narratives would comprise. AR, with its collaborative focus on addressing questions of *how*, was selected as the methodological approach.

Storytelling and Narratives: Contextual Framework

Oral storytelling transcends cultures and has ancient roots (Bayer and Hettinger, 2019). It can convey the history of a people (Miller, Gillam and Peña, 2001) and can preserve important messages regarding values held dear to cultures (Malo and Bullard, 2000). Koki argues that humans have “a basic need” (1998, p.1) to share stories. Stories function as a means by which we can organise our thoughts and make sense of our experiences. The stories told by children can provide us with a window into the way they see, and think about, the world around them (Wright et al., 2008).

In Ireland, oral storytelling is an important cultural tool and was popular among Gaelic (Irish)-speaking people, with stories having pre-Christian origins (McKendry, 2016). The country had Gaelic-speaking professional storytellers who were divided into well-defined positions: ollaimh (professors), filí (poets), baird (bards), and seanchaithe (historians and storytellers). Their duty was to know by heart the tales, poems and history proper to their rank, which were then recited for entertainment and praise (McKendry, 2016). In primary education in Ireland, oral storytelling, children’s ability to tell and retell stories, is firmly anchored within the National Council for Curriculum and Assessment’s (NCCA) new *Primary Language Curriculum* (NCCA, 2019) which is applicable in English-medium schools both outside and inside Gaeltacht regions (Gaeltacht is used to denote those areas in Ireland where the Gaelic language

is, or was until the recent past, the main language spoken by the majority of the local population). It is also applicable to Gaelic-medium schools (these schools are situated both within the Gaeltachts and outside of these areas) and special schools in Ireland. Additionally, the country's primary education Social, Environmental and Scientific Education–History strand commits to teaching and learning in relation to Ireland's myths and legends (NCCA, 1999).

Children's narration has its place both in the classroom (Shiel et al., 2012) and at home (Malo and Bullard, 2000; Andersen, 2011); both key social contexts within which children communicate. Storytelling, or narrating, "is a process that occurs within a complex network of social structural, interpersonal, and environmental relations" (Daiute, 2014, p.32), wherein narration at school may be typically fact-sharing and at home may focus more on entertaining. Storytelling can be considered a bridge to literacy, with oral narrative skills often an early predictor of later literacy skills (Ryokai, Vaucelle and Cassel, 2003). It is equally true that difficulties telling stories may affect literacy development (Reilly et al., 2004) as well as overall future academic progress (Bishop and Edmundson, 1987; Royal College of Speech and Language Therapists, 2005).

Narrative skills impact on social skills and consequently, friendships (Dunn and Cutting, 1999). Storytelling is inherently dynamic and interactive; Daiute reminds us that "narrating is an interaction with others" (2014, p.28). It is clear that storytelling is a vital ability in today's society, no less important than it was for our ancestors. Given the importance of narrative skills for humans in both child- and adult- hood, it is important that children develop these vital skills. However, before delving into the nature of language difficulties, it is prudent to first consider how oral language typically develops, since language

development provides a foundational perspective from which to consider the language assessment process.

Language Acquisition Contextual Framework

Language acquisition, in itself, is an area that has received much consideration over centuries (Bickerton, 1990). Goldin-Meadow (2019) summarises the four main theories of language acquisition, namely the behaviourist, nativist, connectionist and social/cognitive accounts. The researcher espouses a broadly social-cognitive / constructivist / socio-pragmatic / social-interactionist perspective on language development: an emphasis on interaction is common to these approaches. There is a strong evidence base to support the Linguistic Society of America's claim that "children acquire language through interaction" (Birner, n.d.), with newer additions to this evidence from Yusa et al. (2017) and older publications from Peccei (1999) and Sachs, Bard and Johnson (1981). Tomasello's constructivist, usage-based language acquisition argument describes "interactive contexts" (2009, p.71) during which infants learn to structure their first intentional communications. Social-interactionism, as described by Piaget (1926) and Vygotsky (1978), conceptualises children's innate language-learning capabilities as being developed through their social interactions with others in the world around them, and Goldin-Meadow (2019) describes the innateness of language as developmental resilience, not infinitely resilient but capable of a surprising amount of robustness against external and internal variation.

These theoretical foundations relate to the research in two main ways. In the context of this research, it is expected that language learning will be evident

across a variety of backgrounds, for example, with children who have not only language difficulties but also speech impairments, as well as with children exposed to a number of different languages at varying levels of exposition. Secondly, this theoretical foundation's focus on social interactions for language learning, and on children's communication partners, has resulted in acknowledgement of the important roles played by parents, as children's first communication partners, and peers in the children's class, who interact with each other and tell news and stories at school.

This thesis is formed upon the basis that language acquisition is considered to comprise an interaction, or engagement, between genetic or innate abilities and one's communicative environment (Saffran, Senghas and Trueswell, 2001; Fisher et al., 2010; Bohn et al., 2018). Overall, it is a broad constructivist, social interaction-based language acquisition theory that underpins ontological and epistemological viewpoints in this thesis. For some children, the acquisition of language is not a straightforward process. The research focuses particularly on children with DLD since this is a population with whom the researcher has contextual knowledge and clinical experience.

Developmental Language Disorder (DLD)

Speech and Language Therapists facilitate children with poor oral narrative skills in developing storytelling abilities (Royal College of Speech and Language Therapists (RCSLT), 2005; RCSLT, 2017). As well as working with children whose speech and language difficulties are associated with a particular diagnosis, such as Autism Spectrum Disorder or Down Syndrome, SLTs work with children whose difficulties lie primarily in the area of spoken

language. Experts involved in terminology consensus agreed that “Specific Language Impairment (SLI) has been widely used to refer to children whose language development is not following the usual course despite typical development in other areas” (Bishop et al., 2017, p.1068). It is now, in recent years, generally agreed that Developmental Language Disorder (DLD) is identified in children whose language falls well below that of their peers, impacting on their everyday functioning. Children who met the traditional criteria associated with primary or specific language impairment are in a subset of the larger group DLD. While these difficulties may be easily defined in broad terms, the parameters for identifying DLD imposed by various government bodies and researchers can vary significantly (Bishop et al., 2017). A key consensus among experts, Bishop et al. (2017) report, is the poor prognosis associated with this presentation. In consideration of that consensus position and relating to the context of this research, assessment methods that provide information on a child’s prognosis are of particular interest.

For a child or young person, having DLD means that they have significant, on-going difficulties understanding and/or using spoken language, in all the languages they use. The terms specific or primary language impairment, specific speech and language impairment, specific language disorder and language learning disability have been used interchangeably in the literature in Ireland (Irish Association of Speech and Language Therapists, 2017). DLD has now been adopted by the SLT’s professional body in Ireland, the Irish Association of Speech and Language Therapists (IASLT). This term has been introduced to a number of countries further to the work of an international group of experts who participated in the Criteria and Terminology Applied to Language Impairments: Synthesising the Evidence (CATALISE) project (Bishop et al., 2017). Ebbels (2017) noted that the expert panel “agreed on the term ‘Developmental Language Disorder’ (DLD) for when the language disorder is NOT associated with a known biomedical condition” (Ebbels, 2017,

upper case in original quote). This project comprised a panel of 59 experts from English-speaking countries, representing the fields of education, speech and language therapy, psychology, paediatrics and child psychiatry (Bishop et al., 2016).

Children with DLD present with varied impairments across the different linguistic parameters -lexical, syntactic, phonological, pragmatic and morphological- and DLD can take many forms (Bishop et al., 2017). Attempts have been made in previous decades to deepen our understanding of primary language impairment by categorising presentations into subtypes (e.g., Bishop, 2004a; van Daal, Verhoeven and van Balkom, 2004) or explaining varied presentations by proposing an individual differences model (Leonard, 2014). More recently, Lancaster and Camarata (2019) critiqued both the latter and former and argued that DLD should be reconceptualised as a spectrum condition for the purposes of diagnosis and intervention. This has important implications for this research, as the children profiled are not anticipated to present with uniform strengths and needs profiles and may have dissimilar responses to the intervention undertaken as part of mediated learning experiences, which will be discussed later. The prevalence rate of DLD is estimated to be between six and eight per cent (Norbury et al., 2016; RCSLT, 2018) and Raising Awareness of Developmental Language Disorder (RADLD) suggest that one in 14 children in every classroom may have DLD (RADLD, 2018).

Developmental Language Disorder within the Irish Context

In the Republic of Ireland, a national, longitudinal study found that almost one in ten nine-year-old children had speech or language difficulties identified by either their parent or teacher (Gibbon, O'Toole and Rooke, 2013). This is a higher figure than the percentage associated with DLD as it encompasses all severities of speech and/or language impairment. With specific reference to DLD, the IASLT position paper on DLD states that "based on a review of international prevalence studies it can be reasonably estimated that there are currently in the region of 70,000 children in Ireland up to the age of eighteen years with DLD" (IASLT, 2017, p.7).

For primary-school aged children, aged between four and 13 in the Republic of Ireland, who meet specific criteria set out within Circular 0038/2007 from Department of Education and Science (DES, 2007), the Republic of Ireland's governmental department overseeing education within the country, there are places available in the aforementioned Special Classes for Pupils with Specific Speech and Language Disorder (DES, 2007). The name of these classes has not changed in recent years, although the IASLT has adopted the term DLD, and it is these classes that are known in Ireland as language classes. The language classes are attached to mainstream primary schools, having first been set up in 1990 (National Council for Special Education, 2016). At the time of the National Council for Special Education (NCSE) report, there were 367 pupils enrolled in language classes (NCSE, 2016), from a total child student body of 550,200 in the 2016/2017 school year (DES, 2016). It is with this relatively small group of children that the research may have particular implications. In the Republic of Ireland, there are no state-funded pre-schools set up for children with significant primary speech and/or language difficulties. Similarly, at the secondary level of education, from approximately 12 years to 18 years in the Republic of Ireland, there are no schools or classes currently

established to support children with DLD anywhere in the country (NCSE, 2020).

Language classes are currently only established with approval from the area's special educational needs organiser. Within the researcher's county there are four classes split between two primary schools in a county with 174 primary schools (of 3107 primary schools in the Republic of Ireland) operating in the 2019/2020 school year. A full-time primary teacher is assigned to each class, and classes operate with a reduced pupil to teacher ratio of 7:1, with a minimum of five eligible pupils required for a school to retain a class. For context, average class size in the Republic of Ireland was 25 in the 2019 report of the Organisation for Economic Co-operation and Development (OECD) compared to the OECD average of 21 (OECD, 2019). Eligible pupils may spend up to two years in these classes (DES, 2007). In the context of the research, small class sizes within language classes in Ireland allow the SLTs working part-time in the school to individually support the seven children, although the limited time span of the language class placements, of two years maximum, mean it is important that SLTs obtain relevant information efficiently and in short timeframes when assessing the children's language domains, such as their narrative skills.

The HSE, which is the publicly-funded health provider in the Republic of Ireland, funds the provision of SLT services for the children attending these classes (DES, 2007). Therapy is provided to the children in the school setting and it is in this context that intervention and intervention-related assessment takes place. The IASLT's DLD survey (IASLT, 2017) found that there is a non-standardised range of therapy input into special classes for pupils with specific speech and language disorder, with three half days per week being the most

commonly reported level of service (39% of respondents), followed by two half days (14%) and four half days (11%). In the researcher's region, therapy provision is set, by local management in the HSE Speech and Language Therapy Department, at two half days per language class per week. Within this particular context, the local therapy delivery approach is a combination of individual and group therapy. Individual therapy in this context has followed a traditional pull-out approach (Cirrin et al., 2010), where children are removed from the classroom setting for speech and language therapy as well as small group and whole class groups that are push-in, with classroom-based direct services (Cirrin et al., 2010). Narrative intervention has been delivered individually and in small- and class- groups, dependent on the target. Following a maximum two-year placement, pupils return to mainstream education in their original primary school. Part-time attendance in a language class, school-based speech and language therapy provision outside of the language class context, and phased reintegration to mainstream classes are not typical practices in the Republic of Ireland (IASLT, 2017) and it is acknowledged that "despite the fact that DLD is known to be a long-term condition, a continuum of provision is not available in Ireland" (IASLT, 2017, p.86).

In order to be enrolled in a language class, officially termed a special class for pupils with specific speech and language disorder, a child is required to meet each of the following criteria, and as such, the children involved in the research have already met these:

a) The pupil has been assessed by a psychologist on a standardised test of intellectual ability that places non-verbal ability within the average range or above i.e., non-verbal IQ of 90, or above;

b) The pupil has been assessed by a SLT on a standardised test of language development that places performance in one or more of the main areas of speech and language development at two standard deviations or more below the mean, or at a generally equivalent level. i.e., two standard deviations or below, at or below a standard score of 70;

c) The pupil's difficulties are not attributable to hearing impairment; where the pupil is affected to some degree by hearing impairment, the hearing threshold for the speech-related frequencies should be 40Db;

d) Emotional and behavioural disorders or a physical disability are not considered to be primary causes (DES, 2007).

Most recent statistics have identified 1098 SLTs working in the public sector in Ireland (IASLT, 2019). Sixty six per cent of maternity leave vacancies in the public sector were not filled in the wider context of a workforce wherein 99% of respondents identified as female (IASLT, 2019). Thus, maintaining current staffing levels remains as much of a challenge as increasing the numbers of SLTs working in the Republic of Ireland. In the Republic of Ireland in 2019, over 19,000 children were awaiting speech and language therapy services. Therefore, this research is contextualised within a framework of staffing difficulties and on-going waiting lists.

There are few examples of SLTs being funded other than by the Department of Health via the HSE in Ireland, with the notable exception of recent posts funded by the NCSE on a pilot basis (Gallagher, 2021). With the NCSE pilot posts, there is a focus on trialling universal and targeted models of provision (Gallagher, 2021). In Ireland, in general, schools do not fund SLTs themselves,

and funding does not come from the DES. The NCSE in Ireland is tasked with providing in-school educational supports to Irish children with educational needs, for example, the allocation of Special Needs Assistants in schools. As recently as 2018, the NCSE's annual research conference's guest speaker presented an outline of an international approach of SLTs working within schools and stressed the importance of both this work and also new research commencing in Ireland (McCartney, 2018). Widespread SLT input into schools, and research regarding same, is not yet embedded in Irish culture and DES-funded SLT posts are not yet established in Ireland. This information may contextualise the responses of the SLTs who participated in this research as all of the participants' posts are funded by the HSE.

As a HSE-employed SLT working across both a language class setting in a primary school and primary care clinics, the researcher is interested in supporting children with DLD who experience difficulties in the linguistic area of narrative skills, which is commonly found in children with DLD (Duinmeijer, de Jong and Scheper, 2012). However, in order to facilitate narrative skills development, SLTs must first be able to comprehensively assess a child's narrative abilities and weaknesses, in a way that reflects the interactive, dynamic nature of narratives and the social and communicative contexts in which children use narratives (Miller, Gillam and Peña, 2001; Westerveld and Gillon, 2010; Westerveld, 2011). This thesis aims to investigate how SLTs in the Republic of Ireland currently assess narratives with children who have DLD and how SLTs respond to multiple sources of assessment, by collaborating with Irish SLTs and employing an action research methodology.

Chapter 2: Literature Review

In order to interrogate what is already known about the assessment of narrative skills, this literature review presents some of the most relevant published findings regarding oral narrative skills development in children both with and without DLD. Current assessment practices in speech and language therapy are outlined and a widely used method, static assessment, is firstly considered. Complementary assessment approaches to static assessment are examined, specifically dynamic assessment (DA), parent interview and naturalistic language elicitation, in consideration of the established importance of multiple sources of assessment for children with DLD. Gaps in knowledge in relation to current narrative assessment practices are identified and an argument is made in support of an encompassing profile of children's narrative abilities, with a similar holistic viewpoint of the overall context within which assessment for children with DLD is now being recommended in Ireland (IASLT, 2017). A holistic approach, consistent with the 2001 World Health Organisation (WHO) International Classification of Functioning, Disability and Health (ICF) recommendations for conceptualising disorders and disabilities, would enable SLTs to examine narrative form and function across a range of social contexts. Consistent with this conceptualisation is an assessment approach that supports holistic data gathering. Firstly, assessment is considered within the context of its purposes. A popular approach to assessment is considered, static assessment, and further approaches are also examined that would assist in establishing a child's narrative profile across social contexts and with communication partners; namely dynamic assessment, naturalistic child elicitation and parent interview.

Literature searching was undertaken in a systematic manner, using defined keywords and phrases and truncated terms and Boolean operators. Relevant articles were downloaded in electronic pdf format, read, and critiqued.

References were electronically managed using Mendeley™ reference management software and Microsoft Excel. Table 2.1 is an example from the literature search strategy used and a search results management example can be found in Appendix 1. Literature searches included previous terminologies used to refer to subgroups within the umbrella of DLD, such as specific language impairment or primary language impairment.

Table 2. 1 Example from literature search strategy

TOPIC(S) #2: DLD, NARRATIVE DEVELOPMENT IN DLD		KEYWORDS
SYNONYMS	Developmental Language Disorder Specific Language Impairment Personal Narrative(s) Oral narratives Narration Storytelling Linguistics Paediatric Speech therapy Speech and language therapy Speech-language pathology Typical development Discourse	Narrative Development Narration Speech Language Therapy Pathology Expression NOT Written NOT Comprehension
WORD ENDINGS	Narrati* Development*	Narrati* Development*
PHRASE SEARCHING	“developmental language disorder” “specific language impairment” “language impairment” “language-impaired” “impaired language” “narrative development”	
ABBREVIATIONS	DLD SLI LI SLT SLP	DLD SLI LI SLT SLP
AMERICAN VS. ENGLISH	Pathology vs. Therapy Speech-Language Pathologist vs. Speech & Language Therapist Paediatric vs. Pediatric	

Assessment in Speech and Language Therapy

Assessment, in Speech and Language Therapy, is typically undertaken for one of five main purposes: (i) screening for the presence of impairment; (ii) evaluation to determine eligibility for special education or resources, such as a place in a language class; (iii) assessment for therapy episode or programme planning; (iv) monitoring a child's progress over time; and (v) programme evaluation (McLean, Hemmeter and Snyder, 2014). The researcher investigated what is currently known about how SLTs in Ireland currently assess narratives and how they would comprehensively assess the narrative skills of school-aged children with DLD. As a starting consideration, attention is firstly turned to how SLTs in Ireland identify those children who may be considered for differential diagnosis of DLD. The IASLT (2017) position paper states that assessment for DLD in Ireland should be comprehensive and based on a bio-psychosocial model considering impairment, activity and functioning as espoused by the WHO's ICF framework (2001). Furthermore, the IASLT (2017) states that comprehensive DLD assessment should consider parent, teacher and child concerns, differentiating conditions, co-occurring needs and risk factors as well as clinical markers. Comprehensive DLD assessment should include both formal and informal assessment tools as well as dynamic assessment (IASLT, 2017) and should be culturally appropriate, timely and repeated as required, with consideration of a child's response to intervention.

In Ireland, *formal assessment*, the term used by IASLT (2017) and employed in the preceding paragraph, refers to static assessment; either standardised and norm-referenced or criterion-based. It is identified as one of the multiple sources of information key to DLD assessment and diagnosis by the CATALISE consortium (Bishop et al., 2017). Age-normed assessments, in common with other norm-referenced tests, provide scores that measure a

child's performance relative to that of other children possessing similar characteristics (McGrath, 2011), in this case, children of similar chronological age. In contrast, criterion-referenced or mastery-oriented assessments yield scores that indicate the percentage of questions that a child has answered correctly, or whether the child has demonstrated competency in the language domains being assessed (McGrath, 2011). Unlike criterion-referenced assessments, norm-referenced assessments indicate how a child has performed relative to individuals in the assessment's norm sample (McGrath, 2011). In commonality, both formal norm-referenced and criterion-referenced assessments tend to be *static* in the nature of their administration. That is to say, these assessments capture a child's performance at a single point in time and *what* they have learned to date, and do not focus on *how* a child learns. For context, in this thesis the term *static assessment* will be used to identify formal assessments, both norm-referenced and criterion-based, that are applied in a static format. These will later be considered in relation to assessments that are applied in a dynamic format.

The American Speech-Language-Hearing Association (ASHA) report that children's spoken language is typically assessed using an element of static assessment (ASHA, 2004). With static assessments such as the commercially-available norm-referenced and criterion-based assessments, feedback is not typically performance-based (ASHA, 2004; Law and Camilleri, 2007). Instead, feedback is carefully unrelated to performance; the assessor's feedback is kept to a minimum and the aim is to measure the child's independent performance during assessment (Law and Camilleri, 2007) and their current levels of functioning in a domain (ASHA, 2004). Law and Camilleri (2007) note that giving performance-related feedback to a child when administering static assessments is considered a source of measurement error. In addition to the field of speech and language therapy, static assessments are also commonly used in the related field of Psychology, measuring children's intellectual functioning (Deutsch, 2005).

In spoken language assessment, the advantages of static assessments that are standardised are well-established (Hedge and Pomaville, 2008). The long history of static assessment means that there are many commercially available. Standardised static assessments are considered more objective than informal or other non-standardised assessments, with CATALISE consensus that “reliance on subjective judgements created scope for biased and inequitable decisions” (Bishop et al., 2017, p.677). The manuals provided by commercially-available static assessments provide SLT examiners with information on test reliability and validity. Some jurisdictions allocate educational resources based only on performance on standardised static assessments. In Ireland, as previously stated, for example, applications for places in the language classes require the results of two static standardised assessments: the student is assessed by a Psychologist and a SLT using standardised assessments of both intellectual and language abilities, per DES Circular 0038/2007 (DES, 2007). Once familiar with static assessments, SLTs find that they are convenient to administer and analyse compared with individually-designed assessment protocols. Commercially-available formal static assessments are pre-prepared with stimulus materials; another time-saving advantage. Additionally, the results of static standardised assessments are designed to be comparable across settings and SLTs (Hedge and Pomaville, 2008).

However, there are some limitations associated with static assessments, as with all assessment elements. The consensus of the CATALISE panel was that test scores from standardised language assessments provided useful information “but should not be used as the sole criterion for identifying language disorder” (Bishop et al., 2017, p.677). There is an acknowledged mismatch between the number of children identified using standardised assessment as having language impairment and the number determined clinically to have impaired language who are accessing speech and language therapy services (Bishop and MacDonald, 2009). In Bishop and McDonald’s

research, fewer children were accessing SLT services than had been identified using standardised assessment. In light of these findings, the authors advocated strongly for the addition of parental report during diagnostic assessment (Bishop and MacDonald, 2009).

The reverse, under-identification of language impairment, can also be true when using static standardised assessments to diagnose, and there is often a gap between clinical diagnosis of language impairment and a speech and language therapy's standard operational criteria (Aram, Morris and Hall, 1993). A number of commercially-available standardised assessments do not actually identify children with clinically determined language impairment using the tests' own low score criteria (Spaulding, Plante and Farinella, 2006). This may be due to the fact that some static standardised assessments use mixed normative sampling in delineating typical language performance ranges, with some including children with language impairment and others excluding this cohort (Peña, Spaulding and Plante, 2006). This disparity can impact on classification accuracy (Andersson, 2005). It is worth acknowledging that while one of the main purposes of assessment may be to identify language difficulties (McLean, Hemmeter and Snyder, 2014), both over- and under-identification may occur with standardised language assessments.

Additional limitations to static standardised assessments have been identified. Denman et al. (2017) reviewed the psychometric properties of fifteen commonly used school-aged children's language assessments, with particular focus on the reliability, validity and responsiveness domains. While the authors found evidence of hypothesis testing, relating to validity, in most of the language assessments considered, no assessments were determined to provide evidence of structural validity, or reliability in internal consistency and

error measurement when examined in detail (Denman et al., 2017). Few static standardised assessments of early language skills actually have good predictability of later language and communication abilities (Hedge and Pomaville, 2008). For example, among the results of the Early Language in Victoria Study (Reilly et al., 2009) of Australian children's language across the years was the finding that it is only at four years of age that language ability, as assessed on standardised assessment, can more accurately predict low language at age seven (McKean et al., 2017a, 2017b). Consistent with the CATALISE panel's recommendations for functional assessment of DLD (Bishop et al., 2017), there is a need for language assessment to be comprehensive and holistic in nature, and therefore, not reliant on static formal assessment alone. Instead, a more comprehensive assessment approach is certainly indicated for both diagnosis and intervention-planning.

The structure and formality of formal assessments do not support sampling of natural social interactions, nor does test performance necessarily represent functional communication skills in real-life social situations. It is timely at this point to revisit again the WHO (2001) ICF framework which conceptualises conditions in terms of not only the impairment but the impact of a condition on an individual's activities, functioning, and participation in their own social contexts. This bio-psychosocial model is integral to the recommended approach for supporting children with DLD in Ireland (IASLT, 2017). In this regard, formal static assessment is often an inefficient captor of narrative abilities which are dynamic and interactive (Daiute, 2014) in nature. Commercially available formal static assessments in Ireland do not assess the same elements of narrative skills and this makes comparison of assessments difficult. For example, one formal static story re-telling assessment, Peter and the Cat (Leitão and Allan, 2003) examines the use of adverbials as part of a criterion-based assessment whereas another static story re-telling assessment, the Bus Story Test (Renfrew, 1997), does not as part of its norm-based assessment. Martin (2012) succinctly summarises some of the main

issues with static assessments: “they privilege individual performance over joint performance, rule out mediation and maintain the distinction between assessment and intervention/teaching” (Martin, 2012, p.52).

Static Assessment with Culturally Diverse Populations

Static assessment is particularly problematic when used with linguistically and culturally diverse cohorts of children. In the 2016 Irish Census, 17.3% of the population was born outside of Ireland with the top ten non-Irish nationalities living in Ireland comprising Polish, UK, Lithuanian, Romanian, Latvian, Brazilian, Italian, Spanish, French and German nationals (Central Statistics Office, 2016). In Ireland, there are two official languages in the population of 4.9 million (Central Statistics Office, 2019): English and Gaelic, the latter having 1.76 million self-reported speakers. Polish, with 135,895 speakers, of whom 27,197 were born in Ireland, is the most spoken foreign language in the state (Central Statistics Office, 2016). Polish is followed by French, Romanian, Lithuanian, Spanish, German, Russian, Portuguese, Chinese and Arabic, as well as other languages (Central Statistics Office, 2016). 612,018 people in Ireland, or 13 per cent of the overall population, are multilingual, speaking a language other than Gaelic or English at home. There are 72 different languages listed as being spoken in Ireland and each of these languages has at least 500 speakers living in Ireland (Central Statistics Office, 2016). Given emerging and increasing multi-culturalism in the country, SLTs working in Ireland should expect to assess and provide intervention with culturally diverse populations.

Pearce and Williams' (2013) research concerned the potential for bias when static standardised assessment is used with bidialectal and bilingual children. They administered the *Clinical Evaluation of Language Fundamentals - 4th Australian Edition* (Semel et al., 2006), standardised against Standard Australian English, with nineteen Indigenous Australian children aged between eight and 13 years of age. In addition, the authors collaborated with teachers to obtain oral language ratings. When the standardised assessment was administered and scored as per the manual's instructions, there was a mismatch between the test's determinations of language impairment and teachers' ratings of oral language performance. After adjustment of the raw scores to accept Indigenous Australian dialectal variations as correct, the scores were more closely aligned with the teachers' ratings (Pearce and Williams, 2013). Research such as this suggests that SLTs in Ireland should also take a cautious approach to administering standardised assessments with bidialectal and bi- or multi-lingual children and that additional measures of assessment, such as teacher report, are valuable.

When considering how best to support bilingual and multilingual children, Armon-Lotem and de Jong (2015) argue convincingly for narration as an "entry point" (2015, p.14) to comprehensive language assessment, as narratives allow SLTs to ascertain multiple linguistic levels in a single activity; including lexical, syntax, phonological, morphological, and fluency. Narration in different languages allows SLTs to assess parallel measures across languages, facilitating within-subject, cross-language comparisons as well as allowing insight into possible code-switching. However, it is important to note that while the typical oral narrative developmental stages already described appear to have cross-linguistic applicability (Armon-Lotem and de Jong, 2015), a number of cross-cultural studies inform our knowledge of certain creative and stylistic features of narratives which may be culture-specific (John-Steiner and Panofsky, 1992; Gorman et al., 2011).

Gorman et al. (2011) examined the narratives produced by 60 African American, Latinx American and Caucasian American students in response to one of two wordless picture books in the United States of America (US). Specifically, the authors coded for the following creative and stylistic elements: organisational style, dialogue, reference to character relationships, embellishment, and paralinguistic devices. Gorman et al. (2011) ascertained both similarities and differences between the ethnic groups. For example, commonality was identified in terms of organisational style and the use of paralinguistic devices. Differences were also noted, such as African American children in the study including more fantasy in the stories, Latinx children naming their characters more often, and Caucasian children making more references to the nature of character relationships.

The work of Gorman et al. (2011) highlights the need for further data and analysis in order to provide greater ecological validity for narrative assessment tools. Results such as these indicate that assessment tools chosen for bi- and multi-lingual children should be sensitive to cultural differences and encapsulate more than standardised assessment alone. Squires et al. (2014) considered story retelling in bilingual children both with and without language impairment and found differences in the macrostructure and microstructure development across two time points. As more than 100 languages are now spoken here (Bilingual Forum Ireland, n.d.) in addition to a number of regional dialects in usage, it is suggested that SLTs in Ireland will become increasingly more exposed to children who are bi- or multi-lingual. With multiculturalism a consideration across a number of countries, it should be noted that many designers of standardised assessments now attempt to minimise cultural bias (Hedge and Pomaville, 2008).

Although SLT dissatisfaction with static standardised assessments has been documented (Huang, Hopkins and Nippold, 1997; Kumar, Rout and Kundu, 2011; O'Toole and Hickey, 2013), their use continues widely and their role in a comprehensive assessment of DLD may be easily argued. There is a recent move here in Ireland from a diagnosis-based model of resource allocation within schools: the NCSE has produced an advice paper which supports a needs-based assessment approach with tiers of intervention (NCSE, 2013). Similarly, within the HSE there is also a move towards more equitable access to children's health services nationally, impacting both disability and primary care services, where access will be needs led rather than diagnosis led (HSE, 2019). For a needs-based service, it is important in the first instance to establish what a child's areas of individual need are. To this end, it is prudent to consider both typical narrative development and impairment profiles associated with children who have DLD.

Typical Development of Narrative Skills

Narrative acquisition is closely related to the cognitive ability to sequence events logically and organise information into episodes (Applebee, 1977; Buckley, 2003). Typical narrative development appears to follow a broad structure across stages as suggested by Applebee (1977). These ideas have been further developed with story grammar elements proposed by Stein and Glen (1979) and remain unchallenged over the intervening years (see also Hedberg and Westby, 1993; Hutson-Nechkash, 2001; Khan et al., 2016). Children's first narratives, heap stories, emerge around age two, where events are described in a collection of unrelated ideas (Applebee, 1977). Between two and three, sequence stories emerge. While there may be coherence through the continuity of a central character, setting or topic, no cause-effect relationships are evident. Between three and four, primitive narratives emerge. There is an initiating event, an action and some consequence around a central

core. The first use of inference may be seen in these narratives. However, there is no real ending to the story. This period broadly corresponds to children's pre-school years.

School-aged children continue to develop their narration (Applebee, 1977; Hutson-Nechkash, 1990). It is expected that, at age five, focussed chain narratives will be evident. These narratives contain an initiating event, a plan, an action and some result with either cause-effect or temporal relationships. However, the plot is weak due to the child's not-yet-developed understanding of character motivation and the listener needs to interpret the ending. Between five and seven years of age, true narratives emerge, with a central theme, character and plot. These stories include descriptions of motivations behind characters' actions, and events will be connected either causally or temporally. All five story grammar elements are evident (Stein and Glenn, 1979): an initiating event, a plan or character motivation, an attempt or action, a consequence and a resolution to the problem. By around eight years of age, children's narratives include internal responses, plans and reactions. In summary, narrative skills are honed during children's primary school-based years, which is the stage of interest to the researcher.

In framing narrative development and the assessment of narrative skills, researchers variously refer to the terms macro- and micro-structure (Westerveld and Gillon, 2010; Yates and Chen, 2012; Squires et al., 2014) of narratives as well as content versus form. Macrostructure story elements focus broadly on content, considering the setting/s (including character/s, location/s, habitual contexts or states and time), initiation of events (the problem, events or dilemma for the story); internal responses (characters' reactions and emotions); plan to solve the problem; attempt (the action of the main

character/s to solve the problem), and consequence or reaction; the results of the protagonist's actions (Yates and Chen, 2012; Squires et al., 2014). Microstructural features of narratives consider the form in which the narrative is delivered, specifically responding to the syntax and morphology used, sentence complexity, the amount of information and detail provided, the mean length of utterance, the total number of words, cohesion including conjunctive cohesion and also pronouns and their referents (Yates and Chen, 2012; Squires et al., 2014). Narrative tasks, such as story-telling, picture-elicited narratives and personal narratives, are used in SLTs' clinical assessment of DLD, as they provide information about a range of skills related to children's linguistic content, form and use (Bååth et al., 2019). Considering the knowledge we have on typical narrative development and the parameters of children's narratives, what do we know about narrative development in children with DLD?

Narrative Development in Children with DLD

The narratives produced by school-aged children with DLD tend to be judged more negatively in terms of quality when compared with typically-developing children's narratives (McFadden and Gillam, 1996). Colozzo et al. (2011) examined the narrative production of children with and without DLD using the Test of Narrative Language (Gillam and Pearson, 2004). Children with DLD differed in their narrative production compared with typically-developing peers (Colozzo et al., 2011); not unexpected given the semantic, syntactic and morphological language difficulties that children with DLD can experience. Children with DLD were more likely to produce stories of uneven strength than their age-matched peers; either narratives with poor content that were grammatically accurate or stories with enhanced content but less grammatically correct form (Colozzo et al., 2011). This finding has implications for assessment: the SLT may find on analysis of narratives that the child's

difficulties lie primarily with either form or content so assessment should consider both elements of narrative language.

Overall fluency of narratives may be impaired for children with DLD when compared with age-matched peers: children with DLD produced more speech disruptions in their narratives than age-matched typically-developing peers, for example, using silent pauses or whole word repetitions in their narrative productions (Guo, Tomblin and Samelson, 2008). For children with DLD, difficulties with narratives continue into the teen years (Wetherell, Botting and Conti-Ramsden, 2007), with an impression created of overall poor quality, rather than inaccuracy, in their stories. As children with language impairment become older, their narratives may be useful during differential diagnosis if investigating the primary cause of a language impairment, for example, as part of an assessment battery when evaluating whether a specific child has DLD or requires further assessment regarding Autism Spectrum Disorders (Botting, 2002). The CATALISE statements note that from five years of age upwards, difficulty in producing narrative is an indicator of atypical language development (Bishop et al., 2016), therefore evaluation of narratives is key in considering a child's language presentation. Given the importance of evaluation of narratives, it is important that assessment involves data-gathering across different settings and with various communication partners or stakeholders in order to obtain a full picture of a child's abilities and needs.

Gaps in Knowledge

More normative data from narratives of children with DLD, as well as renewed narrative sampling from their typically-developing peers, would be beneficial

to SLTs (Norbury and Bishop, 2003) when describing the specific narrative impairments with which a child is presenting. There remains a role for static assessment in capturing the narrative performance of children with DLD and typically developing children. The researcher has listed the environments in which children typically use narratives, such as home and school, and it is contended that it would be helpful to obtain information about children's narration in these non-clinic environments. How do children's narratives vary in quality and content when elicited in a naturalistic setting versus the SLT clinic room? It is important that assessment captures the child's narrative abilities across settings as this can then form a basis for planning effective intervention, specifically tailored to a child's individual needs and social relationships. This is in accordance with best practice espoused by the WHO's ICF framework (2001), where the focus is not merely on impairment but on one's functioning, activities and participation in society (WHO, 2001). The following sections will consider assessment approaches beyond impairment, in formats that may capture more than a child's current strengths and level of need. These include consideration of the child's learning potential as well as the child's functional use of narration in naturalistic settings such as at home and in school.

The Role of Dynamic Assessment as an Assessment Approach

Dynamic assessment (DA) of language abilities emerged as a theme within SLT in the 1990s and 2000s (e.g., Peña, Quinn and Iglesias, 1992; Gutiérrez-Clellen and Peña, 2001; Jacobs, 2001), having had its basis in psychology with Vygotsky's Zone of Proximal Development theory (Vygotsky, 1978). The zone of proximal development is defined as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance, or in collaboration with more capable peers" (Vygotsky, 1978,

p. 86): the difference between what a child can do without help and what he or she can achieve with assistance. Dynamic assessment is also referred to as mediated- and learning potential- assessment (Caffrey, Fuchs and Fuchs, 2008). Within the field of Education, DA has been considered valuable when assessing children in English when the children's own first language is not English (Lantolf and Poehner, 2011) as the ability of children to problem-solve with guidance can help to distinguish between intellectual/capacity limitations and cultural/language-learning limitations. Dynamic assessment has long been supported as an assessment protocol suitable for bilingual children in the US (Patterson, Rodriguez and Dale, 2013) and is relevant in Ireland, too, with increased migration and multilingualism (Bilingual forum, n.d). It is specifically referred to as an assessment of choice by the panel of experts involved in the CATALISE project (Bishop et al., 2016) to help distinguish between children whose language difficulties are due to a lack of exposure to a language and those whose learning is impaired.

Dynamic Assessment and Responsiveness to Intervention

Dynamic assessment is related to the term Responsiveness to Intervention (RTI), commonly used in educational contexts (Grigorenko, 2009; Fuchs et al., 2011; Long, 2012). Grigorenko (2009) compared and contrasted the historical roots of the two terms as well as their constructs and premises. Dynamic assessment emerged from Psychology in the 1920s and 1930s in response to identified limitations in standardised assessment procedures of cognitive abilities and aimed to support the concept of assessment for the sake of selecting or modifying intervention; not for assessment's own sake (Grigorenko, 2009). Responsiveness to Intervention emerged from the Education field in response to the disproportionate number of ethnic minority children receiving special education in multi-ethnic countries such as the US. (Grigorenko, 2009). However, while their emerging fields differ, both DA and

RTI are primarily concerned with children who underachieve. The terms diverge again when responding to this underachievement: RTI requires information regarding teaching interventions in the past and to date (Grigorenko, 2009). Dynamic assessment, in contrast, is more concerned with diagnosing learning potential and the primary focus of DA is the intervention that follows in the future (Elliott, Resing and Beckmann, 2018). Dynamic assessment has a broader focus than RTI: it considers general learning potential, whereas RTI is confined to academic domains such as reading or math (Grigorenko, 2009).

There are some overlapping critiques of both DA and RTI. Dynamic assessment is often criticised for “construct fuzziness” (Grigorenko, 2009, p.9) and RTI has similar criticisms, for example, for its intangible concept of “degree of responsiveness” (Grigorenko, 2009, p.10). Fundamentally, both DA and RTI are concerned with growth and change (Grigorenko, 2009). Responsiveness to Intervention differs significantly from DA in terms of its established tier structure (Grigorenko, 2009). In the Republic of Ireland, as previously referred to, there have been recent changes to the provision of supports for children with additional educational needs, and this new approach is based on a RTI framework (NCSE, 2013). Three tiers are now considered in the Irish educational context, with Level 1 referring to intervention at whole school level, where children receive support with their peers. Level 2 refers to targeted interventions and Level 3 support comprises “intensive, individualised intervention” (NCSE, 2013, p.133). The adoption of RTI in the Irish education system could be compatible with SLTs using DA as this assessment process can help to ascertain which children require certain levels of intervention. Such a combination (of DA by the SLT and subsequent RTI in schools) is championed by Long (2012). In that article, Long (2012) suggests that in the US, school-based SLTs who provide reading intervention use DA to assess learning potential and RTI to assess progress. Exploration of the potential for

use of a combination of both DA and RTI is certainly worthy of further discussion in the Irish educational setting in future.

Characteristics of Dynamic Assessment

Miller, Gillam and Peña (2001) state that DA has the following characteristics: firstly, it is interactive, with the examiner involved in facilitating change. Secondly, it is a learning process, during which the examiner can gain knowledge about children's learning strategies. Thirdly, it provides information on learner responsiveness, which examines how a child responds to the intervention process trialled during DA. Dynamic assessment of language skills can assist SLTs in ascertaining how the child learns, thus informing the intervention plan; consider, for example, the intervention planned following DA of sentence structure as reported by Hasson and Dodd (2014). In the area of narratives, DA has the potential to make a unique contribution to the assessment of children's storytelling skills due to the novel information that can be obtained from its administration and will be considered in more depth.

