What Assistance is Needed?

Assessment for Literacy Learning Difficulties

in NZ Schools

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Abstract

At the present time, contemporary information regarding effective assessment and remediation practices for children with literacy learning difficulties in New Zealand/Aotearoa schools is scarce. The aim of the present study was to fill that gap in our understanding by carrying out a survey of current practices and comparing these with the research literature on best practice in assessment and remediation. To address the research questions, an online survey was developed and emailed to all schools in New Zealand/Aotearoa. There were 208 responses from a wide range of schools across the country and from a number of specialist teachers and school leaders. In addition to the online survey, interviews were carried out with 13 of the respondents, representing both teachers and specialist teachers. The results indicated a wide diversity of assessment and remediation practices in schools for students with literacy learning difficulties. A possible explanation for this is that assessment and remediation methods are often tied to theoretical views of the literacy process. At the current time in New Zealand/Aotearoa there are varied theoretical perspectives that seem to account for that diversity, in particular, the difference between whole language and phonological theories and their implications for assessment and remediation. The results from this study indicated that teachers and specialists were focusing mainly on proximal factors in assessment and were teaching to those factors. They paid less attention to the assessment of distal factors which is more of a focus among psychologists. This study provides the basis for further discussion into how best to identify and remediate students with literacy learning difficulties in New Zealand/Aotearoa.

Preface

This research study was designed with the needs of students/ākonga and their teachers/kaiako at the fore. So many of our children/tamariki in New Zealand/Aotearoa struggle with literacy learning and so many of our hard-working teachers struggle to understand their needs and how to best support them. I hope that this research will reach out to teachers across the country and assist them with reflecting on ways to enhance their practice, using some of the evidence-based methods discussed. Because no child deserves to be left behind.

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Introduction

Literacy education is probably the most important area of learning for children of any age, because being literate is a crucial life skill (Ministry of Education, 2010). A major goal of the education system in New Zealand/Aotearoa is to enable students to become literate by the time they leave school (Limbrick & Aikman, 2005) and to have the knowledge, competencies, and values required to be successful citizens (Ministry of Education, 2007b). Developing literacy skills empowers school leavers to be fully functioning, employable citizens who are able to read and write to communicate in their careers as well as their personal lives.

Students in New Zealand/Aotearoa (NZ) achieve well in literacy, on an international scale (Chamberlain, 2013; Ministry of Education, 2015c). Organisations such as the International Association for the Evaluation of Educational Achievement (IEA) and the Organisation for Economic Co-operation and Development (OECD) regularly conduct assessments internationally, to monitor students' performance and compare results between countries. When evaluating results from these assessments, the majority of NZ students have consistently been found to be achieving above the average levels in literacy on an international scale.

Therefore, at first glance one may assume that the education system in NZ is well suited to support students in reaching the goal of becoming literate. Unfortunately, there continues to be a tail of underachievers, who we are failing to reach (Education Review Office, 2008; Tunmer, Chapman, Greaney, Prochnow, & Arrow, 2013). Results from the IEA's Progress in International Reading Literacy Study (PIRLS), which tested Year 5 students in 2010/2011, indicated that, compared to higher-performing countries, there were a significant number of NZ students (25%) who did not meet the International Benchmarks in Reading (Chamberlain, 2013). Furthermore, this high number of low achievers has remained the same since 2001, whereas most other countries have seen

improvements. The Programme for International Student Achievement (PISA) 2012 results indicated that 16.3% of NZ students were achieving below the expected standard in Reading (OECD, 2016).

Following a review of system-wide data, the Ministry of Education (2016a) has indicated groups of students/ākonga who are disproportionately represented amongst those most at risk of underachievement in NZ. These students are predominantly of Māori or Pasifika ethnicity, from low socio-economic backgrounds and/or have special education needs (including dyslexia, dyspraxia, attention deficits and autism).

This gap between those who achieve and those who struggle (particularly in literacy) demonstrates that there is a need for change. The Education Review Office (2008) strongly recommended that high quality, evidence-based practice be provided for all students to enable them to succeed. A Select Committee report (House of Representatives, 2016) made several recommendations, including improved pre-service teacher education, and ongoing professional development (PD) for teachers, to identify as well as respond to the needs of students with additional learning needs.

In order to bring about effective change in education practice, as recommended by the Education Review Office (2008) and the House of Representatives (2016), current practice must first be identified and analysed, in terms of what appears to be working well. Only then can discussions begin regarding how to bring about the necessary changes in order to effectively identify and target the gaps in children's literacy learning.

The research questions this study aimed to address were therefore:

1. What is current practice in New Zealand/Aotearoa schools for assessing the specific needs of students who have literacy learning difficulties?
2. How are assessment data being used to ensure that students' specific literacy learning needs are being met in New Zealand/Aotearoa schools?

In order to address these research questions, this study first examined the literature regarding best practice for assessment and intervention of Literacy Learning Difficulties (LLD), as well as recent trends in NZ and overseas. The term LLD is used in this study to describe literacy learning difficulties in general, and may include students who struggle with reading, spelling and/or writing. The term SLD (Specific Learning Disabilities) is an official term, recognised by the Ministry of Education, and includes students who have been formally diagnosed with a specific difficulty in a particular learning area, such as reading, spelling and/or writing.

The tools and methods currently being used in NZ schools for assessing and remediating LLD were then investigated using a mixed methods approach to research. An online survey was sent to all schools and RT:LB (Resource Teachers of Learning and Behaviour) clusters in NZ to seek information from teachers about how the specific needs of students with LLD are identified and how they are being remediated. A follow-up to the online survey involved interviews with 13 teachers in various positions, including SENCOs (Special Education Needs Coordinators), Specialist Teachers, and RT:LBs from different parts of NZ. These educators shared their experiences of assessment and remediation with students that they have worked with. The data gathered revealed that the range of assessment tools and remediation methods currently being used for the specific learning needs of LLD students was very diverse. The current practice of assessment and remediation for LLD in NZ schools revealed in this study has been evaluated against contemporary literature regarding best practice pedagogy.

The researcher has been a teacher (at Secondary, Primary as well as Early Childhood level) for over 20 years. She now works in the private sector providing professional development in teaching/learning and behavioural strategies for teachers and teacher aides. She also works with students with learning difficulties, providing cognitive and educational assessments (in conjunction with SPELD NZ), as well as tuition and support.

Chapter 1: Literature Review

In order for education professionals to best meet the needs of students with LLD, the obvious first step is to determine what factors are contributing to their struggles with reading, spelling or writing. Assessments, observations or data collection can be undertaken in order to understand the precise nature of a student's abilities or difficulties. A considerable amount of literature has been written about 'best practice' for assessment and remediation of LLD – both in NZ and on an international level, but what becomes apparent is that this obvious first step of assessment depends very much on how policy makers and practitioners theorise literacy development and how they theorise the nature of LLD. Finding a common approach to the assessment and remediation of LLD is difficult, since the literacy process is enmeshed in controversy. Contemporary studies involving scans of the brain (Elkins, 2007; Gustafson, Svensson, & Fälth, 2014; Shaywitz, 2005) have added a neuropsychological component to the theories around literacy pedagogy .

A common literacy assessment approach assumes a shared understanding of the acquisition of literacy, but this is currently not the situation, both here and overseas – among both teacher practitioners and researchers (Elliott & Grigorenko, 2014). Assessment and remediation practice in schools is strongly tied to conceptions of how students acquire literacy. These conceptions, at the present time, differ from one place to another and reflect long-standing historical debates about how best to teach literacy – often referred to as the "Reading Wars" (Elliott, 2015). Proponents of a phonics-based approach are often challenged by those who favour a whole-language approach to literacy learning. Others advocate for a blend of both phonics and whole language, to provide a more balanced approach to reading instruction, therefore addressing the needs of students who struggle with the acquisition of literacy skills – particularly when explicit instruction of letter-sound relationships is neglected.

Therefore, a suggestion is to bear in mind that literacy assessment and remediation practices discussed herein, will not necessarily be undertaken in corresponding ways within the NZ context. In this chapter, we begin with the etiology behind why different students may present with LLD. This is followed with a review of theoretical differences in conceptions of literacy acquisition, demonstrating how they affect assessment and remediation practice. Finally, some examples of best practice intervention approaches, and the necessity for ongoing professional development, are discussed.

1.1 Risk factors associated with literacy learning

Data from international Reading assessments such as PISA and PIRLS (Chamberlain, 2013; OECD, 2016), as well as a local report on National Standards achievement in Reading (Ward & Thomas, 2016) indicate that approximately 20% of students in NZ struggle with literacy learning. The figures also show disproportionate number of these learners come from low socio-economic backgrounds, or are of Māori or Pasifika ethnicity. Others who are not achieving in literacy may have special needs, or a Specific Learning Disability (SLD). In order to address the disparities in literacy achievement, teachers must understand what is behind the difficulties. Once the learner's particular weaknesses (and strengths) are identified, decisions should be made about what type of remediation will best suit their individual needs (Aaron, 1997; Flanagan & Alfonso, 2011). Students who have LLD may present with a range of various symptoms, which must be investigated.