Dynamic assessment processes differ in their methods for assessing potential for change. Hasson and Joffe (2007) cite two popular formats. The *sandwich* format consists of pre-test, teaching and post-test phases in order to measure improvements achieved. This approach may use standardised tests during the pre- and post-test phases. The sandwich format aligns with Millar, Gillam and Peña's (2001) test-teach-retest approach. The *cake* format of facilitating DA presents prompts and cues during an initial assessment phase (Hasson and Joffe, 2007), gauging the child's need for assistance. The cake format may make use of non-standardised procedures as part of its approach to DA.

Returning to the sandwich approach, the teaching elements of Millar, Gillam and Peña's (2001) test-teach-retest format of DA take place within Mediated Learning Experiences (MLEs), facilitated by the SLT. Lidz (1991) produced rating scales of key components of MLEs as based on Reuven Feurstein's writings, further distilled in Lidz and Peña's work (1996) and these components remain evident in Peña's later published DA assessment (Millar, Gillam and Peña, 2001). Martin (2012) highlights three main concepts that shape this particular DA format of MLE usage: intentionality, mediation and transcendence. *Intentionality* involves the SLT raising the child's awareness of the purpose of the activity, with an aim that a child who is aware of his or her own learning can utilise language to mediate their own social and emotional behaviour (Martin, 2012). For example, in a MLE, the SLT would relate the intent, of changing functioning, to the child. The SLT would tell the child the target of the MLE and the reason for this MLE. For illustration, in a MLE focusing on the feelings of characters in a story, the SLT would explain that the target of the MLE is to think about what characters are feeling and why they might feel a certain way.

The process of *mediation* sees SLTs assess both the zone of actual development as well as strategising to engage children's zones of proximal development (Vygotsky, 1978). This can support child learners so that learning becomes a joint, co-constructed activity. Mediation uses double stimulation to utilise a learner's memory as a tool to solve the current problem. In a MLE, the SLT would focus the child's attention on what is important to learn, helping the child to attend to important features of the task and ignore unimportant features. This facilitates the child in understanding why a particular task is important. For illustration, the SLT could draw the child's attention to the facial expressions of illustrated characters to talk about how they might be feeling and why they may feel that way. Lidz and Peña (1996) noted that mediation of many components may occur in MLEs, for example, mediation of intentionality,

meaning, transcendence, task regulation. praise or encouragement, psychological differentiation, change, challenge, sharing and joint regard.

Transcendence involves consciously applying newly-learned language strategies and knowledge to real or imagined contexts (Martin, 2012). In DA, as compared with static assessments, the examiner-student relationship is slightly different, since the examiner provides performance-contingent feedback during MLEs and also offers instruction during the MLEs in order to enhance the child's performance. However, it should be noted that while interaction does occur during MLEs, additional assessment formats would be required to capture a child's interactions during storytelling with communication partners such as peers. Transcendence involves the bridging of concepts and events beyond the immediate task and introduces abstract ideas. Examples of questions could be, *what would happen if your friend did not want to play with you?* or *have you ever felt sad?.* The MLE process in DA also considers *self-evaluation, transfer* and *competence* (Peña et al., 2006). The purpose of these components of the MLE is to help children to plan and to assist them in thinking through how they will use the targeted strategy. In discussing appropriate times to use a particular skill, the SLT may ask, *how will you remember next time you tell a story to talk about the characters' feelings?*.

One of the most unique concepts associated with DA is the term *modifiability* (Millar, Gillam and Peña, 2001), which is used to describe the child's response to an MLE based on the SLT's observations during the teaching session. This concept also makes the MLE process distinctive: SLTs who undertake DA are specifically looking at child responsivity, transfer skills and examiner effort and these elements of modifiability are explicitly commented upon, based on SLT

observations during MLEs. In relation to a child's responsivity, SLTs undertaking dynamic assessment that includes MLEs may observe the following: how well does the child respond to the MLE undertaken? Does the child attend to the task and maintain attention? Does the child demonstrate efficient learning strategies, including meta-cognitive approaches? In consideration of transfer skills, SLTs who undertaking MLEs as part of dynamic assessment observe how a child applies the target skills from one item or one task to the next. Additionally, examiner effort is observed by SLTs who undertake MLEs as part of a dynamic assessment approach. The SLTs consider how much support a child needed during the MLE and the nature of the support required. This concept adds value to the assessment process, as the examiner can gather information that will inform intervention-planning.

Dynamic assessment is critiqued, however, for construct ambiguities or "fuzziness" (Grigorenko, 2009, p.9) in the areas of theory, purpose, procedures and uses (Caffrey, Fuchs and Fuchs, 2008) and additionally for low reporting of reliability and validity in literature. The lack of established inter-rater reliability (Hasson and Joffe, 2007) is a case in point. It is acknowledged that there is still "relatively little research" available in the field of DA (Bishop et al., 2016, p.13). Hasson and Joffe (2007) argued for its use, observing that DA, used effectively, could improve the outcomes of SLT intervention, whereby intervention programmes are more specifically targeted towards a child's individual needs. The argument for this "alternative assessment paradigm" (Muskett, Body and Perkins, 2012, p.88) continues to be developed in literature, where examples of practical applications of DA in language domains have been published (e.g., Camilleri and Law, 2007; Law and Camilleri, 2007; Hasson and Botting, 2010;). For illustration, Camilleri and Law (2014), argued that DA could add particular value to assessment profiling of children with low language skills, following their trial of DA in the area of receptive language with 40 pre-school children.

Dynamic assessment has potential to play a key role in comprehensive, holistic assessment. Returning to the WHO's (2001) ICF, Westby (2007) observed that *capacity* and *performance* are differentiated in the ICF. Capacity and performance are examined in four ways: performance in the current environment; capacity without assistance; capacity with assistance and performance in the current environment without assistance. While capacity without assistance may be determined with static assessment, DA is well placed to evaluate capacity with assistance. This unique benefit of DA renders it potentially valuable as part of a comprehensive assessment of narrative language and the following section will examine the existing evidence base for DA in narrative assessment.

Dynamic Assessment in Narrative Assessment

Dynamic assessment has been used within the language subcategory of narration. Dynamic assessment of narratives with children from culturally diverse backgrounds can assist in differentiating between language impairment and language difference (Peña n.d.). Peña, Gillam and Bedmore (2014) argue that it is DA that accurately identifies language impairment in English Language Learners. This contention is supported by Petersen et al. (2017) who found that using DA in relation to short narratives, in English, resulted in high classification accuracy for bilingual children with and without language impairment. The evidence suggests that DA has a particular place as an assessment battery used by SLTs working with bilingual children, who wish to ascertain if a child's narrative difficulties are a result of second language learning difficulties or a feature of DLD.

Peña et al. (2006) provide a robust exploratory study of the potential of DA for narrative assessment. The authors used DA in the US with 71 culturally-diverse children whose language abilities had previously been categorised into either typically-developing or language-impaired. Three groups were formed: typically-developing children (TD); language-impaired children (LI); and age-matched typically-developing controls. Children in the TD and LI groups received two individual thirty-minute mediated learning experiences designed with specific scripts for examiners, training the children in increasing story length and complexity. Fidelity of treatment was examined to ensure consistency of these MLEs. Following re-administration of the test, the results of inferential statistical analysis, analysis of variance and discriminant function analyses and descriptive statistical analyses showed that DA and its mediated intervention improved performance for both TD and LI children (Peña et al., 2006).

The work of Peña et al. (2006) in the US supports the use of DA in narrative language assessment as it identified potential for learning in this diverse population. In the United Kingdom (UK), Martin (2012) utilised the same test materials as those used by Peña et al. (2006), including the same wordless picture books, entitled Bird and His Ring and Two Friends, with three children in the English Midlands. Martin (2012) investigated the cultural accessibility of the US materials for UK students by administering one of the stories with a typically-developing child in the same class group as the children studied. Employing a dynamic assessment approach that incorporated MLEs, the study asked what DA could offer in terms of information about children's language difficulties, language learning capabilities and intervention (Martin, 2012). The results offered insights into language differences in each child's zone of actual development on initial testing, with learning capabilities in mediation evident during MLE administration in the children's zones of proximal development. Additionally, the narrative DA procedure administered revealed the relationship between the assessor's effort and the children's

responsiveness, thus informing intervention planning (Martin, 2012). Martin suggests that since DA “blurs the traditional divide between assessment and future intervention, its results can better inform the manner and content of differentiated teaching/learning for inclusive schooling for those with language disabilities” (Martin, 2012, p.16). The same test materials as utilised by Peña et al. (2006) and Martin (2012) would later be used in this research, in an Irish context.

Dynamic Assessment in Ireland

Dynamic Assessment has not begun to translate widely into SLT clinical practice as yet in Ireland (IASLT, 2017), or across the English-speaking world (Bishop et al., 2016). The IASLT DLD position paper (IASLT, 2017), as previously referenced, is produced by Ireland’s professional SLT body and represents this country’s gold standard for assessment of DLD. Importantly, the document provides insights into current practices of Irish SLTs working with children who have DLD. The IASLT conducted a survey in relation to SLT practices in Ireland (IASLT, 2017). There were 185 respondents, ten of whom identified themselves as responding on behalf of a team of therapists. This survey captures a sizeable portion of SLTs working in Ireland when it is considered that, at around that time, 1098 SLTs were working in the Irish public sector with children and/or adults (IASLT, 2019).

The IASLT report noted that “a smaller proportion of therapists responded to questions relating to use of dynamic assessment than other questions in the survey” (IASLT, 2017, p.46). There were 70 non-responses to this section of the survey relating to DA and RTI although some therapists reported that they

are incorporating DA into their practice, with just under half (46%) of the section's 116 responders reporting this. The IASLT reported the SLTs surveyed "noted the challenges of undertaking dynamic assessment in the context of timeframes for decision-making to access educational supports and the need for development in this area" (IASLT, 2017, p.46). The IASLT reported that SLTs will need to be supported to undertake DA and RTI in clinical practice in Ireland "given caseload demands, and since dynamic assessment is relatively new in its application in the field of speech and language therapy" (IASLT, 2017, p.55). Given the responses offered in this survey regarding assessment of DLD, research into DA as applied to narrative assessment in Ireland is timely.

The potential contribution of DA to a more comprehensive protocol of narrative assessment will be explored in this research. Where static assessment can address the WHO ICF (2001) at the impairment level and can provide information on capacity without assistance, DA, as previously stated, can go further and ascertain a child's capacity with assistance. Dynamic assessment may be considered a complementary assessment process to static assessments, since DA may have corresponding strengths where static norm-referenced or criterion-refenced assessments have limitations, and vice versa. Dynamic assessments have strengths in therapy planning (Martin, 2012) as well as other clinical activities such as progress monitoring and professional accountability (McLean, Hemmeter and Snyder, 2014). Additionally, alternatives to both static- and dynamic- assessments may address what is lacking in both approaches. Neither DA nor static assessment provide the opportunity to observe narration within a natural social interaction with peers. Additionally, DA and static assessment tends to take place in the clinic and in school, and there is a lack of information about a child's communicative functioning in a significant setting in which the child spends the bulk of their non-school time: the home.

Naturalistic and Observational Language Elicitation

Naturalistic language elicitation of narratives has also been considered integral to a comprehensive assessment approach, with direct observation of the child considered integral to good assessment practices (Bishop et al., 2016). Naturalistic and observational language elicitation can provide us with information on the child's narrative performance in his or her own environment as well as illustrating the child's functioning at the activity level of the WHO's ICF (2001) framework. As such, it could provide this research with real world validity as it collects data from participants in one of their real-life communicative contexts, the school, and with regular communicative partners: their peers. The classroom is one of school-aged children's natural or habitual environments. Consequently, naturalistic forms of elicitation of narrative samples (Westerveld, 2011), for example, using puppets and toys to aid children in telling an oral narrative during class storytelling time or circle time in a small group of peers, could add to the richness of data to be gained from this research.

Facilitated narrative elicitation was favoured over observation for this research in order to purposefully obtain language samples from each child participant. A comparison of the quality and nature of oral narratives, elicited through naturalistic language elicitation with both static assessment and dynamic assessment protocols, could contribute to our understanding of its clinical utility. As DA is not naturalistic in its nature, there are aspects of functionality that it is unlikely to capture. The same can be said for static assessment. Systematic literature searching revealed no research comparing the quality and content of narratives produced in naturalistic language elicitation tasks with either static assessment or dynamic assessment protocols, or with a combination of these. This approach may offer ecological validity, given the context in which data is obtained.

Parent Interview

Parent interview / questionnaire is specifically referred to in the CATALISE consensus statements relating to DLD assessment (Bishop et al., 2016). Additionally, the IASLT's Irish position paper recommends consultation with parents during DLD assessment (IASLT, 2017). In this research, its benefit is extrapolated to narrative assessment. The home is an important social context for children and narratives produced there are of interest to SLTs. Parent questionnaires are well-established as useful assessment tools in the field of speech and language therapy (e.g., Scherer and D'antonio, 1995; Boudreau, 2005). Literature searches have not revealed research around school-aged children's oral narrative development that involves parent consultation or interview. Parent interview can add valuable perspectives and provide insight into the school-aged child's functional oral narrative skills in their home environment. Parents are important stakeholders in the speech and language therapy process, and parents' role as advocates (Rehm et al., 2013) for their children should be acknowledged and explicitly identified. Involving parents in assessment highlights to parents, from the beginning of the therapy process, the important role that they play (Rehm et al., 2013) and can also help SLTs develop functional goals, as espoused by the WHO's ICF (2001), so that child-centred outcomes are achieved in therapy.

There is a complex relationship overall between parental narrative input and child-to- adult output (Stavans and Goldzweig, 2008); the latter being the type of oral narrative that would be elicited in this research in response to picture books. The resemblance between parents' and their children's narratives grows stronger as the child gets older; however, the relationship is difficult to interpret as parental input may also be influenced by the child's overall language and narrative development (Stavans and Goldzweig, 2008). Stavans and Goldzweig's (2008) observations support the social-interactionist theory

of language acquisition as also conceptualised by the researcher. Parent interview would facilitate assessment at both activity and participation levels of the WHO ICF (2001), by providing SLTs with information regarding the child's narration at home and when out and about with their parents. Information from parents would provide data on the child's real-world functioning in a key social and communicative context; their own home. Parent interview could also result in greater ecological validity of research findings.

The Current Gap in Research: Problem Statements

To date, narrative research has focused primarily on comparing static assessment and dynamic assessment and not on considering their complementary benefits when used as part of a functional, comprehensive assessment battery that includes measures for obtaining ecologically valid data. There has been no consideration to date as to how either static assessments or dynamic assessments of narratives compare with (or complement) naturalistic, observational assessment of storytelling, such as stories told in the classroom to peers or in the clinic setting. In addition, parents of school-aged children in Ireland have not been consulted using any structured means (for example, a semi-structured interview) to establish children's everyday narrative functioning in the home environment.

However, those critiques are minor in comparison to the wider gap in knowledge evident: there has been no published collaboration to date between stakeholders in Ireland in terms of determining what a comprehensive assessment for narrative abilities might comprise in the Republic of Ireland, or indeed in relation to narrative assessment elsewhere in the English-speaking

world. There is a need in the field of speech and language therapy for research that is translational in nature (Kent, 2012), quickly bridging the gap between what is investigated in structured research situations and what is used in the clinic with clients (ASHA, 2006), and engaging with stakeholders may be the key to this translation. It is important that action occurs in collaboration with stakeholders, such as SLTs who assess children, in order to further develop narrative assessment practices in Ireland. The actions to be undertaken should not simply be decided by one SLT (that is, the researcher); rather, as an alternative, actions would be agreed upon collaboratively with other interested SLTs working in the field and then considered in relation to everyday clinical situations in order to capture the realities of work as a practising SLT in Ireland. For example, one individual caseload may not include many bi- or multi-lingual speakers, whereas another SLT in a neighbouring county could have valuable insights to share on the challenges and complexities of assessing the narratives of multilingual children.

The CATALISE project consensus regarding assessment in DLD agreed that “multiple sources of information should be combined in assessment” (Bishop et al., 2016, p. 11) and this research aims to meet that criterion. The panel of experts refer to approaches such as DA and RTI in the following CATALISE statement: “assessment approaches that explore how children learn language provide a promising approach. They can be integrated with intervention to give an indication of responsiveness to specific approaches. However, although there has been much interest in this approach in the field of reading disabilities, there has been relatively little research on its application to children's language learning difficulties” (Bishop et al., 2016, p.13). In addition to this international context, Irish SLTs should work within an assessment framework that is compatible with the most up-to-date NCSE position (2013) regarding tiers of intervention rather than focusing on diagnosis-specific access to educational resources. Any new assessment protocols or practices should reflect the value

NCSE places on assessment for the purpose of intervention-planning, rather than simply labelling or diagnosing (NCSE, 2013).

Research Aim and Questions

This research aimed address the following overarching question: how can SLTs comprehensively assess the narrative skills of school-age children with language impairment in Ireland in a way that reflects the interactive, dynamic nature of narratives and the social, communicative contexts in which these children use narratives?

The first objective of this research was to ascertain the elements of oral narrative assessment considered important to specialised and non-specialised SLTs in Ireland. What information do specialised and non-specialised SLTs want to obtain from the assessment process concerning narrative skills in children with DLD? The second research objective was to trial, by administering, a range of assessment formats: static assessment, a dynamic assessment process involving mediated learning experiences, naturalistic group language elicitation and parent interview. What does administration of the various methods of narrative assessment add to the process? The third research objective aimed to collaboratively evaluate and compare the importance and usefulness or clinical utility of the results of each assessment source: static assessment, a dynamic assessment process involving mediated learning experiences, naturalistic group elicitation and parent interview.

This research also had two longer-term aims or aspirations:

- to collaboratively establish a comprehensive narrative assessment protocol to guide practice in assessment of oral narratives in Ireland; and

- to add to the knowledge of the contribution of different assessment approaches, disseminating relevant information to SLT colleagues both nationally and internationally.

The next chapter will detail this research's methodological approaches.

Chapter 3: Methodology

Research design: Theory and Context

Having established the problems and research questions, this next chapter will detail research methodology. The terms quantitative and qualitative methodologies are well known (Robson, 2002) and these two approaches may alternatively be considered fixed versus flexible in their designs (Robson, 2002), wherein, for example, traditionally quantitative approaches call for hypotheses and tight pre-specification of the design prior to data collection. In this instance, the context and problems that led to this research's aims were framed in terms of how and what research questions. With inductive reasoning and a search for meaning thus identified, the methodology focus was on understanding and describing the opinions and experiences of participants. From an ontological position, this research considered multiple realities according to various perspectives. These perspectives would also be considered within their contexts. This positioning reflects a philosophy of critical realism, in which social situations are determined to be so complex that general laws cannot prescribe action for particular instances (Winter and Munn-Giddings, 2001).

In considering epistemology, both the context and cultural elements involved clinical practice in the Republic of Ireland. The data generated was expected to facilitate the description and interpretation of findings from SLTs and children with DLD living in the Republic of Ireland, generating theory. Rooted in clinical practice, and seeking the opinions of clinicians, this research also considered clinical utility as an outcome goal. In framing an open research question and acknowledging the importance of understanding findings within their specific contexts, the methodological approach needed to be both

inductive and flexible in nature, responsive to the results of the findings and facilitating theory generation. Given these particular circumstances, it was established that a flexible, qualitative methodological orientation would be best suited to answering the research questions.

Action Research

The qualitative methodological orientation of this research required a flexible design that would consider the specific context and remain cognizant of its particular problems and the research questions. The methodological implications of a critical realist basis (Danermark, 2019) were considered. Critical realists argue that the purpose of social inquiry is to understand social situations in such a way that we are in a position to effect change (Winter and Munn-Giddings, 2001). For critical realists, social practice results from an interaction between structure and agency, where intentionality and action (or agency) mediate, and are mediated by, social relations and institutional practices (or structures) (Molla and Nolan, 2020). In order to answer the research questions posed in Chapter 2, action would be required, with a focus on informing future clinical practice. The methodological approach determination process considered both the problem-focused nature of this research and its situation within contexts specific to children with DLD living in the Republic of Ireland and SLTs working in Ireland. Critical realism posits that social inquiry is always part of the social world it is describing (Winter and Munn-Giddings, 2001), therefore, there is no external platform to which researchers can remove themselves to conduct observations on third-party participants.

Considering the above parameters, this qualitative research was undertaken within the context of an Action Research (AR) methodological approach. Action research has been defined as “a period of inquiry, which describes, interprets and explains social situations while executing a change intervention aimed at improvement and involvement. It is problem-focused, context-specific and future-oriented” (Waterman et al., 2001, p.23). Action research is ideally suited for critical, self-reflective practice, with the process of research as important as the outcomes and is a means by which we may account for ourselves as professionals (McNiff, 2013). As such, it is ideal for a researching clinician; working within the field in which they wish to research. It is important that research in a practical field be translational in nature, with a focus on bringing research to everyday clinical practice (ASHA, 2006; Kent, 2012). Action research is a process aimed at change (Waterman et al., 2001) as well as generating knowledge, and these twin foci are considered in this AR project. Theoretically, AR is positioned in the field of critical realism when its epistemological and ontological foundations are considered (Coghlan and Brannick, 2010). The AR methodological approach fitted well with context-specific inquiries into narrative assessment practices in Ireland.

It is acknowledged that AR is not without its limitations. Waterman et al. (2001) conducted a systematic review on AR studies in the field of healthcare. Their literature search yielded 285 possible studies, of which 59 met their inclusion criteria. In addition, they conducted five focus groups with participants from the included studies and two focus groups of action researchers. Waterman et al. (2001) found that interview, questionnaire and observation were the three most common methods of data collection in the AR studies considered and qualitative research methods predominated. Participants were primarily nurses, in a hospital setting. The researchers identified eight “pivotal factors” (Waterman et al., 2001, p.16), that is, characteristics of AR that were perceived to have both strengths and limitations. These eight categories encompass participation, key persons, the action researcher-participant relationship, real-

world focus, resources, research methods, project process and management and knowledge (Waterman et al., 2001).

Participation, for example, was a key component in 70% of the studies considered by Waterman et al. (2001). On the one hand, AR's focus on participation can lead to more comprehensive understanding of problems. On the other hand, there is potential for problems to arise if participants include a diverse group of individuals with possibly conflicting goals. To address that potential limitation in this research, planning would be required in order to facilitate respectful and positive group dynamics. With regards to key persons as identified by Waterman et al. (2001), this role tended to align with senior managers, and balance was required between the key person being in a position to initiate the practice that is the focus of change and being perceived as either imposing or opposing projects on staff. That particular concern did not impact on this research as all participants were clinicians and none had management roles.

The action researcher-participant relationship dynamic considerations were based on whether or not the researcher was considered to be an insider or outsider (Waterman et al., 2001). As an advantage, insider AR may offer greater understanding of issues and context. As a limitation, insider AR could be perceived as having potential for familiarity to cloud understanding. Outsider AR can bring a fresh perspective to problems but conversely may lead to challenges understanding in context. This research may be considered insider AR as the researcher works in the same field as participants and there is no management-clinician division. Waterman et al. (2001) stress the importance of a positive working relationship between the action researcher and participants regardless of whether the researcher is an insider or an

outsider. The authors note that a positive working relationship is critical since "as a group they will be required to assess the identified problem, identify possible alternate solutions (plan), implement (take action) and evaluate new practices" (Waterman et al., 2001, p.34, brackets in original quote).

Real-world focus in AR acknowledges the real-life contexts in which research takes place. However, Waterman et al. (2001) found that only 36% of the studies they examined provided data on context and conditions prior to change implementation. Additionally, while a real-world focus can increase the relevance of research, it requires time and perseverance on the parts of participants. In this research it will later be noted that all ten SLT participants gave of their time at two different time points in their lives and their perseverance in participating on both occasions is acknowledged and appreciated. Regarding resources, time was identified as a potential limitation for both participants and researchers (Waterman et al., 2001). In this research, a degree of time limitation in light of the scope of this doctoral thesis is recognised. In relation to research methods, Waterman et al. (2001) stress that if the fundamental aim of AR is to improve practice rather than to produce knowledge, there may be too little focus on the research methods selected in inquiry. For Waterman et al., "practice, reflection and research go hand-in-hand" (2001, p.38). In this research, both knowledge generation and practice improvements are valued.

In project process and management, an advantage of AR is that a problem, after being initially identified by a researcher, may be further clarified by participants. However, an initial lack of direction at the beginning of a study is at risk of the formulation of objectives or ideas which could be biased in favour of more powerful groups or persons, including the action researcher. In this

research, critical self-reflection and discussion with a critical friend strove to identify and address any bias that could arise. In relation to the knowledge generated in AR, Waterman et al. (2001) found that while AR may foster practical knowledge, participation does not always foster theory development. This limitation requires recognition, as it is not always possible to predict the type of knowledge generated in advance when planning AR. Waterman et al. (2001) note that AR "has been perceived as 'unscientific' by some researchers and funders and, therefore, as not being of value in the context of research and development" (Waterman et al., 2001, p.57, commas in original quote). In order to sufficiently address concerns, researchers should ensure that quality is maintained by applying a series of critical appraisal questions to their research, such as those identified by Waterman et al. (2001) or the checklist as adapted from that source by Greenhalgh et al. (2005). In this research, quality was carefully considered and will be discussed in more detail in a later section.

Koshy, Koshy and Waterman (2011) outlined the particular advantages of AR for researchers. Research is set within a specific context or situation; in this case children with DLD in the Language Class setting in Ireland and with SLTs working in Ireland. Continuous evaluation and modifications may be made in an AR methodological approach as the project progresses, due to the dynamic nature of the AR process. In this research, modifications took place across cycles in response to stakeholder, namely SLT participant, feedback as well as to the research findings themselves. For illustration, changes were made from the single case study to the three cases profiled (detailed in cycle descriptions). Changes were also made to the number of participants in the focus groups between AR cycles. Theory may emerge from AR research (Koshy, Koshy and Waterman, 2011) which could influence narrative assessment in other similar settings or in wider community settings. Thus, it is possible that the findings of this AR may be generalisable to other settings in Ireland. For the healthcare setting or employer, AR develops local solutions to

solve local problems and as such, this research may be of interest to the HSE, which funds SLTs working in language classes, and the majority of SLTs, in Ireland. By consulting with primary care and community-based SLTs, the solutions would have a wider contextual base than if the research participants had been restricted to only SLTs working in language classes. In addition, the research focus of this AR would be meaningful to the parent participants as it could influence future assessment practices with their children and other children who have DLD. In summary, this research aimed to produce results which could inform other similar contexts and situations, for example, other SLTs working in other language classes in Ireland or SLTs in primary and community care in Ireland assessing the narrative skills of children with DLD.

Contextual definitions of Participation, Collaboration and Innovation

Action research has been described as “a family of practices” (Reason and Bradbury, 2012, p.1) which “calls for engagement *with* people, opening new ‘communicative spaces’ in which dialogue and development can flourish” (Reason and Bradbury, 2012, p.3, italics and commas in original quote). Riel (2019) notes that a range of modifiers can be applied to AR which can highlight different dimensions. For example, Riel (2019) uses the term collaborative AR “to highlight the different ways in which action research involves collaboration with critical friends” (2019, p1) and Hall et al. (2017) utilise the term participatory AR to highlight the democratisation of the knowledge process. A modifier has not been applied to this AR: characteristics of the wider family of AR will be firstly considered before focusing on specific features of AR depicted in this thesis.

Action research is also conceptualised as “a family of approaches” (Reason and Bradbury, 2012, p.7) and it is acknowledged that “there is no ‘right way’ of doing action research” (Reason and Bradbury, 2012, p7, commas in original quote). In consideration of quality, Reason and Bradbury (2012) urge action researchers to be aware of one’s choices and to make those choices clear to oneself, inquiry partners and, later, to the wider world. It is a wide field, where “practice is hugely varied” (Reason and Bradbury, 2012, p.4), although some features of practice, or purposes, are broadly shared. Reason and Bradbury (2012) identify five of these characteristics: AR has a common purpose of generating practical, useful knowledge as well as creating new forms of understanding, contributing to human flourishing and facilitating knowledge-in-action and it is participatory in nature (Reason and Bradbury, 2012).

Proponents of AR consider those being studied, whether practitioners or service users, to be “co-researchers” (Waterman et al., 2001, p.13). In practice, however, the degree of participation varies, both *within* and *between* studies (Waterman et al., 2001). Waterman et al. (2001) cite and describe six categories within which modes of participation might fall: co-option, compliance, consultation, cooperation, co-learning and collective action. In co-option participation, token representatives are chosen but have no real input or power. Compliance participation sees outsiders assigned tasks with incentives. Consultation participation seeks local opinions, with outsiders analysing and deciding on a course of action. In cooperative participation, locals work together with outsiders to determine priorities but the responsibility remains with outsiders for directing the process. Co-learning participation involves locals and outsiders sharing knowledge to create new understanding and they work together to form action plans, with the outsider as facilitator. Collective action participation involves locals setting their own agenda and actioning this themselves in the absence of outside initiators and facilitators.

This AR thesis encompasses three modes of participation at different stages of the research. Practitioner participation began in the first AR cycle, in the dual modes of *consultation* and *cooperative* participation in the first set of focus groups. Service user participation took place in the second AR cycle, in the form of consultation participation with parents. *Co-learning* participation was facilitated, in addition to consultation and cooperative participation, in the third AR cycle during the second set of focus groups.

The broad nature of AR allows for flexibility regarding the nature and format of participation and collaboration. Similarly, this current typed thesis is structured in a manner not typically associated with AR papers, although at various stages of this research it was presented in alternative formats, as a more traditional format was later chosen to maintain flow. Here, AR cycles are detailed and reference is made to planning, action, reflection stages in this Methodology chapter.

Participants in this AR collaborated at various stages, with working together identifiable between participants in groups as well as between the researcher and participants. For illustration, in the first set of focus groups, SLT participants interviewed in a group collaborated to describe and identify the features of narratives they considered important, to provide deeper insight into current assessment practices in Ireland and to respond to the various assessment formats presented to them for consideration and discussion. Speech and language therapist participants who were interviewed in groups in the second set of focus groups, as they reviewed children's narrative profiles, collaborated in their responses to the child's profiles. Additionally, there was collaboration between participants and researcher in these second

focus group meetings in establishing tenets for a more comprehensive narrative assessment protocol.

Greenhalgh et al. (2005) are concerned that AR should deal with innovation. There are two explicitly innovative elements in this research: firstly, interviewing SLTs about their perspectives and experiences of narrative language assessment with children who have DLD in the Republic of Ireland and secondly, in producing wide narrative assessment profiles for the children in the study that included the relatively more novel information from DA. The reader is reminded that, in Ireland, DA is considered “relatively new in its application” (IASLT, 2017, p.55). Specific elements within this research are innately innovative in nature. This research, at the time of its undertaking, appears to have been the first of its kind in the Republic of Ireland to go beyond comparing static assessment with DA; instead, this research involved developing a more encompassing profile of children’s narrative skills, incorporating both of these forms of assessment as well as information from parents and naturalistic language elicitation. Additionally, it was innovative at the time of research to have engaged stakeholders in ascertaining their opinions on narrative assessment in the Republic Ireland, the stakeholders in this research being parents and SLTs.

As previously considered, critical realists argue that social inquiry is charged with understanding contexts so that researchers can effect situational change (Winter and Munn-Giddings, 2001). This research project aimed to gain insight and deeper understanding of the assessment practices of SLTs who evaluate the oral narrative skills of children with DLD in Ireland in order to bring about change in that specified situation. Coghlan and Brannick (2010) remind us of how radical an approach AR is, by sharing the power of knowledge

development with participants. This may be compared with traditional knowledge production and policy development, which tends to lie with researchers and policymakers. In this situation, the child participants and their parents provided responses to stimuli and participated in this research, which in turn provided the SLT participants and researcher with the opportunity to co-learn and to co-construct knowledge.

Method Selections

Having established that a flexible, qualitative design within an AR methodological approach would best answer the research questions, specific methods were considered. In order to ascertain the elements of oral narrative assessment considered important to specialised and non-specialised SLTs, the opinions of SLTs needed to be obtained. Both questionnaires and semi-structured interviews were initially considered as data collection methods. Questionnaires were considered an option as they had been employed as a design tool in ascertaining SLTs' opinions of standardised assessment practices in other countries such as Canada (Kerr, Guildford and Bird, 2003), India (Kumar, Rout and Kundu, 2011), and the US (Huang, Hopkins and Nippold, 1997). Questionnaires are advantageous in that they provide a straightforward approach to the study of attitudes, values, beliefs and motives and additionally offer high amounts of data standardisation (Robson, 2002). Questionnaires also have disadvantages: typically, the response rate is low and misunderstandings of questions may not be detected in online, postal or other self-administered settings (Robson, 2002).

Ultimately, whilst questionnaires are used as tools for a variety of research purposes, it is not as well suited to carrying out exploratory work, important in knowledge generation, as it is to other research purposes such as descriptive or explanatory (Robson, 2002). As the overarching approach to this flexible, qualitative research, AR tends to operate across three modes (Newton and Burgess, 2008): (i) knowledge-generating mode, (ii) improvement of practice mode and (iii) emancipatory mode. This research contains aims aligned to the first and second of these modes, with incidental outcomes that may occur in association with the third mode. Considering the frameworks of such modes, and the positioning of the researcher in this insider research, data collection was determined to be best met by a method more participatory than questionnaires.

Interviews were chosen as a data collection tool as part of this AR methodological approach in order to obtain in-depth and detailed responses from SLT participants. Group meetings were conducted in a focus group interview style, with focus groups being conceptualised in their original form as *group depth interviews* (Marczak and Sewell, n.d.; Savin-Baden and Major, 2013), where it is a carefully planned and moderated interview. Unlike the Delphi Technique (Hsu and Sandford, 2007; Savin-Boden and Major, 2013), establishing consensus was not the sole purpose of these focus interview groups: all opinions expressed were valued and of interest. Groups that refer only to the outcomes or consensus findings (List, 2001) are at risk of missing the rich information that analysis of group interactions can offer regarding participants' values and beliefs (Bowling, 2002; Kitzinger, 2005). Focus group interviews are similar to group interviews (Savin-Baden and Major, 2013) in that they involve small groups of participants. In contrast to group interviews, group interaction is encouraged, compared with group interviews where participants respond in turn. The data generated by participant interaction was considered in addition to the data gathered from opinions expressed (Carter and Henderson, 2005).

In order to obtain high quality interviews, an Interview Transcript was developed (Oppenheim, 1992), known in this research as a Moderator's Guide, which was designed for the interviews. The moderators' guide (Appendix 3 contains an example of one of the moderator's guides used) began to be developed and the questions were all first trialled with two SLT volunteers based in other counties in Ireland, who kindly agreed to provide trial interviews and to offer subsequent feedback regarding the questions asked of them. Detailed feedback was sought from these two SLTs and the researcher made adaptations as appropriate. For example, in this research, an explanation of the features of DA was added to the moderator guide following these trial interviews. Both SLTs had requested further information regarding DA during the trial interviews. Following the interviews and in providing feedback on the questions asked, this addition was specifically requested by one of the two volunteer SLTs.

The moderator's guide included an outline of the basic ground rules for the interview as recommended by Legard, Keegan and Ward (2003), establishing that the interviewer is the facilitator and enabling the SLT participants to discuss their thoughts and feelings. In addition, this establishment of ground rules and the confirmation and reassurance of a mutually respectful forum addressed one potential limitation to AR, as previously identified by Waterman et al. (2001). The ground rules also provided an opportunity to reiterate the consent given and offer the option to withdraw consent at any time. The interview introduction also reminded participants about the recording taking place. Good interview practice involves the presence of rapport (Crabtree and DiCiccio-Bloom, 2006) and trust with participants and these foundations were established early in the interview. It was ensured that the interviews did not take longer than 60-90 minutes and private, comfortable settings were carefully selected that were neutral and non-intimidating (Oppenheim, 1992). Settings used in this research for interviews included a small conference room in a hotel, a room in a community centre and a room in an ante café.

The first phase focus group interview with six SLTs was audio-recorded as well as videoed and quotes were additionally transcribed verbatim by both an assistant (a Student Placement Coordinator and Senior SLT) and the researcher, a secondary activity to the researcher's role as Moderator. Please see the Focus Group Interview Moderator's Guide example (Appendix 3) for further information on the questions asked and prompts prepared for use as necessary. The audiotapes were transcribed and analysed using Onwuegbuzie et al.'s (2009) framework of non-traditional techniques, which examine both group and individual data using qualitative approaches. Individual member data collection focused on noting non-verbal communication and also on a term devised by Onwuegbuzie et al., *micro-interlocutor analysis* (2009). This technique examines how participants respond to each question as well as the order and nature of responses, adding to the rigour of this AR. In addition, Onwuegbuzie et al. (2009) recommend conversational analysis of turn taking and structure. This analysis framework attempts to address dominant member result bias and, by examining more than the participants' verbal responses, also adds rigour to the AR process. In the second phase of focus group interviews, change was implemented and the maximum number of participants was set at four; therefore, an assistant was not required. Due to participant location or scheduling difficulties for these face-to-face interviews, a small number of participants were interviewed one-to-one (two participants in the first round of interviews and four participants in the second round of interviews), and in these cases the format was more similar to semi-structured interview than focus group interviews.

Action Research Cycles Overview

Action research involves iterative cycles of *identifying* a problem and clarifying its nature, *planning* an intervention, *acting*, by undertaking this intervention, and *evaluating* the outcomes of the action (Coghlan, 2007; Coghlan and

Brannick, 2010); please see Figure 3.1 below for a visual representation of an AR cycle. Reason (2001) outlined three broad strategies for AR: first person AR addressing the researcher's ability to self-reflect; second-person AR involving face-to-face inquiry with other stakeholders into mutual problems, such as professional practice; and third-person AR to create a wider community of inquiry. This research project would involve all three perspectives: first-person critical self-reflection combined with second-person co-inquiry with SLTs, parents and children and third-person impact within the wider field of SLT following its dissemination.

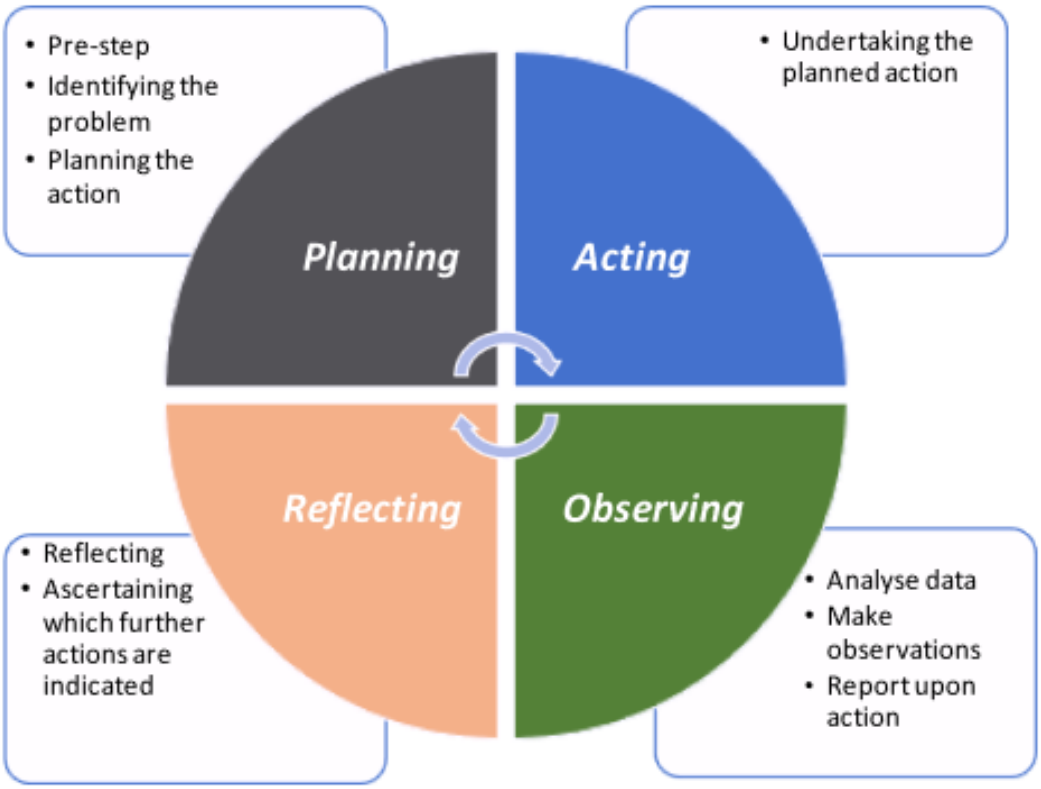

Figure 3. 1 Visual representation of AR cycle (based on Coghlan and Brannick, 2010)

While Figure 3.1 presents a visual representation of AR cycles and the elements integral to each process, the three specific core cycles in this AR

thesis will be detailed in the next paragraphs. Cycle terminology has been used to frame and design both this thesis action research as well as the core action research project (Coghlan and Brannick, 2010). The process of taking action from this research protocol and engaging in research constituted the thesis AR cycle. Its completion was heralded by the production of a final dissertation. Three core AR cycles were planned for the timeframe of this research. A visual representation of the three core AR cycle research events, with the corresponding research objectives, follows in figure 3.2.