The causes of LLD can be rather varied in nature and origin – ranging from biological reasons, environmental factors, as well as insufficient instruction, therefore individual student‘s needs may be difficult to determine, on the surface. Stone and Learned (2014) propose that effective programmes of language and literacy learning instruction (including assessment) should integrate the tools of both sociocultural and neurocognitive perspectives. They propose that a neurocognitive model is useful for conceptualising and generalising about LLD, in order to determine possible causes and

effects, while a sociocultural model will focus on a child's potential, therefore identifying and building on their strengths (prior to remediating their weaknesses). This must certainly be relevant for education in NZ, where we have a range of cultures and abilities to cater for and support.

Research continues to provide insight into the distal (indirect) factors behind LLD, such as familial background, environment, socio/emotional factors, or cognitive weaknesses (Olson, 2000; Raschle, Stering, Meissner, & Gaab, 2014; Tambyraja, Farquharson, Logan, & Justice, 2015; Vellutino, Fletcher, Snowling, & Scanlon, 2004). Unfortunately, logistical constraints restrict the average classroom teacher's ability to remediate these distal factors on an individual basis. It can, however, be valuable to have some understanding of the nature of the various underlying difficulties that our students may face, in order to provide accommodations in the classroom, as well as remedial assistance or referrals, where appropriate.

Proximal indicators (direct causes, or those that are more obvious), such as weaknesses in oral language, vocabulary, word recognition, language or comprehension, are assessed by teachers to aid decisions in how best to support students with LLD. Sensory proximal causes such as vision or hearing issues, or problems with motor skills, are not addressed in this study. Similarly, most of the distal factors are not within the scope of this study, however underlying cognitive difficulties will be discussed later in this chapter.

Having awareness and knowledge of these distal factors, or the literate cultural capital from which students come, is essential to enable teachers' understanding of underlying needs. As Nicholson (2003) points out, students from low socio-economic backgrounds are already disadvantaged when they begin school, often due to a lack of financial resources. It is difficult to say whether these distal factors are the cause, or correlated to LLD, however many of these children have significantly lower skills in phonological awareness than those from wealthier homes. Methods of assessing and remediating phonological awareness will be discussed later in this chapter, as will the collection of

ecological assessment data, which can provide an important overview of a student's background. The NZ Government has initiated programmes aimed at addressing the gap between those who achieve well in literacy and those who do not, in the hope of reducing the "Matthew Effect", where the gap widens over time, as demonstrated in Nicholson's (2003) study. Some initiatives have been targeted towards the specific needs of Māori or Pasifika students, and have proven successful in bridging the gap for these learners (Alton-Lee, 2015; R. Bishop, Berryman, Wearmouth, Peter, & Clapham, 2011; Ministry of Education, 2013b).

The model of a causal theory of the origins of reading (or decoding) ability proposed by Snowling and Hulme (2011) is shown in Figure 1, to demonstrate how distal and proximal factors can both contribute to a student's ability to read. This theory acknowledges that distal factors of genetics and environment are influential, however the underpinning cognitive difficulties (including letter knowledge and phoneme skills) resulting in LLD are those that should be targeted for intervention.

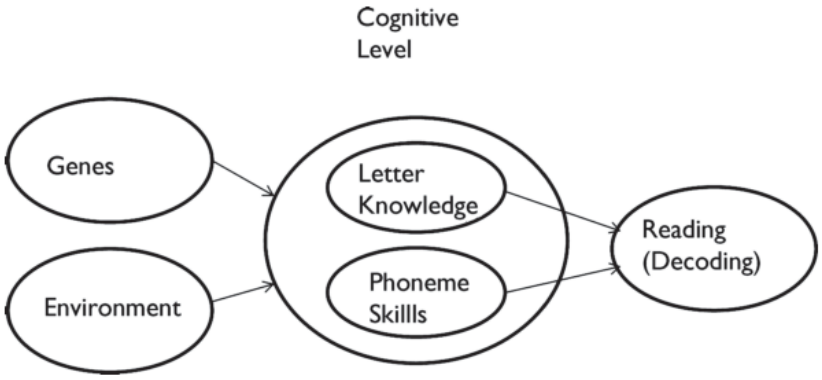

Figure 1: Model of a causal theory of the origins of decoding (Snowling & Hulme, 2011)

Regardless of what the etiology of a student's LLD may be, it is important to understand that there may be a range of possible causes to be investigated. This can assist teachers in supporting the learners, accommodating any difficulties and taking approriate

measures towards remediation. This study aims to identify effective methods for assessing possible causes of students' LLDs, as well as methods for remediation.

1.2 Assessment of distal factors underpinning LLD

While there is little teachers can do to assess or remediate distal factors such as genetics or socio-economic background, some of a student's underlying cognitive factors can be identified, in order to understand their specific needs, with a view towards accommodation and/or remediation. Some of the formal assessment tools outlined in Appendix A which investigate cognitive functions (such as working memory, processing speed, etc.) can be used as screening tools to identify students who appear to have LLD. Often, however, a full examination of these neurocognitive factors is beyond the domain of classroom teachers and requires specialist assessments to be administered. Current pre-service teacher education in NZ does not provide teachers with the specialist training required to identify the underlying factors behind students' LLD (Ministry of Education, 2015b).

Teachers or SENCOs may find it advantageous to refer students to a psychologist or Level-C registered assessor (such as a SPELD NZ assessor) for a specialist assessment. These specialists are authorised to conduct psychometric testing using standardised, norm-referenced tools such as the Wechsler Intellectual Scale for Children – version 5 (WISC-V), or the Woodcock Johnson Tests of Cognitive Abilities, Oral Language and Achievement – version 4 (WJ-IV) to provide information regarding a student's ability as well as underlying weaknesses that may be impacting on their LLD.

These assessments, are based on the Cattel-Horn-Carroll (CHC) Theory of Cognitive Abilities, which proposed a model of general intelligence comprising multiple cognitive abilities which are controlled, regulated and managed by executive functions of the brain. CHC cognitive abilities include: Crystallised Intelligence (comprehensive/acquired knowledge); Fluid Intelligence (reasoning/problem solving); Quantitative Reasoning (numerical/quantitative abilities); Reading and Writing Ability; Short-Term and Working

Memory; Long-Term Storage and Retrieval; Visual Processing (analysis/use of visual information); Auditory Processing (analysis/use of auditory information; Processing Speed (thinking quickly/automatically); and Decision and Reaction Speed.

Schneider and McGrew (2012) present growing evidence for the relevance of the CHC theory to neuropsychological, cognitive and information-processing models of assessment. Findings from studies (Cormier, Bulut, McGrew, & Frison, 2016; Cormier, McGrew, Bulut, & Funamoto, 2017) investigating the ability of CHC factors to predict literacy ability indicated that some cognitive abilities were stronger predictors than others. Broad CHC abilities of Comprehension-Knowledge, Processing Speed and Fluid Reasoning were important predictors of written expression and basic writing, while the Fluid Intelligence cluster of the WJ-IV was found to be the strongest and most consistent predictor of reading achievement for school-age students.

1.3 The obsolete 'discrepancy model' for diagnosing SLD

While a cognitive assessment was previously a pre-requisite for an SLD diagnosis, the 'discrepancy model', which involved measuring a learner's IQ against their other academic abilities, has now been invalidated in the DSM-5 (American Psychiatric Association, 2013). The model has been used by psychologists and educational specialists for many years as a formulation to diagnose SLD, where an individual's measured literacy attainment needed to be below the expected level, based on age (or grade level) and IQ.

The manner in which this discrepancy model could exclude individuals from an SLD diagnosis, assuming that their reading ability was closely correlated to their IQ, became very controversial (Elliott & Grigorenko, 2014; Shaywitz, 2005; Snowling & Hulme, 2012). Rather than intervening at an early stage to provide assistance to children who display signs of SLD, the discrepancy-based model has seen educators holding back for at least a year after beginning school, rather than suggesting that costly IQ assessments be undertaken. This appeared to cause a "wait-to-fail" effect, which inhibited a child's

progress in literacy (Tunmer & Nicholson, 2011). IQ is not synonymous with an individual's potential to achieve. Research suggests that IQ is not a good indicator of reading achievement, therefore should not exclude vulnerable students from accessing the support they need (Snowling & Hulme, 2012; Spear-Swerling & Sternberg, 1996; Vellutino, Scanlon, & Jaccard, 2003; Webb & Whitaker, 2012). Elliott and Grigorenko (2014) argue that the cost of pursuing expensive IQ testing would be better spent on providing remediation to all those who need it. It is strongly suggested that a learner's lower-than-average IQ scores may actually be *caused* by their LLD over time (Shaywitz, 2005; Tunmer & Greaney, 2010). Kuppen, Huss, and Goswami (2013) found that phonological skills and basic auditory processing skills, rather than IQ, influenced a child's reading development, therefore children with low IQ who are experiencing LLD should not be excluded from gaining access to appropriate interventions.