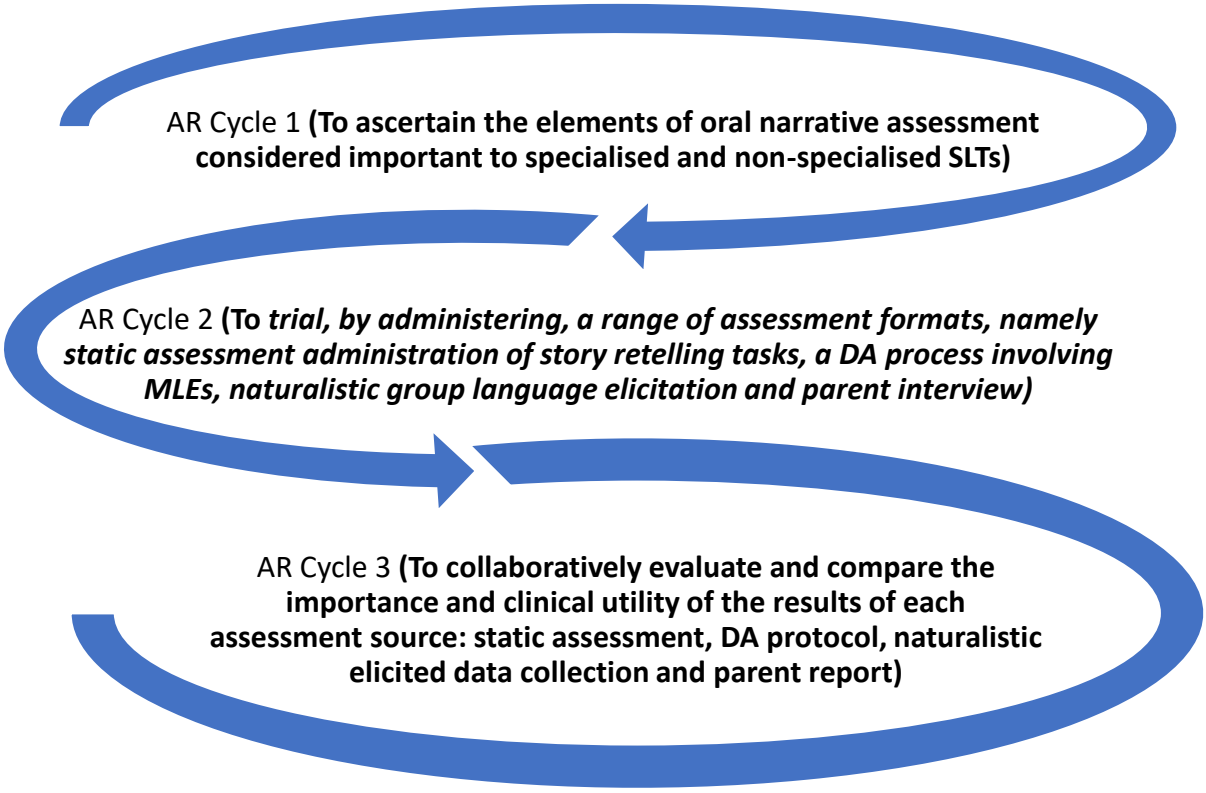

Figure 3. 2 Overview of sequence of research events with corresponding research objectives

In this research, as shown by Figure 3.2, each AR cycle's research events aligned to a research objective. The figure that follows, Figure 3.3, represents

a visual overview of the planning, action, observation and reflections undertaken in each of the three core AR cycles. Each AR cycle will be further explained in the next pages.

Figure 3. 3 Visual overview of the three core AR cycles

As observed from Figure 3.3, each cycle contained the four elements integral to an AR cycle; planning, acting, observing and reflecting.

Action Research Cycle 1 (Focus Group 1)

The first AR cycle involved literature review, a single case study, and the first set of focus groups and semi-structured interviews. The pre-step stages were concerned with literature searching and initial pre-planning.

Piloting SLT Focus Group Questions

As previously stated, in advance of the focus groups, two interviews with volunteering SLTs were undertaken to test, select and practice the final questions. These interviews were audio-recorded and played back by the researcher with the SLT volunteer's permission and notes were taken during the interviews. It was at this stage that the focus group questions were refined. Items were initially selected based on the research questions. The focus group questions were first trialled in interviews and feedback also was sought from these SLTs regarding suggested modifications to the questions. In listening to and re-reading the question responses following the first interview undertaken, the researcher considered volunteer feedback and assessed how understandable the questions were. In a subsequent interview, the researcher trialled the revised questions with the second SLT. The feedback, responses and suggestions of these SLTs were collated and a final refined version of the focus group questions was produced in the form of the moderator's guide (example of moderator's guide in Appendix 3). The two administration trials of the focus group questions and subsequent amendments added to this research's quality and rigour.

Pilot: Single Child Case Study

The single case study, in Appendix 2, allowed the researcher to gain experience and insights into the demands of administering a formal DA protocol involving mediated learning experiences, naturalistic language elicitation and parent interview as well as a range of formal static assessments, both criterion-referenced and norm-referenced, namely *Peter and the Cat* (Leitão and Allan, 2003), the *Bus Story Test* (Renfrew, 1997*)* and *Captain Grey and the Greedy Aliens* (Murphy, 2013)*.* These three static assessments were selected as they were static *story retelling* assessments and because the purpose of the single case study was not to critique specific static assessments or to determine their standalone validity. Story retelling was selected for the formal static assessments since the particular formal DA used facilitated *story generation in response to wordless picture books*. It is acknowledged that, at first point-in-time administration and prior to any mediated intervention, a formal DA can initially generate the same type of data as a formal static assessment, particularly when both are assessing the same narrative format. Since the purpose of this pilot study was to generate a breadth of narrative formats, focus for these static assessments centred on story retelling rather than story generation.

If the goal of this research had been to add to a body of evidence relating to static assessment as an assessment format, a robust static and standardised assessment of proven validity would have been selected, such as Bishop's (2004b) *Expression, Reception and Recall of Narrative Instrument (ERRNI)* which includes story generation in response to wordless picture books. Instead, in the specific context of this research, the intention was to have assessment formats that would, together, provide a range of information regarding a child's narrative language, rather than to compare or critique specific narrative language assessments. Subsequent decisions regarding the

static assessments selected for the children's narrative assessment profiling took place during consultative participation and collaboration with the SLTs as part of the first set of focus groups. The case study participant was selected for the case study as he was the first child from the language class whose parents responded to provide consent. The next three respondents, given the pseudonyms Abe, Ben and Cal, would later participate in the second AR cycle and their narrative assessment profiles were considered by SLT participants in the third AR cycle.

This pilot case study provided a number of learning opportunities. It was novel to the researcher to administer this particular formal DA protocol to a child with DLD in a Language Class setting and this specific opportunity was afforded in the pilot case study. Prior to this particular administration, the familiarisation process was similar to that undertaken with other unfamiliar assessments. Firstly, the researcher thoroughly read the manual and test information accompanying the test, including record forms and specific test materials. Secondly, the novel assessment was administered with two children known socially to the SLT, and not clinically, from family and friend volunteers including nieces, nephews and children. Thirdly, the assessment was used in clinic settings with six children attending SLT in order to ascertain test utility in a clinical setting, in this case a community care setting in the Republic of Ireland. This included administration with three children with confirmed diagnoses of DLD and three whose language difficulties were not associated primarily with DLD. Given the small numbers of children attending language classes, this DA had not, prior to that point, been administered by the researcher with a child attending a language class, in a language class school setting. In this context, undertaking the pilot with a child in a language class as part of a school day was most helpful. The school day in Ireland, with its two breaks totalling forty minutes, lent itself well to administering Story 1 of the DA in the morning, analysing and selecting targets for the mediated learning experiences during the day, and undertaking mediated learning experience 1

on the afternoon of the same day, as permitted in the test manual. Administering this novel assessment with the child in the pilot greatly assisted with planning and time-management considerations during the assessments with Abe, Ben and Cal. The novel test familiarisation process described above was similarly applied to static formal assessments used, where any were less familiar to the researcher.

Naturalistic language elicitation in the pilot study was elicited one-to-one, in response to question prompts, such as tell me a fairy tale you remember and tell me a happy / sad / scary story. In the pilot study, that child told a story in formal manner, as a child would retell a story to an unrelated adult. This narrative was recorded and analysed and it was observed that the results did not offer significantly different insight into his narrative skills compared with the dynamic or static assessment formats. As new learning from this pilot, the researcher considered the element missing from the profile of the pilot study child was a snapshot his use of narratives in a way a child would typically function, for example, at participation level of the WHO ICF-CY (2007) framework. In telling or retelling a story to peers of his own age, this child could have demonstrated his abilities in using narratives functionally; a skill considered important for forming and maintaining friendships at school. Following the pilot case study, the decision was made to encourage the children to retell stories to each other in a group setting, so as to generate data applicable at the WHO ICF-CY's (2007) specified levels of activity and participation. The change from one-to-one storytelling with an adult to the facilitation of storytelling with peers would later offer this research ecological validity, by examining narratives produced with peers in a real-life setting.

Additionally, review and evaluation of the case study data findings resulted in improvement in the quality of subsequent parent interviews that took place in creating the three children's narrative language profiles. For illustration, in the case study the child's parent referred to the child's narrative performance as "lazy" if the topic was not of interest to him. During that pilot case study interview the researcher remained neutral-to-encouraging throughout the interview but did not respond verbally to this comment. The researcher reflected carefully on the interview following its conclusion, as part of reflective practice espoused in AR cycles. The researcher had, perhaps mistakenly, believed that responding specifically to this comment at the time of the comment or interrupting the interview to later return to the comment would have influenced the parent's testimony, impacted on the trust between parent and SLT and/ or would have been inappropriate behaviour from the standpoint of an unbiased researcher.

However, acknowledging that critical realist research conducted accepts that it is never fully unbiased, the researcher now feels comfortable with the role in the research as a clinician who is also an advocate for adults and children with communication impairment. On critically reflecting upon the interview later, the researcher believes an opportunity was missed to advocate for a child with DLD, where it is not helpful to use a label of *lazy* within the context of a child's long-term difficulties in receptive and expressive language. As such, the researcher used the results of this case study to improve research practice going forward: determining to use the parent interview to engage with parents and respond to any misconceptions surrounding DLD at the end, when the interview was completed, in a respectful manner. However, as it transpired, no commentary such as the words used in the pilot case study actually arose in the next three parent interviews. The situation thus detailed exemplifies one practical application of quality improvement that followed from trial and pilot case study findings in advance of the three child profiles and was helpful in creating a shared understanding of narratives from a parent perspective.

This first phase / AR cycle aimed to answer the first research question; to ascertain the elements of oral narrative assessment considered important to specialised and non-specialised SLTs. This focus group would collaborate on the selection of assessments for the next phase of the study. Ten SLTs were recruited. For the purposes of this research, the term *specialised* was used if the SLT had reported more than 3 years' experience working specifically with children who have DLD. As previously reported, two interviews were undertaken with volunteer SLTs, prior to the focus groups, for the purpose of deciding on the final questions for inclusion in the moderator's guides. Following the two practice / trial interviews, the researcher critically reflected upon learning that had emerged from the experience. As a direct result of the two practice interviews, the moderator's guide was specifically designed to include an explanation about DA per the ASHA website (2014).

To summarise, the *planning* in this AR cycle encompassed literature searching, piloting SLT questions for the focus groups and undertaking a pilot case study with one child. *Action* in this AR cycle concerned the undertaking of the focus group and semi-structured interviews. As *observing* in AR relates to analysis, it is at this phase of the AR cycle that the first thematic content analysis was undertaken, in relation to the focus group findings. Additionally, analysis was undertaken in relation to the piloting of questions and the pilot case study. *Reflection*, another integral element in the AR cycle, was undertaken with journaling and meetings with the researcher's Critical Friend. In this AR cycle, the researcher learned about the assessments used and preferred by the SLTs in this particular research and finalised the selection of assessments planned for AR cycle 2 based on their information. This AR cycle was determined by the researcher to have achieved its stated aim and the second AR cycle was planned.

Action Research Cycle 2 (Child Participant Assessment and Parent Interview)

The second AR cycle involved child participant assessment and parent interview. The aim of this AR cycle was to achieve the second research objective: to trial, by administering, a range of assessment formats namely static assessment in the form of story retelling, a DA process involving story generation that included mediated learning experiences, naturalistic language elicitation and parent interview. Three children were profiled using the assessment approaches. *Planning* for the assessments was undertaken with the SLTs during the first AR cycle and complemented *pre-planning* in the pilot case study assessment administration. The *action* stage of this AR cycle concerned assessment with children and interview with their parents. In the AR *observing* stage, assessments were scored and analysed according to their manuals as appropriate. *Reflection* was undertaken utilising reflective journaling and discussion with the Critical Friend. As the researcher considered that this AR cycle had achieved its stated aim of compiling narrative profiles for the children, planning began for the third and final AR cycle. In this phase, the parent participants collaborated with the researcher in co-constructing an understanding of the current narrative assessment process in Ireland from a parent's perspective and contributed to knowledge-generation in relation to parents' opinions of narrative assessment practices in Ireland with children who have DLD.

Action Research Cycle 3 (Focus Group 2)

The third and final AR cycle involved the second meeting of focus groups and semi-structured interviews. This AR cycle had the aim of achieving the third research objective: to collaboratively share views to evaluate and compare the

importance and usefulness of the results of static assessment, a DA protocol incorporating mediated learning experiences, naturalistic elicited data collection and parent report. Planning for this action involved collating the detailed children's narrative profiles in advance of their presentation to the SLTs. One of the three profiles was provided at random to each grouping of SLTs, with the SLTs selecting a number between one and three, corresponding to a child profile, with a maximum of four of the ten SLTs examining any one profile. The static assessment was provided first as this information would typically have been the only information available to SLTs from this cohort of assessment formats. The order of presentation of the remaining materials (DA, group elicitation, parent interview) was varied for each interview so as to reduce order bias for these less familiar assessments. The information was provided in the form of typed transcripts of the recorded assessments along with completed record forms, where record forms were used with a particular assessment format. In this case, the formal static assessments and formal DA contained published record forms in their test packs and these were completed and provided to the SLTs.

The researcher provided the SLTs with full transcripts and scoring, as appropriate, of the static assessments, DA protocols and mediated learning experiences, parent interviews and the naturalistic group elicitation of narrative. In addition, information along with the DA transcripts and scoring record form included a brief commentary on student modifiability, also known as responsivity to intervention, and SLT effort as observed when undertaking the mediated learning experiences. The action in this AR cycle consisted of the focus group and semi-structured interviews. Thematic content analysis was undertaken during the observing phase of this cycle. Reflecting took place using self-reflective journaling after each group or interview and meetings with the researcher's Critical Friend and the reflections were developed to form the beginnings of the content for Chapters 7 and 8.

Data Collection: Recruitment of Participants

Speech and Language Therapist Participants

Purposive sampling was undertaken when recruiting SLTs in order to target the SLTs with expertise and interest in the area of DLD. It was originally planned to recruit four specialised SLTs (with more than 3 years' experience working with children who have DLD) and six non-specialised SLTs working in Community and Primary Care. The research was advertised in the Specific Language Impairment (SLI) Special Interest Group (SIG) community within the Republic of Ireland's professional body, the IASLT. Now renamed the DLD SIG, recruitment information for this research was sent by e-mail to their mailing list in order to alert relevant interested participants. The first ten SLTs who provided informed consent comprised the participants; see later section regarding consent and ethics. Within this cohort there were five each of specialised SLT working with children who have DLD and non-specialised community SLTs who had children with DLD on their caseloads. This meant that in the final research there were actually not four but five specialised SLTs and not six but five non-specialised SLT participants. These non-specialised SLTs had varying levels of experience with DLD, although all participants had an interest in the area and were members of the IASLT SLI SIG at the time. The decision to accept both specialised and non-specialised SLTs was an attempt to reflect the variety of skill levels within Ireland. There are only a small number of SLTs working exclusively with children who have DLD. For illustration, there are only three Clinical Specialist level posts for DLD in Ireland from 1098 SLTs in total identified as working in the health service in 2018 (IASLT, 2018). This variety of SLT participants and their backgrounds added value to the research and contributed to the real-life applicability of the findings, a goal considered in the selection of this AR methodology.

Child and Parent Participants

Inclusion and exclusion criteria applied to the three child participants who participated in this study, plus the one child participant who participated in the single case study. The inclusion criteria comprised school-age children who had a confirmed diagnosis of DLD and who attended a language class in the county in which the researcher resides. Language classes were selected as this setting has a higher concentration of children with DLD compared with Primary Care settings, and admittance to the language class meant that DLD had already been established as the primary cause of the child's language difficulties. The selection of language classes in the county in which the researcher resided was made for practical geographical reasons due to the requirement to undertake a number of visits to the schools for the purposes of undertaking assessment. School-aged children were selected since DLD is identified by its persistence (Bishop, 2017). Given the challenges in distinguishing between language delay, difference or disorder, particularly with bilingual or multilingual children (Norbury and Sparks, 2013), it was considered beneficial to consider school-aged children rather than younger pre-school children, in order that the diagnosis of DLD be reflective of persistent difficulties extending beyond an initial early language delay. Following ethical approval from the University and the researcher's employer the HSE, approval was sought from the school's Board of Management. When permission had been obtained, letters were posted to all parents of children in the language classes inviting them to participate in the research.

The exclusion criteria specific to this research included severe speech impairment and language levels below an output of three-word utterances. Severe speech impairment was excluded as significantly impaired intelligibility impacts on transcription and can make it difficult for children to mark grammar and tense and it can be difficult for SLTs to identify these markers in speech.

Three-word utterances or above were required as narratives require some early sentence structure for coherence (Westerveld, 2011). The first four parents, whose children met the criteria, who responded and provided informed consent (see section regarding the consent and ethics process) were accepted, with the first child participating in the case study as part of the first AR cycle and the next three participating in the second AR cycle. The first child was referred to as Child X in the pilot case study and the three study children were assigned pseudonyms; Abe, Ben and Cal. Three provided an optimal number of child participant profiles for the focus groups. Having undertaken the single child pilot case study, the researcher reflected on the volume of information generated in a multi-assessment narrative profile and considered the potential impact of an overload of information on the SLT research participants. In addition, initial child assessment results, as early as the first assessment administered with each child, indicated that the three children who participated in this research presented with varying profiles that reflected the heterogeny of DLD. Unique characteristics included a child with exposure to two languages, a child with expressive language as a relative strength, and a child with receptive language as a relative strength.

Data Collection: Tools Used

Focus Group Interviews with SLTs

As noted, interviews were chosen as a data collection tool, rather than questionnaires, in order to obtain in-depth and detailed responses from SLT participants. Group meetings were conducted in a focus group interview style (Marczak and Sewell, n.d.; Savin-Baden and Major, 2013). In order to obtain high quality interviews, a moderator's guide for the interviews (please see Appendix 3 for example of Moderator's Guides used) was created. This was

developed following literature review and the questions were all trialled with two SLT volunteers before being modified as appropriate for the focus groups. As previously stated, the two pilot, or interview trials, resulted in the further refinement of the interview questions; with more prompt questions available as required as well as the introduction of an explanation of DA for participants during the interviews. The moderator's guide included an outline of the basic ground rules for the interview as recommended by Legard, Keegan and Ward (2003), establishing that the interviewer is the facilitator and enabling the SLT participants to discuss their thoughts and feelings. There was an opportunity to reiterate the consent previously given, offering participants the option of withdrawing consent at any time, and also reminding them about the recording taking place. As stated, the interviews lasted no longer than 60-90 minutes and took place in carefully selected private, comfortable settings that were neutral and non-intimidating.

Data Recording and Transcription

The first phase focus group interview with six SLTs was audio-recorded as well as videoed, with participant permission. Group interviews were videoed as well as audio-recorded for analysis; semi-structured interviews were only audio-recorded. Notes were taken by the assistant moderator for the focus group of six participants (the Student Placement Coordinator who also works as a Senior SLT) and the researcher in a secondary activity to the role of Moderator. These notes were in the form of verbatim quotes from participants and the assistant moderator's role involved only making notes of this nature during the interview. This additional data was in place in the case of any recording failures, which did not, in the event, occur. The Focus Group Interview Moderator's Guide example in Appendix 3 contains further information on the questions asked and the prompts available for use as required. The audiotapes were transcribed using a transcription service and

checked and re-checked transcription against the audio-recordings on at least three occasions for each transcript. Jefferson (2004) transcription symbols were used for adult interviews.

The reflective phase of AR, in the first cycle, caused the researcher to consider the responses of the first focus group of six and compare it with the responses received in the smaller groups. It was theorised, following consideration of the initial results from Onwuegbuzie et al.'s (2009) framework and on initial analysis, that the SLTs spoke less per person overall in the large group of six. This theory was proved by replaying the recording, with the finding that agreement with other participants' sentiments took the place of in-depth personal responses in the larger group of six. Therefore, the researcher planned in order to ensure that in phase two of the SLT interviews, the total number in any one group would change to consist of fewer than six participants. In the second phase of focus group interviews, the maximum number of participants in any one group was four: this removed the need for an assistant moderator and reduced formality of discussions. Otherwise, the methods of recording and transcription were the same in phase two interviews.

Some of the SLT interviews took place one-to-one. These took place to facilitate SLT availability and in light of the participants' geographical spread across Ireland. Participants from all four provinces in the Republic of Ireland participated in this study: the three counties of Ulster not part of Northern Ireland, Leinster, Munster and Connaught. In the first phase, two single-participant interviews with SLTs was undertaken along with the six-participant group. In the second phase, one four-participant group interview, one two-participant group interview and four single-participant interviews with SLTs occurred, arranged at the convenience of participants. As noted, in the second

phase the researcher actively planned to facilitate as many smaller groups as possible in order to facilitate detailed SLT responses.

Semi-structured Interviews with Parents

Semi-structured interviews were carried out individually with parents. These interviews took place at comfortable venues chosen by the parents for their own convenience. Two of the parent interviews took place in a quiet room in the school containing the Language Class, with permission from the school, and one interview took place at the parent's home during school hours. Parents were interviewed alone; no children were present. Only one parent for each child attended for interview, by their own choice. Semi-structured parental interviews (Appendix 5) were the means by which the researcher was able to collect rich data regarding parents' opinions and experiences of their children's narratives skills at home; data that are more meaningful for the research goals than that which might be gathered from questionnaires (Harrell and Bradley, 2009). The researcher was able to clarify questions as needed and check understanding of participants' responses. The interviews were audio-recorded, transcribed and analysed (Mathers et al., 1998). Please refer to Appendix 5 for parent interview protocol. This protocol was initially devised based on literature review and research questions. It was first trialled during the pilot case study and the final version was revised before being used with the three parents; for illustration, change was made to the question wording following the pilot case study, focusing on open-ended questions, so as to elicit as detailed responses as possible.

Assessment used with Children: Static Assessment

The researcher administered the research assessments with the four children in this research (case study plus three profiled children). Three static story retell formal assessments of narratives were administered during the pilot case study that comprised the first AR cycle: the *Bus Story Test* (Renfrew, 1997), *Peter and the Cat* (Leitão and Allan, 2003) and *Captain Grey and the Greedy Aliens* (Murphy, 2013). Following the pilot case study, this clinician had hoped to administer only the *Bus Story Test*, as this formal norm-referenced assessment was found in the pilot case study to be quick to administer, provided a transcript that was familiar and could be easily interpreted by SLTs, and provided age-related standard scores with which SLTs would be familiar. The volume of data generated in the child's narrative profile was also large overall given the number of transcripts produced. However, the SLTs interviewed in AR Cycle 1, could not reach a consensus on using either the *Bus Story Test* (Renfrew, 1997) or *Peter and the Cat* (Leitão and Allan, 2003), their two most popular suggestions for formal static narrative assessments. In consultative collaboration with the SLTs, it was agreed to administer both of these assessments as, although both the *Bus Story Test* and *Peter and the Cat* are short static story re-telling tasks designed to assess oral narrative skills, one of these static assessments, *Bus Story Test*, is norm-referenced, and the other one, *Peter and the Cat*, is criterion-referenced. The picture books and examiner's scripts, as per published manuals, were used in this research. Analysis of children's responses considers both the child's use of grammatical complexity and information provided, examining both macrostructure, or content, and microstructure, or form, of the narratives produced on story retelling (Yates and Chen, 2012; Squires et al., 2014; Westerveld and Gillon, 2010).

Assessment used with Children: Dynamic Assessment Process

At the time of conducting this research, there was one commercially available DA of children's narrative skills. This test, the *Dynamic Assessment and Intervention* (Miller, Gillam, and Peña, 2001), was selected and used with the three children. With a focus on a dynamic format of assessment, the scripts provided for mediated learning experiences (MLEs) in this DA addressed some of the primary identified concerns regarding DA's quality and replicability. The scripts presented as useful for achieving consistent introductions, transcendence strategies, et cetera, in the mediated learning experiences. The assessment involves scoring stories using one of the two wordless picture books provided in the pack. An example of pictures from one of the wordless story books, *Two Friends,* may be viewed in Appendix 7. With the information from the first wordless picture book, the SLT can conduct DA sessions, another term for MLEs, to document the student's responses to a supportive narrative learning experience and to determine whether the student would benefit from additional mediated learning sessions. The assessment manual also guides SLTs in conducting interventions using the principles of mediated learning, which is the particular DA process espoused in this test.

In administering *Dynamic Assessment and Intervention* (Miller, Gillam, and Peña, 2001), the wordless story book *Two Friends* (Story 1) is first given to the child as a prompt to elicit a story. The child's narrative, produced in response to this book, is transcribed and analysed. Following analysis, two MLEs may then be planned to target areas of weakness identified in Story 1. Following target area selection, the two MLEs are undertaken. A second wordless story book included in the protocol, *Bird and his Ring*, is presented to the child at least eight or more days after the second MLE has been facilitated. In all, this DA process involves three to four short contacts across three to four different days, in a timeframe spanning nine consecutive days minimum. Both Story 1

and MLE1 can take place on the same day, as occurred in this research. Tape recording and typed transcription was undertaken for both the picture book presentations to elicit narrative generation and the mediated learning experiences.

Naturalistic Group Elicitation and Observations

Naturalistic group observations were undertaken by the researcher in a small group setting with the three children. In a group setting, with peers, the researcher obtained narration at WHO ICF-CY (2007) classification of both activity and participation levels, with the narratives produced being used to tell a story to other children as well as to the facilitating adult. The environment was in their own school setting, for familiarity. The children were also familiar with their peers in Abe, Ben and Cal. Prompts such as finger puppets and small toys, photos of animals and children's television characters were gathered. A standard prompt was used asking the children if they could tell a story about anything that had happened to them and pictures of animals were laid on the table. This tool was devised following literature searching and the questions were developed and subsequently revised following learning from the pilot case study. The prompts used in this group elicitation also included tailored topic prompts as suggested by the children's parents during parent interview. The contextual prompts were considered age appropriate (Westerveld, 2011) for eliciting personal narratives from the children. For illustration, prompts such as small plastic pet animals were presented to the children and the topic of having a pet was introduced. The researcher asked if anyone had a pet. Of those who responded, the researcher asked, "Do you have any funny stories about your pet?". The researcher used feelings as an anchor point for the story elicitation, asking if children knew any funny / sad / scary / happy stories inspired by a particular prompt. The children were asked in turn to tell a story so that each had the opportunity to produce a narrative.

Access, Ethics and Informed Consent

Access

The 2018 General Data Protection Regulation (GDPR) Act has informed the storage of collected information. Prior to its inception the Data Protection Acts (1998, 2003, 2018) were used as guidance documents.

Ethics and Informed Consent

This research proposal received ethical approval from the University of Bath Research Ethics Approval Committee for Health and the researcher's employer: the HSE local ethics committee. In addition, an application submitted to the Board of Management of the school in which Language Classes were located, for permission to undertake research, was successful. As this research involved minors with language impairment, the researcher paid careful attention to informed consent as well as responsibilities regarding safeguarding children and any child protection issues that could arise. Consent to work with the children was obtained from their parents. Informed consent protocols and the right to withdraw consent at any time were included in the Ethics protocols and adhered to during this research. Please see Appendix 6 for participant information leaflet example. The right to refuse to participate or withdraw consent was explicitly referred to in the participant information leaflets. A time frame of at least 24 hours was set between information being given and then consent being sought. In practice, 48 hours was the minimum time provided to participants.

All adult participants were considered to have capacity to provide informed consent. Suitable child participant information was also provided to the children following their parents' consent and their assent was verbally sought. Participant information leaflets (Appendix 6) were provided to both the SLT participants and the child and parent participants prior to seeking consent. These participant information leaflets outlined the purpose of the study, the gathering and management of data collected and the rights of participants to withdraw their consent at any point. As assessment activity is considered routine care in speech and language therapy, child participants were not considered to be receiving interventions significantly over and above those clinically indicated. No harm was identified in relation to child or adult participants with the exception of some time being used to participate in this research. Duty of Care was considered when relaying assessment information to parents and home programmes were available to target narratives if parents were interested in pursuing home practice. The researcher confirmed that all participants had a regular SLT from whom they could receive therapy and provided assessment information summaries for parents to bring to their regular SLTs.

Ethics and Insider Research

Working and researching in the relatively small field of speech and language therapy provided both benefits and challenges (Costerly, Gibbs and Elliott, 2010). It was a beneficial way for the researcher to undertake AR and the researcher had in-depth understanding of the issues discussed as well as a shared frame of reference when communicating with other SLTs. There were some particular challenges, for example, securing consent for the research to take place in locations that included the researcher's own county of practice. The researcher undertook to provide anonymity and confidentiality to all participants including any work colleagues who wished to participate from the

network area; although one could not absolutely guarantee that other participants would adhere to the confidentiality explicitly referred to at the outset of focus group meetings, the confidentiality was reinforced at the outset of every interview. When the researcher has come across information or made interpretations during thematic content analysis that challenged the value system of the professional field, careful examination has been required in relation to how these understandings have come about. In addition, for brief periods there could be temporary power implications when the researcher changed from colleague, and at times senior colleague, given the researcher's job title of Senior SLT, to researcher if a participant who was staff grade SLT co-worker. Reflective journaling assisted in addressing against bias. In addition, the researcher has maintained values of openness, authenticity and honesty and a commitment to truthfully represent the experiences and expressed views of fellow SLTs.

Approaches to Data Analysis

Transcription

The services of Rev.com were utilised in the initial transcription stages for interviews and focus group transcripts were checked at least twice each by the researcher and corrected as needed prior to initial analysis. Child assessments were transcribed verbatim at the time of administration and later cross checked and corrected using the audio recordings. All transcriptions were read, the audio recordings listened to at least three further times and later proof-read for spelling errors. Jefferson (2004) transcription symbols were used for adult interviews.

Thematic Content Analysis

Data from the SLT interviews and from the parent interviews were analysed using a thematic content analysis approach primarily influenced by Braun and Clark (2006). Braun and Clark (2006) argued that instead of embedding thematic analysis within such traditions as grounded theory, thematic analysis should be considered a method in its own right. The authors are critical of an attitude towards themes that implies that they are simply *emerging* from the data, as if the analysis is a passive thing and the researcher does not play an active part in selecting themes and choosing which to report to the reader. In short, the researcher's own role in analysis must be acknowledged. Braun and Clark (2006) select six specific phases of thematic analysis:

i. familiarise yourself with your data;

ii. generate initial codes;

iii. search for themes;

iv. review themes;

v. define and name themes; and

vi. produce the report (Braun and Clark, 2006).

These six phases of thematic analysis were to form a base for the thematic content analysis in this research. In addition, a 15-point checklist of criteria for good thematic content analysis (Braun and Clark, 2006) was applied during reflections in order to maintain quality within the research.

In contrast to Braun and Clark's focus on thematic analysis, Vaismoradi, Turunen and Bondas (2013) make a strong argument for content analysis and warn "flexibility can lead to inconsistency and a lack of coherence" (Vaismoradi, Turunen and Bondas, 2013, p.398). However, their arguments for the differences between thematic analysis and content analysis, with no reference to a hybrid concept, such as thematic content analysis, did not stand up to strong scrutiny. While the philosophical backgrounds may differ, the analysis process was strikingly similar and the final products also appeared strongly similar when considered and reflected upon in reflective practice during AR and some considerations follow.

To understand and choose the analytical approach for this research, relevant literature was examined in both thematic and content analysis fields. For illustration, in thematic analysis one spends time *familiarising with data* (Braun and Clarke, 2006) whereas with content analysis the researcher is *being immersed in the data* (Vaismoradi, Turunen and Bondas, 2013). There is coding in both approaches. Both approaches require review. Both approaches require a final report and both benefit from visual supports, either called a *thematic map*, in thematic analysis, or *conceptual map*, in content analysis. Elo and Kyngas (2008) further informed on the process of content analysis. Vaismoradi, Turunen and Bondas (2013) used the hybrid term *thematic content analysis* and argued that most thematic content analysis is mainly thematic analysis with some elements of content analysis involved. Gale et al. (2013) offered a Framework Method for analysis that had similarities to Braun and Clarke (2006). These writings were considered in framing this research's thematic content analysis framework.

Onwuegbuzie et al. (2009) had referred to constant comparison analysis and keyword-in-context analysis for focus group interviews. Constant comparison analysis in Onwuegbuzie et al. (2009) referred to three stages: open coding

for codes, axial coding for categories and selective coding for themes. This approach to coding was incorporated into the final analysis strategy for the interviews. Keywords-in-context was only used for later discussion chapters as it is a concept used to conceptualise how words are used in context, when reflecting on the culture of the use of a word. In summary, the thematic content analysis used in the research amalgamates elements from Braun and Clarke (2006) as the main influencer, along with Elo and Kyngas (2008), Gale et al. (2013) and, to a lesser degree, Onwuegbuzie et al. (2009). The process is primarily thematic in nature with a secondary consideration of content analysis. Tabular summary follows (table 3.1), an excerpt from the researcher's self-reflective journal.

Table 3. 1 Phases of the researcher's thematic content analysis

PHASE 1: Familiarise myself with the data
Consistent across Braun and Clarke (2006) and Gale et al. (2013), I familiarised myself thoroughly with all the data, reading and re-reading the transcripts and trying to make sense of the data as a whole (Elo and Kyngas, 2008). I took notes alongside the data as described in both Gale et al. (2013) and Braun and Clarke (2006). I identified the units of analysis (Elo and Kyngas, 2008) and data items (Braun and Clarke, 2006).
PHASE 2: Generate initial open codes
Open coding was identified across Braun and Clarke (2006), Elo and Kyngas (2008) and Gale et al. (2013). My initial coding took place in a side margin of the documents. Coding sheets referred to by Elo and Kyngas (2008) were Excel spreadsheets in my situation and helped to develop analysis matrices or frameworks (Elo and Kyngas, 2008; Gale et al., 2013).
PHASE 3: Search for themes: group and categorise data
Gathered data by content (Elo and Kyngas, 2008) and collated into potential themes (Braun and Clarke, 2006).
PHASE 4: Review themes: constant comparative analysis
If not already begun, in this stage I reviewed the themes and compared my coding and theme / category generation as the data was being gathered. I began again with theme / category searching (PHASE 3) as often as necessary until no new themes or categories emerged.

PHASE 5: Define themes
This stage involved abstracting (Elo and Kyngas, 2008) and naming (Braun and Clarke, 2006) themes. I developed more detail on how each theme (/ category) would be defined and considered sub-themes and sub-categories as well as main themes (/ categories).
PHASE 6: Produce final report
This element is heavily emphasised in both Braun and Clarke (2006) and Elo and Kyngas (2008). My report was a document-in-progress, with final analysis and interpretation occurring as the report was being generated. I supported each theme with references from the interviews and focus groups. I related the findings to my research questions. At this stage, I also considered the findings of micro-interlocutor analysis and turn-taking with regards to the focus group (Onwuegbuzie et al., 2009) to see what learning could be extracted from these details.

Justifying Claims in Qualitative Research

This AR thesis aims to maintain rigour and quality standards in order to produce research that has validity. Melrose (2001) presented the viewpoint that some researchers consider rigour synonymous with validity. The researcher acknowledges the close relationship between the terms in relation to AR. Research validity is concerned with the accuracy and trustworthiness of data, assessment tools used, and research findings (Melrose, 2001). Melrose (2001) advocates for measures of *internal, external* and *construct validity*. Internal validity is concerned with whether the change in AR is a result of reflection and action, or of something else. External validity asks if the results can be generalised or transferred to another community. Construct validity ascertains if the method of gathering data is appropriate for the underling paradigm. All of these can add to rigour in AR and this research has aimed to achieve validity across these three parameters.

Validity in AR

Criticism of AR generally addresses one or more of the following areas: the role of the researcher; the project design and validity; the measurement of outcomes; and whether AR is a research method (Koshy, Koshy and Waterman, 2011). Waterman et al. state that “it has been argued that action research is anecdotal and subjective, and that it is inherently biased due to a lack of researcher independence or separation from the research process” (Waterman et al., 2001, p.2). To counteract some of these claims, it has been argued that a process of critical reflexivity and self-reflection (McNiff, 2013) would help researchers to undertake the dual roles of professional and researcher. In this AR, self-reflection was combined with robust ethics applications tailored to the unique situation of insider AR. Whilst the project design may not have validity in the traditional positivist or scientific sense of the word, any knowledge claims made as a result of this AR project are able to be validated.

Validation in AR is four-fold. Firstly, the researcher became one’s own best critic, involving self-evaluation. A research journal, or diary, was kept. The research journal contained observations as well as commentary and self-reflections following the various stages of each of the AR cycles. It also included commentary on the development of various elements of this research, for example the thematic content analysis approach. The researcher addressed methodological issues by undertaking systematic enquiry with personal and social intent. When making claims, the researcher reflected on whether the claims were: Comprehensible? Truthful? Authentic? Appropriate? (McNiff, 2013).

As previously referred to, the researcher formally liaised with a Critical Friend. The concept of a critical friend (Riel, 2019) or critical colleague in AR is a partner who can advise, critique and support the researcher during the AR process (Kember et al., 1997). The Critical Friend in this research had over 20 years' experience working as a teacher in schools with children who had speech, language and communication needs secondary to Autism Spectrum Disorder diagnoses. In addition, she had herself completed a Professional Doctorate in Education. This Critical Friend has had a key role in ensuring that the research has validity and rigour, as anticipated when an Action Research methodology is employed. She also provided inter-rater support during the initial coding stages of thematic content analysis. The researcher considered the Critical Friend to be an insightful and responsive conversation partner during the researcher's own process of answering the following questions, which arose during the AR cycles: Does the report accurately describe what is happening? Does the evidence support the claims being made? Are emergent knowledge claims tested within the report itself? Is there evidence of methodological rigour? Is there evidence of the need to link new knowledge with clinical practice? (McNiff, 2013).

In relation to rigour (McNiff, 2013), the researcher considered each AR cycle when writing up this thesis. The researcher also tested her own assumptions and interpretations of what was happening by engaging with supervisors and the Critical Friend in order to challenge her own assumptions and interpretations of what was happening during the cycles. The triangulation of data (Armstrong et al., 1997), during the multi-method assessments used when gathering the child data for the narrative profiles, ensured that a number of different views of the situation were recorded for analysis and interpretation. The formal static- and dynamic- assessments used were undertaken according to the exact instructions in the relevant manuals. Analyses of transcripts were undertaken in a systematic manner. Extracts from the transcriptions were made available to the Critical Friend to facilitate discussion

regarding initial coding at the beginning of the thematic content analysis process. Additional rigour was facilitated by the recording and transcription of all interviews.

Quality in AR

Concerns regarding quality and rigour in AR are systematically addressed by Coghlan and Brannick (2010, p.14). In relation to quality, they ask researchers to answer questions such as the following:

- *Is the AR explicit in developing a praxis of relational participation?* A good working relationship was established, based on rapport and mutual respect, between researcher and the SLT participants. This is most clearly seen in the fact that all participants continued to participate and undertook the second interviews, despite a time interval between interviews.

- *Is AR guided by a reflexive concern for practical outcomes?* This was ensured by considering practical outcomes during self-reflective journaling.

- *Does the AR engage in significant work?* This work adds considerably to the body of research undertaken in language classes in the Republic of Ireland and to children with DLD in Ireland.

- *Does the AR result in new and enduring infrastructures?* The focus on a more comprehensive, encompassing, narrative assessment approach aimed to result in sustainable change for children with DLD, both in language classes as well as in the workplaces of the other SLTs

involved in this research. Also, the participating SLTs, their co-workers and other SLTs who read about this research may choose to employ any principles, or tenets, for narrative assessment agreed upon in this research. In addition, future SLT students mentored by one of the SLT participants could benefit from the new knowledge gained by participants, thus passing the findings to newly-qualified SLTs for years to come.

An alternative conceptualisation of quality in AR is considered by Newton and Burgess (2008). Their contribution returns to reflection on the three primary modes of AR; knowledge-generating, practical and emancipatory, with the first two being relevant to this particular AR. Five *validities* may be considered across these modes. Outcome validity refers to the extent to which the outcomes of the AR match the intended purposes of the research. This type of validity is primary and key in both knowledge-generating and improvement of practice modes. Process validity is concerned with the efficacy of the chosen approach in addressing the research problem. Process validity is considered a secondary key form of validity for knowledge-generating AR (Newton and Burgess, 2008). Catalytic validity is considered a secondary form of validity for improvement-of-practice modes of AR, focusing on the ability of the research process to stimulate further social action. This research operated primarily across both knowledge-generating and practical modes and as such there was focus on outcome, process and catalytic validity. The researcher considers the outcomes of the research to have met their stated purposes in the research objectives and that the research approach was efficacious in addressing the research problem. In deepening the knowledge of both the researcher and the SLT participants in relation to narrative assessment for children with DLD in Ireland, research validity is contended.

In summary, the researcher has taken systematic steps to imbue this research with valid and quality processes and practices in order to justify the claims that arise from it. The next chapter considers results that emerged from this research.

Chapter 4: Results and Analysis of Focus Group 1 (AR Cycle 1)

This AR cycle was concerned with the first focus groups for the SLT participants. As previously noted, the first focus groups aimed to obtain responses to the first research question and to achieve the first research objective: to ascertain the elements of oral narrative assessment considered important to specialised and non-specialised SLTs. Ten SLTs participated in this research. Having firstly obtained biographical data, the following questions were asked (see Moderators' Guide in Appendix 3):

- What comes to mind when you think of the term 'narrative skills'?
- How do you usually assess narrative skills in children with language impairment?
- Are you familiar with dynamic assessment? (Moderator to provide specific
- information per Moderator's Guide if not)
- With that information, what role do you think Dynamic Assessment could play in assessing narrative skills?
- What do you feel a comprehensive narrative assessment should comprise?
- The various elements of the action plan for the next cycle (assessing the children's narratives) were outlined to SLTs for discussion and feedback.

Jefferson (2004) transcription symbols were used for all adult interviews. In this system, upper case indicates syllables or words that are louder than surrounding speech. In this thesis, an objective notation of vocal volume was used as a preference to the use of underlining for vocalic emphasis, which would have required greater transcriber interpretation. For the purposes of confidentiality, the ten SLTs are identified by letters. The participants' profiles follow in Table 4.1.

Table 4. 1 SLT Participant profiles (Focus Groups)

Partici-pant	Experience / Background	Focus Group 1	Focus Group 2	Child Profile Rec'd Focus Group 2
Aa	Employed as Senior SLT - pre-school setting for children with a diagnosis of physical disability. Aa considers a number of these children to have DLD in addition to physical impairments, 15+ years working. Member of DLD SIG. Graduated from undergraduate qualifying programme I in Ireland.	Group interview, n=2	Individual	**Cal**
Ab	Employed as Senior SLT - Language Classes and Community / Primary Care. 12+ years working with children who have DLD. Member of DLD SIG. Graduated from undergraduate qualifying programme I.	Group interview, n=2	Individual	**Cal**
B	Employed as SLT and Regional Clinical Placement Facilitator. 5+ years working with children and adolescents with DLD in primary care and school settings. Member of DLD SIG. Graduated from undergraduate qualifying programme II.	Individual	Individual	**Ben**
C	Employed as Clinical Specialist SLT - Language Classes and Community / Primary Care. 20+ years working with children who have DLD. Member of DLD SIG. Graduated from undergraduate qualifying programme I.	Individual	Individual	**Cal**
Da	Employed as SLT - Community / Primary Care. 8+ years working with children who have DLD in primary care. Member of DLD SIG. Graduated from post-graduate qualifying programme II.	Group interview, n=6	Group interview, n=2	**Ben**
Db	Employed as SLT - Community / Primary Care. <2 years post-graduate experience working with children who have DLD, as part of a mixed community caseload. Graduated from undergraduate qualifying programme I.	Group interview, n=6	Group interview, n=4	**Abe**
Dc	Employed as SLT - Community / Primary Care. 3+ years working with children who have DLD, most of which was gained in private practice. Graduated from post-graduate qualifying programme II.	Group interview, n=6	Group interview, n=4	**Abe**
Dd	Employed as SLT - Child and Adolescent Mental Health Team. <2 years post-graduate experience working with children and young people who have DLD, however, specialized experience within a DLD-specific setting. Graduated from post-graduate qualifying programme II.	Group interview, n=6	Group interview, n=2	**Ben**
De	Employed as SLT - Community / Primary Care. <1 year experience working with children with DLD as part of a mixed community caseload. Graduated from post-graduate qualifying programme II.	Group interview, n=6	Group interview, n=4	**Abe**
Df	Employed as SLT - Community / Primary Care. <1 year experience working with children with DLD as part of a mixed community caseload. Graduated from undergraduate qualifying programme III.	Group interview, n=6	Group interview, n=4	**Abe**

Thematic Content Analysis and Results

In analysing the data gathered from the ten SLTs in the first focus groups, some common themes and sub-themes were generated from data across interviews. There were three main themes: Narratives and the SLT; The SLT at Work; The SLT's sense of 'self'.

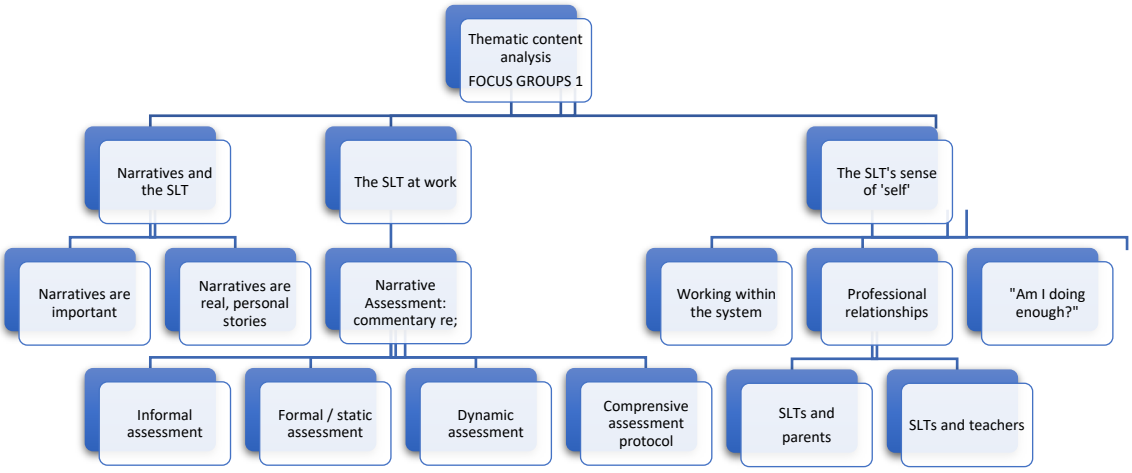

Figure 4. 1 Thematic content analysis for Focus Groups 1

Narratives and the SLT

This main theme encompasses the attitudes, experiences and values expressed by SLTs in relation to narrative skills. This theme was generated from data in the responses to the first question posed; "What comes to mind when you think of the term 'narrative skills'?"

Narratives are considered by SLTs as important

The participating SLTs reported narratives to be important. Specifically, they are considered key skills that speech and language therapy service users should have; “one of the most key important areas” (Participant B, lines 49-50). Narratives are “the most practical skill children and adolescents should have” (B, lines 57-59). They are vital for “functionality” (Da, line 92). One SLT considered that “everything kind of comes under it” (Dc, line 109). Narratives “can mean lots of different things on lots of different levels” (Dd, lines 97-98). Participants across the focus group strongly agreed that narrative skills were “a powerful tool” (Da, line 104), with head nodding, murmuring and comments of “yes” and from the five other focus group members (Db, Dc, De, Df) to this comment. These quotes are consistent with Kemper’s assertion that “storytelling is one of the first uses of language and one of the most skilled” (1984, p.2). The impact of DLD on the acquisition of narrative skills was also highlighted by one participant, who stated that “narratives skills are HUGE but for a child with SLI it is like EVEREST” (C, lines 349-350).

However, while SLT participants expressed, and agreed with each other in a group setting, that narratives are important, there was not as much reporting of regular specific/targeted assessment or treatment of narrative skills as would be expected from its acknowledged importance. Participant B reported that narrative skills are “really important to work on” (line 68), yet also said that “we don’t target narrative per se as like a direct intervention” (line 54-55). Participant Ab commented “I suppose it makes me realise that I don’t really dedicate enough time to narrative you know I would never do a whole session on narrative” (lines 246-249). In intervention, participant Ab reported “I’d usually add it into the end” (lines 249-250). When assessing a child with DLD she observed that “I kind of tend to you know try and tie it in with other stuff” when not undertaking “a formal assessment” of narrative (Ab, lines 251-253).

Participant Da reported that “I tend to do [narrative assessment] sometimes” (lines 135-135).

It is suggested that the disconnect between expressed importance of narratives and reporting of assessment and intervention of narratives may be an indication that it is not as important in everyday clinical practice to clinicians as they acknowledge it to be in theory. Some SLTs may be aware of possible incongruence; for example, participant Da asked the researcher at the end of the focus group, “Are you finding Louise that people aren't using narrative as much as they should be? or is that what the research is saying (.) or?” (Da, lines 669-672).

The SLTs’ comments on narratives also illustrate the areas of spoken language involved in their production. One SLT commented “it’s syntax and it’s semantics but are we fixing that whole social piece?” (C, lines 612-613) in relation to narratives. Another considered that “storytelling to me has always come in under the semantic/pragmatic as well” (B, lines 376-378). Participant B additionally commented that narrative language was “the one I suppose that we hope that all our other structured interventions would generalise to” (B, lines 51-53), indicating that narratives may be considered an indirect, rather than a specific, therapy target for this SLT. Participant Dd expressed that narrative assessment could mean “you're looking at the overall macro-structure or if you're looking at more the grammar of being able to put together a narrative at a sentence level” (Dd, lines 99-102), a comment that was non-verbally agreed with by other group members as evidenced by head nodding and murmuring (Da, Db, Dc, De, Df).

Narrative development involves an extended trajectory that requires the integration of linguistic, cognitive, and social capacities and the participating SLTs described possible difficulties in assessing this area of language. Participant Aa reported that narrative skills were “hard to quantify” (line 88). Participant Ab described narrative skills as “hard to analyse” (line 89). Participant Dc considered, in response to the opening question of what comes to mind when thinking about narrative skills, that “everything kind of comes under it” (line 109). When contemplating assessment of narratives with children who have DLD, participant C reported that “it’s VERY difficult because there’s actually little LANGUAGE and they’re you’ve to really try to find something that THEY like” (C, lines 696-699). It is acknowledged that the participants were not asked how often they assessed narrative skills, in comparison with other areas of language, and this information was not offered by SLTs during the course of the focus group interviews.

Narratives are considered in terms of real, personal stories

When framing a definition of narratives, a common theme was generated across the participants: the narratives that SLTs consider ‘important’ are not structured retellings of stories from picture prompts, or academic writings in the subject of English, but “storytelling skills” (Aa, line 32) and “telling stories” (Df, line 91; and also, Da, line 132) of “that real lived event” (Aa, lines 420-421). Personal stories are what are considered useful socially: “It’s the old personal stories? kind of matters socially doesn’t it?” (Aa, lines 282-284). These stories are personal to the children, such as those elicited when a child responds to a question like, “What did you do for the weekend?” (Dd, line 420; and also, Da, line 140) or talking about “a favourite book or favourite film they’ve recently watched” (B, lines 108-110). It was considered to be key that a child have the skills to be “able to share your day or share a story with your family” (Dc, lines 93-94). SLTs keep narratives personal by putting “the names

of siblings" (C, line 730) into stories being told to the children; and value was placed on ascertaining if the children "could generate their own story" (B; lines 317-318). There is an awareness of the importance of supporting the development of functional narrative skills that can be independently used in real life settings: "It's all very well to support them talking but I'm not going to ALWAYS be facilitating them in their LIVES" (C, lines 423-424). The importance participants placed on real-life, personal narratives will be later discussed in terms of assessment practices in chapter 7.

The SLT at Work: day-to-day practical considerations

The SLT and the assessment process

Current assessment practices were discussed in response to the question, "How do you usually assess narrative skills in children with DLD?" and the responses follow.

Informal assessment

Informal assessment is used when assessing narrative skills in Ireland, with SLTs referring to "informally looking at just the child's ability to recount what's happened to them during the day" (Aa, lines 33-35) and "informally just looking at what they can do en route" to the SLT therapy room (Aa, lines 68-69). Participant B also noted, "I would normally do it [narrative skills assessment] through an informal analysis initially" (B, lines 77-78), and participant Dc observed that when assessing narrative skills, "a lot of it would be language samples or a more informal [assessment]" (Dc, lines 118-119). Some SLTs,

for example, participant Ab, consider the assessment of sequencing skills to be key: “I suppose I rely a lot on kind of assessing the sequencing skills” when assessing narratives (Ab, lines 45-46). The widespread use of informal assessment in language assessment overall is confirmed by Williams and McLeod (2012), and this research reflects similar findings in narrative assessment for children with DLD in Ireland.

Only two participants referred to parent report or teacher report being an element of current practice, with participant Dc reporting that when she undertakes narrative assessment she considers “a more informal parental report around or teacher report (.) where he just can't get his message across or that he got muddled up” (Dc, lines 119-123). Responding to this comment, participant Da recalls that she tends to have parents contact her at the request of a child’s teacher: “I suppose my experience as well would be you know a lot of teachers getting parents to contact us for and we'd do speech and language assessment or maybe a first initial assessment (.) and they come out with something within upper limits (.) but their reports from school or home are that they're having difficulty telling stories or writing stories as well” (Da, lines 124-133).

Static Assessment

The first set of focus groups confirmed that static assessment is used when assessing narrative skills in Ireland, with participants reporting usage of both static norm-referenced tests and static criterion-referenced tests. The *Bus* Story Test (Renfrew, 1997) was referenced by five participants: Ab, Aa, B, C and Dc. Peter and the Cat (Leitão and Allan, 2003) was referenced by four participants: Aa, Ab, Da and Db. The Expression, Repetition and Recall of

Narrative Instrument (Bishop, 2004) was referenced by three participants: Ab, B and C. The narrative subtest of the Assessment of Comprehension and Expression (Adams et al., 2001) was referenced by one participant; Ab. The Test of Narrative Language (Gillam and Pearson, 2004) was also referenced by one participant; Da.

Speech and Language Therapists expressed ambivalence towards the static assessments used to assess narratives in Ireland in the first round of focus groups. On the one hand, static norm-referenced or criterion-referenced assessments are considered “kind of the ideal test to do” (Dc, line 368) as “it’s good for norms and then for parents to just quantify then as well” (Db, line 365-366). Static standardised assessment use was supported because “to measure progress as well it’s good to have it” (Df, line 369). Participant C also reported utilising static formal assessment as a tool pre- and post- intervention “to see do you make a difference” (C, lines 1079-1081). On the other hand, static assessment usage in Ireland was not considered totally without criticism from the participants. One participant noted that “they all seem to measure different things” (Ab, lines 295-296). Another noted the significance placed on static standardised assessments results by sources such as the Department of Education and Science in Ireland, for example, when determining eligibility for teaching supports in primary schools (before recent changes by the NCSE), saying that “everything is based on the standardised score” (B, lines 131-132). She also expressed satisfaction that the Department of Education and Science “are moving away from this 'minus two standardisations to get your 3.7 hours resourced’ or whatever it is” (B, lines 346-349) in order for a child with DLD to access additional teaching supports.

Content analysis of the comments in the first round of focus groups relating to static assessment indicated that more newly qualified SLTs, less specialised in DLD, offered lengthier explanations as to the value and benefit of static assessment (Db <2 years, Dc 3+ years, Df <1 year) than the more specialised, experienced clinician who expressed opinions (C 20+ years). Where the shortcomings of static assessment were described by participants, the SLTs who offered criticism were those experienced SLTs with more post-graduate experience working with children who have DLD (Ab 12+ years, B 5+ years)

Dynamic Assessment

The SLTs were initially asked if they were familiar with the term 'dynamic assessment'. The most common response to this question was "not really" (Aa, line 95; Ab, line 96; C, line 885; Db, line 258; De, line 259). Three participants who were in the larger group did not respond verbally (Dc, Dd). Two of the ten participants answered in the affirmative (B, line 186; Da, line 257). All participants, including the two who said they were familiar with DA, elected to hear a description of the term (description contained in Moderator's Guide in Appendix 3). On hearing this description, SLTs expressed understanding of the term and only the larger group opted to watch the introductory video by Dr. Elizabeth Peña (see Moderator's Guide in Appendix 3.

Having been provided this description, participants were asked, "What role do you think Dynamic Assessment could play in assessing narrative skills?". The response was positive towards the approach as a whole, with some specific criticisms of the particular test books to be used with the children in this research project. One SLT confirmed that "I think there would be a role for it"

(Dc, line 328). Another SLT commented that “you’re really allowing the individual to show what their strengths and skills ARE and if you have to mediate it and come in you’re looking to see are there skills and things within there that haven’t yet been utilised and so you’re going to see how you can allow more learning to be developed in the child” (C, lines 897-903), in a process whereby “you’d be looking within your own head sort of reflecting back” (C, lines 906-907). Participant B noted that “by using a dynamic assessment you would learn more about the child throughout that process” (B, lines 276-278). Participant Ab considered DA to be a process by which she could “think about things like well (.) what effort did I apply (.) and did the child actually learn? You know? I suppose did he take what we did this week into next week. You know (.) to really measure it (.)” (Ab, lines 256-260). Participant Dc offered, “I think there would be a role for it. To teach the narrative skills or the gaps in the narrative skills (.) and see if they respond to that and if they're generalising it (.) and then like pre-test. kind of a pre-test” (Dc, lines 328-333). Participant Db noted, “It’s kind of like an outcome measure as well isn’t it” (Db, lines 334-335), which was affirmed by other participants using head nodding and verbal agreement (participants Db, Dc, De, Df).

Some participants discussed whether or not they were already using DA in their clinical practice in Ireland. Participant Aa reported that she is doing DA “now” (Aa, line 178), continuing “well probably small, less structured than you're describing” (Aa, lines 178-179) and later commenting that what she undertakes at the moment is “<u>not</u> maybe totally measuring the input and the time and the output in a <u>very</u> structured way” (Aa, lines 233-235). Participant Ab reported that DA is something she considers she might “informally in my head do” (Ab, lines 264). Participant B considered DA to be something that is being used already: “I think without formally calling it 'dynamic assessment' is probably something that therapists have been using so far to date without kind of even realising that they have been doing dynamic assessments” (B, lines 236-241). She also later commented that it is something she considers she is

probably doing herself: “it's probably something that I've been using without calling it dynamic assessment. and I think a lot of therapists have been using it” (B, lines 385-388).

Participant B also observed that DA could have benefits for SLTs in Ireland if it were used more strategically: “I think that the role of dynamic assessment based on some of the constraints we've said already about kind of the TIME being a factor and resources if resources were a factor (.) that dynamic assessment could really buffer out those as being factors. because if you were to use it more STRATEGICALLY and use the task-teach kind of element that dynamic assessment would be a bit more fluid during your block of therapy rather than having to have tests (.) spend two sessions testing and then some therapy and then reassessments after” (B, lines 242-255). Participant Da commented, “I think it's one of those things maybe people were doing already but a little bit and I wonder again like is it truly then dynamic assessment” (Da, lines 336-340). Content analysis revealed that only the more experienced, specialised SLTs reported that SLTs were already undertaking DA (Aa *15+* years, Ab *12+ years*, Da *8+ years,* B *5+ years*). This uncertainty regarding what exactly DA looks like in clinical practice in Ireland will be further discussed in chapter 7.

The specific test book shown to the focus group drew criticism that snowballed across the larger group: Onwuegbuzie et al.’s (2009) framework, in Appendix 4, was helpful in evaluating this group response- so that they were strongly in agreement regarding negative feelings towards the book pictures (participants Da, Db, De, Df): participant Da opined, “It's quite busy though, isn't it?” (Da, line 688). Db asked, “Is it meant to be confusing?” (Db, line 692). Da additionally observed the book to be a “bit weird looking” (Da, line 707). De

commented, “This pattern will not (2) you know it's just” (De, lines 708-709), with Df interrupting to refer to the depictions as “psychedelic” (Df, line 710). The wordless picture books (examples of pages from one of the wordless story books used in this research may be found in Appendix 7) were specifically designed to be accessible in a multi-cultural environment such as the US which was noticed by one participant: “but it's kind of the pattern of [1] I feel like it's nearly culturally trying to be too American and Mexican” (Da, lines 694-696). One group participant, Dd, did not offer an expressed opinion on the picture books. Participant Dc only commented to add, “Now that you've told me the name of it, I can see that there's a bird with a ring” (Dc, lines 704-705). The group discussion contained one positive comment, in relation to the picture book’s images and meanings being accessible to a larger and more multi-cultural audience: Da commented, “I think it's good for (1) child can go off topic easier (.) go off script” (Da, lines 700-701). This larger group was the only focus group in which participants commented specifically on the picture books to be used.

The participants in the larger group were also the only participants to comment specifically on the record form planned for use with the chosen DA. In contrast to the picture books, the record form was strongly agreed to be helpful in both layout and content, with support in the form of head nodding and murmuring (Da, Db, Dc, Dd). Participant Dc noted that “the record form is nice” (Dc, line 711). Da commented, “I LOVE the record form” (Da, line 712) and continued, “I must say I love the teaching effort bit because like how many times does your three sessions get that done? You know what I mean? You know yourself that's atypical and unusual, but I love that section” (Da, lines 713-718). Content analysis of comments indicated that the more newly-qualified and non-specialised SLTs were more cautious in expressing positive commentary regarding DA (Db < *2 years*, Dc *3+ years*) than the more experienced SLTs who commented were (Ab *12+* years, Da *8+ years*, C *20+ years*) but were also less critical of DA in general than their more experienced, specialised

colleagues (Da *8+ years*, B *5+ years*), with specific commentary regarding the picture books and record forms excluded from this analysis.

A Comprehensive Assessment Protocol

Speech and Language Therapists were asked their opinions on what they felt a comprehensive narrative assessment should comprise. Participants Aa and Ab would include static formal assessment, with Aa commenting that “they're very useful for tracking (.) aren't they?” (Aa, line 267) and Ab verbally agreeing. Participant B also considered she would include static standardised assessment: “I don't think that I would not use formalised or standardised assessments by all means” (B, lines 355-357). Participant C agreed that she would also include static standardised assessment. In the larger group, participants Db, Dc, Dd and Df agreed that they would include static standardised assessment. Db considered, “I think it's good for norms and then for parents to just quantify then as well” (Db, lines 365-366); Dd reported that static standardised assessment would “standardise it” (Dd, line 367); Dc reported that “it’s kind of the ideal test to do” (Dc, line 368), and Df agreed “to measure progress that as well it's good to have it” (Df, lines 369-370).

Participants Aa and Ab would include DA in a comprehensive protocol, with Aa responding, “OH YEAH. I would say (.) yeah. Certainly, that response to intervention thing” (Aa, lines 319-321). Ab reported that in the language class setting in which she works, she “would be able to do a little bit of that as well” (Ab, lines 336-337). Participant C also agreed she would include DA in a protocol, saying, “Aw I do. I do” (C, line 1077). Three participants in the larger group said they would include DA in a comprehensive narrative protocol for use in Ireland, with Df and Da verbally agreeing and De identifying clinical

utility with bilingual and multilingual clients: “I think in particularly for those children that are possibly bilingual (.) I think dynamic assessment is really good for teasing out whether (1). if you quickly teach strategies will the child (1) will a bilingual and multilingual kid pick on those strategies and be able to use them very quickly (.) in which case you're probably dealing with a language difference as opposed to disorder. So, I think it would be very good. I think it's a good tool there for those kind of clients” (De, lines 376-387).

Speech and Language Therapist participants were asked following question: “What about parent or child interview? Why / why not (use in a comprehensive assessment)?”. Participants reported that they wanted to review information from parents on the children in the study, although at this initial point in the first set of focus groups, parent interview was not conclusively agreed upon by the SLTs as something they would definitely include in a comprehensive assessment protocol for use in Ireland. Participant Aa reported she would include it: “It’s interesting to track what parents are reporting with their intervention and their ability to initiate stories” (Aa, lines 241-243). Participant B stated that “asking the parent about the child's skill or asking the parent to get the child to tell a story” (B, lines 470-472) would be beneficial; “I definitely think there’s a role for it” (B, lines 475-476). She also suggested sending out a Likert scale to parents “about you know (.) rate your child on a Likert scale of one to seven (.) telling stories (.) introducing characters (.)” (B, lines 588-592).

Participant C was more ambivalent regarding parent interview: “I think there is value in a brief parent interview but rather than come with YOU KNOW what (1) narrative is a big word for a parent” (C, lines 1148-1151). Participant Dd was similarly circumspect regarding parents’ insights into their children’s

narrative skills: “I think parents sometimes don't know why they're not understanding their child. They say they're talking too fast. Might say the speed. That's what I mean about not being able to explain it. This is a broad umbrella of everything.” (Dd, lines 439-445) which drew strong agreement from other participants who murmured and nodded their heads in assent (participants Da, Db, Dc, De, Df).

Parent report may not be wholly ‘trusted’ in some respects - “it wouldn’t be something reliable to do on its own” (B, lines 479-481) - and is considered a secondary source of information: “I think sometimes it’s second-hand knowledge” (Dc, lines 240-241). It is possible that conflicting goals, or even different language for the same goals, could also be a feature of the parent-SLT relationship. There could be a negative impact on the SLT-parent relationship when both parties have divergent goals. Participant C commented, “YOU have all these - want this child to achieve all these things, but WHEN you go to the PARENT, all the parent wants is for their child to talk and to be able to converse and to mix with their peers” (C, lines 558-562), suggesting that “they [parents] don’t care. How you do that” (C, lines 564-565) to achieve the goals. Child interview was agreed to be a potential element of comprehensive narrative assessment by participants B, C and Dc but not expanded upon more than Dc’s comment that “I know those older children might be able to tell you themselves as well (.) where they struggle” (Dc, lines 249-249),

Speech and Language Therapists would include other informal measures in a comprehensive narrative assessment for school-aged children in Ireland, with participant Aa and Ab agreeing informal assessment should be included. Participant B reported that she would typically associate informal assessment

with speech evaluation, but also gleans information on narrative skills at the same time: “I suppose I think of more informal assessments for speech (.) but any informal assessments that I carried out would have always been on a narrative level as well” (B, lines 420-424). It is possible that participant B considers her informal assessment practices to include narratives already as she later commented, “I don't think I would rule out using additional informal assessment, but I think narrative is always is where I've used it informally” (B, lines 435-438).

Observation in a natural environment, such as a classroom, was referred to by Aa, Ab and Dc, although Aa and Ab noted difficulties with this practice in lines 340-346:

Ab: “on occasion I would sit in on a class. but-”

Ab: “-don't see what you need to see (.) really (.) isn't it?”

Aa: “well your presence (.) as a strange adult (.) they're all (1) it changes the behaviour.”

Ab: “yeah. yeah. yeah (.) it's true.” (lines 340-346).

Considering the merits of naturalistic language elicitation in comprehensive narrative assessment, there was broad support for capturing narratives in this manner in these first focus groups. Participant Aa recalled, “I know what I've done sometimes (.) sometimes accidentally and sometimes on purpose

((laughter)) is just have a bit of a disaster in the clinic, like spill a glass of water or something and mop it up and then we build the story – “Oh (.) I need to be careful with that glass because do you remember what happened?" - you know and then see can they tell the preschool staff when they go back to their ROOM” (Aa, lines 404-413). Participant B reported that she would “most definitely” (B, line 449) want to capture naturalistic language, previously reporting “when I think of narrative, I'm kind of thinking of a structured narrative versus kind of unstructured narratives as well” (B, lines 302-305). Participant C highlighted the importance of choosing prompts that the children would respond to: “I’d go naturalistic with them but you really have to be careful about what you would pick so that it’s you get. get them going.” (C, lines 167-168). Participant Dd referred to language elicitation in a class setting, reporting value in her experiences of “doing wee stories in class you know what did you do for the weekend. and then seeing do they use the different elements that you've been teaching because that generalises the class learning” (Dd, lines 419-424).

Additionally, SLTs suggested teacher report as being worth considering for inclusion in a comprehensive narrative assessment, and it was explicitly referred to by three participants: Aa (line 352), Ab (lines 459-462) and B (line 601). Ab reported “I find using the teacher actually very important (.) because as a teacher report (.) because they do see a lot of the narrative (.) don't they (.) in the class?” (Ab, lines 459-462) and Aa also reported it to be important, considering it important “if I can convince the teachers that I trust their report, you know?” (Aa, lines 349-350). Participant B reported, “I would always send one of those [questionnaires] out to school” (B, lines 617-618).

While not referring to teacher report as part of a comprehensive narrative assessment, participant C spoke at length about her experiences of working with teacher colleagues throughout a long career in Ireland. She placed value on a positive SLT-teacher relationship, stating that “I think that liaison [between teachers and SLTs] is wonderful” (C, lines 163-164) and “it’s very important but I can’t - I REALLY do think the link needs to be STRENGTHENED” (C, lines 188-189), suggesting greater interprofessional learning as a solution. There should be a “marrying together of what goes and I think WE need to be informed of the curriculum. We have to have an ongoing professional (.) need to make sure that we are aware of those changes in the curriculum so that both SLTs and teachers are keeping up to date with changes and developments in Ireland” (C, lines 197-200). Participant C reports that “I over the years have done a huge amount of teacher training. I value it immensely” (C, lines 159-160).

Participant C has also experienced challenges in her SLT-teacher relationships. In one comment, she reflects on her experiences as impacted on by divides between health and education departments in the country: “I THINK we have a role in partnership with teachers but we’ve also a huge role and to impart information to teachers that they can USE to make it easier for THEM and it’s because our role in education isn’t (1) they’re very AWARE of us and they know we’re a very important PART and those teachers that GET speech therapy the children are so lucky because they KNOW they’re on the same field as us but NOT ALL teachers get that. So, a lot of children can lose out” (C, lines 105-112). Later, she refers to perceived differences in approaches between teachers and SLTs, illustrating as an example, “the child needs to be given the opportunity. to BE the teacher. and the teachers look at you as if you’ve three heads and the CHILD initially looks at you to say where has SHE come out of” (C, lines 449-457). In the larger group, participant Dc also reported a possible challenge to successful SLT-teacher collaboration, suggesting that “teachers might not understand what sequencing is” (Dc, line

251). Collaborative practices between teachers and SLTs will be discussed in greater detail in a Chapter 7.

Comprehension of narratives was referred to by one SLT in the first round of focus groups (Db, line 620). As an assessment tool, SLTs would like a comprehensive narrative assessment that is “easy” (Db, line 602); “easy to score” with an “easy template” (participant B, lines 322 and 336). Ease of administration and scoring is valued, that “you could literally map out quite quickly” (B, line 329-328). There is a desire for “something that tied everything together” (Ab, lines 304-305). A comprehensive assessment tool would mean that the “therapist will have another tool they’ll feel comfortable using but they don’t have to need a minus two [standard deviations from the mean] or whatever it is” (B, lines 364-368). The SLTs’ initial impressions, in this first set of focus groups, of what a comprehensive assessment protocol might comprise will be discussed in chapter 7 in consideration of the SLTs’ responses, in the second set of focus groups, to data from a number of the assessment elements they considered for a comprehensive protocol which were collected in the second AR cycle.

Further Analysis

Further thematic content analysis revealed additional contextual issues that informed a deeper understanding of both the SLTs’ expressed opinions regarding narrative assessment in Ireland and the contexts in which SLTs practice in Ireland. The processes of observing and reflecting within AR facilitated this deeper insight regarding the specific contextual situation and its problems and later framed the development of problem solutions and recommendations.

The SLT's Sense of 'Self'

The SLT working within 'the system'

All of the SLTs interviewed were working as public servants, with nine employed directly by the national health service, the HSE in the Republic of Ireland, and one working in an organisation directly funded by the HSE. There was a focus on outcome measurement (Db, line 334) and measuring progress (Df, line 369), relating to a broader consideration of accountability in the field of speech and language therapy. The therapy "block" is referred to by participants (B, lines 165, 252, 264, 266, 275; C, line 1053; Da, line 715), rather than therapy "journey" which is used in NHS online publications in the UK for children, for example, England's South East Essex Community Health Services website, and Bedfordshire Community Health Services website, Scotland's Greater Glasgow and Clyde Paediatric Speech and Language Therapy website and Northern Ireland's Northern Health and Social Care Trust Children's Speech and Language Therapy website, but online searches confirm that it is not currently used in HSE online publications regarding children's speech and language therapy in Ireland. These referenced website addresses may be found at the end of the Bibliography section, on page 191.

"Time" emerged as a strong theme and as a factor in decision-making regarding narrative assessments, with a feeling of not having enough time to fully undertake a range of assessments being common across all interviews and all specialised, experienced SLTs. Time was referenced as a consideration in assessment in these first focus groups by participants Aa, Ab, B, C and Da. Participant B noted that "in primary care we've got more time constraints" (B, lines 135-136) in comparison with a previous employment in private practice. It would not be a good outcome if "your whole block of therapy is engaged in the assessment process throughout" (B, lines 265-267) as in

public practice when “the child falls into the model where they get six sessions or else (.) they'll maybe get two assessment sessions” (B, lines 166-169). Participant C reflected that “I THINK (.) as well our system - in this COUNTRY in Community CARE it’s all about getting SEEN and waiting lists and all the rest of it (C, lines 535-539).

As the researcher later reflected upon the interviews, there do not seem to be immediate answers to the questions the SLT participants posed, for example, on, “How many sessions you need to establish a skill” (C, lines 1025-1026) or dosage questions: “Do you do one day a week over three weeks or do you do three days in a row” (C, lines 1020-1022). Participant B suggested a specific new clinical pathway for children: “a dynamic assessment pathway I think that's something that should be supported” (B, lines 400-402). With the changes in resource allocation in primary schools (NCSE, 2014) changes are afoot: “I think the way the system is moving at the moment allows us to be less restrictive by having to do X assessments to get the resource hours” (B, lines 358-362).

<u>“Am I doing enough?’”</u>

The SLT participants interviewed demonstrated self-reflection skills and a desire to offer the most effective service for the children on their caseload with narrative difficulties. Participant Ab wondered if “it might feel more (.) make me feel BETTER I suppose (.) as a therapist if I was to give a whole session [to narratives]” (Ab, lines 254-256). Participant C reported experiencing thoughts such as “AM I doing (1) enough? WHAT is happening here that’s not allowing ME to get this child to progress” (C, lines 299-301). Doubt can emerge: “I just don’t know if I’m the right therapist for this child?” (C, lines 500-

501). The role of SLT can be all-consuming: “You wake up in the middle of the night. Why didn’t I think of that?” (C, 506-508); “with language impairment you HAVE to sit down, and stuff and say, ‘Where am I with this child?’” (C, lines 295-296). The SLT may draw comparisons between what is done and what ‘should be’ done: “Are you finding so far Louise that people aren’t using narrative as much as they should be?” (Da, lines 699-672).

Summary

The first AR cycle aimed to ascertain the elements of oral narrative assessment considered important to specialised and non-specialised SLTs. In summary, both specialised, experienced SLTs and non-specialised SLTs who were more newly-qualified consider narratives to be important, particularly with regard to their role in conveying real, personal stories. It was not ascertained in these focus group interviews how often narratives are assessed relative to other areas of spoken language for children with DLD. What is clear, however, is that current assessment practices for narratives rely on both static assessments and informal assessment practices; although this does not tend to typically include parent, child or teacher interview. Non-specialised, less experienced SLTs provided longer explanations of the value and benefit of static standardised assessments than specialised clinicians and only more experienced, specialised SLTs criticised static standardised assessment as an assessment tool.

The most common response from both specialised and non-specialised SLTs was that they were “not really” initially familiar with ‘dynamic assessment’ as a specific term. Non-specialised, more newly-qualified SLTs were not as likely

as more experienced, specialised SLTs to express positive commentary regarding DA. This is in contrast to the commentary on static assessment. Following an explanation, specialised SLTs drew similarities between the principles of DA and their current clinical practices. In similarity with static assessment commentary, only more experienced, specialised SLTs criticised DA as an assessment tool.

Both specialised and non-specialised SLTs responded positively to the concept of an assessment protocol for narratives that would encompass more contexts than are currently assessed; notably with the inclusion of parent interview, naturalistic group elicitation and a structured form of DA involving two mediated learning experiences within test-teach-retest structure. Time, however, is a key consideration in the assessment and therapy process and both specialised SLTs have concerns regarding spending the majority of contact time, within a specified number of available sessions, on assessment, which is an issue taken forward in planning for the second AR cycle. Additionally, specialised LTs provided insights into the SLT's sense of self, including self-reflective practices such as the question of 'am I doing enough?'.

Learning from Self-Reflective Journal

The researcher reviewed the research journal as well as the notes made during the interview with the SLTs and one of the most common words jotted down during the interviews was "informal". This term was regularly used by the SLT participants when describing how narratives are assessed. The phrase noted most often when journaling after the interviews was "diagnostic therapy vs. dynamic assessment". The researcher considered both the similarities and

differences between the terms. Researcher understanding of the term ‘diagnostic therapy’, in the context of this AR, reflects the description provided by Kersner (2012): when the decision-making process is not particularly time-sensitive, for example, due to being in a school setting rather than in an assessment clinic. Kersner notes that “when working with children in schools, the information may be gathered over a longer period, and assessment - therapy - reassessment may be part of an ongoing ‘diagnostic therapy’ process” (Kersner, 2012, p.7). It is noteworthy that the three specialised SLTs work in the school settings referred to by Kersner (2012) and not primarily solely or primarily in clinics.

‘Dynamic assessment’, in the context of this research, is conceptualised as proposed by Miller, Gillam and Peña (2001), also with a test-teach-test approach in its process. The formats of test-teach-retest may be considered similar across both ‘diagnostic therapy’ and ‘dynamic assessment’ when DA is undertaken in this particular format. Similarly, both ‘diagnostic therapy’ and ‘dynamic assessment’ are distinct from the traditional assessment-therapy dichotomy described by Hasson and Joffe (2007), wherein “in therapy the interaction with the therapist is central, while in assessment, efforts are made to remove the influence of the assessor and reduce inter-tester variability” (Hasson and Joffe, 2007, p.12): ‘dynamic assessment’ involves mediated interaction between the student and examiner and ‘diagnostic therapy’ involves some degree of diagnostic assessment during interactive therapeutic intervention. In similarity, DA and diagnostic therapy are both suitable when standardised assessment is not suitable for a child. Task selection in both may be similar, for example in DA where tasks are selected that are teachable, relevant, and language-based (Austin, 2016), this may be equally applied to diagnostic therapy task selection.

Some of the similarities above, including the test-teach-retest scenario in the format of DA applied in this research, would have been familiar to the specialised SLTs who engage in diagnostic therapy in their school settings. However, there are also noteworthy differences between DA and diagnostic therapy. Initially, consideration of the names suggests that the purpose of diagnostic therapy may involve achieving a diagnosis or completion of a language profile. A trans-disciplinary approach to understanding the concept of 'diagnostic therapy' suggests that it is "a clinical intervention intended to diagnose a patient's disease, condition or injury" (NHS Wales, 2021). Conversely, Hasson and Joffe (2007) note that with DA, the focus is on the process of how a child learns as well as the child's underlying skills, rather than on a product. Similarly, DA may be understood as "a method of conducting a language assessment which seeks to identify the skills that an individual child possesses as well as their learning potential" (ASHA, 2014).