A discrepancy-based diagnosis does not address concerns regarding poor readers who have not received adequate exposure to literacy learning, in particular, phonological processing instruction (Tunmer & Chapman, 2007; Tunmer & Greaney, 2010). Furthermore, studies have determined that poor readers who have lower-than-average IQ scores often have the same type of phonological difficulties as LLD students with higher IQ scores (Aaron, 1997; Siegel & Smythe, 2005). Therefore, the exclusion of students from appropriate remediation because their IQ is below the 'norm' is strongly criticised, as many interventions can serve high and low IQ students alike. Researchers suggest a 'reading component model' (discussed later in this chapter) as a more pragmatic approach to defining LLD than a discrepancy model (Aaron, 1997; Hoover & Tunmer, 1993; Siegel & Smythe, 2005; Vellutino et al., 2004).

In response to the evidence indicating that the IQ-achievement discrepancy is not a valid determiner of SLD, the DSM-5 now explicitly states that reading ability (or general academic ability) does *not* need to be out-of-line with general IQ for a diagnosis of SLD.

A popular alternative to the obsolete discrepancy model of SLD diagnosis, is an inclusionary approach. This approach identifies the indicators of LLD displayed by the student, to determine possible cognitive deficits contributing to LLD. An inclusionary definition of SLD proposed by the International Dyslexia Association (Mather & Wendling, 2012), examines the persistent LLD traits that individuals might present with, such as phonological cognitive deficits that may be causing difficulties with word recognition, spelling and decoding. These phonological processes have been shown to have a strong association with SLD (Tunmer & Greaney, 2010). Other (proximal) presenting factors may be difficulties with reading comprehension and vocabulary.

1.4 Assessment of neurocognitive disorders

The use of cognitive assessments to determine the distal factors involved in LLD may not always diagnose other contributing neurocognitive disorders. A myriad of neurocognitive disorders may present among learners in today's classrooms, posing challenges for teachers to ensure inclusion. Many of these disorders can affect the acquisition of literacy learning, for example Attention Deficit and Hyperactivity Disorder (ADHD) can affect the ability to concentrate and focus, therefore making it difficult to learn (Milne, 2005; Reid, 2011). Diagnosis of medical disorders such as ADHD for children must be undertaken by a medial professional such as a paediatrician or child psychiatrist.

Some disorders are more specific to the proximal aspects of literacy learning, including dyslexia, which is related to the ability to acquire reading, spelling and/or writing skills, and dysgraphia, which affects handwriting skills (Berninger, 2015; Reid, 2011). Many of these developmental learning disorders occur co-morbidly. More than half of all children with dyslexia have a co-occurring disorder, and ADHD occurs together with dyslexia 30-50% of the time (Moreau & Waldie, 2016).

Another condition which is often related to LLD is dyspraxia – also referred to as Developmental Co-ordination Disorder (DCD). Frequently linked to motor learning,

balance, and sometimes speech, dyspraxia affects co-ordination skills and can often present difficulties with handwriting, as well as the planning and organising of written work (Alloway, 2011; Milne, 2005; Reid, 2011).

Teachers in NZ may have access to resources such as the Lexia suite of assessments, or the Dyslexia Screener, to screen for the possibility of neurocognitive conditions such as dyslexia or other developmental disorders. If a formal diagnosis is sought, however, a referral must be made to an appropriate specialist (i.e. an Occupational Therapist for dysgraphia or dyspraxia, or a psychologist/Level C Assessor for a dyslexia diagnosis). Dyslexia is not listed as a stand-alone disorder in the DSM-5, but is included in the descriptive text under Specific Learning Disorders.

Several educational specialists (Elliott & Grigorenko, 2014; Waber, 2010) claim that the use of labels (such as dyslexia, DCD or ADHD) are inappropriate, as they fail to encompass a holistic view of the child. These disorders are often comorbid with other difficulties, therefore a "one-size-fits all" approach to identification and/or remediation should never be assumed. When promoting the use of Dynamic Assessment approaches over psychometric testing, Lebeer et al. (2011) argued that the static nature of cognitive assessments may sometimes be necessary for the purpose of obtaining access to special education resources. As cognitive assessments are only a 'snap-shot in time', however, Lebeer et al. argued that they can sometimes be counter-productive if used as a 'final prognosis', as they do not always focus on a student's propensity to learn, or their response to intervention (whereas Dynamic Assessment usually will).

The Ministry of Education (2016b) reports that dyslexia is experienced by approximately 10% of the population, and significantly impacts learning in literacy-related tasks right across the curriculum. Since formally recognising dyslexia as a disability in 2007, the Ministry have not yet finalised a definition. Their working definition states that dyslexia: is a spectrum of SLD; is developmental; affects reading and writing skills; is persistent in spite of access to effective/appropriate instruction; and involves normally developing

students (i.e. excluding other disorders). Other definitions proposed by Tunmer and Greaney (2010) and the International Dyslexia Association (Mather & Wendling, 2012) include these same factors, but also emphasise that dyslexia is characterised by difficulties with phonological skills.

Due to the wide number of linguistic and cognitive factors that are implicated as causes or correlates of dyslexia, such as working memory, phonological awareness, rapid automatised naming and processing speed, it is a very difficult disorder to describe in simple terms (Abu-Hamour, Hmouz, Mattar, & Muhaidat, 2012; Badian, 2005; A. G. Bishop & League, 2006). Some specialists have proposed that the spectrum of difficulties can be classified further, using terms such as ‘surface’, ‘deep’ and ‘visual’ dyslexia (J. W. Gillett, Temple, Temple, & Crawford, 2012) as well as ‘developmental’ or ‘acquired’ dyslexia. Teachers must be mindful of the variety of presenting difficulties that dyslexic individuals may present with when planning programmes of remediation. A handbook of support strategies for dyslexic students was produced to assist teachers in this endeavour (Ministry of Education, 2008a) and provides advice regarding identification, specific support approaches, and whole-class strategies for a “dyslexia friendly” classroom.

A significant amount of research (Carson, Gillon, & Boustead, 2013; Gough & Tunmer, 1986; Pape-Neumann, van Ermingen-Marbach, Grande, Willmes, & Heim, 2015; Pugh et al., 2013; Tambyraja et al., 2015) indicates that dyslexic students have deficits in skills required to decode printed words, thus struggle to recognise unfamiliar words and build a sight word vocabulary. Despite these areas of weakness, dyslexic individuals can often achieve average or higher IQ scores, often due to strengths in listening comprehension. This ability may mask decoding deficits, unless assessments which specifically examine this area are administered.

1.5 Assessment of underpinning cognitive abilities

Students with a 'dyslexic' profile or other LLD may present with other underpinning cognitive weaknesses, besides phonological awareness. Recent developments in neuroscience have been able to identify different parts of the brain that are activated during reading, to suggest how the brain learns to read (Milne, 2005; Mody & Christodoulou, 2014). Research by Shaywitz (2005) has demonstrated that a disruption in the neural circuits of the brain can lead to reading impairments. The fundamental circuits of the brain used for coding language are required not only for reading, but can also affect the ability to spell words, retrieve words, articulate words and remember certain facts. Research has also demonstrated that the brains of students experiencing persistent LLD, function less effectively for reading (Ministry of Education, 2008a; Nicolson & Fawcett, 2008). A study by Waldie, Wilson, Roberts, and Moreau (2017) identified precise variations in dyslexic brain activity which suggests potential for the development of cognitive remediation programmes targeting the specific neural underpinnings of dyslexia.

A study of brain activity by Petersson, Reis, Askelöf, Castro-Caldas, and Ingvar (2000) suggests that the functional composition of an adult's brain is influenced by literacy learning during childhood. A hypothesis that teachers involved in literacy instruction assist students with enhancing brain activity is yet to be validated, as neural connections found to increase during verbal tasks have not yet been seen to transfer to reading behaviour (Waldie et al., 2017).

Following their study on the effect of early intervention, Vellutino et al. (1996) suggest that the reason some students did not respond well to short-term intervention was probably due to cognitive weaknesses underpinning reading ability. These students were more difficult to remediate as they had different needs to those whose LLD was merely due to inadequate exposure to literacy instruction.

Working Memory

Working memory (WM) is a cognitive function that can contribute towards LLD. This executive functioning skill in the brain involves the ability to hold information for a short time while it is being manipulated (Flanagan & Alfonso, 2011). Poor WM skills can affect reading comprehension, planning, organising and self-monitoring abilities.