It is acknowledged that the various approaches to DA can differ across three integral elements of focus, interaction and target (Hasson and Joffe, 2007). It should be noted that while diagnostic therapy may involve a test-teach-retest format or an element of "diagnostic teaching" (ASHA, 1994), it is not confined to any particular approach or process. 'Focus' is not identifiable from the descriptions of clinical practice of 'dynamic assessment' provided by the specialised SLTs and no methods of measurement or recording are described, nor was 'interaction' or 'target' explicit in any description offered. Participant Aa reported that what she conceptualises as clinical practice that utilises 'dynamic assessment' is "probably small less structured than you're describing" (Aa, lines 178-179) and later reported that what she is currently doing is "not maybe totally measuring the input and the time and the output in a very structured way" (Aa, lines 233-235). The 'dynamic assessment' undertaken by participant Ab is something she might "informally in my head do" (Ab, lines 264). Participant B described 'dynamic assessment' as "probably something that I've been using without calling it dynamic assessment" (B, lines

385-387), although no further detail regarding focus, planning, structure or recording was provided. Additionally, no participant described examining or recording either examiner effort factors (Austin, 2016) or student modifiability (Peña, Gillam and Bedmore, 2014); two elements key to DA as described in the process and steps proposed by Miller, Gillam, and Peña (2001).

Dynamic Assessment tends to be undertaken in therapy by way of one of two major approaches; test-teach-retest or graduated prompting. Diagnostic therapy may involve one or both of those approaches but is not confined to these. In similarity, DA and diagnostic therapy are both suitable when standardised assessment is not suitable for a child. Task selection in both is likely to be similar, for example in DA where tasks are selected that are teachable, relevant, and language-based (Austin, 2016), this may be equally applied to diagnostic therapy task selection. Could DA be considered a more structured substratum within a wider field of diagnostic therapy? This may be arguable, but at the risk of losing one of the advantages of diagnostic therapy for SLTs: its structural flexibility.

The researcher's reflections have led to insight into the possibility that, for practicing clinicians, the terms 'dynamic assessment' and 'diagnostic therapy' may include similar terminology and frames of reference. However, in published research, the approaches described as DA and steps prescribed for DA are typically clear and structured. There appears to be a difference between the DA processes described in literature and the practice of DA as experienced, specialised SLTs consider themselves to be undertaking. These reflections caused some apprehension in relation to terms and descriptions of processes that could mean different things for clinicians and researchers in the course of this AR. Unease increased when the researcher later attended

a formal training event in Ireland on the topic of DA in speech and language therapy. A number of the training participants made contributions to the conversation that were strikingly similar to the comments recorded in the researcher's interviews. They described to the trainer a process that appeared closer in practice to informal diagnostic therapy; a description that contrasted with the structured DA process delineated in the trainer's own slideshow and presentation. The researcher observed that the trainer acknowledged the similarities between DA and diagnostic therapy and did not attempt, during the question-and-answer session, to extrapolate on, not only the similarities, but the differences between the two. Time consideration may, of course, have been a reason for her response. Nonetheless, as part of own learning from the first focus groups, the researcher resolved to review with all participants the definition of DA in the second focus groups, to facilitate a degree of shared understanding across interviews and participants.

The above information guided the planning of the next element in the AR cycle (children's narrative assessment): the two static narrative assessments named most often by the SLTs in the first focus groups were administered with the children, so as to best reflect current clinical practice in Ireland. One assessment, the Bus Story Test, is a formal standardised assessment with norms for ages. The second most commonly-named static assessment, Peter and the Cat, is commercially available and is criterion-based, although there are neither age equivalencies nor norms supplied in the manual so it contributes to quantified scoring but is primarily qualitative in its value. In addition, the researcher administered DA in the process prescribed by Miller, Gillam and Peña (2001) using mediated learning experiences. SLT participants in the first action cycle expressed interest in obtaining information from parent interviews and naturalistic group elicitation, with both of these tools aiming to capture information regarding the 'real-life' narratives expressed as being held in high regard by the participating SLTs.

Chapter 5: Results and Analysis of Children's Assessments (AR Cycle 2)

As previously noted, four parents in total responded on behalf of their children and agreed to participate in the research with their children. Three children participated in this second AR cycle, with the first parent and child participating in the pilot case study. The researcher undertook four different forms of narrative assessment with the three children -Child A who will be referred to by the pseudonym Abe, Child B who will be referred to by the pseudonym Ben and Child C who will be referred to by the pseudonym Cal- who each had diagnoses of DLD and were in educational placements in a Language Class in Ireland (the classes established for children with specific speech and language disorder).

The purpose of gathering narrative assessment information from a number of sources, including static assessment, parent interview, naturalistic group elicitation and DA, was in order to examine with the SLTs how different methods contribute to the profile of children's narrative skills, in the third AR cycle. Figure 5.1 depicts the typical sequence of events that occurred, where the only event to change in order was the parent interview, arranged for parents' convenience. Following assessment data collation, the researcher then presented this information to the SLTs involved in the study at the second focus group. For reader ease, the researcher has presented the participants' specific comments on the various assessments (from the second round of focus groups) in text boxes within this chapter. Therefore, this chapter contains not only the three children's assessment profiles (the aim of the second AR cycle) but also results -in the form of SLT participant responses to the various assessment methods as they specifically relate to the children profiled- from the third AR cycle.

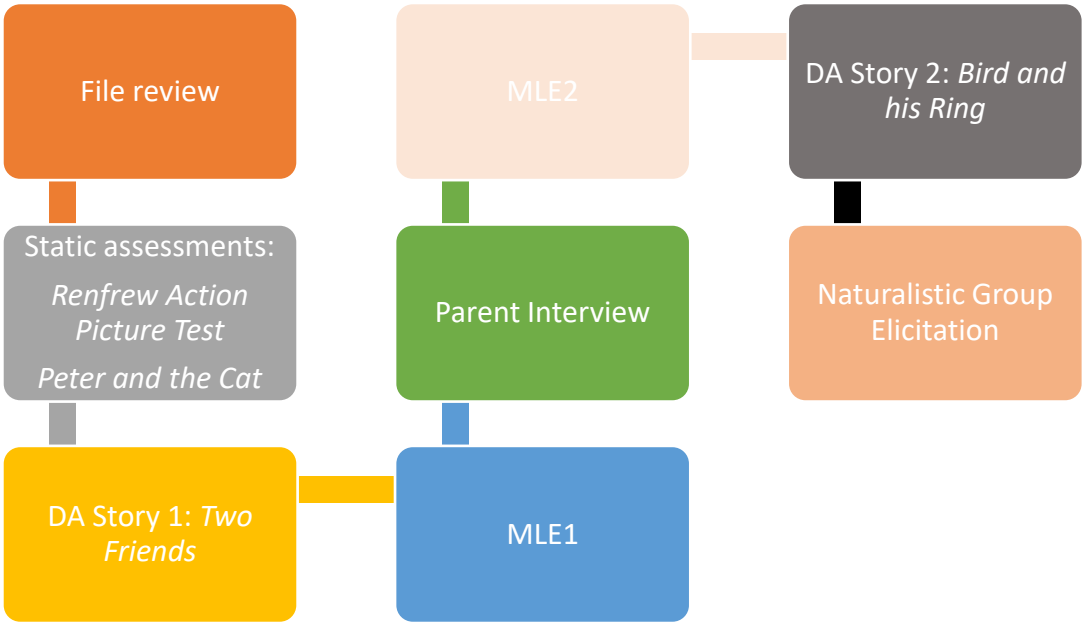

Figure 5. 1 Typical sequence of events in children's assessments phase (the order in which assessments were undertaken by the researcher).

Abe

Abe was a boy aged 7 years and 5 months at the time of assessment. He is monolingual and had almost completed his second year of placement in the Language Class at the time of testing. He first attended speech and language services at the age of three. The following pre-research standardised assessment results were obtained with parental permission from previous speech and language reports (see Table 5.1):

Table 5. 1 Abe's pre-research static assessment language scores

Year	Name of Static Assessment	Standard Score	Descriptive interpretation
End of year 1	*Clinical Evaluation of Language Fundamentals - 4th UK Edition (CELF-4-UK) (Semel, Wiig and Secord, 2003)*	Receptive Language Index 75	Moderate impairment
		Expressive Language Index 75	Moderate impairment

The above results indicate an upward increase in his standardised assessment test score, which may or may not be attributable to the intensive input afforded by the Language Class placement.

Abe's Static Assessments

In the *Bus Story Test* (Renfrew, 1997), Abe was found to score between 1.5 to 2 standard deviations below the mean for a child of his age for the Information score. This indicates moderate impairment in Content compared with age-matched peers (child's score of 21 compared with peer average score of 33). Sentence length was within the range expected. Abe produced both regular and irregular past tenses in his story retell. In *Peter and the Cat* (Leitão and Allan, 2003), Abe scored more highly in the areas of Story Structure, Story Content, Referencing and Story Register (e.g., scores of

between 2-3 where the maximum score is 3), and relatively lower on parameters focusing on Vocabulary, Adverbials and Connectors (e.g., scores of 0-2 where the maximum score is again 3). In summary, these static assessments indicate that more of Abe's narrative difficulties affect microstructural elements than macrostrucural (Yates and Chen, 2012).

Comments from SLT participants in relation to Abe's static assessment results and goals:

The SLTs who were randomly assigned Abe's profile identified goals to target microstructure: Df commented that her goals, based on static assessment, would include "irregular past tense and abstract vocabulary" as well as "inferencing / predicting". Participant Db would target "age-appropriate subordinating conjunctions and adverbs to provide more variety and connection between sentences" as well as further developing vocabulary. Participant Dc would target "irregular past tenses, conjunctions, syntax, vocabulary enrichment" in addition to narrative skills such as the general structure of a story. Participant De reported that she would target "irregular past tense verbs" and "conjunctions and subordinates" based on the results of the static assessments.

In summary, the SLTs who received and reviewed Abe's static assessments proposed to work on microstructure targets, which is consistent with where Abe's difficulties appear to primarily lie at this point.

Abe's Parent's Interview

Abe's mother provided a detailed interview relating to her son's narrative strengths and weaknesses. For example, his mother noted that "as a child, Abe wouldn't have liked to listen to stories as much as other children [in the family]". Consistent with the static assessment findings regarding a more basic microstructure in narratives than expected, his mother reported that "you wouldn't get a lot of detail at all" in Abe's stories. To illustrate, Abe's mother gave an example of when she recently asked Abe to tell her a story. He responded with, "Once upon a time there was a leprechaun at the bottom of the garden. The end". Abe's mother described her son's narrative skills as a relative "weakness" when compared with his overall communicative abilities and recent general receptive and expressive language progress. Abe's mother places value on narratives and narrative assessment: she considers that narration "helps with their imagination and everything". She also positively associates storytelling with children's semantic development: "It brings out more words. The vocabulary is expanded". Abe's mother reports that she did not recall previous narrative assessment taking place with her son when she attended clinics with him, prior to his place in the Language Class.

Comments from SLT participants in relation to Abe's mother's interview:

Participant Dc considered that "I think you get an insight into how much more work it is for her to get a story out of him like the effort that she has to put in, all the prompting and you know like it's such a big goal for her like, the Mum and Dad". Participant Df suggested that parent interview findings could be "actually even more useful than the assessment of the child themselves" and Db praised the "functional" (Participant Db) information that can be obtained during interview. Participant De reported that "I think based on this

I would feel that actually maybe I should be doing more of this talking to parents and getting the parents' insight" into a child's difficulties.

Speech and language therapist participants who considered Abe's mother's interview commented on the "insight" (Dc, De) they obtained from the information gained from this transcript, commenting on the "functional" (Db) information that could be "actually even more useful than the assessment of the child themselves" (Db).

Abe's Responses to Naturalistic Group Elicitation

Abe responded positively to naturalistic group elicitation. He was the child who spoke most during the time and offered his own stories as well as prompting others to share their narratives. For example, he told the following story: "Once my grandpa, once my Dad, I went over to this a different person's house there's this horse, lying like this, sleeping, and he pet the horse and he, the horse, kicked him". When Cal was asked to tell a story, Abe interjected to tell the group that Cal "has a dog". The group interaction demonstrated Abe's communicative competency in a real-life group situation, at the participation level of the WHO's ICF-CY (2007) framework. He responded to the researching clinician as well as to other children and contributed to the conversation. For example, in a discussion about the TV show Paw Patrol™, Abe asked, "Who's the fire boy? And the garbage boy?"

Comments from SLT participants in relation to Abe's group elicitation:

Participant Db reported that "It's like he's keeping the group going". Participant Df also reported that "everything is relevant to what's being said". However, Participant Dc noted that narrative difficulties are also evident: "sometimes I get a bit lost in all" when trying to track Abe's comments in the conversation.

Speech and language therapist participants commented on the contextual information gained regarding Abe's functioning in a classroom setting, with insights into his role in "keeping the group going" (Db). The information gained at the level of participation suggest both strengths and weaknesses in a real-world situation, whereby participant Df notes that what Abe is saying is "relevant" (Df) yet participant Dc struggled to follow the narration.

Abe's DA

Abe's production of Story 1 of the DA, *Two Friends,* from the *Dynamic Assessment and Intervention* (Miller, Gillam and Peña, 2001) was examined. The transcript contained key events in the story, produced in short single-clause sentences (e.g., "He couldn't find the cat") and using basic vocabulary (e.g., "And they lost the cat"). Macrostructure and microstructure elements were both identified as therapy targets, suggesting that this particular DA transcript uncovered difficulties with both levels of narratives, where the particular static assessment transcripts pointed more to microstructural impairments. In this instance, macrostructure was selected as the target for the mediated learning experiences (MLEs). In the first mediated learning

experience (MLE1), the researcher focused on two items from story components: time and place. In the second mediated learning experience (MLE2), the researcher focused on the character's internal responses or feelings. These selections were based on Story 1's results and followed the prescribed format in the DA manual for targeting these areas in MLEs.

Story 2 of the DA, *Bird and his Ring,* administered following the two MLEs, differed in comparison to Story 1: there was a slight increase in the number of words used (+2%) with more words used per clausal unit (C-unit), +17%, and more clauses noted overall (+17%), although there were fewer sentences used overall (-35%) and the number of clauses divided by clausal units remained unchanged (0% change). For illustration, Abe relayed what characters said in Story 2 on seven occasions (e.g., "He asked the bird, 'Do you have the ring?'") compared with five occasions in Story 1. These results, overall, suggested that Abe responded to intervention and made improvements following MLE1 and MLE2. However, the researcher is also cautious in this reporting: as Story 1 and Story 2 differ, it could be argued that any variation between Story 1 and Story 2 may be a result of the individual differences between the stories and their wordless picture pages. It is noteworthy that Abe's Story 2 did not contain references to time or place (the focus of MLE1) or to characters' feelings (MLE2 focus). The researcher considered the lack of carryover following MLE intervention and overall impression of short utterances across both Story 1 (e.g., "There a dog and a cat") and Story 2 (e.g., "There a bird and a ring"). These reflections support the working hypothesis of Abe's diagnosis of DLD, where shorter sentence length and less lexical diversity than children without DLD (e.g., Klee et al., 2004) have been identified as markers of DLD.

The process of facilitating MLEs offered the researcher a number of insights into Abe's language and learning. In MLE1, where the researcher introduced the concepts of time and place, it was ascertained that while Abe was familiar with times of the day, he did not appear to have a solid concept of years and days in terms of time and the concept of 'future' was difficult to frame using language. He required scaffolding to support him in selecting and using temporal concepts. However, despite the scaffolding required, the MLEs with Abe did not feel tiring or effortful on the researcher's part (a self-reflection prescribed in this particular format of DA). Abe was responsive both to and in the MLEs (in that he was eager to attend the sessions, participated during the sessions and talked about the stories in the books); suggesting that he would also participate in any future therapy sessions with enthusiasm, should intervention be required following assessment.

Comments from SLT participants in relation to Abe's DA:

Participants appreciated the subtleties revealed with DA: Participant Dc noted that "the standard assessment really wouldn't have really given us that information of how he has maybe a poor understanding of the time". Participant De agreed: "He doesn't have a very robust range of feelings to be able to describe. And that wouldn't come across in a lot of standardised language assessments". Participant Df also agreed and observed: "this kind of stuff is actually eye opening as to what you can get out of them by taking all these different approaches compared to a standardised assessment".

Participants who considered Abe's profile tended to compare the DA results with those typically obtained using static assessment, possibly due to more familiarity with static standardised assessment results. Participant Dc noted that "the standard assessment really wouldn't have really given us that information"; participant De expressed that information regarding Abe's

descriptions of feelings “wouldn’t come across in a lot of standardised language assessments”; and participant Df considered the information obtained following review of DA information as “actually eye opening”.

Ben

Ben was a boy aged 8 years 11 months at the time of assessment. He is bilingual, with Polish spoken at home within the family, as well as in his wider social network, and had almost completed his second year of placement in the Language Class. Ben was born in Ireland and was first exposed to English by health and educational professionals during routine developmental and medical checks and later during two years at pre-school and in primary education, which begins at approximately age four in the Republic of Ireland. He first attended speech and language therapy services at the age of four, having been identified at primary school as having language difficulties.

Review of previous assessment reports indicates that it was established soon after Ben initially began to attend speech and language services that language difficulties were present in both Polish and English. The assessment process to diagnose DLD considered Ben's performance in formal assessments undertaken in English and informal assessment in conjunction with a Polish interpreter. Kohnert (2010) notes that for bilingual children with DLD, "the underlying impairment manifests in both languages" (2010, p.463). Ben attended a monolingual English-speaking preschool for two years and has attended primary school since the age of four, where he has been taught through English. It should be noted that due to the scope of this research, the narrative profiling assessments were undertaken in English only. This is an acknowledged limitation as assessment data in Polish would have added to Ben's narrative profile. Ben's language baseline scores follow, with the following standardised assessments having been administered through English by his regular SLT prior to this research (Table 5.2).

Table 5. 2 Ben's pre-research static assessment language scores

Year	Name of Static Assessment	Standard Score	Descriptive interpretation
End of year 1	*CELF-4-UK* (Semel, Wiig and Secord, 2003)	Receptive Language Index 69	Severe impairment
		Expressive Language Index 46	Severe impairment
End of year 2	*CELF-4-UK*	Receptive Language Index 53	Severe impairment
		Expressive Language Index 45	Severe impairment

The above results represent continued low standardised assessment test scores. Ben's mother also reported continued difficulties in Polish, although the level of these difficulties cannot be quantified at present.

Ben's Static Assessments

While presenting with syntactic and morphological errors on his retelling of the Bus Story Test (Renfrew, 1997), Ben communicated the key points of the story easily, providing basic content. His score of 15.5 on Information contrasts with the 38 that is the mean for children of his age. He related the narrative in the present tense and demonstrated a large verb vocabulary relative to his noun vocabulary (e.g., "After he drive on the road. He got it.") This will later be discussed in Chapter 5's reflections.

With Peter and the Cat (Leitão and Allan, 2003), Ben showed good knowledge of Story Structure (scoring 2 out of 3), with difficulties evident with Content, Vocabulary, Connectors, Adverbials and Story Register (e.g., scores of 1 or below and 2 or below). In summary, these results indicate that Ben presents on static assessment in English with knowledge of some of the basic elements of narratives, for example, that a narrative may contain an event, but with significant difficulties impacting on both the macrostructure and microstructure of oral narratives.

Comments from SLT participants in relation to Ben's static assessment results and goals:

The SLTs who were randomly assigned Ben's profile considered the data. Responding to the Bus Story Test data, Participant Da would like to "research Polish syntax e.g., types of tenses, etc". and Participant Dd observed that she "would like to probe his vocabulary and word finding" based on the formal assessments. Participant Dd's intervention targets included macrostructure of narratives ("when [time'] concepts") as well as microstructures ("tense marking, adjectives"). Participant B noted, "Limited

presuppositional information throughout" as well as "No setting" commenting on, "overall very poor organisation of narrative and lack of cohesion between ideas." Participant B also commented on the "limited syntactic structures evident" and "limited vocabulary". Therapy targets identified by Participant B included "vocabulary - semantic networks" as well as "syntax / morphology", for example negation and irregular past tenses, utilising the visual supports that seem to be helpful for Ben.

For therapy targets related to Peter and the Cat, Participant Da would like parents to elicit and transcribe a narrative in Polish and discuss any errors with Ben's SLT. Participant B identified "very limited introduction of characters and setting" in this assessment, as well as "limited conjunctions" and "vocabulary difficulties" as a recurring theme. For therapy, Participant B identified "visuals to support story retell" including story books.

Participants who examined Ben's static assessment transcripts were aware of difficulties affecting both macrostructure and microstructure of narratives. Participant B commented upon "very limited introduction of characters and setting" (B) and noted difficulties with vocabulary. Vocabulary difficulties were similarly identified by participant Dd, who also highlighted difficulties with the concept of 'time'. Participant Da focused-on syntax, in common with participants B and Dd. Participant Da was interested in Ben's narrative functioning in Polish and identified the absence of this information as contributing to a gap in her knowledge.

Ben's Parent's Interview

The interview with Ben's mother took place through English as this is a language in which Ben's mother reported herself to be an effective communicator, having lived and worked in Ireland for over ten years. She declined the offer of an interpreting service. She described how Ben's stories have changed from retelling events that have happened to him to more creative re-imaginings of events: "Yeah. Now they change because him never lie. And now him lie. Close to your eyes". However, interviewing in English brought some challenges as his mother did not, on occasion, fully understand the questions being asked and repetition or rephrasing was required. Despite this, Ben's mother was able to communicate her opinions regarding Ben's narrative abilities to the researcher. For illustration, she indicated that rather than start stories at the beginning, "he tells from inside story". Most of Ben's stories are humorous ("The most is funny"); and Ben's mother reports that she laughs a lot with her son when he is telling stories. She reported that due to her work hours, "it's very difficult to help" Ben with speech and language therapy activities at home. Ben's mother places value on the SLT as an 'expert' in the area of communication, saying, "It's the best therapists like you see to themselves. I don't know with him it's so difficult to do." She did not recall Ben previously having his narrative skills assessed during his time in clinic-based services.

Comments from SLT participants in relation to Ben's mother's interview:

Participant B noted that while asking about Ben's interests was "really good information to ask", she opined that the interview was limited: "I think Mum's understanding of what a narrative or what a story is, is probably limited to her understanding of what you're kind of asking." Conversely, Participant Dd found it helpful to read the transcript and formulate an impression of Mum's

English usage: “Yes, that's the big piece of the puzzle, isn't it? His Mum isn't giving him that modelling at home in the English language” and Participant Da noted, “The Mum is struggling with English.”

Participants who examined Ben’s mother’s transcripts had mixed opinions regarding the value of an interview with her in English. On the one hand, it was possible to gain insights into Ben’s home life, with participant B noting that asking about Ben’s interests was “really good information to ask”. On the other hand, participant B considered the interview “limited” due to difficulties Ben’s mother had in understanding English, which required repetition and rephrasing. The transcript was helpful to participant Dd who considered it “the big piece of the puzzle” that Ben’s mother might not be providing him with an accurate modelling of English as spoken in Ireland, with participant Da observing that “the Mum is struggling with English”.

Ben’s Responses to Naturalistic Group Elicitation

Ben engaged in the naturalistic group interaction and asked more questions than told stories (e.g., “Was there a girl?”). He took a number of turns during the interaction and his participation facilitated the participation of other children in the group. In the naturalistic language elicitation, a relative strength in macrostructure over microstructure was evidenced in the story he told about dressing as a bear for Halloween. He managed to communicate that he dressed up as a bear to scare his sisters, while retelling this past event primarily in the present tense (e.g., “I just dress the bear for Halloween”). The humour in Ben’s storytelling identified by his mother was also evident in the group elicitation, where he commented “I just kidding” to his peers.

Comments from SLT participants in relation to Ben's group elicitation:

Dd found that she "thought maybe the tense areas were more prominent in an actual conversation as well and that his responses were already short without much detail either" and Participant Da noted that Ben "starts relying on questions, so, he doesn't have to tell a story". Participant B observed that even with another student providing prompting, Ben struggled without visual aids: "But even the clarification that he tried, he still got it wrong".

Participants who considered Ben's part in the group elicitation noticed some impairments more clearly during this interaction, with Participant Dd noting that "maybe the tense areas were more prominent in an actual conversation" and participant B adding that "even the clarification that he tried, he still got it wrong." Participant Da identified a possible compensatory strategy used by Ben in order to participate in a group despite his narrative difficulties, observing that Ben "starts relying on questions, so, he doesn't' have to tell a story".

Ben's DA

Ben's production of the DA's Story 1, *Two Friends*, was consistent with the narrative output produced in the *Peter and the Cat* and the *Bus Story Test* (e.g., "And then tiger is sleeping"). The transcript contained the key story events, produced primarily in short single-clause sentences (e.g., "A lion see a cat") and using basic vocabulary (e.g., "And the wolf find the cat"). There was no reference to time, place, setting, internal response, attempt or consequence. Macrostructure and microstructure elements were both identified as therapy targets and macrostructure was specifically targeted for

the mediated learning experiences (MLEs). In MLE1 the researcher focused on complexity of ideas: why-because. In MLE2 the researcher focused on two areas from story components; time and place.

Story 2 of the DA, *Bird and his Ring,* administered after the two MLEs, differed from Story 1: there was a decrease in the number of words (-30%) and clauses (-34%) produced, with commensurate reduction in clauses per C-unit (-35%). There was no change in the number of clausal units produced (0% change). In the case of Ben, it may be that the variation between stories could account for some of the scoring difference. For illustration, Ben relayed what characters said in Story 1 on five different occasions (e.g., “So, he’s going somewhere, and the tiger says ‘wait’”) compared with four occasions of characters speaking in Story 2 (“And the bird says, ‘Where is my ring?’”), and this difference accounted for changes in scores. It is possible that Ben did not engage with Story 2 to the same degree as with Story 1, although this is speculation.

Overall, in considering student modifiability and SLT effort across the MLEs, as per this DA’s administration process, a lot of effort was required by the researcher during the sessions, with significant scaffolding provided. Ben was supported to consider ‘why’ events occurred in MLE1. In MLE2 he demonstrated understanding of place but had difficulty communicating his understanding of time concepts. Ben appeared to have difficulty recalling details of *Two Friends*; Story 1, which was revisited and used as a teaching tool in both MLE1 and MLE2 as per the manual. This particular finding also supports a diagnosis of DLD with the existence of additional cognitive difficulties that require further consideration. For example, Henry and Botting (2017) contend that not only are verbal working memory difficulties associated with a diagnosis of DLD, but there may be wider impairment across the central

executive domain. The benefits of DA for bilingual populations have been established well in the US among English-Spanish speakers (Miller, Gillam, and Peña, 2001). Given that DA has a role in distinguishing between language difference and language disorder, the lack of positive change between DA stories 1 and 2 indicates that Ben's difficulties are complex and supports a working hypothesis of a diagnosis of DLD for this bilingual child. However, it should be noted that assessment in both languages is required for a complete picture of Ben's overall language profile. It is hoped that the findings of these assessments, and the results of the DA in particular, will result in further assessment in both languages.

Comments from SLT participants in relation to Ben's DA:

Participant Da was positive with regard to DA: "First of all, it seems very appropriate for him because we're definitely getting to see, I think, an accurate representation of him, the need for scaffolding by the therapist and the amount of work that you said you had to put in does show with difficulties he has in English." Participant Dd observed that "I think it's definitely worth exploring because it does show you what the child can do with scaffolding and prompts". Participant B noted that "I think definitely what I'm seeing from kind of the first narrative to the last narrative, I suppose, is that the student doesn't seem to have utilised the strategy of 'why?' There seems to be no kind of reasoning or hypothesising in the story. So, I don't think that skill has been acquired in that way students need to utilise it. But the work that I do see him using is the 'where?' So, he is including the information about where the ring is and asking questions where is my ring as well".

Participant Da considered the findings of Ben's DA to be "very appropriate for him because we're definitely getting to see, I think, an accurate representation

of him”. Participant B commented on Ben’s reasoning and hypothesising deficits based on the DA transcripts, and participant Dd considered DA “definitely worth exploring because it does show you what the child can do with scaffolding and prompts”.

Cal

Cal was a boy aged 7 years and 0-1 months at the time of this research assessment. He is monolingual and had almost completed his second year of placement in the Language Class (See Table 5.3). In addition to language impairment, Cal had significant speech intelligibility difficulties at the time of research assessment administration. He has attended speech and language therapy, initially due to speech intelligibility difficulties, since the age of two.

Table 5. 3 Cal's pre-research static assessment language scores

Year	Name of Static Assessment	Standard Score	Descriptive interpretation
End of year 1	*CELF-4-UK* (Semel, Wiig and Secord, 2003)	Receptive Language Index 88	Within normal limits
		Expressive Language Index 76* *Severe speech impairment likely to have impacted on this score	Moderate impairment

End of year 2	*CELF-4-UK*	Receptive Language Index 86 Expressive Language Index 77* *Severe speech impairment likely to have impacted on this score	Within normal limits Moderate impairment

While the above results did not represent upward standardised assessment test scores between year one and year two in the Language Class, it is noted that expressive output increased from primarily 2-word utterances to up to 5-6 word utterances during his time in the Language Class, as per parental report.

Cal's Static Assessments

During this assessment the *Bus Story Test* (Renfrew, 1997) *w*as administered. Cal identified characters in the story and used adjectives to describe feelings (angry, sad) and also used some verbs, fewer than ten (such as splash), during his retelling of this story. All scores were below the scores expected for a child of Cal's age (mean information score for a child of Cal's age is 32.6; his score was 6). Output consisted of short phrases and single clause sentences (e.g., "Bus go"). The narrative assessment *Peter and the Cat (*Leitão and Allan, 2003) was also administered. Analysis of Cal's response to this story retelling indicates a clinical impression consistent with the results from the *Bus Story Test.* Cal produced short phrases and generally incomplete sentences during this assessment. He scored poorly across the areas of Story

Structure, Content, Vocabulary, Connectors, Adverbials and Story Register (scoring between 0-1 on scales of 0-3). In summary, given the significant difficulties observed, both macro- and micro-structure could be considered possible therapy targets.

Comments from SLT participants in relation to Cal's static assessment results and goals:

The SLTs who were randomly assigned Cal's profile considered the static assessment data. In responding to the Bus Story Test, Participant Aa commented on "poor story structure and content". She acknowledged "good use of emotion vocabulary" (also noted by Participant C), however, she queried if Cal's commentary was related to facial expression and "picture description more than character internal state". Participant Ab noted Cal's "limited range of verbs" and "inconsistent use of 'he' / 'him'). Participant C "would query a significant word finding difficulty" and identified "no plan" as well as "significant difficulty with syntax and morphology". Participant Ab commented on Cal's "poor sentence structure" and "limited vocabulary" and for future therapy goals, would choose "developing basic sentence structure," "working on comprehension of pronouns," "developing vocabulary," and "listening to short stories and responding" to WH- questions. Participant Aa would tailor future therapy to "focus on verb vocabulary and simple sentence structure" and "encourage use of noun in subject role for clarity". Participant C would target "story telling activities with pictures and toys" as well as auditory processing difficulties," "vocabulary development" and "semantic links".

Participant Ab commented on Cal's "poor sentence structure" and "limited vocabulary" and for future therapy goals would choose "developing basic sentence structure", "working on comprehension of pronouns", "developing vocabulary" and "listening to short stories and responding" to WH- questions.

In considering the data from the Peter and the Cat, participant Aa drew similarities between Cal's performance in Peter and the Cat and the Bus Story Test. Participant Aa noted "poor establishment of the setting" and "lack of clarity re: characters involved". Here again, Participant Aa observed that "word repertoire and range of sentence structures is very limited". Participant C was more positive regarding this story: Peter and the Cat "was simply told and we were able to determine the characters, where they were, what they did and what occurred". However, significant difficulties remained. Participant Ab commented that on reviewing transcripts of Cal's relating to Peter and the Cat, he "gets some key information but lacks knowledge of correct sentence structure," "using incomplete sentences". She observed that the story "would be very difficult to follow if not familiar with the story". Ab's therapy targets in response to this static assessment included working on "comprehension of short stories" and "basic sentence structure". Participant Aa would tailor therapy goals to "encourage reflection on internal goals / emotions". Participant C notes that "Cal appears to be developing narrative skills. He is at a very early stage and will require a lot of scaffolding to develop narration skills." As such, she recommended therapy target "vocabulary development" and "sentence formulation".

Participants Aa, Ab and C provided detailed descriptions of Cal's narrative performance on the static assessments and identified both micro- and macro-structure goals from considering these transcripts.

Cal's Parent's Interview

Cal's mother was interviewed as part of this research. She provided details and examples of her son's narratives abilities and difficulties, and her impressions were consistent with other assessment format results (e.g., "it might just be one part of the story he would usually talk about"). For example, Cal's mother reported, "He would often ask his sister for the words to tell the story. So, like yesterday he wanted to tell me the story about the cat and she couldn't understand what he was on about, but there was a sign for a cat on the petrol station. There was one on the other side of the sign, and Cal's sister called them 'copy cats' and all he could say to me was "copy cats, copy cats, Mammy," but he couldn't tell me the story of what the copy cats were about so then when she started helping, he got it."

She noted that her son communicated simple stories in short sentences on topics of interest to him, for example, the family's new dog. She does not recall narrative skills being assessed previously (also the scenario with the mothers of Abe and Ben) and recommended that SLTs ask parents to send in "personal, relevant" materials to support the elicitation of narratives.

Comments from SLT participants in relation to Cal's mother's interview:

Participant Ab noted that "I suppose it kind of lets us know that he's kind of keen now to tell stories, he likes talking about what he's interested in." Participant C identified Cal's mother's "good insight" and noted that "she's very aware of what's going on, but she really doesn't know where to go with

it.” Participant Ab found value in the parent interview due to the insights she gained into Cal’s personality: “the best of it would be how motivated he is.”

Participant C commented on Cal’s mother’s “good insight,” and participant Ab considered the parent interview to be valuable in relation to both “what he’s interested in” and “how motivated he is”

.

Cal’s Responses to Naturalistic Group Elicitation

Cal did not initiate during the group elicitation but did respond to the researching clinician and other children’s prompts and questions. His sentences were short and at times incomplete, for example, “And Chase, and Skye. And Rubble.”, pup characters from the television show Paw Patrol™. The scaffolding provided by other children benefited Cal, as they asked him relevant questions about his areas of interest, for example when Ben asked him “Was there a girl?” in the Paw Patrol™ television show.

Comments from participants in relation to Cal’s group elicitation:

Participant Aa commented that “you can kind of see the group supporting him quite a bit.” Participant C noted that Cal’s needs presented in the group situation as “very severe” and that “modelling works” for him. Participant Ab found the group elicitation helpful in that “you get to see how they function on an everyday basis more, and how they might interact with their peers in general.”

Participant Aa commented on the support provided to Cal in his narrative formation from his peers: "you can kind of see the group supporting him quite a bit." For participant C, Cal's difficulties presented in the group setting as "very severe". She also gained insight into an approach that was successful for Cal, namely modelling. Participant Ab reported that the group elicitation was helpful as "you get to see how they function on an everyday basis more."

Cal's DA

DA administration of Story 1, *Two Friends,* revealed difficulties similar to those identified on static assessments *Peter and the Cat* and the *Bus Story Test* with Cal, namely a basic sentence structure consisting of short single-clause utterances (e.g., "The dog and the cat") with basic vocabulary (e.g., "The birdie had a ring"). Macrostructure and microstructure elements were both identified as therapy targets and macrostructure was specifically targeted for the MLEs. In MLE1 the researcher focused on the concrete ideas of time and place. Cal responded to the teaching by answering 'when' and 'where' questions. In MLE2 the researcher focused on episode structure: the attempts or actions in a story and Cal could name some of the actions in the story with prompting and support.

Story 2 of the DA, *Bird and his Ring,* administered following the two MLEs, differed in comparison to Story 1: there was a 10% reduction in the number of words used and reductions in the number of clauses overall (-65%) and C-units (-62%). However, the mean number of clauses per C-unit increased by

6% and the mean length of clause per unit increased very considerably by 153%; from 4.15 to 10.5. For illustration, whilst the number of utterances overall reduced in Story 2 compared with Story 1, the length increased such as this example: “the ring and the bird and the sun come out and sing a song.” These results indicate that there could be benefit to further narrative intervention and support a case for further intervention to address Cal’s significant narrative difficulties. Overall, in considering student modifiability across the two MLE teaching sessions, a significant amount of effort was required by the researcher during the sessions, with extensive scaffolding provided to Cal.

Comments from participants in relation to Cal’s DA:

Participant Ab noted that with DA she found that Cal “actually knows a lot more than what he was able to put across”. She noted that as a SLT she found that “definitely you get a better feel of what the child is actually able for, kind of draws out his knowledge a bit more than just giving him like pictures to talk about.” Participant C observed that “I would think it's a really very good way of doing assessment…for these children who are very complex” and “another test wouldn't give you that scaffold.” Participant Aa noted that “It kind of gives an idea of the level of support I suppose he'd need and ability to retain it.”

Participant Ab responded to the DA findings positively, noting that “definitely you get a better feel of what the child is actually able for, kind of draws out his knowledge a bit.” Participant Aa considered that DA “kind of gives an idea of the level of support I suppose he’d need”. Participant C also observed that “it’s

a really very good way of doing assessment" for children with complex presentations.

Comparison between Assessment Formats for Abe, Ben and Cal

Table 5.4 summarises the SLT participants' findings in relation to the different forms of assessment, across interviews, participants and children.

Table 5. 4 Comparison between the findings of different forms of assessment with Abe, Ben and Cal.

Narrative assessment format	**Static Assessment**	**Parent Interview**	**Naturalistic Group Elicitation**	**Dynamic Assessment**
What it added / how it limited the information known about Abe, Ben and Cal.	Transcripts facilitated SLTs to describe narrative weaknesses in significant detail. Illustrated strengths in narratives. Addressed micro- and macro-level elements. Lent itself to impairment-based goal-setting for therapy planning.	Parent interview provided information on weaknesses and strengths in children's narratives, this time from their parents' perspectives. Provided insight into parental effort and experiences of supporting narrative development. May be limited by parental factors such as level of communicative competency.	All three children engaged with each other and produced short stories. Varying degrees of scaffolding and support provided by both the researcher and peers during the naturalistic group elicitation process. May be hard to follow or analyse in transcript format	Administration of Story 1 highlighted the weaknesses in the children's narratives. MLE process provided insight into how the children responded to intervention as well as providing information on understanding of concepts such as time and place. Story 2 and the act of comparing it with Story 1 gave information about carryover and learning.

Narrative assessment format	Static Assessment	Parent Interview	Naturalistic Group Elicitation	Dynamic Assessment
Any similarities with other assessment formats used in the course of this research with Abe, Ben and Cal.	In common with parent interview, naturalistic group elicitation and DA, this assessment lent itself to devising impairment-based narrative goals in view of identifiable strengths and weaknesses in children's narratives.	In common with all of the other assessments, weaknesses in narration were identifiable (this time by the parents themselves), e.g., the children not providing enough detail in stories to be understood by even familiar listeners.	In common with DA, the level of scaffolding a child required to tell a short story was identifiable. In common with all other assessments, impairment-based goals could be generated. In common with parent report, insight provided into a natural environment in which a child would tell a narrative.	In common with group elicitation, insight was gained into the level of scaffolding and feedback each child required, during the MLE process. In common with all other assessments, impairment-based goals could be generated.
Any unique contributions to Abe, Ben and Cal's narrative assessment profiles	Added value of helping to devise impairment-based narrative goals for the children. Information at the impairment level of *ICF-CY* (2007). One participant noted that this assessment demonstrated narrative skills in development. Another SLT referred to insight provided into comprehension. Assisted with planning for assessment in other areas e.g., vocabulary.	Offered insight into the children's past engagements with narratives (e.g., not enjoying stories when younger). Information at impairment, activity and participation levels of *ICF-CY* (2007). Provided information on how the children used narratives in the home environment. Learning about specific interests unique to each child (e.g., a new dog) and about the child's personality traits (e.g., 'the joker' of the family).	Unique opportunity to identify child's communicative functions e.g., initiating a conversation, responding to peer's questions etc. Offered value of examining the children interacting functionally and engaging with peers and telling stories to other children. Information at impairment, activity and participation levels of *ICF-CY* (2007).	MLEs offered the assessment process an insight into how the children responded to teaching and how they synthesised new learning (student modifiability). Information gained regarding attention, concentration and participation during short intervention sessions (including examiner effort). Information at the impairment and activity levels of *ICF-CY* (2007)

Narrative assessment format	Static Assessment	Parent Interview	Naturalistic Group Elicitation	Dynamic Assessment
SLT participant quotes relating to this assessment format with Abe, Ben and Cal.	Participant would target "irregular past tenses, conjunctions, syntax, vocabulary enrichment" (Dc). Child "gets some key information but lacks knowledge of correct sentence structure" (Ab). "would like to probe his vocabulary and word finding" (Dd). Child's narrative "would be very difficult to follow if not familiar with the story" (Ab). Child "appears to be developing narrative skills. He is at a very early stage and will require a lot of scaffolding to develop narration skills" (C).	"I think you get an insight into how much more work it is for her to get a story out of him like the effort that she has to put in, all the prompting and you know like it's such a big goal for her like, the Mum and Dad" (Dc). Parent interview could be "actually even more useful than the assessment of the child themselves" (Df). "the best of it would be how motivated he is" (C). "functional" information (Db) can be obtained from parent interview. "I think Mum's understanding of what a narrative or what a story is, is probably limited to her understanding of what you're kind of asking" (B).	"It's like he's keeping the group going" (Db). "you can kind of see the group supporting him quite a bit" (Aa). "you get to see how they function on an everyday basis more, and how they might interact with their peers in general" (Ab). Child "starts relying on questions so he doesn't have to tell a story" (Da). "sometimes I get a bit lost in all" (Dc).	"The standardised assessment really wouldn't have really given us that information of how he has maybe a poor understanding of the time" (Dc). "He doesn't have a very robust range of feelings to be able to describe. And that wouldn't come across in a lot of standardised language assessment" (De). "very appropriate for him because we're definitely getting to see, I think, an accurate representation of him" (Da). "what I'm seeing from kind of the first narrative to the last narrative I suppose is that the student doesn't seem to have utilised the strategy" (B). Child "actually knows a lot more than what he was able to put across" (Ab).