Vandenbroucke et al. (2018) investigated the development of WM components which largely depend on maturation of the prefrontal cortex. They found that WM was still developing as children transitioned to their second year at school, and that it can be influenced by a positive teacher-child relationship. A significant finding was that screening new entrants for difficulties in the phonological loop and visuospatial sketchpad components of WM helped to predict difficulties in academic areas such as reading and spelling, which could then be remediated (or prevented altogether) through training and stimulation.

For older students, however, there is a dearth of evidence demonstrating long-term gains through WM interventions (Elliott & Grigorenko, 2014). It appears, therefore, that the most effective approach to supporting these students with WM difficulties is to provide accommodations to reduce the load on WM capacity, such as allowing note paper or recording devices to substitute for a deficient visuospatial sketchpad.

As Nuthall (2007) points out, teachers must recognise the need for repetition and reinforcement of concepts learned. To enable LLD students with memory difficulties to move information from short-term WM to long-term memory, they will need exposure to concepts exponentially more than their peers.

Processing Disorders

While some researchers claim that processing disorders can contribute to LLD, Elliott and Grigorenko (2014) caution that this matter is still under debate. Sensory deficits such as visual processing and auditory processing disorders have not been sufficiently researched in terms of their relationship to LLD. While some individuals may present with

difficulties of this nature, they may be co-occurring, rather than causal. Elliot and Grigorenko concede, however, that until the relationship of sensory difficulties to LLD is disproven, then must not be discounted in favour of an “overly simplistic phonological model” (Elliott & Grigorenko, 2014, p. 81).

Visual perceptual skills, usually developing in infancy, refer to the brain’s ability to interpret what is seen. Even with ‘normal’ eyesight (20/20 vision), visual perceptual difficulties, including visual memory, visual figure-ground or visual closure, can affect literacy learning (Evans & Allen, 2016). The importance of binocular visual assessments was highlighted by Dusek, Pierscionek, and McClelland (2010), in order to determine if a student’s LLD is impacted by visual function anomalies. Shin, Park, and Park (2009) found significant relationships between visual processing dysfunction and academic scores, therefore recommended assessments of accommodative and vergence functions for all students experiencing LLD. Students with LLD may not always present with visual processing difficulties, as “coping mechanisms” may have developed, where students use other cognitive strategies to compensate for their difficulties (Elliott & Grigorenko, 2014). While LLD such as dyslexia are not caused by visual factors, it is often recommended that students are referred to a behavioural optometrist, to eliminate any visual processing difficulties that may co-occur and be compounding their struggles with LLD.

While students with an Auditory Processing Disorder (APD) may not have difficulties with the physiological function of hearing, their brain may have difficulty with listening – i.e. processing the information that is heard, or extracting information from the sounds that are received. Many children with APD may have had an impaired ability to fully develop their phonological awareness skills, therefore have difficulties with accurately identifying and manipulating sounds in words (Baran, 2013; Wang, Huss, Hamalainen, & Goswami, 2012). Students with APD often find it difficult to distinguish sounds, as they may hear

them all at the same pitch, frequency or volume, resulting in them falling behind in their learning due to not understanding classroom instructions.

If an APD diagnosis is obtained through a paediatric audiologist, an Assistive Techology application can be made to assist with classroom learning situations (Ministry of Education, 2016d). Sound field FM systems may be recommended to allow students in classrooms to hear their teachers more clearly through speakers, thus enabling better educational outcomes for students with APD. An personal frequency modulation (FM) system can be a better alternative for students with APD. The teacher's voice is transmitted via a microphone directly to a student's personal FM receiver or cochlear implant.

Students with LLD may have difficulty keeping up with their peers due to processing speed deficits. Processing speed is measured by the rate at which an individual can respond to visual or auditory stimuli (Flanagan & Alfonso, 2011). Kail (2007) found that development in children's information-processing speed was linked to an increase in working memory capacity – an important aspect of reading ability.

Specialist assessments to determine distal factors contributing towards a student's LLD, such as underpinning cognitive weaknesses, may assist teachers with understanding the specific learning needs of their students. This can enable accommodations to be provided, or appropriate methods of remediation to be sought, thus assisting students to access the curriculum.

1.6 Assessment of proximal factors contributing towards LLD

While the assessment of distal factors contributing towards LLD often remains the domain of specialist assessors, a range of assessment tools and/or methods are available for teachers to assess proximal factors. These tools/methods may either be standardised, norm-referenced assessments (which measure students' achievement against their peers), or criterion-based assessments (measuring students' achievement

against benchmarks of expected performance). Informal measures such as classroom observations can also be used alongside the formal assessment methods, to examine students' strengths and weaknesses, thus providing a general evaluation of students' progress and attainment using 'Overall Teacher Judgements' (OTJ).

Assessment has traditionally been summative in nature, providing evaluations of cumulative learning following instruction. Formative assessment (often referred to as 'Assessment For Learning', or AFL) is now more favoured and allows ongoing feedback which can enhance students' learning (S. Clark, Timperley, & Hattie, 2008; McPhillips, Bell, & Doveston, 2010). Information gained from formative assessment can inform teacher' forward planning, and indicate to students which areas they need to focus on – an important approach for students with LLD. Assessment data can assist with the identification of LLD if it demonstrates that students are not meeting the expected level for their age or grade in literacy activities such as reading, writing or spelling.

1.7 Formal tools and methods for the assessment of LLD

Schools in NZ are guided by the NZ Curriculum (Ministry of Education, 2007b, 2008b) in regards to *what* they teach, however have the autonomy to decide for themselves *how* they teach the curriculum, as well as how they assess it. This study aimed to investigate whether teachers were choosing the most appropriate tools that were 'fit for purpose' of assessing students' specific LLD needs. It is important that teachers choose tools/methods that will provide useful data for all stakeholders, including the Ministry of Education (for nation-wide education policy planning), Boards of Trustees (for school-wide policy planning), school management teams (for school-wide planning), as well as families and whanau (for partnerships in learning). The most important stakeholders in assessment are the students themselves, as well as their teachers.

A wide range of formal assessment tools are available for assessing LLD in NZ schools. Teachers are free to choose from this range of formal tools, or other informal methods, to enable their OTJs of student progress. In many cases, however, teachers may lack a

conceptual understanding of what LLDs involve, therefore may choose tools which do not fully meet the purpose of the assessment.

The Ministry of Education (2015a) recommends that a range of factors are considered to select the most appropriate assessment tools (besides the skills or knowledge to be assessed). These factors include: time, cost, administration, availability, source, reliability, validity, standardisation, language, scores/measures, scoring/analysis, curriculum/year level, training, cultural appropriateness and whether it provides strategies for follow-up instruction. An outline of literacy assessment tools considered in this study has been compiled, comparing a number of these factors and is included in Appendix B.

1.8 The influence of whole language theory on literacy assessment and practice in in NZ

When deciding on what is most appropriate approach to assessing and remediating LLD, teachers must be familiar with the most evidence-based methods available. The debate about the best way to teach literacy, sometimes called the “Reading Wars”, has a long history both in NZ and overseas, between those who subscribe to the ‘whole language’ approach and those who favour the ‘phonological’ approach (Elliott & Grigorenko, 2014; H. Ryan & Goodman, 2016; Ylimaki & McClain, 2007). On one side of the debate, many educators adhere to a constructivist, whole language approach based on the premise that children learn to read naturally, through exposure to the language of books and reading text, without the need for explicit instruction. On the other side of the debate, many practitioners adhere to the view that literacy learning requires *explicit* phonological instruction as well as learning literacy through exposure to books while reading. This phonics approach endeavours to provide phonological instruction through explicit teaching of the alphabetic code. An equidistant position in the literacy debate is described Tunmer and Nicholson (2011) who argue that a ‘whole language’ or ‘phonics’ approach on its own will not be sufficient to enable the learner to crack the alphabetic

code and learn to read and write, and that text-based cues should *supplement* word-level cues when engaging in early literacy learning.

Schools in NZ have autonomy to assess and remediate in the way that best suits their students (Ministry of Education, 2007b). In spite of this autonomy, the assessment and remediation of LLD has traditionally, at least over the last 40 years, been very strongly influenced by the whole language theoretical view of literacy (Nicholson, 2000; Tunmer & Nicholson, 2011), as can be seen in the advice provided in the Ministry of Education's Effective Literacy Practice handbooks (Gadd, 2006; Thompson, 2003). More recent Ministry publications, however, encourage teachers to incorporate assessments of phonological skills in their literacy practice, including the Reading and Writing Standards for Years 1-8 (Ministry of Education, 2009), and the Literacy Learning Progressions (Ministry of Education, 2010). New Zealand researchers, including Prochnow, Tunmer, and Arrow (2015) and Chapman, Greaney, and Tunmer (2015) have argued that, while these guidelines are moving somewhat away from the extremes of the whole language approach, assessment and remediation practice still has a predominantly whole language emphasis, and are failing around 20% of NZ students. Tunmer et al. (2013) renounce the 'pervasive myth' of success that supports a widely-held view about the achievement of literacy in NZ. They propose that NZ's National Literacy Strategy has been unsuccessful in several ways. The Strategy was proposed following recommendations from a Literacy Taskforce (Ministry of Education, 1999b), which was commissioned by the Government to study ways of reducing persistent disparities between successful and struggling students in NZ, especially those from minority backgrounds, such as Māori and Pasifika students.

A Literacy Experts Group (Ministry of Education, 1999a), which was assembled to provide advice to the Taskforce, recommended significant changes in the approach to literacy education including a focus on phonological instruction for early literacy learners, and within pre-service teacher education. A Select Committee Inquiry (New Zealand

House of Representatives, 2001), made similar recommendations on how to reduce the incidence of LLD. In spite of this clear, evidence-based advice, the Literacy Taskforce's report prevailed (Tunmer et al., 2013). Recommendations selected from this report included suggestions for a system of National Standards, a statement of best practice in literacy teaching as well as guidelines for administering and analysing running records, and for using this data to inform instruction. A comprehensive 'best practice' literacy instruction PD package was recommended, as well as a review of existing interventions, including Reading Recovery (RR). Tunmer et al. (2013) portrayed how, more than 10 years following the implementation of the National Literacy Strategy, data gathered from the 2011 PIRLS study (Chamberlain, 2013) showed that the Strategy had been ineffective in closing the gaps in achievement, which persisted over the previous two PIRLS cycles. The 2011 PIRLS study demonstrated that, while NZ's Year 5 students achieved relatively well in reading on an international scale, there continued to be a notable tail of weaker readers, particularly from Māori and Pasifika populations and those from low socio-economic backgrounds.

In their critique of the National Literacy Strategy, Tunmer and Chapman (2015) advocate for an alternative to the constructivist approach to literacy education, which they argue has seen a dearth of direct instruction in specific literacy knowledge and skills. They describe the domination of a 'whole language', multiple-cues (or 'searchlights') theoretical model over early literacy instruction policies in NZ and argue that this has contributed to the failure of the National Literacy Strategy. Their response recommends that the Government adequately respond, at school entry level, to assessment findings of disparities in literate cultural capital, and to revise the restrictive nature of policies regarding the first year of literacy teaching, to include more phonological instruction, where needed.

1.9 The literacy debate in other countries

In England, government policy has moved away from whole language to a phonics-based curriculum. Government policy initiatives in England to raise standards have focused on the early literacy curriculum. Rose (2006) chaired an Independent Review of the Teaching of Early Reading (the 'Rose Report'), which recommended the teaching of synthetic phonics as part of early reading instruction. Another recommendation was that efforts be made to ensure that the gains made by students during intervention programmes are sustainable back in the mainstream classroom (K. Hall, 2007). Whole language critics, however, have argued that the changes have gone too far in favour of synthetic phonics over analytic phonics (K. Hall, 2007; Wyse & Styles, 2007). A synthetic phonics approach (also referred to as "blended" or "inductive" phonics) involves teaching individual letter sounds first, then blending them to make whole words, thereby focusing on letter-sound relationships (or phoneme-graphemes). In contrast to this, an analytic phonics approach (sometimes referred to as "analogy" phonics) does not teach letter sounds in isolation, but presents words and blends as whole units, or onset and rime (e.g. the word "chip" is made up of the onset: "ch", then the rime: "ip"). The Education Endowment Foundation (EEF), with support from the Department for Education, recommend evidence-based, effective strategies to raise the achievement of disadvantaged children. In their guidance report for improving early literacy achievement, the EEF (2016), provide very extensive evidence to promote a systematic phonics programme, and, due to the lack of evidence to favour synthetic over analytic phonics, suggest a *combination* of both approaches.

In Australia, a review of the national curriculum (Department of Education, 2014) resulted in "Quality Schools, Quality Outcomes" (QSQO), a package of school reforms aimed at enhancing learning outcomes for all students (Department of Education and Training, 2017). A nationally consistent checkpoint was sought to reverse the trend of declining performance demonstrated by national and international assessments such as NAPLAN

and PISA. A key proposal of QSQO was to introduce a national phonics (and numeracy) check of all Year 1 students. The Australian Government has recently signalled plans to implement a National Year 1 Literacy and Numeracy Check (Department of Education and Training, 2017), although there has been criticism of this initiative (M. M. Clark, 2017; Honan, Connor, & Snowball, 2017).

Similarly in the United States, there has also been a move away from a whole language approach to literacy teaching. The US Congress, in 1997, commissioned the National Institute of Child Health and Human Development, with the US Department of Education, to convene a national panel to investigate the most effective, evidence-based methods of reading instruction. A National Reading Panel was established, comprising literacy experts, teachers and parents. After reviewing extensive research on reading instruction, the National Reading Panel (2000) produced a report presenting their findings and conclusions, under five sub-areas of reading which they had identified as important. These areas are often referred to as the "Big Five" (phonological awareness, alphabetic principle/phonics knowledge, fluency with text, vocabulary, and reading comprehension).

Subsequent reforms saw the introduction of the No Child Left Behind Act 2002, then the "Reading First" initiative in 2003 (Ylimaki & McClain, 2007). This saw a shift in educational administration from local to national governance and required schools to engage in rigorous testing to demonstrate adequate yearly progress. Bills in many states were passed which dictated the explicit teaching of phonemic awareness in elementary schools, as well as all remedial grade levels. Common Core State Standards were also added to this regime, involving more intense testing against National Standards in most states.

Ylimaki and McClain (2007) report that "Reading First" (a large-scale intervention designed to support struggling readers in high-poverty, low-performing schools), was designed to focus on the "Big Five" components of reading. Other aims were the early identification and prevention of LLD, as well as enhancing PD for teachers of literacy.

The 2001 Act has since been superseded with the Every Student Succeeds Act 2015, which allows each state to develop autonomous plans to "close achievement gaps, increase equity, improve the quality of instruction, and increase outcomes for all students" (US Department of Education, 2015).

1.10 The influence of whole language theory on assessment of LLD – the case of Reading Recovery

In NZ, the remediation approach for students with LLD that has received most support from the government has been Reading Recovery (RR). This intervention is often recommended if the Observation Survey of Early Literacy Achievement (also referred to as the "Six-Year Net") reveals that a six year old is struggling with literacy. Both the assessment tool and remediation are reported to be strongly influenced by the whole language approach, which many have argued is the main reason why the National Literacy Strategy has "failed" (Tunmer et al., 2013, p. 140). RR is based on Clay's (1979) early detection and remediation programme for struggling readers. RR has been criticised for not meeting the needs of the many children with LLD due to the whole-language principles of RR, which favour the use of contextual cues over graphophonic cues when reading (Tunmer & Nicholson, 2011). Clay's view was that children's decoding skills would arise incidentally in the context of reading connected text, therefore explicit instruction in grapheme-phoneme correspondence was superfluous. In spite of many recommendations for improvements, RR's supporters have resisted any modifications to the programme since its inception in the 1970s (Soler & Openshaw, 2007).

Tunmer et al. (2013) maintained that data gathered from RR's annual monitoring report (Lee, 2011), while appearing to validate programme's success, revealed that RR did not sufficiently help Māori or Pasifika students, or those from low socio-economic backgrounds. They argued that higher percentages of these students needed longer time on the programme, and/or were subsequently referred on for specialist assistance or

long-term support. They contended that these children did not respond to the whole language emphasis of RR remediation, therefore RR was not effective for these children (Tunmer et al., 2013).

Some of Tunmer et al.'s (2013) arguments have been disputed by other researchers. Schwartz (2005) found that RR was effective in enhancing the literacy progress of low-performing students. While acknowledging that there was potential for marker bias in his results, in that RR teachers conducted all the assessments themselves, he concluded that RR was effective in greatly reducing the numbers of students needing long-term literacy support. In support of his position, D'Agostino and Harmey (2016) reported a meta-analysis of 16 studies of RR, concluding that RR was generally effective in the short term, with an overall effect size of 0.59 (a moderate effect). They mentioned, however, that outcomes varied, depending on the literacy domain measured. Measures of print knowledge, text reading, encoding, and phonological encoding gained larger effect sizes, compared to phonological awareness, comprehension, word reading, decoding, and letter identification. One factor that may have contributed to the moderate effect size of RR was that students worked with a teacher every day, reading and writing on a one-to-one basis. Many studies in the meta-analysis did not have a comparison group that also received one-to-one instruction using an alternative intervention which would have controlled for the one-to-one teacher effect.