SLT participants used each assessment format in turn to respond in detail to the information they provided in the formation of a narrative assessment profile. Advantages to the use of each format was identified for each child. Limitation to usage was identified in relation to parent interview and naturalistic group elicitation assessment approaches.

Learning from Self-Reflective Journal

As part of self-reflection, the researcher considered comments noted on the experience of administering these assessments and compared these findings with the SLT participants' findings. In relation to the findings regarding static assessment, the advantage of being able to administer the assessment, as opposed to reading only from a transcript, meant that the researcher had access to additional non-verbal cues that SLTs reading only the transcripts did not have: the researcher could observe when a child carefully studied the picture books and listened attentively to the story telling and when a child struggled to maintain attention and concentration to the task. These non-verbal cues provided insight into individual factors that could impact on a child's participation in any future intervention.

The researcher noted contrast in perception of Ben's mother's communicative competency and the impression of SLT participants; being in the same room provided me with similarly helpful para-verbal and non-verbal cues which aided her communication with me, such as intonation and volume as well as eye contact and gesturing. From this learning, the resaercher concluded that future research may benefit from SLT participants observing video footage of the assessment formats being administered. Comparing SLTs' opinions regarding naturalistic group elicitation with administration of this assessment format, the researcher observed that the experience was interactive between all speakers. This in turn made real-time analysis of narrative quality a challenge and the researcher benefited from reading the transcripts as an administrator. The researcher commentary of administering the DA was similar to the SLTs' commentary, since this assessment process afforded the researcher the opportunity to comment on experiences of administering the assessment and to share subjective clinical ratings, as experienced during administration, with SLT participants. This resulted in a degree of shared

understanding between researcher and participant regarding the experience of undertaking this assessment format.

On reflection, the researcher had not expected Ben's relative strength with verbs when compared with nouns. It is noteworthy because maternal speech tends to contain mainly nouns and also verbs have fewer concrete meanings so they are developmentally acquired more gradually than nouns across languages (Befi-Lopez et al., 2013). Verb usage also lags behind noun usage even in young children with DLD (Conti-Ramsden and Jones, 1997). It is possible that verbs were a previous therapy target for Ben, which could account for his strength in this area. The researcher found it helpful to reflect upon Colozzo et al.'s (2011) findings regarding Content and Form in the narratives of children with DLD. Colozzo et al. (2011) looked at two related studies of the narratives of children with DLD as compared with their typically-developing age-matched peers. They found that compared with typically-developing peers, children with DLD produced narratives of uneven strength.

Colozzo et al. (2011) found two general subtypes: children with DLD who produced stories that were quite grammatically correct but with poor content and children whose stories had elaborated content but were less grammatical. On reflection, Ben presented with more elaborated content and less evidence of form and the combination of verbs and nouns in his vocabulary added to the researcher's impression of greater content than form. Researcher reflections also prompted research into the influence of Polish as L1 on English as L2. Jaskulska and Łockiewicz (2017) report that children with Polish as L1 may make lexical transfers into English, for example, using the wrong verb form (e.g., "I would like to found") and incorrect inflectional endings, such as

not using -ed to mark the past tense of verbs. This could explain why Ben's narrative account was related in the present tense.

The administration of these child assessments resulted in a great deal of reflection overall. On reviewing the research journal and supervisory notes from the time period when the assessments were undertaken, the researcher can see that each element of the assessment caused self-reflection. During the course of administering the static assessments the *Bus Story Test* and *Peter and the Cat,* the researcher reflected that normally this type of information could, in some situations, be the only information available to SLTs in relation to the narrative productions of a child with DLD. Additionally, on reflection, parent interviewing did not take as long to administer as had initially been anticipated. It was also observed that the parents who participated in this research were tuned into their children's difficulties. The relationship between participation in narrative assessment research and insight into one's child's narrative difficulties is complex and could not be fully understood without further probing questions with parents: were the parents motivated to participate in research due to their interest in their children's narrative assessment? Did they undertake more observation in relation to narratives on signing up to the research? These questions, as interesting as they are to the researcher, cannot be answered within the scope of this current research.

The group elicitation with all three children offered an opportunity to witness the children interacting with each other. The researcher was particularly impressed by the support that these peers gave each other wherever possible. It was reflected that the functional abilities of the children were most clearly communicated during this assessment format. Self-reflection was unavoidable during the DA process, as well as reflection on the children's narrative abilities,

and the researcher reflected after the MLEs in a way not undertaken with any other assessment format: did the researcher pitch the *intention to teach* at too high a level? Could the reseracher have given other more concrete examples to the children? The self-reflexivity prescribed in this particular format of DA proved to be an interesting experience as a clinician.

The researcher noted a common requirement for scaffolding to support narrative production across the three children and considered it indicative of the degree of language impairment associated with DLD. Another cross-child observation is that the particular qualities of Story 2, Bird and his Ring, could possibly be contributing to the mixed profile of seeming ‘improvements’ and ‘dis-improvements’ within the children themselves and across the children. This will be considered in later reflections. Returning to Cal, the researcher noted that he appeared to have difficulty recalling more than the very basic details of Two Friends even with the story book in front of him. Again, this could be reflective of wider central executive functioning difficulties that are now arguably associated with DLD (Henry and Botting, 2017).

Chapter 6: Results and Analysis of Focus Group 2 (AR Cycle 3)

The third AR cycle was concerned with the second set of focus groups for the SLT participants. In this second set of Focus Groups, the same ten SLT participants (Table 4.1) were asked questions relating to the profile of the child profile their group had collaboratively selected by agreeing on a number between one and three. Choosing number one corresponded to Abe's profile, number two corresponded to Ben's profile and number three corresponded to Cal's profile. Since static assessment was the only format from the four assessment formats -static assessment, DA, parent interview and naturalistic group elicitation- that all ten SLT reported undertaking already as part of narrative assessment, static assessment transcripts were provided first to the participants. Participants were asked how this data added to the narrative profile of the child and asked to comment on the assessment's usefulness (with respect to clinical utility or barriers to usage) and to talk about why they had a particular opinion. DA, parent interview and naturalistic group elicitation transcripts were then provided in turn (the order of presentation was varied in order to reduce order bias for the items less familiar to the SLTs) and the order is contained in Table 6.1.

Table 6. 1 Participants examining each child profile and order of presentation of assessment formats

Child	**Abe**	**Ben**	**Cal**
SLT participant	**Db, Dc, De, Df**	**B, Da, Dd**	**Aa, Ab, C**
Order of assessment presentation	Static Assessment	Static Assessment	Static Assessment
	Parent Interview	Group Transcript	Dynamic Assessment
	Group Transcript	Parent Interview	Group Transcript
	Dynamic Assessment	Dynamic Assessment	Parent Interview

For each assessment format, participants were asked the same questions: How does this data add to the profile of the child? How useful is this information (regarding clinical utility or barrier to usage)? Could you tell me a bit more about why (you have this opinion)? The participants' commentaries regarding the children's profiles are integrated within Chapter 5. This chapter focuses particularly on the next three questions asked in the focus group:

- What elements would you include in a comprehensive assessment of narrative skills?

- Do you think there is anything missing from your assessment information?

- How do you think we could put this into action? (potential for planning)

Thematic Content Analysis and Results

The main theme across interviews and participants concerns SLTs' responses to the various forms of assessment.

Static Assessment

Participants developed detailed impairment-based narrative and wider language goals based on the static assessment results provided to them. All ten SLT participants reported that they would include static formal assessments of narratives in a comprehensive narrative assessment profile. Participant De would include "the

standardised narrative [assessment] as well. They're going to give you I suppose some idea for narrative skills in comparison to peers" (De, lines 501-502). Participant Aa noted, "I probably would, just because of the benefit of being able to repeat it" (Aa, line 202). She also highlighted a recent change in her own clinical practice "and I do, out of them all I'm increasingly liking the ERRNI 'cause I do like the story is done twice in the session. I found quite different profiles from that children who can't recall it at all and some have a much better version with time. But to all intents to give me a guide with recommendations to make" (Ab, lines 204-207). Participant Ab felt that static standardised assessment is suited to her school-based setting: "I think in terms of where I would support most of the kids' work in schools would be actually a standard score is useful" (Ab, lines 209-210). Participant Ab would use static formal assessment as a comparator with more naturalistic measures: "I think it would be good to even be able to compare his performance on like a more naturalistic story-telling that's based on his personal interests or personal information compared to something that's very new to him and that he hasn't seen before and that he doesn't have a particular interest in. I think it would be good just to compare his performance and the information that he can give" (Ab, lines 205-207). Participant B sees a role for static standardised assessment, although not as a standalone measure: "standard assessment is useful and beneficial, but shouldn't be taken alone" (B, lines 311-312). Participant Dd considered static standardised assessment in relation to bilingual and multilingual children: "I think it's a good starting point, benchmark as well, to have. But then when there is that second language learning piece, you do have to look wider than that as well. Then you're not going to have the standard assessment in the second language" (Dd, lines 189-191).

Dynamic Assessment

Dynamic Assessment, when specially considered in relation to Abe, Ben and Cal, was reported by the SLT participants to be useful. For illustration, in considering Abe,

participant Df commented, “This kind of stuff is actually eye opening as to what you can get out of them” (Df, 316). In relation to Ben, participant Da reported, “It seems very appropriate for him because we're definitely getting to see, I think, an accurate representation of him” (Da, lines 133-134). Regarding Cal, participant Ab reported, “Definitely you get a better feel of what the child is able for” (Ab, line 65). However, when asked if they would include DA in comprehensive narrative assessment protocol, participants were more ambivalent. Five of the ten SLTs replied in the positive and five were more undecided in their responses; the latter including both Aa and B, the SLTs who considered they currently undertake DA. No participant reported that they would definitively exclude it from a comprehensive assessment protocol. Participant Da considered it beneficial: “It should be [part of a comprehensive narrative assessment approach]” (Da, line 207) and participant Dd agreed “it should be” (Dd, line 208). Participant Db considered therapy intervention choices could be influenced by DA results: “I worked in a place where we did narrative groups and kids came in like four of them. We did like setting the scene and do videos of that. I think there’s definitely kids there that need it. And I think that dynamic assessment is the only way to get that information” (Db, lines 447-450). Participant Aa was more cautious, although receptive to investigating further: “I think I would when I look at the transcripts. Yeah, I like the fact that it would pair nicely with something a little bit more spontaneous or a little bit more relaxed. Yeah, I like the idea of trialling some teaching as part of the assessment” (Aa, lines 217-219).

Time constraints were considered to be barriers to usage, with Aa citing, “Time being the obvious one” (Aa, line 57), participant B reporting, “I think the time factor is the major one” (B, line 271), and participant Da noting, “Time to analyse. There's a lot and you've done so much and. we just don't have that time in Primary Care” Da (Da, line 177). DA was criticised as either not prescriptive enough, with Da commenting, “It seems maybe very wishy washy. It's hard to employ it, maybe” (Da, line 171), or too prescriptive, with participant B reporting, “You're kind of stuck to it” (B, line 249) when undertaking DA with a particular format and structure. Additionally, in relation to this

particular format of DA, participant B, who reported in the first set of focus groups that DA was “probably something that I've been using without calling it dynamic assessment” (focus group set 1, line 385), considered this particular approach and commented, “I did not realise or take on board until now the technicality and the complexity of using it” (B, lines 355-356).

Speech and language therapist participants reported lack of knowledge, impacting on confidence to use DA. Participant Da considered a barrier of “probably confidence” (Da, line 166) and “just, I suppose, knowing what to do?” (Da, line) and participant Dd reported that she would want more “confidence” in the undertaking process also (Dd, line 175). Participant Aa, who also reported in the first set of focus groups to be undertaking DA although “less structured than you're describing” (Aa, focus groups set 1, line 178) considered this particular approach to DA and commented, “I would say the biggest barrier is in terms of can I try this tomorrow? Yeah, I definitely need that scaffold, in terms of reporting back the usefulness of it. Being quite specific in terms of what we're reporting up” (Aa, lines 95-96). A need for more training and support was identified as a barrier to usage: participant Ab reported, “I'm not hugely familiar with it but we have been talking about it a lot at work lately” (Ab, lines 87-89) and participant B noted, “I think it possibly could have its use but I think that you, there definitely needs a bit more support on how to use it” (B, lines 356-357).

Parent Interview

The SLTs who participated in this research placed value on parent interview as part of assessment, with participant Dd reporting, “That's the big piece of the puzzle, isn't it?” (Dd, line 101). Parent interviews were considered useful for providing more

information about the children, specifically about children's interests and their functioning at home in overcoming language barriers, for example, De commented, "I think based on this I would feel that actually maybe I should be doing more of this talking to parents and getting the parents' insight" (De, lines 60-61). Parent interview was considered to provide insights into parents' attitudes and experiences as well as their understanding of their child's difficulties. For example, participant Df commented, "It's functional, and just to get the parent's perspective on what they feel their child is lacking" (Df, lines 55-56), and participant Dc commented, "I think you get an insight into how much more work it is for her to get a story out of him like the effort that she has to put in, all the prompting and you know like it's such a big goal for her like, the Mum and Dad" (Dc, lines 71-73). All ten participants agreed that parent interview is something that should be included in a comprehensive narrative assessment protocol, although the degrees of positivity expressed towards parent interview varied across participants.

Once again, "time" emerged as a significant barrier to the use of an approach, this time, in relation to the logistics of parent interview, with Aa commenting, "I suppose time. You know an interview would take up a good portion of a session I suppose. That's probably one thing. And maybe in a school session it would be hard to get the parents in" (Aa, lines 171-173). As an additional consideration, an interpreter may be required, for example, in the case of Ben's mother, with participant Da suggesting, "You really need the interpreter and can't continue to interview Mum with English." (Da, lines 115-116), and Dd agreeing "that would be key to have for everyone to express themselves" (Dd, line 117).

Parental engagement in the therapy process was identified as a potential barrier, with participant B commenting, "engagement is a really difficult thing for certain parents to

actually attend sessions and to work with speech and language therapists" (B, lines 140-142). Sometimes a parent could have language difficulties or differences themselves, with participant C noting, "A parent may have had difficulty themselves, and so they're not going to . . . you have to build up trust with them, and that sometimes doesn't work out. And that's the hard part. The parents accept you and know that you're asking them what to do, and they go off and do it. But you are going to get some people that just can't process what's going on" (C, lines 380-383).

Naturalistic Group Elicitation

The participants praised the naturalistic group elicitation for the insights gained into the children's narrative functioning with peers, social and interaction skills, coping skills, and self-awareness of difficulties. For example, participant Dd considered it "functionally highly impactful" (Dd, line 58) and participant Ab reported, "You get to see how they would perform on an everyday basis amongst their peers with storytelling or news, things like that" (Ab, lines 113-115). Participant Db reported that Abe was "keeping the group going" (Db, line 153). Participant Da noted that Ben "starts relying on questions so he doesn't have to tell a story" (Da, lines 38-39). Participant Aa reported that in relation to Cal that "I'm getting a really good sense of how he is at peer interaction" (Aa, 107-108).

When asked if participants would include naturalistic group elicitation in a comprehensive narrative assessment protocol, two participants responded in the positive, one in the negative and the seven other participants responded with ambivalence. Participant C was positive: "All I'll say to you is I'm a real proponent of groups" (C, line 195), and Dd reported, "I wouldn't have thought of it before, but then

having read that, it is more clear. It's functionally highly impactful” (Dd, lines 57-58). In contrast, participant Db reported, “Yeah, I don’t think it’s realistic” (Db, line 205), and participant Df agreed, “It's idealistic. Yeah. But idealistic just to kind of gauge how he's interacting with peers with someone who's able to give him the prompt” (Df, lines 206-207).

Barriers to use were identified, and this approach was not seen as an element of comprehensive assessment, mainly due to practical issues such as the management and dynamics of groups, with participant Aa considering, “So probably just the practicality of having a group of kids in” (Aa, lines 137-138) as well as confidentiality / GDPR concerns. SLT participants felt that an SLT facilitating the group would need to know the children well to manage individual child personalities and that the children would need to have a level of familiarity with their group peers, with Ab considering, “You need to have enough of the background knowledge about these kids, so you need to know them quite well” (Ab, lines 122-123), and participant B noting, “You need to have a good knowledge of the actual students and their interest in order to be able to generate conversation topics and keep the conversation going” (B, 76-78). Participant Da considered, “You probably need somebody quite skilled in terms of an examiner or prompter” (Da, lines 70-71). Time constraints also featured in relation to this assessment format, as referred to by Ab. Overall, naturalistic group elicitation was not deemed to be a “realistic” (Db) clinical tool for a comprehensive narrative assessment battery as most of the interviewees worked in the clinic setting and not in schools.

Additional Assessment Formats Suggested

Teacher interview and liaison was suggested by participants Ab, B and C as an assessment format that could be added to a comprehensive narrative assessment protocol. Participant Ab commented, “Because maybe the home situation it might be different, he might be given lots of cues, whereas in the classroom, just to see, to talk to the teacher just to see how he is able to cope in the classroom” (Ab, lines 196-198). Participant B said, “And I definitely think that part of the overall assessment protocol there should be the inclusion of teacher interviews and not just a teacher questionnaire or teacher checklist, but also like an actual phone conversation or interview with the teacher” (B, lines 327-330).

For bilingual and multilingual children, participants B, Da and Dd would like language samples in all languages. Additionally, participants individually suggested the inclusion of a narrative comprehension measure (participant Aa), phonological system assessment (participant B), in-school observations (participant B), reading school reports and items of written schoolwork (participant B), and comparison of personal narratives with retelling of popular fairy stories, such as the three little pigs (participant Dc).

Learning from Self-Reflective Journal

The researcher reviewed the research journal as well as the notes made during the interviews with the SLTs and a recurrent theme in the responses involved the concept of “time”. It is possible that the three case studies provided to the SLTs contained too

much information for them to process, leading to a feeling that they did not have time to respond to it. It is possible that they may have felt differently if they had viewed a recording of the assessment administrations and this was noted as reflective learning.

The researcher had observed during the first focus group that a maximum of four participants was probably optimal. Some group dynamics came into play even in the small groups, where at times the interviewees agreed with each other, using “mmm huh” rather than specific words (c.f. analysis as per Appendix 4). The researcher was able to ascertain support for various suggestions from the mmm-huhs, although the verbal responses overall for the groups were somewhat lessened compared with the individual interviews due to this (typical) group activity of agreement. The learning the researcher took from these observations of group dynamics was that when developing protocols in future, it may be helpful to conduct some individual interview or techniques that involve individual responses initially before introducing a group element, for example, a Delphi method may be worth consideration for future research in this area.

Chapter 7: Discussion

Reviewing the Gaps in Knowledge

This research emerged in response to identified gaps in knowledge in the field of narrative assessment of children with DLD in Ireland. Prior to this research, the literature detailing assessment into narrative skills in children with DLD considered primarily a comparison of static assessment and DA; it did not focus on establishing what complementary information each could offer practising SLTs as they build an inclusive profile of a child's oral narrative functioning. Additionally, the value offered by naturalistic elicitation involving peers and by parent interview had not been explicitly considered in research actively involving participating SLTs. There was also no previous research literature involving AR that worked collaboratively with SLTs to describe problems associated with how a comprehensive assessment of narrative skills for children in Ireland might look and identify possible solutions.

With these gaps in mind, this research asked how can SLTs comprehensively assess the narrative skills of school-age children with language impairment in a way that reflects the interactive, dynamic nature of narratives and the social, communicative contexts in which these children use narratives? The AR design comprised three cycles each addressing particular research objectives.

The first AR cycle focused primarily on interviewing ten participating SLTs about their opinions and experiences in relation to assessment of narratives. The first objective was to ascertain the elements of oral narrative assessment considered important to

specialised and non-specialised SLTs. The second AR cycle involved assessing the narratives of three participant children with DLD with the objective of generating data from a number of assessment formats; namely static assessment, DA with mediated learning experiences, parent interview and naturalistic group elicitation. In the third AR cycle the ten SLTs were re-interviewed, this time in relation to their opinions on the child assessment findings and the various assessment methods used. The objective was to ascertain the assessment formats considered valuable by participating SLTs and to establish which formats of narrative assessment might be included in a more comprehensive narrative assessment protocol. Key findings follow with reference to the identified objectives and AR cycles.

Finding 1: SLT participants place value on narratives, particularly narratives capturing children's personal 'real life' stories

The participating SLTs identified narratives in general to be important. This finding is supported by, and supports, other recent research. Thomas, Schulz and Ryder (2019) also convened focus groups with a total of seventeen SLTs with varying ranges of experience, ranging from two to thirty-eight years' experience. Their focus groups considered the experiences of SLTs in the DLD assessment process. One of the main themes that emerged from their work was that narratives were included by SLTs as a key indicator of DLD, albeit to a lesser degree than other factors such as word order errors and word finding difficulties (Thomas, Schulz and Ryder, 2019). This research extends the findings of those such as Thomas, Schulz and Ryder (2019) by considering both the current assessment process with children who have DLD, in this case, specifically in relation to assessment of narratives in children with DLD and also by collaborating with practising SLTs to envisage what a comprehensive oral narrative assessment might comprise for SLTs in Ireland.

The SLTs associated narration with real, personal stories, for example, “that real lived event” (participant Aa, focus group round 1) and attached importance to these types of narratives. The personal narratives described by the SLTs in this research may be contrasted with fictional narratives that are elicited from wordless picture books or from the retelling of picture stories. A tension between values placed on personal and fictional narrative emerged from the data: narratives were primarily considered valuable for telling personal stories to family and friends; yet the assessment elements agreed by consensus, by the practising SLTs, as being integral to a comprehensive oral narrative assessment protocol considered mainly fictional story retelling.

Finding 2: SLTs place value on static assessment, dynamic assessment and naturalistic language elicitation

Static Assessment

Static assessment, overall, was held in regard by the ten SLTs who participated in this research. In the SLT focus groups undertaken as part of this research, favourable responses to static norm-referenced and criterion-referenced tests spanned levels of experience, although more newly-qualified SLTs, those with less than three years post-graduate experience working with children who have DLD, offered lengthier explanations as to their value and benefit. Where the shortcomings of static standardised assessments were described by participants, the SLTs who offered criticism were those experienced SLTs with greater than five years post-graduate experience working with children who have DLD. This finding raises the question of whether SLTs become less reliant on standardised assessments as they gain clinical experience. Returning to the original literature search in describing the problem during the first AR cycle, some elements of the results are broadly similar to Huang, Hopkins and Nippold’s (1997) questionnaire findings, which found half of their 216 US clinician

respondents to have expressed neutrality towards standardised assessment, with the rest evenly split between some degree of satisfaction or dissatisfaction. School-based SLTs were significantly less satisfied compared with SLTs in clinic/hospital settings. To compare, in this current research specifically focused on paediatric clinicians in Ireland, the more experienced clinicians tended to be school-based (three of the five more experienced SLTs), whereas the less experienced SLTs carried a broader clinic-based caseload (all five less experienced SLTs). Therefore, it may also be the case that satisfaction with standardised assessments could be related to workplace setting. In Huang, Hopkins and Nippold's (1997) research, more experienced SLTs were similarly less satisfied with standardised assessments than their less experienced counterparts, particularly in relation to the time allocated to administer, score and interpret the tests (Huang, Hopkins and Nippold, 1997; Nippold pers.comm. 13/10/2021). Returning to the results being considered now, it is inferred that a degree of SLT dissatisfaction with static standardised assessments still remains and 'time' continues to remain a source of tension for SLTs.

The second round of focus groups with SLTs revealed the specific elements of narratives identified by the SLTs as evident in static assessments, and feedback from participating SLTs focused broadly on particular linguistic elements, such as the use of conjunctions, as well as on narrative structure, for example, including a beginning, middle and end to the story. Participating SLTs, on review of the static assessment results, suggested impairment-level goals for future speech and language therapy blocks. When asked during the focus group interviews if they would include static assessment in a comprehensive assessment protocol to assess oral narratives of children with DLD in Ireland, all ten SLT participants responded in the affirmative.

This finding, establishing static formal assessment as an integral element of language assessment in Ireland, is reflected in available international research literature.

Returning to the literature search, Kerr, Guildford and Bird's (2003) questionnaire with 144 Canadian SLTs considered how SLTs would rank the following assessment elements in order of most to least importance in decision making: standardised assessments, reports from significant others, observations in context, criterion-referenced procedures, language sample analysis and case history. For school-aged children, standardised assessments ranked as most important, relative to the other elements, for screening, diagnosing, describing the language system and establishing treatment goals, and was in second and joint first place, when used with elementary children and high-schoolers respectively, to measure treatment progress. Similarly, Kumar, Rout and Kundu (2011) found in their questionnaire, adapted from Huang, Hopkins and Nippold (1997) and applied in India, that standardised assessments were used for both diagnostic purposes (29 of 40 participants) as well as for intervention purposes (14 of 40 participant respondents). This research relates to a gap in knowledge, as the Canadian and Indian data do not relate specifically to narrative assessment or DLD.

Fulcher-Rood, Castilla-Earls and Higginbotham (2018) examined diagnostic decision making with fourteen US speech-language pathologists, who were each presented with five case studies of children with congruent and incongruent results between static standardised assessments and informal measures. Static assessments included cognitive screening (*Kaufman Brief Intelligence Test–Second Edition*), three static language tests (*CELF Preschool–Second Edition*, *Preschool Language Scale–Fifth Edition* and *Structured Photographic Expressive Language Test–Third Edition*) and a hearing screening. Informal data was available from two language samples (one story retelling from *Frog Goes to Dinner,* and story elicitation using pictures of Santa, the beach, McDonalds™, a child with a hurt knee and a Halloween scene) with transcription and also *Systematic Analysis of Language Transcripts* software analysis and coding, and parent and teacher questionnaires. Participants selected the assessments they wished to review and subsequently made a diagnosis based on the assessment information. Researchers analysed the talk of the participants to

determine the materials considered when making diagnostic decisions. Standardised assessment was used by SLTs in 97% of case study analysis, with 80% of participants requesting parent and teacher concerns and 70% requesting written transcripts of the picture elicitation task. In cases of an incongruent presentation, standardised assessment results guided diagnosis. Fulcher-Rood, Castilla-Earls and Higginbotham (2018) considered child language in general, whereas this research focuses on narrative language. The research presented in this thesis further adds to available data as it contains SLT participant commentary on the ongoing place of static assessment, and particularly norm-referenced or criterion-referenced static assessment, as it pertains specifically to narrative assessment and children with DLD. The place of static assessment as an integral element in narrative assessment in Ireland is confirmed with this research, although the relative importance of static assessment in decision-making when compared to other assessment elements has not been elucidated.

Dynamic Assessment

Speech and language therapist participants, in the first round of focus groups, responded positively to the *concept* of DA. Participants recognised, as early as the first focus group, some of the unique characteristics of a dynamic element to assessment, for example, allowing the child to demonstrate their narrative strengths. The particular DA approach used in this research; that is, DA with pre- and post-intervention story generation and two structured mediated learning experiences between those time points, was novel to the participating SLTs. There was interest and general approval of the record form used in this particular DA and in particular, the record form's rating scale for teaching effort required when facilitating the mediated learning experiences. The specific assessment books used during this DA, which were designed as part of Gillam, Miller and Peña's (2001) research with multi-culturalism in mind, attracted criticism for this same reason, as the Irish SLTs considered the

wideness in possible interpretation to be confusing. The reader is reminded that the same DA materials have been administered in the UK with success so there may be merit in exploring this further in Ireland (Martin, 2012). In contrast to the findings relating to static assessments, the more newly-qualified and non-specialised SLTs were more cautious in expressing positive commentary regarding DA than the more experienced SLTs. However, in similarity to their commentary on static assessments, non-specialised SLTs were also less critical of DA in general than their more experienced, specialised colleagues. It could be asked; are more experienced SLTs less reliant on both static assessment and DA when assessing narratives than their less experienced counterparts, possibly utilising a wider range of assessment approaches or a less formal approach during narrative assessment?

In the second set of focus group interviews, participating SLTs were asked to respond to its place in a comprehensive narrative assessment protocol, having considered examples of DA data. With the data to hand, participant response was more ambivalent, with five of the ten SLTs replying in the positive and five more undecided in their responses. Barriers to usage included concerns regarding time required to administer DA as well as reported lack of knowledge and training in DA approaches.

Whilst this research could be placed in the context of published research literature relating to static assessment, the data generated in relation to Irish SLTs' attitudes and opinions regarding DA in narrative assessment stand alone. There is published international research literature relating to learners' experience of DA; as examples, Kolahdouz et al. (2018) explored learners' attitudes towards dynamic e-assessment for 35 mathematics major students using questionnaires and semi-structured interviews. The authors found positive attitudes towards dynamic e-assessments in its applicability for this cohort of students. Babamoradi, Nasiri, and Mohammadi (2018)

considered learners' attitudes towards computerised DA with 22 Iranian students taking English as a Foreign Language classes and, similarly, found learners to be positive in their feedback regarding DA. Additionally, there is published research literature considering the attitudes of practitioners, in other fields in which DA is used, towards DA. Nazari (2017) interviewed ten lecturers who taught English to language learners in higher education facilities in the UK. Using grounded theory to analyse his findings, Nazari (2017) found ambivalence from the college lecturers towards DA. Some of the reservations regarding its use with English language learners centred around the time commitment required and level of engagement that would be expected of both students and lecturers, with participants also noting the lack of DA training available to lecturers. The participating lecturers' comments regarding time required was similarly reflected in this research by the participating SLTs.

Deutsch and Reynolds (2000) surveyed 119 Educational Psychologists in the UK with interests in DA and considered the 88 responses received. The participant Educational Psychologists expressed positive attitudes towards DA, coupled with a low level of implementation in practice. Reasons for the low implementation included reports of insufficient training in DA, lack of time due to other assessment priorities and lack of ongoing expert support to maintain its use. Of the reasons for low usage reported by the Educational Psychologists in Deutsch and Reynolds' (2000) research, the issues of time constraints and lack of training are common to the reasons reported by the Irish SLTs in this research in not adopting DA more widely in relation to narrative assessment. This research offers unique insights into SLTs' reasons for not adopting DA more consistently into narrative assessment and there is a degree commonality with the barriers experienced in other professions where DA is also considered to be a feature of best practice.

In considering the responses towards DA, a theme emerged of SLT participants being initially unfamiliar with what DA incorporated and, following explanation, reporting that it is being done already, either under a term different from “dynamic assessment” or with no explicit name. The uncertainty regarding the term “dynamic assessment” and its place in current practice bears consideration. Given the high interest in the DA record form used in this research and the SLTs’ universal acknowledgement of the novelty of structuring and recording mediated learning experiences and of explicitly considering examiner effort, it is suggested that DA, in the format undertaken here in this research, is not what the SLTs were suggesting themselves to be familiar with. Instead, SLTs talked about a format being used in clinical practice that was “less structured” (participant Aa). It is likely, from the SLTs’ descriptions of practice, that those interviewed were both comfortable, and familiar, with adapting static assessments and using a series or a hierarchy of cues to determine which strategies would benefit the child with DLD. The SLTs did not detail the stage at which this approach would be taken and there is no suggestion that it was exclusively applied at points of assessment only.

Whilst graduated prompting and test-teach-retest feature in some applications of DA (Cabaracas et al., 2019), the scope of DA is wide and includes mediated learning experiences as well as DA interventionist models (whereby prompts are pre-planned and fixed) and DA interactionist models (wherein prompts are not determined in advance and emerge from mediated dialogue). However, each of these approaches to DA contain a common feature: active intervention by a mediator with a focus on helping students understand the principles of task solution and structure in order for students to develop successful strategies. Reference to either structure or a form of organisation in the approaches was consistently absent from the SLTs’ descriptions of their own versions of ‘dynamic assessment’. The approaches described also did not refer to explicitly considering examiner effort. It is suggested that the informal approaches being undertaken by the SLTs, whilst undoubtedly adding value to the diagnostic and/or assessment processes during which they are used, do not contain

an identifiable structure. This lack of structure, as applied to a mediated dialogue or to mediated learning experiences, means that it is difficult to apply the term ‘dynamic assessment’, as it is presently understood through published research in the field of SLT, to the actions these SLTs described. Is current practice more similar in nature to diagnostic therapy? Could current DA practices by SLTs in Ireland fall under a substratum of diagnostic therapy? It is not possible to answer these questions at present and the researcher makes no recommendations regarding classification of current practises undertaken by SLTs in Ireland. What can be suggested, however, is that the mismatch between what is described in published research as ‘dynamic assessment’ in the field of SLT and what was considered to be ‘dynamic assessment’ by practising SLTs in Ireland be investigated further and in more detail in future research.

It is suggested that the ambiguity surrounding what DA is in speech and language therapy, and what it is not, warrants further dialogue on an international level within the field, and there are efforts among academics and interested practitioners to further this discussion at present. At present, for example, the researcher is engaged in dialogue as part of a group of SLTs interested in DA, with participants based in Ireland, the UK and Australia, through *DASL: Dynamic Assessment in Speech and Language Therapy Network*. Additionally, researchers in the field of static assessment have also offered alternative viewpoints regarding what static assessment can offer SLTs. Muskett, Body and Perkins (2012) applied conversational analysis to explore the administration of a picture naming test with four children who had diagnoses of Autism Spectrum Disorder. The authors argued that social interaction cannot be removed from static assessment procedures and suggest that clinicians, by re-examining familiar practices such as the administration of static assessment, could discover information regarding students’ abilities that could otherwise be overlooked, while facilitating clinician reflection; essentially, unlocking dynamic elements of even static assessment administration (Muskett, Body and Perkins, 2012). This viewpoint may also be considered in the context of an expanded understanding of the what the term

dynamic assessment means for practising SLTs in Ireland, further consolidating the need for more investigation in the area of narrative assessment for children with DLD.

Contrasting opinions offered by participating SLTs in relation to the term dynamic assessment, variously understood to be either too prescriptive (participant B) or not prescriptive enough (participant Da), also presented as barriers to DA being used more widely by the participating SLTs. Similarly, a lack of formal knowledge or training in Ireland also emerged from the SLTs' commentary. Greater availability of training courses in Ireland would be a possible remedy to this barrier, or alternatively, greater access to online training that is being delivered in other countries, could be another solution.

Naturalistic Language Elicitation

SLT participants, in focus group 1, were positive in their opinions regarding naturalistic language elicitation. Their commentary, in responding to the data pertaining to naturalistic language elicitation collected in AR cycle 2, identified a degree of ecological validity from the interactions between children in telling each other stories, as would happen in a classroom scenario. The findings from these data were considered by participating SLTs to be important and an insight into how the children would function telling narratives with peers.

In describing what the term *narrative* meant to SLTs in focus group 1, the participating SLTs had described narration with real, personal stories, for example, "that real lived

event” (participant Aa, focus group round 1) and had attached importance to these types of narratives. It is acknowledged that in the fields of written and spoken communication, the exact parameters of the term *personal narrative* remain the subject of dialogue (Ingraham, 2017), with questions remaining and suggestion that an understanding of the term requires inquiry into what, firstly, makes a personal narrative a narrative, and secondly, what makes it personal. The understanding expressed by SLTs of what narratives are ties itself to naturalistic group language elicitation. This form of assessment was the one that was identified by SLTs as producing the most “real” and personal children’s narratives, consistent with their view of the importance of capturing children’s narratives of this nature.

Based on the opinions expressed by SLTs in the first round of focus groups, one could surmise that that the naturalistic group elicitation, by virtue of being the one form of assessment used in this research that specifically captured personal narratives, would be viewed positively in the second set of focus groups, when the child data were considered. However, although there was positive commentary in relation to the results (e.g., “you get to see how they perform on an everyday basis” - participant Ab), it was not considered by SLT participants to be an easily-adopted assessment format. The respondents cited a diverse range of reasons against widespread usage, from the “time consuming” element (participant Ab) to the requirement to have “a good knowledge” (participant B) of the children in advance of this type of assessment. Overall, naturalistic group elicitation was not deemed by the SLT participants to be practical as a clinical tool for comprehensive narrative assessment, despite participant acknowledgment of its ecological validity.

Other stakeholders: Parent Interview and Teacher Interview

The SLTs who participated in this research did place some value on parent interview as part of assessment. Parent interviews were seen to be useful for providing more information about the children, specifically about children's interests and their functioning at home in overcoming language barriers. Parent interview was considered by the participating SLTs to provide insights into parents' attitudes as well as into their understanding of their child's difficulties and may also be used to facilitate parent coaching. Participating SLTs observed that parents may feel more involved in the therapy process when their opinions are actively sought in the initial assessment stages.

Once again, *time* emerged as a major barrier to the use of an approach, this time in relation to parent interview, particularly if an interpreter was required or if the child is always in the room with the parent. Conversely, when school-based, SLTs can encounter difficulties accessing parents. Individual differences in parent profiles were also identified as potential barriers, for example, when a parent views the SLT as the expert (as illustrated by the parent of Ben) and does not believe that their role is to become actively involved in the assessment and therapy process; possibly due to a parent's cultural background, or when the parent him- or herself has suspected DLD. Also, the level of disclosure by parents may depend on the relationship and level of trust established with the SLT. Overall, parent interview was considered an element that could enhance a comprehensive narrative protocol although it may not be widely undertaken due to practical issues.

A degree of ambivalence was communicated by SLTs in their responses relating to parent interview. Some of the SLT participants questioned the value of parental insights where parents themselves may be experiencing language difficulties. This applied not only to parents with receptive or expressive language difficulties, but also to parents where English was not a first language. Analysis of some of the opinions expressed by SLTs could be interpreted as reflections of self-image as an expert in the field and the comments may have invertedly created a perception of devaluation of the insights parents can offer into a child's narrative functioning.

Similarly, while three of the ten SLT participants reported that they would like to see teacher collaboration or interview in a comprehensive assessment of narrative skills, the language used to describe interactions with teachers reflected what could be an unbalanced power relationship in Ireland, where the SLT is the expert. This may reflect some tensions in clinical practice, whereby SLTs in Ireland are aware of published literature (e.g., Quigley, 2009) relating to the benefits of teacher-SLT collaboration and of a national impetus to work collaboratively with teacher colleagues (McCartney, 2018), yet they are not experiencing these practices at present. There has also been documented mismatch between best practice and clinical practice in this area in other countries, such as Australia, where Glover, McCormack and Smith-Tamaray (2015) used questionnaire and focus group approaches with SLTs and teachers. 14 of the 156 teachers invited and six of the 36 invited SLTs responded to the questionnaire and four participants contributed to their focus group. Glover, McCormack and Smith-Tamaray (2015) found that minimal collaborative practice was reported to be occurring, although both SLTs and teachers expressed a desire for more training and knowledge as well as more collaboration. Barriers and supports to SLT-teacher collaboration in Ireland may be considered in future research.

Summary

A dichotomy emerged from the data: narratives were primarily considered valuable for telling personal stories to family and friends; yet the assessment elements agreed by consensus by the practising SLTs as being integral to a comprehensive oral narrative assessment protocol considered mainly fictional story retelling.

The place of static assessment as an integral element in narrative assessment in Ireland is confirmed with this research, although the relative importance of static formal assessments in decision making when compared to other assessment elements has not been elucidated. This adds to available data as it contains SLT participant commentary on the ongoing place of static assessment as it pertains specifically to narrative assessment.

This research offers unique insights into SLTs' reasons for not adopting DA more widely into narrative assessment. It also identified a mismatch between what is described in published research as dynamic assessment in the field of SLT and what was considered to be dynamic assessment by practising SLTs and further investigation by future research is warranted.

Naturalistic group language elicitation in that this form of assessment was the one that was identified by SLTs as producing the most real-life and personal children's narratives but was not deemed by the SLT participants to be practical as a clinical tool for comprehensive narrative assessment.