In support of D'Agostino and Harmey (2016), Slavin (2016, p. 61) has stated that "one of the very, very few unquestioned success stories of evidence-based reform is Reading Recovery". Slavin, Lake, Davis, and Madden (2011), however, reported that, when other scores were used instead of book-level scores, RR had a rather small effect size of 0.23. When only book level scores were used, the effect size of 1.23 was much larger, but was only half that (0.68) for other measures. It appears that effect sizes vary considerably, according to the measure used, therefore can be misleading. Reynold and Wheldall's (2007) reviews of RR studies concluded it had a relatively weak research base in spite

of the wealth of data collected. They argued that the validity of reports of student progress was questionable, due to the lack of independent measures of RR gains. They also argued that data could be skewed, when additional students were permitted to enrol in RR beyond Year 1, and when data was withheld for students who did not complete the programme. Tunmer et al. (2013) also argued that exclusion of low-performing students resulted in inflated estimates of reading achievement. They also argued that RR's reliance on running records using book levels as the main measure of progress was also problematic, due to lack of clear achievement intervals between different book levels.

Reynolds and Wheldall (2007) demonstrated that RR failed to meet the predicted goal of significantly reducing demands for special education services, as many students still required these services subsequent to completing RR. Students with more severe reading difficulties appeared to be much less successful than other students who had completed RR. Of the students who were reported to make progress, many of the gains were not maintained over following years. Reynolds and Wheldall suggested that more effective, less costly literacy interventions, based on rigorous, contemporary research, be developed.

Despite the debate about the effectiveness of RR, assessment practice in schools has been strongly affected by this approach to intervention. Running records are used in RR on a daily basis, as a summative assessment of progress. This assessment was developed by Clay (1979, 2017) to measure reading accuracy at word level by observing a student's oral reading behaviour. Running records are also used as part of everyday classroom instruction. An instructional text level is determined by measuring the accuracy of words read in connected text, with a score of less than 90% accuracy suggesting that the text level is too difficult. A miscue analysis is used to determine what cues students use (or neglect) to decode text, with a focus on whether errors are due to difficulties understanding meaning, structure/syntax or visual (phoneme-grapheme) aspects of words. In spite of critics of this style of assessment, running records are still

being promoted as effective methods of measuring reading development (Clay, 2017; E. Gillett & Ellingson, 2017; Shea, 2012). Another assessment developed by Clay to measure success in RR is the Writing Vocabulary Task, which involves students writing all the words they know (with standard prompts if needed) within 10 minutes and is scored on the number of words written correctly.

In NZ, the standardised test used for assessing whether students have reached a level where they may be discontinued from RR is the Burt Word Reading Test (Gilmore, Croft, & Reid, 1981), which measures students' ability to correctly pronounce words isolated from context. In a review of this test, Hewison (1984) questioned its validity and whether the test is an accurate measure of reading ability, although other researchers (including Blaiklock, 1997) defend its validity.

In summary, the RR assessment measures, based on a whole language theoretical approach, have been commonly used in NZ schools for at least 30 years and are well known by teachers and literacy specialists. As a result, educators would be more likely to assess reading using measures such as running records, which have a whole language theoretical orientation, focusing on use of multiple cues for reading. For measures of vocabulary knowledge, they may be more likely to assess LLD through the Writing Vocabulary Task.

1.11 The Simple View model: An alternative to the whole language theoretical approach to assessment

One of the most highly-cited cognitive models of the development of literacy, in contemporary literature, has been the Simple View of Reading and Writing (Gough & Tunmer, 1986; Juel, 1994; Juel et al., 1986; Tunmer & Nicholson, 2011). This model contrasts greatly to the whole language model, with teachers being able to make more targeted decisions regarding assessment and remediation using the Simple View.

The Simple View model was originally supported with data from a longitudinal study by Juel et al. (1986), who proposed that a child's development of phonemic awareness skills

could be predicted by factors such as ethnicity, oral language ability and verbal ability (a measure of intelligence). Exposure to print, in combination with phonemic awareness skills, predicted the development of an ability to decipher unfamiliar words based on their phonemes (which they referred to as cipher knowledge). Exposure to print also predicted the development of lexical knowledge (sight-words). Lexical knowledge, combined with cipher knowledge, predicted both spelling ability and word recognition (decoding) skills.

In support of this model, Kamhi and Catts (2012) define word recognition as a procedure by which the mental lexicon (a type of mental dictionary to store vocabulary concepts) is accessed when deciphering written or spoken language. Vocabulary concepts are thought to be stored in the mental lexicon as phonological forms (speech sounds), visual forms (graphemes), as well as the syntax (grammar) and semantics (meanings) of the words or sentences. Whereas word recognition of spoken language can only be processed phonologically, it is believed that there are two ways of processing written language – directly (visually) or indirectly (phonologically). Children's language and general knowledge, in combination with word recognition skills and listening comprehension, predicted reading comprehension ability. Language, general knowledge and the ability to create ideas, combined with spelling skills, predicted writing ability.

Juel et al.'s (1986) 'Acquisition of Literacy' model is demonstrated in Figure 2. Juel et al. (1986) concluded that this model could assist, not only in understanding how some children learn to read and write, but also why some fail. Juel (1988, 1994) later reported that a longitudinal study (of 54 children from the original study) was able to show how the model explained why some children succeeded while others failed. She found that those who failed in reading had initial difficulties in areas important for reading comprehension such as listening comprehension or word recognition/decoding.

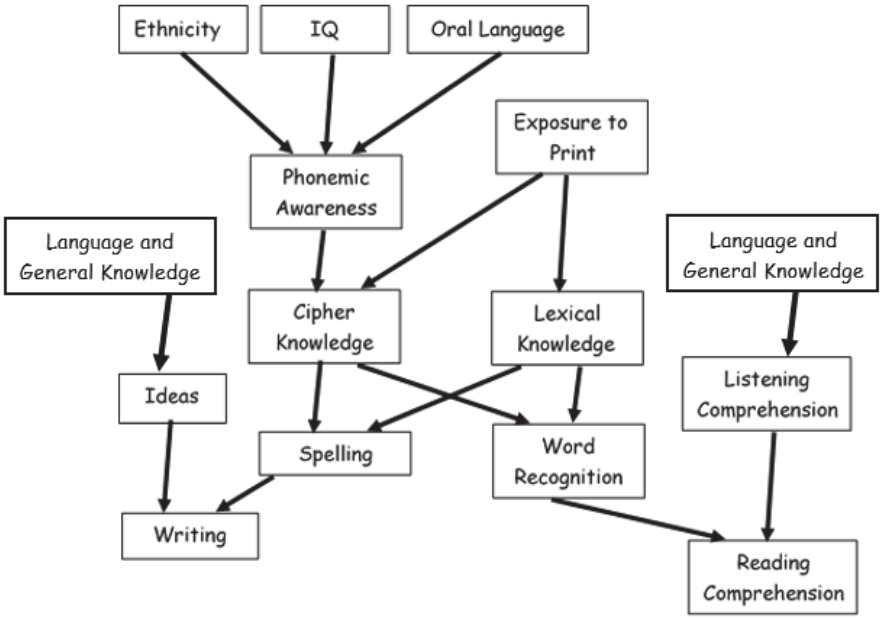

Figure 2: Literacy acquisition model (adapted from Juel, Griffith & Gough, 1986)

Those failing in writing had difficulties with ideation or spelling. The model is therefore a highly-regarded alternative to whole language assessment and remediation (Nicholson, 2005; Nicholson & Dymock, 2015).

The Dual Route model of reading as compared to the Simple View model

A possible neuropsychological explanation to explain Juel's (1986) model was proposed by Marshall and Newcombe (1973). Their Dual-Route model of reading (see Figure 3) suggests that two separate cognitive routes can be involved in word recognition. These two cognitive routes were the lexical route (involving recognition of sight words, and sometimes involving a semantic system) and the non-lexical route (involving identification and sounding out of letters and graphemes). The Dual Route theory proposes that word recognition can occur through either, or both of these cognitive routes, and can be accessed directly from its stored orthographic form without access to the semantic system (Pritchard, Coltheart, Palethorpe, & Castles, 2012).

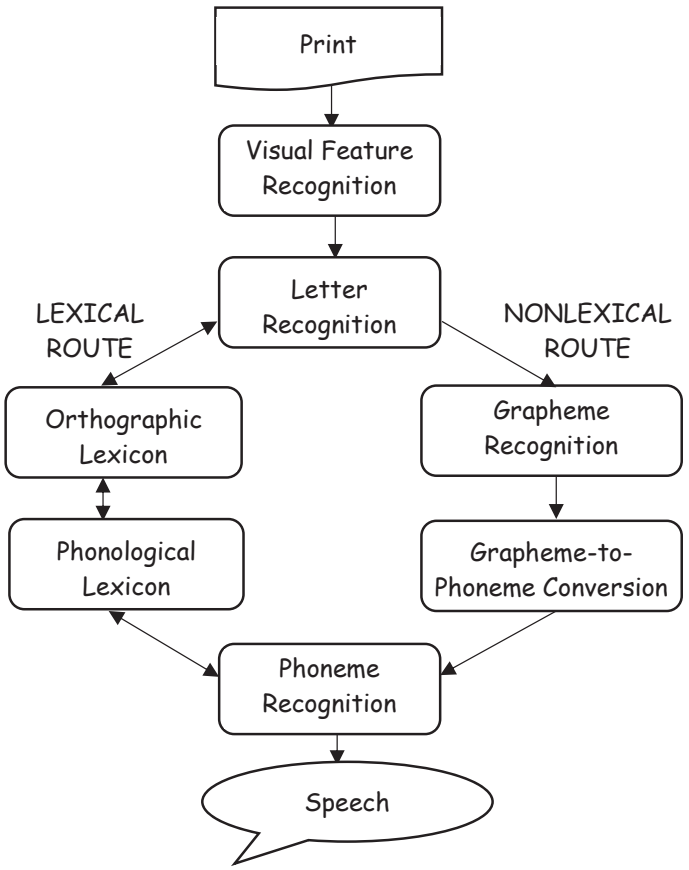

Figure 3: Dual Route model of reading (adapted from Marshall & Newcombe, 1973; Pritchard, Coltheart, Palethorpe, & Castles, 2012)

Moseley et al.'s (2014) study using EMEG scans supported earlier studies which suggest that autistic individuals make more use of the non-lexical pathway for reading simple words, compared to others. Many high-functioning autistic individuals have expert decoding skills, however the study revealed that they did not automatically access or use semantic information when reading.

The Simple View of Reading

The Simple View of Reading (SVR) separates the skill of reading into two components and proposes that reading comprehension (RC) is the end product of word recognition/decoding (D) and listening comprehension (LC):

$$RC = D \times LC$$

SVR also suggests that this conceptualisation can distinguish different kinds of LLD. It proposes that 'LC' measures spoken and receptive language ability (understanding text if it is read aloud), while 'D' is the ability to accurately read individual words (especially pseudo-words) out of context. SVR predicts that students must have an adequate ability in *both* of these components in order to be a successful reader.

Several studies have been undertaken to investigate the validity and effectiveness of the SVR 'reading component' model. A study by Adlof, Catts, and Little (2006) found that students' performance on measures of 'LC' and 'D' explained nearly 100% of the variance in 'RC'. Cain et al.'s (2016) findings supported the broad framework of SVR, however also revealed that reading development was similarly dependent on the development of vocabulary and fluency. Other researchers have also found that vocabulary knowledge (a component of 'LC') has a strong effect on 'RC' (Braze et al., 2016; Braze, Tabor, Shankweiler, & Mencl, 2007; Tunmer & Chapman, 2012).

A longitudinal study with early readers by Savage, Burgos, Wood, and Piquette (2015) confirmed previous findings that both 'LC' and 'D' could independently predict 'RC', as well as explain a very large (68%) proportion of variance in 'RC' at the classroom level (independent of pupil-level variance). These findings support broad theoretical reading paradigms that highlight contextual or ecological factors in early reading development.

The Simple View of Writing

The literacy acquisition model (Juel et al., 1986) also separates *writing* into two components: spelling and ideas (see Figure 2). Spelling is the ability to identify sounds in words and correctly encode them – this requires cipher knowledge. Spelling also involves lexical knowledge, that is, knowledge of how to spell irregular words. Ideation refers to the generation and organisation of ideas, including planning, sequencing and structure. The Simple View of Writing can be used to classify different kinds of writing difficulties, for example, a writer with poor spelling but good ideas; good spelling but poor ideas; poor spelling and poor ideas.

The Simple View: Four subtypes of readers with LLD

The SVR model proposes that there are four sub-types of LLD readers, as shown in Figure 4.

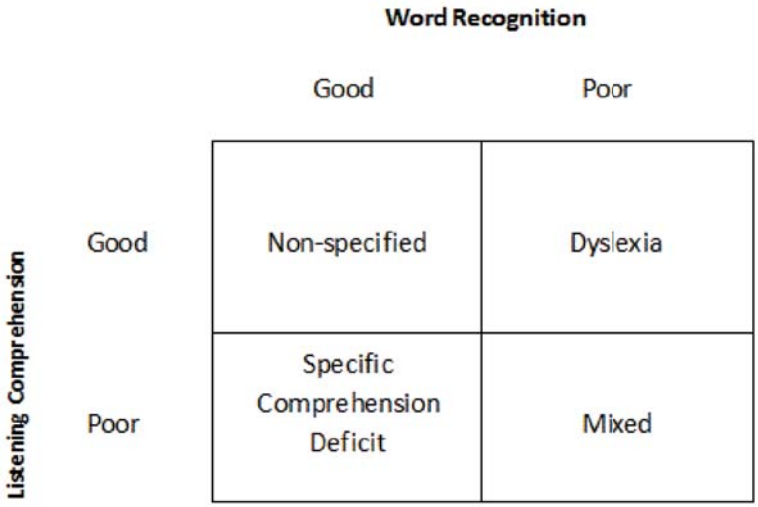

Figure 4: SVR Model – subtypes of LLD based on D and LC abilities (adapted from Juel, Griffith, & Gough, 1986; Kamhi & Catts, 2012)

According to this model, those with good 'LC', but poor 'D', are identified as dyslexic, and require intervention targeted at their word recognition skills. Their strength in 'LC', however may be a compensation for their poor skills in 'D'.

A significant amount of research (Carson et al., 2013; Gough & Tunmer, 1986; Pape-Neumann et al., 2015; Pugh et al., 2013; Tambyraja et al., 2015) indicates that dyslexic readers have deficits in the ability to decode printed words, which can cause difficulties in recognising unfamiliar words and building a sight word vocabulary. Their relative strengths in 'LC' however, will often mask deficits in 'D', unless assessments which specifically examine this area are administered.

Students with good 'D' but poor 'LC' are referred to as having a specific comprehension deficit – sometimes known as "hyperlexia" (Tunmer & Chapman, 2005). These individuals will need support with listening comprehension (e.g. vocabulary learning, inferencing, etc.), which may require them to engage in more reading of text. Those with

weaknesses in both D and LC are classified as “mixed” or “garden variety” poor readers (Kamhi & Catts, 2012) and need assistance in both these areas of literacy acquisition. The main difference between poor readers classified as “dyslexic” and those classified as “mixed” is usually that the latter have more severe phonological processing deficits, which emerge earlier (Tunmer & Greaney, 2010).

While this model appears to exclude students with a “mixed” reading ability profile from an SLD diagnosis such as dyslexia (Elliott & Grigorenko, 2014; Kamhi & Catts, 2012) this type of discrepancy model has been criticised, as discussed earlier. The DSM-5 criteria would appear to diagnose a “mixed” reading ability as an SLD if these difficulties were unexpected, in terms of the student’s other abilities.

It is maintained that by using the SVR model, teachers can differentiate those readers whose difficulties are predominantly with word recognition, compared to those with listening comprehension-related difficulties (van Boekel, Kendeou, & Fletcher, 2017), therefore can be very useful for making assessment and teaching decisions for students with LLD (Aaron, 1997; Hoover & Tunmer, 1993; Nicholson & Dymock, 2015; Tunmer & Chapman, 2012; Tunmer & Greaney, 2010).

1.12 The Double Deficit Hypothesis

Another conceptualisation of LLD has been the double-deficit hypothesis, suggested by Wolf and Bowers (1999). This model proposed that developmental dyslexia is characterised by two core deficits: processing speed and phonological awareness, with LLD students presenting with either one, or both, of these difficulties. Students who had both, presented with poor reading fluency (in addition to poor comprehension) and were the hardest to remediate. Measures of Rapid Automatised Naming (RAN), which integrate visual and verbal skills, have been used widely as a predictor of processing speed and reading ability (Elliott & Grigorenko, 2014). Other research (Johnston & Kirby, 2006; Schatschneider, Carlson, Francis, Foorman, & Fletcher, 2002; Waber, Forbes,

Wolff, & Weiler, 2004) has established a common co-occurrence between naming-speed deficits and phonological deficits, thus supporting the double-deficit hypothesis.

1.13 Four phases of word reading development

The SVR model did not specify how decoding skills were developed, however Ehri (2005) proposed a model of four phases of reading development which children often progress through when learning to read words (see Figure 5).