A degree of ambivalence was communicated by SLTs in their responses relating to parent interview. Although they saw it as useful for providing more information about the children, specifically about children's interests and their functioning, they also identified potential barriers. So, although it could enhance a comprehensive narrative protocol, it may not be widely undertaken due to issues of practicality. In the same vein, barriers and supports to SLT-teacher collaboration in Ireland were identified, and these may be considered in future. The implications of these findings will be considered next.

Principles for Planning a Narrative Assessment Protocol

Initially, the researcher had anticipated that an outcome of the AR would comprise a consensus-agreed comprehensive protocol for guiding comprehensive assessment of narration in school-aged children with DLD. However, this specific outcome was not achieved in the research timeframe. Instead, the research has informed the development of a series of tenets for the establishment of a comprehensive protocol in the future. SLTs report that a comprehensive protocol should include engagement with both parents and teachers. SLTs in Ireland feel constrained by time when they are working; a comprehensive protocol should be easy and quick to administer. SLTs will require training in new techniques before using it with confidence. Training is essential for uptake. SLTs in Ireland are eager to provide a holistic, comprehensive assessment to paediatric clients and their families, consistent with the WHO (2001) ICF framework. Those tenets could form the basis for further action cycles to implement a comprehensive narrative language assessment protocol.

Some core principles for a comprehensive narrative assessment battery may be collated from this research. Firstly, the purposes of assessment should be consistent with the methods of assessment. Purpose of assessment in this situation does not refer to identification of a diagnosis. The term is used in this case to relate that the SLTs were motivated to find out about real narratives as opposed to retelling of a picture book or generation of stories from picture books. To return to the WHO ICF (2001) and the extension for children ICF-CY (2007), telling real-life narratives may both be considered an activity and a form of participation. There is a need to capture narratives that relate to a child's own experiences, as specific to a child's own home environment and experiences (for example, the pictures of Child C's dog) as is possible. There is a strong role for informal assessment in a comprehensive narrative assessment battery, focusing particularly on personal narratives.

The SLTs who participated in this research were interested in how functional a child could be with narratives across different settings. It is anticipated that functionality could, and should, encompass assessment across both home and school settings. A tension exists within the field of adult communication therapy, wherein it is recognised that the available assessments of functional language, and indeed assessments of communication activity and participation, may not necessarily reflect what happens in real-life (Worrall et al., 2002). The same could likely be true in paediatric communication therapy and so warrants further investigation. Careful consideration of ecological validity should also be applied to the functional elements of any oral narrative protocol devised. Karem et al. (2019) considered language assessments used with multi-lingual children with regards to the WHO ICF-YC (2007) framework. They found that most assessments examined activity and activity limitation, however, few (nine per cent of the 325 peer-reviewed publications) evaluated participation. Of interest to this research area, narratives, as used to assess the language of pre-schoolers who were multilingual, were found to be understudied relative to other language domains (Karem et al., 2019). Focusing specifically on language outcomes measurement, Cunningham et al. (2017) found that, of the 214 peer reviewed

publications they considered, change was primarily measured in outcomes (65%), body functions or impairment (20%), and finally participation (15%). The principles for future narrative assessment protocol suggested in this research could extend future research in the area of narratives by examining both activity and participation for school-aged children in Ireland, particularly those who are multi-lingual.

A comprehensive narrative assessment battery should be as short as possible, as time was consistently a concern for participating SLTs, yet this timeliness should not negatively impact on the reliability of the methods. Recording materials, for illustration, the scoring or record forms, should be clear and easy to read. In light of the researcher's own experiences administering DA, the addition of clear instructions and / or a script to follow or adapt during MLEs, could be helpful to clinicians as it was to the researcher, if the DA chosen were to include mediated learning experiences. A comprehensive narrative assessment battery in Ireland may include specific stories or materials provided to SLTs, or alternatively there could be a list devised of culturally appropriate materials. It should be appropriate to all the cultures living in Ireland, and as such, may be a little unfamiliar to some SLTs with less experience of multiculturalism, as evidenced by some SLTs' responses to the multiculture-appropriate DA story books used in this research.

In the course of the doctorate the researcher experienced the opportunity to undertake AR as part of this collaborative activity. The issues encountered during this research should help to provide assistance during the development of a protocol. Initial difficulties lessened as we found a rhythm to collaboration, in engaging SLTs to participate during larger group sessions. The researcher made a change in the first versus the second set of focus group in order to improve participation by making the groups smaller and, in that way, more relaxed. Recruitment was initially a challenge

for this research project and the advertising with the DLD SIG was most helpful. The issue of shared ownership was something that the researcher was aware of during the process. The researcher wondered if there would have been more enthusiasm towards DA had SLT participants been given the opportunity to undertake some of the structured DA process themselves. There are also difficulties when people see the researcher as some sort of expert: for example, the researcher was asked her opinion on how often various assessments were being used in Ireland. Riel (2019), in acknowledging the range of modifiers applied to action research, considers the different ways in which collaboration can manifest itself. Collaborations could be with people outside of the setting, with participants in the setting who are engaged in active learning or AR as part of the collaborative AR process (Riel, 2019). In this AR, collaboration occurred with SLT participants who were active in the learning they undertook as they immersed themselves in children's narrative language profiles. While this research identified initial research questions, the SLT collaborative participants responded to the questions posed and generated their own data through progressive problem identification and problem solving.

Speech and Language Therapists' Responses to Proposed Changes

Having examined the contribution of different forms of assessment for children with DLD, it must be acknowledged that SLTs did raise some issues regarding each individual assessment's utility in a comprehensive oral narrative assessment protocol for all assessments except static norm-referenced or criterion-referenced assessments. It will be argued firstly that SLTs need to see the benefits of investing time into less familiar assessment elements, and additionally, of collaborative working with parents and teachers, before there is widespread adoption of a more comprehensive assessment approach. Time, as ascertained, is a most precious commodity to SLTs. It is imperative, therefore, that SLTs see the benefit of investing their time, spent both in training and in undertaking a more comprehensive approach,

on the outcomes for children with DLD. Future research may involve interviewing adolescents and adults with DLD to ascertain the impact of narrative assessment and/or speech and language therapy interventions of value to them, such as research done by Lyons and Roulstone (2018).

This research identifies theory-practice gaps. For illustration, SLTs are aware of the importance of SLT-parent collaboration in theory but have concerns surrounding this practice in a clinical setting with parents of school-aged children. Published research has identified the importance of SLT-parent collaboration and has also recently begun to inquire into how this collaboration occurs in order to translate theory into practice. The practicalities and challenges of parent-SLT collaboration with preschool children have been identified (Davies et al., 2017). A recent paper by Klatte et al. (2020) set the agenda for future research into how SLT-parent collaboration can be achieved so as to maximise outcomes for children attending speech and language therapy. As this research movement progresses, it is anticipated that SLTs who keep abreast of published research will become more and more aware of how best to achieve collaboration with parents in clinical practice.

Change in clinical practice, even in situations where there is established evidence in favour of this change, is not without its challenges. A preliminary search of literature regarding SLTs' response to change, such as the DA introduced as part of the assessment profiles presented to each SLT, indicates that SLTs are willing to engage in change, although barriers exist to their implementation of this change. For illustration, Nicoll (2017) examined change as applied to intervention approaches for children with speech sound disorders and developed a model to frame the various elements involved in change within that context. Trebilcock et al. (2019) considered change influencers for therapy with adults with post-stroke aphasia. Overarching

themes identified in that research concerned collaboration and partnerships, advocacy and innovation (Trebilcock et al., 2019) and they are not entirely dissimilar to results from this research. Collaboration, this time in the form of partnership between researchers and clinicians, may facilitate change in relation to more widespread use of DA, parent interview and naturalistic language elicitation in assessment of oral narratives for children with DLD.

Speech and Language Therapists and Accountability

In the first focus group, many of the SLTs referred to their organisational contexts; delivering therapy as public servants via a national health service. The SLTs referenced measuring therapy input, analysing and quantifying. The therapy “block” is referred to, rather than ‘therapy journey’ or ‘therapy relationship’. It was not framed in terms of a transactional process or as a relationship-based process. “Time”, with its pressures and the perceived lack of it for SLTs in clinical practice, as previously examined, emerged as a theme across both focus groups. Speech and language therapists were conscious of the number of sessions available to each client and of waiting lists. Speech and language therapist concerns regarding their own accountability could be a factor in the first focus group responses to what a comprehensive assessment protocol could comprise, in consideration of accountability expectations to provide an evidence-based services. All elements of assessment were considered worth investigating by SLTs in the first focus groups, whereas specific concerns regarding the utility of various elements emerged in the second focus groups.

Accountability, the practice of setting and enforcing standards of practice, allows for professional autonomy (Vinson, 2009). ASHA defines an autonomous profession as "one in which the practitioner has qualifications, responsibility, and authority for the provision of services which fall within its scope of practice" (1986, p.53), whereby their services do not need to be prescribed or supervised by individuals in other professions. However, it may be argued that clinicians' autonomy is being eroded nowadays with the scrutiny of accreditation agencies, public funding bodies, consumer groups and peers as well as being potentially challenged regarding professional competency, as a result of litigation (Vinson, 2009).

Staff shortages and the high caseloads of SLTs in Ireland, which place demands on SLTs for service, naturally evoke negativity when staff are presented with a change that will potentially require more of their most precious commodities: time and mental energy. This has an implication for any future oral narrative assessment developments in Ireland. Although time is clearly a priority consideration during assessment, the researcher posits that SLTs could gain insights into the potential speed of progress in future therapy or the possible length and intensity of future therapy journeys during a more comprehensive assessment process. While this may, possibly but not definitively, incur a greater short-term time investment at the point of assessment, SLTs could find that assessment findings which shed light on how to best facilitate future therapy with a child, would actually save time in the medium-term. Intervention that is planned in response to a wealth of available assessment information regarding how a child learns could be more efficient than delivery of intervention that incorporates test-teach-teach or mediated learning during a therapy or treatment block. In addition, a more comprehensive and robust assessment process could also meet some of the uncertainties expressed by SLTs, for example, the question of 'I am doing enough as a SLT?'.

Limitations of this Research

While this AR was small in scale, the ten SLTs encompassed a variety of breadths of experience and specialisation. Within the Irish context, this number is not disproportionately small in consideration of recent UK research. For example, Thomas, Shulz and Ryder (2019) examined SLTs' experiences of assessment in DLD with three focus groups across England so as to offer geographical spread; one each in the north, midlands and south. The researchers set a maximum of ten participants in each focus group and completed their research with a total of 17 SLTs from across England. These 17 participants were considered by the researchers to represent a country that is considerably larger than the Republic of Ireland, both in terms of its general population and the number of SLTs working there: there are approximately 17,000 SLTs working in the UK as a whole (RCSLT, 2021) and approximately 1100 in the Republic of Ireland (IASLT, 2020). The three child case studies in this research themselves typified the varied presentation of children with DLD and included one bilingual child, one talkative or chatty child, and one child with both speech and language needs. In an additional consideration, the size of this research was constrained by the time limits of this professional doctorate thesis module.

During the reflection inherent within AR cycles, the researcher also critiqued intervention provided during the DA's Mediated Learning Experiences. For example, the researcher reflected on more than one occasion around the level at which the researcher had pitched intention to teach explanations. With the facilitation of the Critical Friend, the researcher has come to understand the role that self-reflection has played in growth and development as a researcher and clinician. The researcher would be more confident in future regarding modifying the intention to teach explanation when facilitating mediated learning experiences and have the information and personal experience now to offer to other SLTs on common mistakes when approaching DA that includes MLEs when collaborating with others in future.

Chapter 8: Conclusions and Future Learning

The opinions expressed by the SLTs in this research are consistent with what academic literature has argued for many years: narratives have an essential place in language development. Narratives have value as synthesizers of a number of elements of spoken language, including structure, such as grammar, and content, such as vocabulary. Narratives are demonstrators of language in action: real, lived language usage can be seen in children's storytelling. This research has established SLTs' perceptions of the types of narratives that are considered valuable to clinicians in the Republic of Ireland, with an identifiable focus on personal and real-life stories. Assessing such a living, dynamic feature of language has its challenges and a comprehensive battery of assessments is required, particularly when the purpose is to inform intervention.

Static formal language assessments are regularly used to assess narratives and provide valuable information on language impairment and specific strengths in language development. This research solidly establishes the value placed on static assessments by clinicians in Ireland. Parent interview provides SLTs with the opportunity to collaborate with parents and adds value with insights into a child's narrative usage at home, which is a key communicative environment for children. Parent can offer perspective into the child's narrative usage with themselves as well as observation on narratives with other familiar and important communication partners such as siblings or grandparents. While its value was established as early as the first focus groups, challenges in implementing this collaboration with parents were explored by the participating SLTs in the second focus groups. Some of the SLTs interviewed would like a narrative assessment battery to include teacher interview and / or collaboration in Ireland. This research has demonstrated that naturalistic language elicitation is acknowledged to provide unique insight into real-life narratives produced within a communicative context for children, namely with their peers in a school

environment. However, assessment in this vein, at the participation level of the WHO ICF-CY (2007) model, is seen as practically problematic.

Dynamic assessment of narratives also has a distinctive place in a comprehensive assessment battery: it provides valuable information regarding both a child's current level of narrative functioning as well insights into potential responsivity to intervention. This lends itself uniquely to effective therapy goal-setting and intervention planning. Of the various elements comprising a comprehensive assessment battery, DA was reported by participants to be the least familiar to SLTs and this has a consequence of possibly then being more poorly understood by SLTs. Future research may consider in more detail a real-world tension between the format of DA as reported in published research and the understanding of the term by clinicians here in Ireland.

SLTs in Ireland are interested in assessment that captures children's functional, real-life narrative abilities. In addition to the role of fictional narratives in assessment, personal narratives are also a priority for SLTs, and as such, would need to be integrated into a comprehensive narrative assessment battery. The SLT participants' support of real narratives caused reflection on differences between personal narratives and fictional narratives for children with DLD. McCabe et al. (2008) had identified that fictional narratives were typically longer in length, however, personal narratives were typically judged to be better in quality than fictional narratives. Similarities and differences between the fictional versus personal narratives produced by children with DLD is an interesting consideration. The few DAs available commercially focus on fictional narratives; there is great potential for a DA protocol that could apply a DA approach to personal narratives. Future research may wish to further compare personal versus fictional narratives (e.g., McCabe et al., 2008) or utilise story retelling from familiar books (e.g., Kaderavek and Sulzby, 2000). Westby and Culatta (2016),

in particular, highlight the clinical usefulness of personal narratives both as an assessment tool and in narrative intervention. The SLTs in this research were interested in personal narratives and these are arguably integral to any future assessment protocol.

This research has found that there are a number of challenges ahead for SLTs in adopting a more comprehensive narrative assessment battery that would include DA. Primarily, the disconnects lie in time and expertise. There is a perception among SLTs that DA takes up a lot of time. This research indicates that, in practice, it may not take much longer than some static assessments and in some cases may be shorter to administer. Multiple time points, face-to face contacts with a client, are required in certain DA administrations; for illustration, three to four time points would be envisaged in cases where MLEs are used in the DA. It is suggested that this could be incorporated into current assessment procedures with slight accommodations, where the overall assessment time is the same but it is undertaken across more days. Lack of experience and expertise regarding DA is a legitimate concern for the Irish SLTs interviewed and the researcher suggests that this could be supported with DA training in Ireland and DA working groups or special interest groups in the country.

The research question asked: how can SLTs comprehensively assess the narrative skills of school-age children with language impairment in a way that reflects the interactive, dynamic nature of narratives and the social, communicative contexts in which these children use narratives? The answer, to solve the problems that exist at present in capturing ecologically valid narratives, involves utilizing a more wide-ranging battery of assessments in Ireland, with a focus on functionality and time efficiency. This research is not the first to have considered developing a protocol for SLTs (Westerveld, Gillon and Miller, 2004). This work extends the work of Westerveld

and Gillon (2010), who considered the oral narratives of only typically-developing children, as this research considers three children with DLD.

This research identified some of the challenges in implementing a more comprehensive assessment protocol in Ireland and has implications for the support required to facilitate its implementation. In particular, elements of DA in a comprehensive protocol would require training for SLTs in Ireland and protected assessment time that could require up to three to four time points, or client contacts. Information from this research obtained through data gathering from these participants suggests a comprehensive narrative assessment protocol should incorporate both fictional and personal narratives. The future of narrative assessment has foundations in effective collaboration with key stakeholders including the children themselves, their parents and teachers.

Action research lent itself well to this field of language research. As a researching clinician, the collaborative, engaged manner expected from an action researcher is novel. As a professional, the researcher has gained more technical knowledge about the nature of narratives for children with DLD. The AR process resulted in the researcher adopting regular journaling for the first time since childhood and also now has a firm friendship, based on respect and shared interest, with the Critical Friend.

SLTs in Ireland are natural facilitators due to their role and a comprehensive protocol should include engagement with children, parents and teachers. SLTs feel constrained by time when they are working; a comprehensive protocol should be easy and quick to administer. SLTs require training in a new technique before using it with confidence.

SLTs in Ireland are eager to provide a high-quality, accountable, holistic, ecologically valid and comprehensive assessment to children, consistent with the WHO (2007) ICF-CY framework, addressing impairment, activity and participation. Those core principles could form the basis for further action cycles to implement a comprehensive narrative language assessment protocol. The future of narrative assessment in Ireland is certain to herald changes to practice in the next years and it is hoped that this research, when disseminated, will have potential to facilitate SLT discussion and impact on clinical practice in Ireland.

Bibliography

Armon-Lotem, S., de Jong, J. and Meir, N., eds, 2015. *Assessing Multilingual Children: Disentangling Bilingualism from Language Impairment.* Bristol: Multilingual Matters.

Armstrong, D., Gosling, A., Weinman, J. and Marteau, T., 1997. The Place of Inter-Rater Reliability in Qualitative Research: An Empirical Study. *Sociology*, 31(3), pp.597-606.

Andersen, L., 2011. “It is storytelling like ‘in the old days’ when I narrate”: Nostalgia and authenticity in contemporary oral storytelling in Denmark. *Elore*,18, pp.13-34.

Andersson, L., 2005. Determining the accuracy of tests of children’s language. *Communication Disorders Quarterly,* 26(4), pp.207-225.

Applebee, A.N., 1977. A Sense of Story. *Theory Into Practice*, 16(5), pp.342-347.

Aram, D.A., Morris, R. and Hall, N.E., 1993. Clinical and Research Congruence in Identifying Children With Specific Language Impairment. *Journal of Speech, Language, and Hearing Research June,* 36, pp.580-591.

Archibald, L., 2017. SLP-educator classroom collaboration: A review to inform reason-based practice. *Autism and Developmental Language Impairments*, 2, pp.1-17.

ASHA, 1986. *Autonomy of speech-language pathology and audiology* [Online]. Available from: www.asha.org/policy. [Accessed 9 February 2021].

ASHA, 1994. Issues in learning disabilities: assessment and diagnosis [Online]. Available from: www.asha.org/policy [Accessed 9 February 2021].

ASHA, 2006. What is translational research? [Online]. *Access Academics Research* December 2006. Available from: http://www.asha.org/academic/questions/Translational-Research/ [Accessed 29 October 2015].

ASHA, 2014. Dynamic Assessment [Online]. Available from: https://www.asha.org/practice/multicultural/issues/ [Accessed 14 February 2018].

Austin, L., 2016. *Dynamic Assessment with ELLs: A Step-By-Step Tutorial Webinar (Recording)* [Online] Available from: https://www.pearsonassessments.com/professional-assessments/blog-webinars/webinars/2016/10/dynamic-assessment-with-ells-a-step-by-step-tutorial-100716.html [Accessed 17 August 2021].

Bååth, R., Silkström, S., Kalnak, N., Hansonn, K., and Sahlén, B., 2019. Latent Semantic Analysis Discriminates Children with Developmental Language Disorder (DLD) from Children with Typical Language Development. *Journal of Psycholinguistic Research,* 48, pp.683-697.

Babamoradi, P., Nasiri, M. and Mohammadi, E., 2018. Learners' Attitudes toward Using Dynamic Assessment in Teaching and Assessing IELTS Writing Task One. *International Journal of Language Testing,* 8(1), p.1-11.

Bayer, S. and Hettinger, A., 2019. Storytelling: A Natural Tool to Weave the Threads of Science and Community Together. *Bull Ecol Soc Am*, 100(2):e01542.

Befi-Lopes, D.M, Pedott, P.R., Bondezan Bacchin, L. and Manhani Cáceres, A., 2013. Word class and silent pauses in spoken narratives of children with specific language impairment. *CoDAS* 25(1). pp. 64-9.

Bickerton, D., 1990. *Language and Species*. Chicago: University of Chicago Press.

Bilingual Forum Ireland, n.d.. *Bilingualism in Ireland* [Online]. Available from: http://www.bilingualforumireland.com/ [Accessed 12 August 2015].

Birner, B. n.d.. *Language Acquisition* [Online]. Available from: https://www.linguisticsociety.org/sites/default/files/Language_Acquisition.pdf [Accessed 15 September 2021].

Bishop, D. V. M., 2004a. Specific language impairment: Diagnostic dilemmas. In: L. Verhoeven and H. van Balkom, eds. *Classification of developmental language disorders*. London: Erlbaum, pp.309-326.

Bishop, D.V.M., 2004b. *Expression, Reception and Recall of Narrative Instrument (ERRNI).* London: Pearson.

Bishop, D. V. M. and Edmundson, A., 1987. Specific language impairment as a maturational lag: evidence from longitudinal data on language and motor development. *Developmental Medicine and Child Neurology*, 29, pp**.**442-459.

Bishop, D. V. M. and McDonald, D., 2009. Identifying language impairment in children: combining language test scores with parental report. *Int.l J. Lang. Comm. Dis.*, 44(5), pp.600–15.

Bishop, D.V.M., Snowling, M.J., Thompson, P.A., Greenhalgh, T. and CATALISE consortium, 2016. CATALISE: A Multinational and Multidisciplinary Delphi Consensus Study. Identifying Language Impairments in Children. *PLoS ONE,* 11(7): e0158753.

Bishop, D.V.M., Snowling, M.J., Thompson, P.A., Greenhalgh, T. and CATALISE consortium, 2017. Phase 2 of CATALISE: a multinational and multidisciplinary Delphi consensus study of problems with language development: Terminology. *Journal of Child Psychology and Psychiatry*, 58(10), pp.1068–1080.

Bohn, M., Zimmermann, L., Call, J. and Tomasello, M., 2018. The social-cognitive basis of infants' reference to absent entities. *Cognition,* 177, pp.41–48.

Boudreau, D., 2005. Use of a Parent Questionnaire in Emergent and Early Literacy Assessment of Preschool Children. *Language, Speech, and Hearing Services in Schools*, 36, pp.33-47.

Bowling, A., 2002. *Research Methods in Health.* 2nd ed. Buckingham: Open University Press.

Braun, V. and Clarke, V., 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology,* 3(2), pp.77-101.

Buckley, B., 2003. *Children's Communication Skills: From Birth to Five Years.* Oxon: Routledge.

Caffrey, E., Fuchs, D. and Fuchs, L.S., 2008. The predictive validity of dynamic assessment. *Journal of Special Education*, 31(4), pp.254-270.

Camilleri, B. and Law, J., 2007. Assessing children referred to speech and language therapy: Static and dynamic assessment of receptive vocabulary. *Advances in Speech–Language Pathology*, 9(4), pp.312-322.

Camilleri, B. and Law, J., 2014. Dynamic assessment of word learning skills of pre-school children with primary language impairment. *Int. J. of Speech-Lang. Path.,* 16(5), pp.507-16.

Carabacas, L.K.V., Caraballo, J.L.L., Barrios, D.J.C., Rossi, C.A.V. and Arroyo, E.A.B., 2019. Dynamic Assessment Approach in Language Teaching: A Review. *Zona prox.,* 30, pp.82-99.

Carter, S. and Henderson, L., 2005. Approaches to qualitative data collection in social science. In: A. Bowling and S. Ebrahim, ed. *Handbook of Health Research Methods: Investigation, measurement and analysis.* Berkshire: Open University Press, pp.215-229.

Central Statistics Office, 2016. *Census 2016.* Cork: Central Statistics Office.

Cirrin, F.M., Schooling, T.L., Nelson, N.W., Diehl, S.F., Flynn, P.F., Staskowski, M., Torrey, T.Z. and Adamczyk, D.F., 2010. Evidence-based systematic review: Effects of different service delivery models on communication outcomes for elementary school-age children. *Language, Speech, and Hearing Services in Schools,* 41, pp.223–264.

Coghlan, D., 2007. Insider action research: opportunities and challenges. *Management Research News*, 30(5), pp.335-343.

Coghlan, D. and Brannick, T., 2010. *Doing Action Research in Your Own Organization.* 3rd ed. Thousand Oaks, CA: Sage.

Colozzo, P., Gillam, R.B., Wood, M. Schnell, R.D. and Johnston, J.R., 2011. Content and Form in the Narratives of Children with Specific Language Impairment. *J. Speech Lang. Hear. Res.*, 54, pp.1609-1627.

Conti-Ramsden, G. and Jones.M, 1997. Verb use in specific language impairment. *JSLHR,* 40(6), pp. 1298-1313.

Costerly, C, Gibbs, P. and Elliott, G.C., 2010. *Doing Work Based Research: Approaches to Enquiry for Insider-Researchers.* Thousand Oaks, CA: Sage

Crabtree, B. F. and DiCicco-Bloom, B., 2006. The qualitative research interview. *Medical Education*, 40(4), pp.314–318.

Cunningham, B. J., Washington, K. N., Binns, A., Rolfe, K., Robertson, B. and Rosenbaum, P., 2017. Current Methods of Evaluating Speech-Language Outcomes for Preschoolers With Communication Disorders: A Scoping Review Using the ICF-CY. *Journal of speech, language, and hearing research: JSLHR*, 60(2), pp.447–464.

Daiute, C., 2014. *Narrative Inquiry: A Dynamic Approach.* Thousand Oaks, CA: Sage.

Danermark, B., 2019. Applied interdisciplinary research: a critical realist perspective. *Journal of Critical Realism,* 18, pp.368-382.

Davies, K. E., Marshall, J., Brown, L. J. E. and Goldbart, J., 2017. Co-working: Parents' conception of roles in supporting their children's speech and language development. *Child Language Teaching and Therapy,* 33, pp.171– 185,

Denman, D., Speyer, R., Munro, N., Pearce, W.M., Chen, Y. and Cordier, R., 2017. Psychometric properties of language assessments for children aged 4-12 years: a systematic review. *Frontiers in Psychology* [Online], 8. Article 1515. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5594094/pdf/fpsyg-08-01515.pdf [Accessed 18 December 2019].

DES, 2007. *DES Circular 0038/2007: Criteria for Enrolment in Special Classes for Pupils with Specific Speech and Language Disorder* [Online]. Available from: http://www.sess.ie/documents-and-publications/circulars [Accessed 12 February 2017].

DES, 2017. Circular to the Management Authorities of all Mainstream Primary Schools: Special Education Teaching Allocation. Circular No 0013/2017. Available from: www.education.ie [Accessed 23 May 2019].

Deutsch, R., 2005. The Impact of Dynamic Assessment on Educational Services in the United Kingdom. *Transylvanian Journal of Psychology*, Special Issue 1, pp.131-147.

Deutsch, R. and Reynolds, Y. 2000. The Use of Dynamic Assessment by Educational Psychologists in the UK. *Educational Psychology in Practice,* 16(3), pp.311-331.

Duinmeijer, I., de Jong, J. and Scheper, A., 2012. Narrative abilities, memory and attention in children with a specific language impairment. *International Journal of Language & Communication Disorders,* 47(5), pp.542–555.

Dunn, J. and Cutting, A.L., 1999. Understanding Others, and Individual Differences in Friendship Interactions in Young Children. *Social Development*, 8(2), pp.201-219.

Ebbels, S., 2017. [*SUMMARY] CATALISE: a multinational and multidisciplinary Delphi consensus study of problems with language development. Phase 2.* Available from: https://www.rcslt.org/wp-content/uploads/media/Project/RCSLT/revised-catalise-2017.pdf [Accessed 7 June 2022].

Elliott, J.G., Resing, W.C.M. and Beckmann, J.F., 2018. Dynamic assessment: a case of unfulfilled potential? *Educational Review*, 70(1), pp.7-17.

Elo, S. and Kyngas, H., 2008. The Qualitative Content Analysis Process. *Journal of Advanced Nursing*, 62(1), pp.107-115.

Fisher, C., Gertner, Y., Scott, R.M. and Yuan, S., 2010. Syntactic bootstrapping. *WIREs Cogn Sci*, pp.143–149.

Fuchs, D., Compton, D.L., Fuchs, S.L., Bouton, B. and Caffrey, E., 2011. The Construct and Predictive Validity of a Dynamic Assessment of Young Children Learning to Read: Implications for RTI frameworks. *Journal of Learning Disabilities*, 44(4), pp.339-347.

Fulcher-Rood, K., Castilla-Earls, A. P. and Higginbotham, J., 2018. School-Based Speech-Language Pathologists' Perspectives on Diagnostic Decision Making. *American Journal of Speech-language Pathology,* 27(2), pp.796–812.

Gale, N.K., Heath, G., Cameron, E., Rushid, S. and Redwood, S., 2013. Using the Framework Method for the Analysis of Qualitative Date in Multi-Disciplinary Health Research. *BMC Medical Research Methodlology,* 13, p.117.

Gallagher A.L., Murphy, C.A., Fitzgerald, J. and Law, J., 2021. Addressing implementation considerations when developing universal interventions for speech, language and communication needs in the ordinary classroom: a protocol for a scoping review. *Hrb Open Research* [Online]. Available from: https://hrbopenresearch.org/articles/4-41/v1 [Accessed 13 September 2021].

Gillam, R., and Pearson, N.A., 2004. *Test of Narrative Language.* Austin, TX: Pro-Ed.

Gibbon, F., O'Toole, C. and Rooke, Z., 2013. *The Prevalence of Speech and Language Impairment among a Nationally Representative Sample of Irish Children.* Dublin: Growing Up in Ireland.

Glover, A, McCormack, J. and Smith-Tamaray, J., 2015. Collaboration between teachers and speech and language therapists: Services for primary school children with speech, language and communication needs. *Child Language Teaching and Therapy,* 31(3), pp.363 –382.

Goldin-Meadow, S., 2019. Theories of Language Acquisition, Reference Module. *Neuroscience and Biobehavioral Psychology,* pp.*1-9.*

Gorman, B.K, Fiestas, C.E., Peña, E.D. and Clark, M.R., 2011. Creative and Stylistic Devices Employed by Children During a Storybook Narrative Task: A Cross-Cultural Study. *Lang. Speech Hear. Serv. Sch.*, 42(2), pp.167–181.

Greenhalgh, T., Robert, G., Bate, P., Macfarlane, F., and Kyriakidou, O., eds. 2005. *Diffusion of Innovations in Health Service Organisations: A systematic literature review.* Oxford: Blackwell Publishing Ltd.

Grigorenko, E.L., 2009. Dynamic Assessment and Response to Intervention: Two Sides of One Coin. *Journal of Learning Disabilities,* 42, pp.111-132.

Guo, L., Tomblin, J.B. and Samelson, V., 2008. Speech Disruptions in the Narratives of English-Speaking Children With Specific Language Impairment. J. Speech Lang. Hear. Res., 51(3), pp.722-738.

Gutiérrez-Clellen, V.F. and Peña, E., 2001. Dynamic Assessment of Diverse Children: A Tutorial. *Language, Speech, and Hearing Services in Schools*, 32, pp.212-224.

Hall, R., Brent, Z., Franco, J., Isaacs, M. and Shegro, T., 2017. *A Toolkit for Participatory Action Research* [Online]. Available from: https://codeofgoodpractice.com/wp-content/uploads/2019/03/IDL-A-Toolkit-for-Participatory-Action-Research.pdf [Accessed 01 March 2021].

Harrell, M.C. and Bradley, M.A., 2009. *Data Collection Methods: Semi-Structured Interview and Focus Groups*. Santa Monica, CA: RAND.

Hasson, N. and Botting, N., 2010. Dynamic Assessment of Children with Language Impairments: A Pilot Study. *Child Language Teaching and Therapy,* 26(3), pp.249-272.

Hasson, N. and Dodd, B., 2014. Planning intervention using dynamic assessments: A case study. *Child Language Teaching and Therapy,* 30(3), pp.353-366.

Hasson, N. and Joffe, V., 2007. The case for Dynamic Assessment in speech and language therapy. *Child Language Teaching and Therapy,* 23(9), pp.9-25.

Hedberg, N.L. and Westby, C.E., 1993. *Analysing storytelling skills: Theory to practice.* Tucson, AZ: Communication Skills Builders.

Hedge, M.N. and Pomaville, F., 2008. *Assessment of Communication Disorders in Children.* San Diego, CA: Plural.

Henry, L.A. and Botting, N., 2017. Working memory and developmental language impairments. *Child Language Teaching and Therapy*, 33(1). pp.19-32.

HSE, 2019. *Progressing Disability Services for Children and Young People* [Online]. Available from: https://www.hse.ie/eng/services/list/4/disability/progressing-disability/pds-programme/documents/national-policy-on-access-to-services-for-disabilities-and-developmental-delay.pdf. [Accessed 10 July 2021].

Hsu, C. and Sandford, B.A., 2007. The Delphi Technique: Making Sense of Consensus. *Practical Assessment, Research and Evaluation,* 12(10), pp.1-8.

Huang, R., Hopkins, J. and Nippold, M.A., 1997. Satisfaction with standardized language testing: a survey of Speech-Language Pathologists. *Language, Speech and Hearing Services in Schools*, 28, pp.12-29.

Hutson-Nechkash, P., 2001. *Narrative Toolbox: Blueprints for Storybuilding*. Eau Claire, WI: Thinking Publications.

IASLT, 2017. *Supporting Children with Developmental Language Disorder in Ireland: IASLT Position Paper and Guidance Document.* Dublin: IASLT.

IASLT. 2018. *IASLT Pre-Budget Submission August 2018*. Dublin: IASLT.

IASLT, 2019. *Pre-Budget Submission 2020*. Dublin, IASLT.

IASLT, 2020. *Pre-Budget Submission 2021*. Dublin: IASLT.

Ingraham C., 2017. The Scope and Autonomy of Personal Narrative. *Written Communication*, 34(1), pp.54-74.

Jacobs, E.L., 2001. The Effects of Adding Dynamic Assessment Components to a Computerized Preschool Language Screening Test. *Communication Disorders Quarterly*, 22(4), pp.217-226.

Jaskulska, M. and Łockiewicz, M., 2017. Polish as L1, English as L2: the linguistic transfer impact on Second Language Acquisition stemming from the interlingual differences: implications for young learners education*. Problemy Wczesnej Edukacki / Issues in Early Education*. 2(37), pp.68-76.

Jefferson, G., 2004. Glossary of transcript symbols with an introduction. In G.H. Lerner (ed.). *Conversation Analysis: Studies from the First Generation*. Amsterdam: John Benjamins, pp.13-31.

John-Steiner, V. and Panofsky, C., 1992. Narrative Competence: Cross-Cultural Comparisons. *Journal of Narrative and Life History*, 2(3), pp.219-233.

Kaderavek, J. N. and Sulzby, E., 2000. Narrative production by children with and without specific language impairment: oral narratives and emergent readings. *Journal of speech, language, and hearing research: JSLHR*, 43(1), pp.34–49.

Karem, R.W., Washington, K.N., Crowe, K., Jenkins, A., Leon, M., Kokotek, L, Raisor-Becker, L. and Westby, C., 2019. Current Methods of Evaluating the Language Abilities of Multilingual Preschoolers: A Scoping Review Using the International Classification of Functioning, Disability and Health–Children and Youth Version. *Language, Speech and Hearing Services in Schools,* 50(3), pp.454-451.

Kember, D., Ha. T, Lam, B., Lee, A., NG, S., Yan, A. and Yum, J.C.K., 1997. The diverse role of the critical friend in supporting educational action research projects. *Educational Action Research,* 5(3), pp.463-481.

Kemper, S., 1984. *The Development of Narrative Skills: Explanations and Entertainments in Discourse Development.* San Diego, CA:Springer, pp.99-124.

Kent, R.D., 2012. Models and Concepts of Translational Research. In R. Goldfarb, ed. *Translational Speech-Language Pathology and Audiology.* San Diego, CA: Plural, pp. 27-35.

Kerr, M.A., Guildford, S. and Bird, E. K.-R., 2003. Standardized Language Test Use: A Canadian Survey. *Journal of Speech-Language Pathology and Audiology,* 27(1), pp.10-28.

Kersner, M., 2012. The decision-making process in speech and language therapy. In: M. Kersner and J.A. Wright, eds. *Speech and Language Therapy: the decision-making process when working with children.* Oxon: Routledge, pp.5-15.

Khan, K.S. Gugiu,M.R., Justice, L.M., Bowles, R.P., Skibbe, L.E. and Piastaa, S.B., 2016. Age-Related Progressions in Story Structure in Young Children's Narratives. *J. Speech, Lang. Hear. Res.*, 59, pp.1395-1408.

Kitzinger, J., 2005. Focus group research: using group dynamics to explore perceptions, experiences and understandings. In: I. Holloway, ed. *Qualitative Research in Health Care*. Berkshire: Open University Press, pp. 56-70.

Klatte, I.S., Lyons, R., Davies, K., Harding,S. Marshall, J., McKean, C. and Roulstone, S., 2020. Collaboration between parents and SLTs produces optimal outcomes for children attending speech and language therapy: Gathering the evidence. *International Journal of Language & Communication Disorders,* 55(4), pp.618-628.

Kohnert K., 2010. Bilingual children with primary language impairment: issues, evidence and implications for clinical actions. *Journal of communication disorders,* 43(6), pp.456–473.

Koki, S., 1998. Storytelling: The Heart and Soul of Education. *Pacific Resources for Education and Learning,* November, pp.1–4.

Kolahdouz, F., Alamolhodaei, H., Radmehr, F. and Nooghabi, M.J., 2018. Exploring students' attitudes towards Dynamic E-Assessment. *Education Strategies in Medical,* 10(6), pp.414-422.

Koshy, E., Koshy, V. and Waterman, H., 2011. *Action Research in Healthcare.* London: Sage.

Kumar, S., Rout, N. and Kundu, P., 2011. Degree of Satisfaction and/or Dissatisfaction with Standardised Language Tests. *Language in India,* 11(7), pp.248-255.

Lancaster, H.S. and Camarata, S., 2019. Reconceptualizing developmental language disorder as a spectrum disorder: issues and evidence. *Int. J. Lang. Commun. Disord.*, 54(1), pp.79–94.

Lantolf, J.P. and Poehner, M.E., 2011. Dynamic Assessment in the Classroom: Vygotskian Praxis for Second Language Development. *Language Teaching Research,* 15(1), pp.11-33.

Law, J. and Camilleri, B., 2007. Dynamic assessment and its application to children with speech and language learning difficulties. *Advances in Speech–Language Pathology*, 9(4), pp.271–2.

Legard, R., Keegan, J. and Ward, K., 2003. In-depth interviews. In :J. Ritchie and J. Lewis, eds. *Qualitative research practice: A guide for social science students and researchers*. London: SAGE, pp.138–169.

Leitão, S. and Allan, L., 2003. *Peter and the Cat.* Yorks: Black Sheep Press.

Leonard, L. B., 2014. Children with Specific Language Impairment and their Contribution To the Study of Language Development. *J Child Lang.*, 41(1), pp.38–47.

Lidz, C. S., 1991. *Practitioner's guide to dynamic assessment.* New York, NY: Guilford Press.

List, D., 2001. The Consensus Group Technique in Social Research. *Field Methods* 13(3), pp.277-290.

Long, E., 2012. Integrating Dynamic Assessment and Response-to-Intervention in Reading Instruction [Online]. *The ASHA Leader*, 17. Available from: http://leader.pubs.asha.org/article.aspx?articleid=2280180 [Accessed 11 August 2015].

Lyons, R. and Roulstone, S., 2018. Well-being and resilience in children with speech and language disorders. *Journal of Speech, Language, and Hearing Research,* 61(2), pp.324-344.

McCabe, A., Bliss, L., Barra, G. and Bennett, M., 2008. Comparison of personal versus fictional narratives of children with language impairment*. American journal of speech-language pathology*, 17(2), pp.194–206.

McCartney, E., 2018. *SLTs and teachers working together in schools: the importance of new research in Ireland* [Online]. Available from: https://ncse.ie/wp-content/uploads/2018/11/McCartney-NCSE-2018.pdf [Accessed 28 October 2020].

McGrath M.C., 2011. Norm-Referenced Scores. In: Goldstein S., Naglieri J.A. (eds) *Encyclopedia of Child Behavior and Development.* Springer, Boston, MA, p.100.

McFadden, T.U. and Gillam, R.B., 1996. An Examination of the Quality of Narratives Produced by Children With Language Disorders. *Lang. Speech Hear. Serv. Sch*., 27, pp.48-56.

McKean, C., Reilly, S., Bavin, E., Bretherton, L, Cini, E., Conway, L., Cook, F., Eadie, P., Prior, M., Wake, M. and Mensah, F., 2017a. Language Outcomes at 7 Years: Early Predictors and Co-Occurring Difficulties. *Pediatrics* [Online]. 139(3):e20161684. Available from: https://pediatrics.aappublications.org/content/pediatrics/early/2017/02/06/peds.2016-1684.full.pdf [Accessed 18 December 2019].

McKean, C., Wraith, D., Eadie, P., Cook, F., Mensah, F. and Reilly, S., 2017b. Subgroups in language trajectories from 4 to 11 years: the nature and predictors of stable, improving and decreasing language trajectory groups. *Journal of Child Psychology and Psychiatry*, 58(10). pp. 1081-1091.

McKendry, E., 2016. *An Introduction to Storytelling, Myths and Legends*. Available from: https://www.bbc.co.uk/northernireland/schools/11_16/storyteller/pdf/gen_notes_all.pdf [Accessed 27 December 2010].

McLean, M., Hemmeter, M.L. and Snyder, P., 2014. *Essential Elements for Assessing Infants and Preschoolers with Special Needs*. New York, NY: Pearson.

McNiff, J., 2013. *Action research: Principles and practice*. 3rd ed. London: Routledge.

Malo, E. and Bullard, J., 2000. *Paper presented at the International Reading Association World Congress on Reading*, 11-14 July 2000, Auckland, New Zealand. Washington, DC: ERIC, pp.1-18.

Marczak, M. and Sewell, M. n.d. *Using Focus Groups for Evaluation* [Online]. Available from: http://ag.arizona.edu/sfcs/cyfernet/cyfar/focus.htm [Accessed 10 November 2015].

Martin, D., 2012. Dynamic assessment of language disabilities. *Language Teaching*, 48(1), pp.51-58. Published online: 01 May 2012 (print format 2015).

Mathers, N., Fox, N. and Hunn, A., 1998. *Trent Focus for Research and Development in Primary Health Care: Using Interviews in a Research Project.* London: Trent Focus.

Melrose, M.J., 2001. Maximizing the Rigor of Action Research. Why would you want to? How would you do it? *Field Methods*, 13(2), pp.160-180.

Miller, L., Gillam, R.B. and Peña, E. D., 2001. *Dynamic assessment and intervention: Improving children's narrative skills.* Austin, TX: Pro-Ed.

Molla, T. and Nolan, A., 2020. Teacher agency and professional practice. *Teachers and Teaching*, 26, pp.67-87.

Murphy, C.A., 2013. *Profiles and Characteristics of Sentence Production Difficulties in Children with Specific Language Impairment.* PhD Thesis. School of Education, Communication and Language Sciences, Newcastle University.

Muskett, T., Body, R. and Perkins, M., 2012. Uncovering the dynamic in static assessment interaction. *Child Language Teaching and Therapy,* 28(1), pp.87-99.

Nazari, A., 2017. Dynamic assessment in higher education English language classes: a lecturer perspective. *The Journal of Language Teaching and Learning,* 7(1), pp.100-118.

NCCA, 1999. *Social, Environmental and Scientific Education Curriculum*. Dublin: Government Publications.

NCCA, 2019. *Primary Language Curriculum*. Dublin: Government Publications.

NCSE, 2013. *Supporting students with special educational needs in school*. Meath: NCSE.

NCSE, 2016*. Special Classes in Irish Schools Phase 2: A Qualitative Study*. Trim, Meath: NCSE.

Newton P. and Burgess, D., 2008. Exploring Types of Educational Action Research: Implications for Research Validity. International Journal of Qualitative Methods, pp.18-30.

NHS Wales, 2021. Data Dictionary [Online]. Available from: Dynamic Assessment with ELLs: A Step-By-Step Tutorial Webinar. [Accessed 7 October 2021]

Nicoll, A., 2017. *Speech and language therapy in practice: A critical realist account of how and why speech and language therapists in community settings in Scotland have changed their intervention for children with speech sound disorders.* PhD thesis. Glasgow Caledonian University.

Norbury, C.F. and Bishop, D.V.M., 2003. Narrative skills of children with communication impairments. *Int. J. Lang. Comm. Dis.*, 38(3), pp.287-313.

Norbury, C.F., Gooch, D., Wray, C., Baird, G., Charman, T., Simonoff, E., Vamvakas, G. and Pickles, A., 2016. The impact of nonverbal ability on prevalence and clinical presentation of language disorder: evidence from a population study. *Journal of Child Psychology and Psychiatry*, 57(11), pp.1247-1257.

Norbury, C. F. and Sparks, A., 2013. Difference or disorder? Cultural issues in understanding neurodevelopmental disorders. *Developmental psychology*, 49(1), pp.45–58.

OECD, 2019. *Education at a Glance 2019: Country Report Ireland* [Online] Available from: https://www.oecd.org/education/education-at-a-glance/EAG2019_CN_IRL.pdf [Accessed 29 September 2021].

Onwuegbuzie, A.J., Dickinson, W.B., Leech, N.L. and Zoran, A.G., 2009. A Qualitative Framework for Collecting and Analyzing Data in Focus Group Research. *International Journal for Qualitative Methodology,* 8(3), pp.1-15.

Oppenheim, A. N., 1992. *Questionnaire Design, Interviewing and attitude measurement*. New York: Continuum.

O'Toole, C. and Hickey, T. M., 2013. Diagnosing language impairment in bilinguals: Professional experience and perception. *Child Language Teaching and Therapy*, 29(1), pp.91–109.

Patterson, J., Rodriguez, B.L. and Dale, P.S., 2013. Response to Dynamic Language Tasks Among Typically Developing Latino Preschool Children With Bilingual Experience. *American Journal of Speech-Language Pathology*, 22, pp.103-112.

Pearce, W.M. and Williams, C., 2013. The cultural appropriateness and diagnostic usefulness of standardized language assessments for Indigenous Australian children. *Int. J. Speech-Lang. Path*, 15(4), pp.429-440.

Peccei, J.S., 1999. *Child Language.* London: Routledge.

Peña, E.D. n.d. *Dynamic Assessment* [Online]. Available from: http://www.asha.org/practice/multicultural/issues/Dynamic-Assessment.htm [Accessed 12 August 2015].

Peña, E.D., Gillam, R.B. and Bedmore, L.M., 2014. Dynamic Assessment of Narrative Ability in English Accurately Identifies Language Impairment in English Language Learners. *J. Speech Lang. Hear. Res.,* 57, pp.2208–20.

Peña, E.D., Gillam R.B., Malek, M., Ruiz-Felter, R., Resendiz, R., Fiestas, C. and Sabelet, T., 2006. Dynamic assessment of school-age children's narrative ability: an experimental investigation of classification accuracy. *J Speech Lang Hear Res.*, 49(5), pp.1037-1057

Peña, E., Quinn, R., and Iglesias, A., 1992. The application of dynamic methods to language assessment: A nonbiased procedure. *The Journal of Special Education*, 26(3), pp.269–280.

Peña, E.D., Spaulding, T.J. and Plante, E., 2006. The Composition of Normative Groups and Diagnostic Decision Making: Shooting Ourselves in the Foot. *American Journal of Speech-Language Pathology*, 15, pp. 247-54.

Petersen, D.B., Chanthongthip, H., Ukrainetz, T.A., Spencer, T.D. and Steeve, R.W., 2017. Dynamic Assessment of Narratives: Efficient, Accurate Identification of Language Impairment in Bilingual Students. *J. Speech Lang. Hear. Res.,* 60, pp.983–98.

Piaget, J., 1926. *The language and thought of the child.* San Diego, CA: Harcourt.

Quigley, D, 2009. *Can a web portal enhance collaboration between speech and language therapists and primary school teachers?* MSc Thesis. Trinity College, Dublin.

RADLD, 2018. *Raising Awareness of Developmental Language Disorder: Case Studies* [Online]. Available from: https://radld.org/wp-content/uploads/2018/09/2b-170905-Fact-sheet-Case-stories.pdf [Accessed 06 November 2019].

RCSLT, 2005. *Clinical Guidelines.* Oxon: Speechmark.

RCSLT, 2017. *Justice Based Evidence: Consolidation.* London, RCSLT.

RCSLT, 2018. *DLD Factsheet* [Online]. Available from: https://www.rcslt.org/-/media/Project/RCSLT/rcslt-dld-factsheet.pdf. [Accessed 19 June 2021].

RCSLT, 2021. *What is Speech and Language Therapy?* [Online]. Available from: https://www.rcslt.org/speech-and-language-therapy/. Accessed 22 September 2021.

Reason, P. and Bradbury, H., 2012. *The SAGE Handbook of Action Research*

Participative Inquiry and Practice. 2nd ed. London: SAGE.

Rehm, R.S., Fisher, L.T., Fuentes-Afflick, E. and Chesla, C.A., 2013. Parental Advocacy Styles for Special Education Students During the Transition to Adulthood. *Qual. Health Res.*, 23(10), pp.1377-1387.

Reilly, J., Losh, M., Bellugi, U. and Wulfeck, B., 2004. “Frog, where are you?” Narratives in children with specific language impairment, early focal brain injury, and Williams syndrome. *Brain and Language*, 88, pp.229-247.

Renfrew, C., 1997. *Renfrew Bus Story Test*. 4th ed. Bicester, Oxon: Speechmark.

Riel, M., 2019. *Understanding Collaborative Action Research* [Online]. Available from: https://base.socioeco.org/docs/center_for_collaborative_action_research.pdf. [Accessed 02 January 2021].

Robson, C. 2002. *Real World Research.* 2nd Ed. Oxford: Blackwell Publishing.

Ryokai, K., Vaucelle, C. and Cassel, J., 2011. Virtual peers as partners in storytelling and literacy learning. *Journal of Computer Assisted Learning,* 19, pp.195-208.

Sachs, J., Bard, B. and Johnson, M.L., 1981. Language Learning with Restricted Input: Case Studies of Two Hearing Children of Deaf Parents. *Applied Psycholinguistics,* 2*,* pp.33-54.

Saffran, J.R., Senghas, A. and Trueswell, J.C., 2001. The acquisition of language by children. *Proceedings of the National Academy of Sciences of the United States of America* 98(23), pp.12874-12875.

Savin-Baden, M. and Major, C. H., 2013. *Qualitative Research: The Essential Guide to Theory and Practice.* Oxon: Routledge.

Scherer, N.J. and D'antonio, L.L., 1995. Parent Questionnaire for Screening Early Language Development in Children with Cleft Palate. *The Cleft Palate Cranio-Facial Journal*, 32(1), pp.1545-1569.

Semel, E.S., Wiig, E.H. and Secord, W.A., 2003. *Clinical Evaluation of Language Fundamentals - 4th UK Edition.* London: Pearson.

Semel, E.S., Wiig, E.H., Secord, W.A. and Hannan, T., 2014. *Clinical Evaluation of Language Fundamentals - 4th Australian Edition.* Sydney: Pearson Australia.

Shiel, G., Cregan, A., McGough, A. and Archer, P., 2012. *Oral Language in Early Childhood (3 -8 years)*. Dublin: NCCA.

Spaulding, T.J., Plante, E. and Farinella K.A., 2006. Eligibility Criteria for Language Impairment: Is the Low End of Normal Always Appropriate? *Language, Speech, and Hearing Services in Schools*, 37, pp.61-72.

Squires, K.E., Lugo-Neris, M.J., Peña, E.D., Bedore, L M., Bohman, T.M. and Gillam, R B., 2014. Story retelling by bilingual children with language impairments and typically developing controls. *International Journal of Language & Communication Disorders,* 49(1), pp.60–74.

Stavans, A. and Goldzweig, G., 2008. Parent-child-adult storytelling: Commonalities, differences and interrelations. *Narrative Inquiry*, 18(2), pp.230-257.

Stein, N. L. and Glenn, C.G., 1979. An analysis of story comprehension in elementary school children. In: R. Freedle, ed. *New directions in discourse processing*. 2nd ed. Norwood, NJ: Ablex.

Thomas S., Schulz J. and Ryder N., 2019. Assessment and diagnosis of Developmental Language Disorder: The experiences of speech and language therapists. *Autism & Developmental Language Impairments,* (4), pp.1-12.

Tomasello, M., 2009. The usage-based theory of language acquisition. In: E.L. Bavin, ed. *The Cambridge Handbook of Child Language.* Cambridge: Cambridge University Press, pp.69-88.

Trebilcock, M., Worrall, L., Ryan, B., Shrubsole, K., Jagoe, C., Simmons-Mackie, N., Bright, F., Cruice, M., Pritchard, M. and Le Dorze, G., 2019. Increasing the intensity and comprehensiveness of aphasia services: identification of key factors influencing implementation across six countries. *Aphasiology,* 33, pp.865-887.

Vaismoradi, M., Turunen, H. and Bondas, T., 2013. Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing and Health Sciences*. 15, pp.398–405.

van Daal, J., Verhoeven, L. and van Balkom, H., 2004. Subtypes of Severe Speech and Language Impairments: Psychometric Evidence From 4-Year-Old Children in the Netherlands. *Journal of Speech, Lang. and Hear. Res.*, 47(6), pp.1411-1423.

Vinson, B.P., 2009. Workplace skills and professional issues in speech-language pathology. San Diego, CA: Plural.

Vygotsky, L.S., 1978. Interaction between learning and development. *Mind and Society.* Cambridge, MA: Harvard University Press, pp.79-91.

Waterman, H., Tillen, D., Dickson, R. and de Koning, K., 2001. Action research: a systematic review and guidance for assessment. *Health Technology Assessment,* 5(23), pp. i-166.

Westby, C., 2007. Application of the ICF in children with language impairments. *Seminars in Speech and Language*, 28(4), pp.265-272.

Westby, C. and Culatta, B., 2016. Telling tales: Personal event narratives and life stories. *Language, Speech, and Hearing Services in Schools,* 47(4), pp.260–282.

Westerveld, M.F. and Gillon, G.T., 2010. Oral narrative context effects on poor readers' spoken language performance: Story retelling, story generation, and personal narratives. *International Journal of Speech-Language Pathology,* 12(2), pp.132–141.

Westerveld, M.F., Gillon, G.T. and Miller, J.F., 2004. Spoken language samples of New Zealand children in conversation and narration. *Advances in Speech-Language Pathology,* 6(4), pp.195–208.

Westerveld, M.F., 2011. Sampling and analysis of children's spontaneous language: From research to practice. *ACQ,* 13(2), pp.63-67.

Wetherell, D., Botting, N. and Conti-Ramsden, G., 2007. Narrative in adolescent specific language impairment (SLI): a comparison with peers across two different narrative genres. *International Journal of Language & Communication Disorders,* 42(5), pp.583–605.

WHO, 2001. *International Classification of Functioning, Disability and Health* [Online]. Geneva: WHO. Available from: https://www.who.int/classifications/icf/en/ [Accessed 11 November 2019].

WHO, 2007. *ICF-CY: International Classification of Functioning, Disability and Health for Children and Youth* [Online]. Available from: https://www.whofic.nl/en/family-of-international-classifications/derived-classifications/icf-cy [Accessed 12 May 2021]

Williams, C.J. and McLeod, S., 2012. Speech-language pathologists' assessment and intervention practices with multilingual children. *Int. J. Sp. Lang. Path.* 14(3), pp.292-305.

Winter, R. and Munn-Giddings, C., 2001. *Handbook for Action Research in Health and Social Care.* NY, NY: Routledge.

Worrall L., McCooey R., Davidson B., Larkins B. and Hickson L., 2002. The validity of functional assessments of communication and the Activity/Participation components of the ICIDH-2: do they reflect what really happens in real-life? *Journal of Communication Disorders,* 35, pp.213–216.

Wright, C., Bacigalupa, C., Black, T. and Burton, M., 2008. Windows into Children's Thinking: A Guide to Storytelling and Dramatization. *Early Childhood Educ. J.*, 35, pp.363–369.

Yates, B. and Chen, C., 2012. *PANDA Preschool Accelerated Narrative Discourse Activities.* Available from: http://www4.esc13.net/uploads/speech/docs/11_12/april/PANDA_Express_Power_Point_for_Region_13.pdf [Accessed 31 July 2013].

Yusa, N., Kim, J., Koizumi, M., Sugiura, M. and Kawashima, R., 2017. Social Interaction Affects Neural Outcomes of Sign Language Learning As a Foreign Language in Adults. *Front. Hum. Neurosci.,* 31 March 2017.

Websites Referenced [Accessed 21 October 2021]

Bedfordshire Community Health Services:

https://childspeechbedfordshire.nhs.uk/training/your-childs-journey-through-speech-and-language/

Greater Glasgow and Clyde Paediatric Speech and Language Therapy:

https://www.nhsggc.org.uk/kids/healthcare-professionals/paediatric-speech-and-language-therapy/

Northern Health and Social Care Trust Children's Speech and Language Therapy:

http://www.northerntrust.hscni.net/services/speech-language-therapy/contact-childrens-slt/

South East Essex Community Health Services:

https://eput.nhs.uk/our-services/essex/south-east-essex-community-health-services/childrens/speech-language-therapy/slc-pathway/,

Appendix 1: Example of Literature Search Results Management

Date	Database	Subsection	Year-from	Year-to	Search terms		Other det	Results	Comments (NR-Not Relevant to this Thesi
2018	Bath Library	all	all	all	Title contains narrat* AND any field contains lang* AND any field contains speech		English	1260	
2018	Bath Library	all	all	all	Title contains dynamic AND assess* AND subject includes lang*		English	0	
2018	Bath Library	journals	all	all	Title contains dynamic AND assess* AND subject includes speech		English	0	
2018	Bath Library	all	all	all	dynamic assessment language		English	0	
2018	PubMed	all	all	all	dynamic assessment language		All	305717	
2018	PubMed	all	all	all	dynamic AND assessment		All	18519	
2018	PubMed	all	all	all	dynamic AND assessment AND narrat*			75	
2018	Web of Science	all	all	all	TOPIC: (dynamic assessment narrat*)		English	298	
2018	Web of Science	all	all	all	TOPIC: speech pathologist change		All	0	
2018	Web of Science	all	all	all	TOPIC: speech therapist change		All	0	
2019	Web of Science	all	all	all	TOPIC: "Action Research" AND ("Speech Therap*" OR "Speech-Language Patholog*"		All	19	16 excluded (NR); 3 included
2019	Web of Science	all	all	all	TITLE: "Action Research" AND ("Speech Therap*" OR "Speech-Language Patholog*")		All	0	
2019	Web of Science	all	all	all	TITLE: (Action Research) AND TOPIC: (Speech Therap*)		All	7	5 excluded (4 NR; 1 duplicate from previous
2019	Web of Science	all	all	all	TOPIC: Narrati* Development*		All	22503	
2019	Web of Science	all	all	all	TITLE: Narrati* Development*		All	1015	
2019	Web of Science	all	all	all	TITLE: (Narrati* Development*) AND TOPIC: (speech)		All	45	35 excluded (NR); 10 included
2019	Web of Science	all	all	all	TOPIC: (speech AND therap* OR patholog*) AND TITLE: (assess* AND standardi*)		all	75	66 excluded (NR); 10 included
2019	Web of Science	all	all	all	TOPIC: (speech AND therap* OR patholog*) AND TITLE: (assess* AND dynamic)		all	175	Exclusions to be applied
2019	Web of Science	all	all	all	Above search: [excluding] (RADIOLOGY NUCLEAR MEDICINE MEDICAL IMAGING OR		all	49	41 excluded (37 NR, 4 duplicates from previ

Appendix 2: Pilot Case Study Summary

X is an 11-year-old boy who is currently almost finished a two-year placement in a Language Class. He was adopted in his early years and attended SLT services in Community / Primary Care for 6 years before beginning this placement. X meets the criteria for a diagnosis of Specific Speech & Language Disorder as per the DES (2007) specifications. He presents on formal static standardised language assessment with severe language impairment. Overall scores on the *Clinical Evaluation of Language Fundamentals – 4th UK Edition* (Semel, Wiig, and Secord, 2003) have not improved when comparing scores in May xxxx (Core Language Score of 69) with scores of February xxxx (following one year in the Language Class): scores remain more than two Standard Deviations below the mean for children of his age. His parents report whilst he has been discharged from both Occupational Therapy and Child and Adolescent Mental Health Services, they have recently sought re-referral to both services. They are concerned regarding X's attention, listening and concentration as well as his levels of activity.

Over the second year in the Language Class, X's storytelling skills were identified as requiring further assessment during informal evaluation that included questioning about what he had done at weekends and over holiday periods. His parents confirmed that storytelling was also an area of difficulty for him. X loves discussing farming, football and space. The following case study examines the results obtained from a variety of assessment approaches including formal static assessment focusing on story retelling, dynamic assessment and assessment of personal narrative. In addition, X's father was briefly interviewed regarding his son's storytelling skills.

Assessment results and discussion

Formal static assessments of narratives using story retelling

There are a number of story retelling assessments commercially available to SLTs today, including the *Bus Story Test* (Renfrew, 1997) and *Peter and the Cat (*Leitão and Allan, 2003*).* Both of these assessments were administered with X. In addition, a trial of *Captain Grey and the Greedy Aliens* (Murphy, 2013) was undertaken with the kind permission of the author. In general, X performed more strongly in these assessments in the macrostructural areas of narratives (Table 1) compared with the other forms of assessment, whereby the story arc has already been created and it is X's job to recall as much as possible. Mean Length of Utterance (MLU) varied across the assessments from 11 to 14, with *Captain Grey and the Greedy Aliens* eliciting the longest MLUs. It is of relevance that X was visibly enthused at the idea of retelling a story about aliens, as it is of personal interest to him. It is likely that his enthusiasm for the topic aided his recall and increased his MLU. In reflective learning from this case study, the researcher could consider the children's personal choice when offering standard assessments to choose from, as their own interests are likely to impact on their performance on tests.

Table 1: Static formal assessments of story retelling used with X

Name of assessment	X's MLU	Macrostructural features (aggregate)	Microstrucural features (aggregate)
Bus Story Test	11.52	66%	75%
Peter and the Cat	11.62	75%	70%
Captain Grey and the Greedy Aliens	14.45	75%	70%

Dynamic Assessment

In general, X found story generation much more of a challenge than story retelling. The test-teach-retest protocol of this particular dynamic assessment revealed interesting results with X. His MLU increased between Story 1 and 2 from 6.5 to 11.8 following the two mediated learning experiences (MLEs). X's improvement was observable in one of the two areas selected as targets following Story 1 – which were Vocabulary (in Story Ideas and Language) and Internal Response (in Episode Element) – and specifically in relation to his vocabulary. A greater variety of verbs was used in Story 2, such as *screamed* and *snuck*. In addition, adjectives were used in Story 2, namely *big* and *small*, and this was not evident in Story 1.

X's story productivity improved across four out of five areas assessed: the total number of words used, the MLU, the number of clauses used and the average number of clauses per utterance. X's positive response to a specific target, when focused on during the MLEs highlights the importance of a targeted and individualised intervention plan when treating storytelling difficulties in Speech & Language Therapy. I have not currently formulated a theory of why X responded in one area of intervention and not the other. The conclusion reached following dynamic assessment is that X exhibits language-learning difficulties and is ready to benefit from mediated teaching in the areas of narration. The assessment result suggested from dynamic assessment are consistent with the clinical knowledge I have gained from working with X. I suggest that dynamic assessment provides information regarding a child's language learning profile that typically would take many months to gather. This may make it preferable to static assessments.

Parent interview

The brief parent interview administered indicated that X's performance in storytelling is influenced by his interest in the topic. That finding is consistent with the higher MLU noted when retelling a story of personal interest to X. As a reflective learner, the researcher reflected on responses to the father's personal beliefs regarding his son's storytelling skills. He referred to his son's performance as 'lazy' if the topic is not of interest to him. During the interview the researcher remained neutral to encouraging throughout. The researcher had, perhaps mistakenly, believed that responding or interrupting the interview would impact on the father's testimony. However, on critically reflecting upon the interview later, the researcher believes that a valuable opportunity was missed to advocate for a child with DLD, who cannot be written off as 'lazy' within the context of long-term difficulties in receptive and expressive language.

Personal narrative (one-to-one naturalistic elicited storytelling)

Whilst X enjoyed retelling his personal narrative, his storytelling was reflective of a younger child. His personal narrative was a retelling of a week's events in sequence. There was no initiating event, plan or consequence addressed in this narrative. The personal narrative provided me with valuable information regarding X's storytelling at home.

In conclusion, each element of this assessment contributed in different ways towards the researcher's understanding of X's narrative language profile.

Appendix 3: Focus Group Moderator's Guide Example

LOGISTICS	DATE OF INTERVIEW: LOCATION OF INTERVIEW: NUMBER OF PARTICIPANTS: SIX
RESEARCH OBJECTIVE(S)	1. To ascertain the elements of oral narrative assessment considered important to (specialised and) non-specialised SLTs.
RESPONDENT PROFILE	Majority: Community SLTs with a mixed caseload; either currently with one or more children on their caseloads with DLD or anticipate working with this population in the future. Possible: Specialised SLTs who have been working for 3+ years with children who have DLD.
TOPICS TO COVER	• Current assessment of narrative skills • Dynamic assessment • What a comprehensive assessment protocol might include • Ratifying or amending proposed action plan
TIMING GUIDE	INTRODUCTION: 5 MINUTES GROUP RULES: 2 MINUTES CURRENT ASSESSMENT OF NARRATIVE SKILLS: 10 MINUTES DYNAMIC ASSESSMENT: 25 MINUTES COMPREHENSIVE ASSESSMENT: 25 MINUTES ACTION PLAN: 18 MINUTES CLOSE: 5 MINUTES
PURPOSE OF THE SESSION	Thank you for agreeing to participate in this research. My name is Louise and I will be facilitating our discussion today. This is Siobhan and she has kindly agreed to be my assistant moderator. Have any of you ever participated in a focused group discussion? We're going to be talking about narrative skills and assessment today. Our session should last a maximum of one and half hours. The research I am doing is called 'action research' and you will have noticed the visuals about action research when you came

	into the room. Action research is a cyclical process which is participatory and democratic and tries to add to our professional knowledge as well as change our clinical practice. Right now, I want to let you know a few things about what we're doing today.
DISCLOSURE	AUDIO/VIDEOTAPING This session is being tape recorded using audio and visual means. There will be transcription and analysis of the interview. PLANS FOR REPORTING Some of what you say may be quoted in published research, but you will not be identifiable: I will anonymise the data. This research is being undertaken as part of doctoral research and the tapes will be destroyed following completion of the doctoral degree. CONSENT Thank you for already providing written consent to participate in this research. As you are aware, you can withdraw your consent at any stage; just let me know. OBSERVERS TO TAKE NOTES This is Siobhan who will be taking notes along with me in case I miss anything. HOUSEKEEPING In case of fire, do not use the lift. Please use the stairs. Toilets are outside to the left.
PROCEDURES	• There are no right or wrong answers: we want to hear your personal perspectives as clinicians; • Be honest: we want to know what you really think about this topic; • We want to hear from everyone – so don't be shy; on the other hand, be considerate of others if you notice that you are talking mostly and the others are contributing less; • One person should talk at a time, but there is no need to raise your hand to contribute: try to let the conversation flow naturally; • There are no official breaks – the toilets are located outside of this room to the left; we have tea, coffee, and sandwiches for you which you hopefully enjoyed; please feel free to help yourself to any more as you please.
PARTICIPANT INTRODUCTIONS	• First name • Experience with children who have DLD and year graduated • Work setting (e.g. Language Class, Clinic based)
QUESTION GUIDE	• Group Rules

	• What comes to mind when you think of the term 'narrative skills'? Probe (***use if required***): Any particular words / theories / experiences? CURRENT ASSESSMENT • How do you usually assess narrative skills in children with language impairment? Probe: What techniques / assessment materials / sources do you use to gather information? Probe: What assessments / approaches are helpful when assessing narratives? What do you like about your current assessment practices? Probe: Do you experience any problems when you are assessing narratives? Are there any limitations to what you currently use? What, if anything, do you not like about your current assessment practices? DYNAMIC ASSESSMENT Are you familiar with dynamic assessment? *If not…* *Dynamic assessment (DA) is a way of assessing language which seeks to identify the skills that an individual child possesses as well as their learning potential. The DA procedure emphasizes the learning process and is highly interactive and process-oriented. So, whereas a traditional or static assessment has passive participants where the examiner observes and the focus is on identifying the child's language deficits, DA has active participants and examiners and is fluid and responsive to the child's language and learning profiles.* **Play ASHA videos by Dr. Elizabeth Peña* *http://www.asha.org/practice/multicultural/issues/outcomes/ (2.03m)* *http://www.asha.org/practice/multicultural/issues/framework.htm (1.44m)*

	http://www.asha.org/practice/multicultural/issues/components/ *(2.35m)* *With that information,* what role do you think Dynamic Assessment could play in assessing narrative skills? COMPREHENSIVE ASSESSMENT • What do you feel a comprehensive narrative assessment should comprise? Probes, as needed: What would you keep from your current assessment practices? Would you use static assessments? Why / why not? Would you use dynamic assessment? Why / why not? What about informal assessment? Why / why not? What about naturalistic elicitation in the clinic or school environment? Why / why not? What about parent or child interview? Why / why not [use in assessment]? ACTION PLAN • Here is an action plan that I have devised to assess the narrative skills of 3 children in the Language Class setting. Firstly, a static assessment of narrative for story re-telling. What are your thoughts on the static assessment to use? • Next, a dynamic assessment of narratives called *Dynamic Assessment and Intervention: Improving Children's Narrative Abilities* by Miller, Gillam and Peña, 2001. [Pass assessment around] This will involve administering one wordless picture book and analysing the child's response in story generation. Two weak areas of narrative skills are chosen for intervention and 2 'short mediated learning experiences' are given to each child to teach particular skills. No less than eight days after the first wordless picture book is administered, a second wordless picture book will be administered and I will have information regarding the child's response to intervention.

	In addition to dynamic assessment, naturalistic, observational narratives will be elicited from each child using props such as puppets in a circle time approach. Lastly, the children's parents will also be asked about their children's narrative skills at home and some of the children too if their language skills can facilitate this discussion. • I plan to bring the data I have gathered back to you as a group for consideration and evaluation. • I hope that we can devise a comprehensive assessment protocol based on your responses to the data presented to you. Your responses will give help with validation of the findings. • I hope to convene this group again in the next 6 months; does that sound suitable to you? Would you prefer a face-to-face meeting like this or a Skype / Google+ online meeting?
CONCLUSION	Thank you for your time, it is much appreciated.

Appendix 4: Moderator's Analysis Framework Developed

General observations	**Member 1**	**Member 2**	**Member 3**	**Member 4**	**Member 5**	**Member 6**
Current narrative assessment practices						
Response to dynamic assessment as a way of assessing narratives						
Comments on the contents of comprehensive assessment protocol **See separate grid**						
Louise's action plan						

Moderator's guide to notations

> Talk is faster than the surrounding talk.

< Talk is slower than the surrounding talk.

(0.6) Numbers in parentheses indicate periods of silence, in tenths of a second—a dot inside parentheses indicates a pause of less than 0.2 seconds.

::: Colons indicate a lengthening of the sound just preceding them, proportional to the number of colons.

toda- A hyphen indicates an abrupt cut-ff or self-interruption of the utterance in progress indicated by the preceding letter(s) (the example here represents a self-interrupted 'today').

____ Underlining indicates stress or emphasis.

gr^eat A 'hat' circumflex accent symbol indicates a marked increase in pitch.

= Equal signs indicate no silence between consecutive clauses or sentences.

LLL The letter "L" is used to represent laughter.

SSS The letter "S" is used to represent sighing.

FFF The letter "F" is used to represent frowning.

PPP The letter "P" is used to represent passion.

L ↑ Speaker leans forward while talking, the length of the arrow being approximately proportional to how far the speaker leans.

L ↓ Speaker leans backward while talking.

L ← Speaker leans to the left while talking.

L → Speaker leans to the right while talking.

Comments on the contents of comprehensive assessment protocol

	Member 1	Member 2	Member 3	Member 4	Member 5	Member 6
Use static assessment in the comprehensive assessment?						
Use DA?						
Use informal assessment?						
Use naturalistic elicitation?						
Use parent or child interview?						
Other?						

A = Indicated agreement (i.e., verbal or nonverbal)

D = Indicated dissent (i.e., verbal or nonverbal)

SA = Provided significant statement or example suggesting agreement

SD = Provided significant statement or example suggesting dissent

NR = Did not indicate agreement or dissent (i.e., nonresponse)

Appendix 5: Parent Interview Protocol

Introduction (1 minute)	*Thank you for agreeing to meet with me. As you know I'm Louise, the main researcher. I'm speaking with the parents of the children in our research study to look at how Speech & Language Therapists assess children's story telling skills. I will take some notes during the interview and this interview will be audio taped. Your answers will be confidential. I will not include your names or any other information that could identify you in any published work. I will destroy the notes and audio tapes upon completion of my doctoral degree programme.* *Do you have any questions about the study?*
Topic 1 (7 minutes)	*Topic 1: Child's narrative skills at home* *I would like to hear a little about your child's storytelling skills.* • *What is your impression of Y's storytelling?* *Probe: Tell me how Y starts stories? Does Y start at the beginning? Or launch into the middle of the story?* *Probe: Does Y describe main characters or ideas in his/her stories? If answer yes; Tell me about this….* *Probe: What thoughts do you have about the main action in Y's stories?* *Probe: Can you tell me how Y ends his/her stories?* • *How would you rate the 'quality' of Y's stories?* *Probe: Are stories a relative strength or weakness compared with overall language?*
Topic 2 (5 minutes)	*Topic 2: The current narrative assessment process* *Next, I'd like to hear about how your child's storytelling was assessed in Speech & Language Therapy.* • *What do you remember about your child's storytelling skills being assessed by your Speech & Language Therapist?* *Probe: Can you remember if picture books or pictures were used to assess your child's story telling?* *Probe: Do you think that the assessment captured the nature of your child's difficulties (or your child's strengths) in storytelling?* *Probe: If you can't remember it being assessed, do you think storytelling should have been assessed?*

Topic 3 **(5 minutes)**	*Topic 3: Any suggested changes to the assessment process.* *Lastly, I'd like to hear your opinions on any changes we could make to the assessment process.* • *What advice would you give Speech & Language Therapists when they are assessing storytelling skills?* *Probe: What kind of materials or toys or pictures should they use to prompt a story?* *Probe: Should they consult more or less with parents or teachers?*
Final thoughts **(2 minutes)**	*Those were all of the questions that I wanted to ask.* *Do you have any final thoughts that you would like to share?* *Thank you for your time.*

Appendix 6: Participant Information Leaflet Example

PARTICIPANT INFORMATION SHEET: PARENTS

Thank you for taking the time to read this information sheet!

You and your child are being invited to take part in a research study. Before you decide whether to participate, it is important to understand why the research is being done and what it will involve.

- Please read the following information carefully.
- Please feel free to ask for more information.
- Do not hesitate to take time to discuss it with others.

What is the purpose of the study?
Storytelling is a hugely important life skill. It is also an important early predictor of future reading and writing skills. Storytelling skills are traditionally assessed by Speech & Language Therapists using formal assessment tools that may not fully capture the fluid and constantly-moving way that children learn language. This research will involve collaboration between Speech & Language Therapists to develop a comprehensive assessment for use with school-age children who have significant language difficulties.

Why have we been invited to participate?
Children with language impairment can often have difficulties with storytelling skills. Your child has been identified as someone with language impairment attending a Language Class.

Will we be chosen to participate if I sign up for this research?
The researcher would like to recruit up to four children with varying communication profiles from the Language Class, with their parents, so your child will not necessarily be offered a place if four other children who meet the criteria are already signed up.

What will the study involve?
Your child's storytelling skills will be assessed using 3 methods:

a) A traditional assessment tool (Your child is given a picture book and told a specific story about those pictures. Then your child is asked to retell the story);
b) A newer assessment tool (Your child will be given a wordless picture book and asked to make up a story. The story will be analysed and two areas of weakness in storytelling will be targeted in two sessions. No less than 8 days after the first wordless picture book, a second one is given to your child to use in making up a story); and
c) Natural 'in class' storytelling situations will be used, such as Circle Time, with puppets to prompt a story for other classmates, to obtain another story from your child.

You will also be briefly interviewed to hear your thoughts and opinions on your child's storytelling abilities and how we Speech & Language Therapists assess storytelling.

The primary researcher would also like to access your child's recent standardised language assessment results (over the past two years) by liaising with your child's Language Class Speech & Language Therapist in order to obtain these reports and build a comprehensive

profile of his / her language. Alternatively, you may have a copy of these reports at home that you would like to give to me directly.

The assessments and interview will be audiotaped (with written notes taken) and they will be later transcribed and analysed. These recordings will only be used for the purposes of this research project and will be destroyed on completion of the doctoral degree.

Do we have to participate?
It is up to you whether or not you choose to participate in this study. If you do decide to take part, you will be given this information sheet to keep and asked to sign a consent form.

How long will the study take?
The assessments will take place over two weeks in May-June xxxx and will be conducted in the Language Class. Your child will be seen on 3 days spread across this period at xxxxxxxx National School. The assessments will be undertaken by the primary researcher, Louise (Gallagher) Sterritt. Louise will interview parents -at a place of your convenience- during this period.

What if I change my mind during the study?
You and your child are free to withdraw your child from the study at any time. You will not have to give any reasons for your withdrawal, but I kindly ask that you notify me.

What are the risks / disadvantages of participating in this study?
There are no risks to you or your child.

A disadvantage is that your child may miss some other activities while participating in the assessment activities. However, he / she will not miss regular Speech & Language Therapy sessions as the assessments will be undertaken on days your child is not due to receive therapy. The activities are designed to be fun for the children and are similar in format to the usual activities carried out in Speech & Language Therapy sessions in Language classes.

In addition, 10 minutes of your time will be required for the interview.

What are the possible benefits of taking part?
Taking part in the study will provide more information on your child's narrative skills including how your child makes changes to his/her narrative skills. Specific goals tailored to your own child's storytelling skills will be devised from the assessment information and will be provided to you.

The results of this research, when finished, will be used to help other Speech & Language Therapists in their work with children who have narrative language difficulties.

Will my child be disadvantaged or 'miss out' if he / she does not take part?
Absolutely not: your child will continue to receive his / her regular amount of Speech & Language Therapy intervention from the class Speech & Language Therapist separately and irrespective of participation. All research is undertaken in accordance with ethical guidelines.

Will my participation (and my child's) be kept confidential?
All information collected about your child during the course of this study will be kept strictly confidential in accordance to the Data Protection Acts 1988 and 2003. Your child will be identified by a pseudonym and the information will be stored in password-protected computer files, which can only be accessed by the research team. Your name will not be disclosed.

Some of your comments may be used word for word when the research team is compiling the data analysis and in later publications, but neither you nor your child will be identified.

Who is organising this research?
The research is being carried out to fulfil the research part of a doctoral degree being undertaken at the University of Bath, England.

Who has reviewed the study?
The protocol for this study has been reviewed and approved by the Research Ethics Approval Committee at the University of Bath and the Ethics Committee of the Health Services Executive in HSE xxxx-xxxxxxx, the primary researcher's employer. The Board of Management at xxxxxxxx National School have approved this study.

What will happen to the study results?
We aim to publish the results of the study in language and communication journals and present our findings at professional conferences. The data may also be used for teaching at Universities and Institutes of Technology.

What do I do if I want to make a complaint?
If you would like to make a complaint about the study, please contact the primary researcher on 086 xxxxxxx or the research supervisor Prof. Jill Porter on 00 44 xxx xxx xxxx.

How do I find out more?
If you would like more information, please contact Louise (Gallagher) Sterritt, primary researcher:

Speech & Language Therapy Department,
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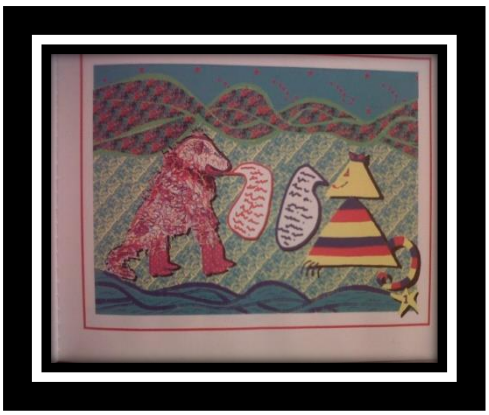
xxxxxxx xxxxx xxxx
xxxxxxxxxxx
Co. xxxxxxx *Tel: xxx xxxxxxx*

Appendix 7: *Two Friends* Wordless Story Book, Pages / Pictures 1-4