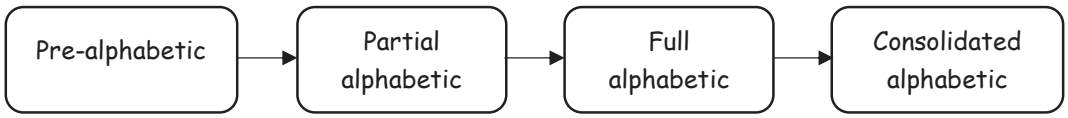

Figure 5: Four phases of reading development (adapted from Ehri, 2005)

The first "Pre-alphabetic" phase (also known as logographic phase) is when children pick up on visual cues, such as logos (e.g. the MacDonald's "golden arches") without having any alphabetic knowledge, or letter-sound connections. The second "Partial alphabetic" phase is where children have some alphabet knowledge, and use these phonetic cues, such as initial letters, to attempt at pronouncing words. A third "Full alphabetic" phase occurs when children are beginning to form alphabetic connections to read whole words by sight, without having to decode individual letters. Ehri proposed that the ability to make connections between graphemes and phonemes is essential when attempting to reading sight words. The final "Consolidated alphabetic" phase is when the reader is able to recognise words quickly as sight words. This model supports assessment practice that traces the development of these high levels of 'D'.

In summary, teachers and literacy specialists with a Simple View theoretical orientation are likely to use assessments that focus on word recognition (D) and listening comprehension (LC) to assess difficulties with reading, and focus on ideas and spelling when assessing difficulties with writing.

1.14 Response to intervention (RTI)

Teachers in NZ schools are able to access a wide range of interventions to assist with remediating LLD, however there is no “one-size-fits-all” approach which caters for everyone’s needs. It is therefore imperitive that specific needs are recognised, in order to provide students with interventions which are “fit for purpose”. Once a student’s specific areas of difficulty have been identified, they can be specifically targeted for intervention (Aaron, 1997; Flanagan & Alfonso, 2011). This study investigated whether the tools and methods currently being used are based on best-practice models. An evaluation by the Education Review Office (2015) provides reports of schools who have set targets and are taking action to make a difference for students who were previously at risk of underachievement. It provides inspiration and guidance for school management and teachers about how they can set effective targets which result in accelerating progress for students who are falling behind.

Response to Intervention (RTI) is an evidence-based, multi-tiered approach to early identification and remediation of learning difficulties (Flanagan & Alfonso, 2011; Preston, Wood, & Stecker, 2016). Rather than using a static testing score to measure student ability, it involves measuring a student’s potential by assessing the level of progress made in response to remedial instruction. This approach has been connected with increasing schools’ abilities to effectively respond to student’s learning and behaviour difficulties as well as being able to diagnose students’ eligibility for special education services/funding (Torgesen, 2009). Vellutino, Scanlon, Zhang, and Schatschneider’s (2008) found that the RTI model was successful for the early identification and cost-effective remediation of early reading difficulties within the first year at school for most children. The measures used were also more effective than tests of intelligence and initial screening to determine those students at risk of requiring more individualised, intensive and/or long-term intervention.

The SVR reading component model (which has been discussed earlier in this chapter) provides both a method for diagnosing the roots of LLD, as well as determining suitable interventions. Teachers can use this model to help target interventions in the most appropriate ways to support students with their specific area of difficulty – whether it is with listening comprehension or word recognition (Tunmer & Chapman, 2012). Students with persistent reading difficulties can be taught to use their brains in a more effective manner, through appropriate intervention strategies (Tunmer & Greaney, 2010). Brain imaging studies have demonstrated that, once students had undertaken intensive remediation, the activation profile of poor readers became very similar to that of normally developed readers, or even better, over time.

1.15 Using the SVR to determine appropriate remediation

For those students with LLD who appear to be "mixed" poor readers, an intervention which assists with developing oral language comprehension skills is recommended. Oral language comprehension describes the ability to derive meaning and draw inferences from spoken language using lexical knowledge (Tunmer & Chapman, 2012; Tunmer & Hoover, 1993). It is thought to depend on linguistic and cognitive abilities, including language and general knowledge (including vocabulary), listening comprehension, verbal or working memory, processing speed (Berninger & Rosenfield, 2009). Oral language comprehension has a direct impact on reading ability and, due to its influence on decoding, is now also believed to have an indirect impact on reading ability (Tunmer & Chapman, 2012). Programmes to enhance the development of these oral language skills for early learners with LLD, including the Hei Awhiawhi Tamariki ki te Panui Pukapuka (HPP) oral language programme, have proven very successful, both in the English and Māori medium (McNaughton, MacDonald, Barber, Farry, & Woodard, 2006; Ministry of Education; Shannon & Oldridge, 2011).

For those students with SLD who fall into the category of “Mixed” poor readers, or “Dyslexic” poor readers, interventions which assist with developing word recognition skills are recommended, of which there are many.

While there are many approaches to the remediation of LLD in schools, many students with SLDs such as dyslexia or dyspraxia fail to make progress as a result of these interventions. Some will seek private or group tuition from external sources, such as Kip McGrath centres or SPELD NZ. The efficacy of SPELD NZ’s specialist tuition was investigated by Waldie, Austin, Hattie, and Fairbrass (2014), who concluded that the one-to-one intervention, when conducted twice a week, was most effective in lifting specific, as well as broad achievement levels of students with dyslexia. Large gains were found to be made in measures of student’s cognitive efficiency and processing speed.

While SPELD NZ tuition targets both proximal and distal factors of LLD, there are a range of programmes which solely focus on the remediation of LLD students’ underpinning cognitive weaknesses, many of which lack a sound evidence-base. One cognitive programme, however, which uses mediated learning to enhance students’ metacognitive abilities, has been proven to be very successful. Feuerstein’s Instrumental Enrichment (Feuerstein, Rand, Falik, & Feuerstein, 2006), was based on his theories of Structural Cognitive Modifiability and Mediated Learning Experience. This programme has a solid evidence base internationally, for enhancing general cognitive, as well as literacy abilities, even in individuals with mental disorders or brain injuries (Ben-Hur, 1997; Burke & Williams, 2012; Kozulin et al., 2010; Lebeer, 2016). Feuerstein’s metacognitive programme has been successful in raising achievement in culturally diverse settings in NZ schools. McIntyre (2017) and Howie (2003) recount how rich experiences of reflective teaching and learning practice along with ipsative assessment, occurring in a reciprocal learning environment, in an ako manner, not only assisted with developing cognitive functions, but enhanced the self-efficacy and motivation of students and teachers alike.

Metacognition is a concept which is promoted as a method of enhancing self-reflection, reasoning, strategising and self-regulation (Ministry of Education, 2010, 2012; Nicholson & Dymock, 2015). Nuthall (2007) discusses how metacognitive thinking can be used to compensate for cognitive difficulties. Metacognition is supported by a rich evidence-base of research and literature from both NZ and overseas (Alton-Lee, 2003; Burton & Daneman, 2007; Fox & Riconscente, 2008; Hamaguchi, 2013; McIntyre, 2017; Reid, 2012; Tunmer & Chapman, 1996; Wright, 2010).

Another programme designed to target cognitive weaknesses underpinning LLD is Multisensory Structured Language (MSL), based on the Orton-Gillingham approach (International Dyslexia Association, 2008). Supporters of this approach argue that language skills will be reinforced when students are actively involved in literacy learning using a multisensory approach which simultaneously involves visual, auditory and kinaesthetic elements. The use of multiple input pathways is believed to enhance memory storage and retrieval through the provision of multiple 'triggers' for memory.

It is proposed that, by providing a mix of visual, auditory and tactile stimuli, students who may have visual or auditory processing difficulties will still have access to literacy learning. Studies have yet to confirm whether the success of this programme is due to the multisensory approach, or the explicit, systematic focus on the structure of language.

1.16 The effects of LLD on students' self-esteem and levels of anxiety

In order to provide a holistic approach to the assessment and remediation of LLD, teachers must also attempt to understand the social/emotional needs of their students. While a key to learning success is a student's self-esteem (S. Clark et al., 2008), students with LLD will often experience difficulties with other curriculum areas, leading to anxieties regarding their performance. A student's self-esteem can suffer when they perceive their abilities in literacy are not up to the level of their peers (Nicholson & Dymock, 2015; Reid, 2011). A review on LLD by the Ministry of Education (2007a) found that it is extremely difficult for children to develop a positive self-image if they are still experiencing

difficulties at ten years of age. Interventions for LLD, therefore must acknowledge these social/emotional factors and strive towards enhancing students' self-esteem. When evidence-based strategies are implemented, which are effective in targeting students' specific identified needs, levels of motivation and self-esteem should increase.

1.17 Accommodations to support LLD students

In order for students with LLD to maintain their self-esteem and motivation to learn while participating in remedial programmes, it is important that their specific needs are accommodated. Accommodations for LLD students may involve allowing them to take a picture of the whiteboard, rather than having to copy notes, allowing extra time to complete classroom tasks or assessments involving reading and/or writing, or allowing them to present their work using a computer instead of handwriting.

Universal Design for Learning

To provide these accommodations in an inclusive manner, so that students aren't made to feel 'different', a Universal Design for Learning (UDL) model may be applied (T. E. Hall, Meyer, & Rose, 2012). As can be seen in Figure 6, UDL goes beyond an equitable

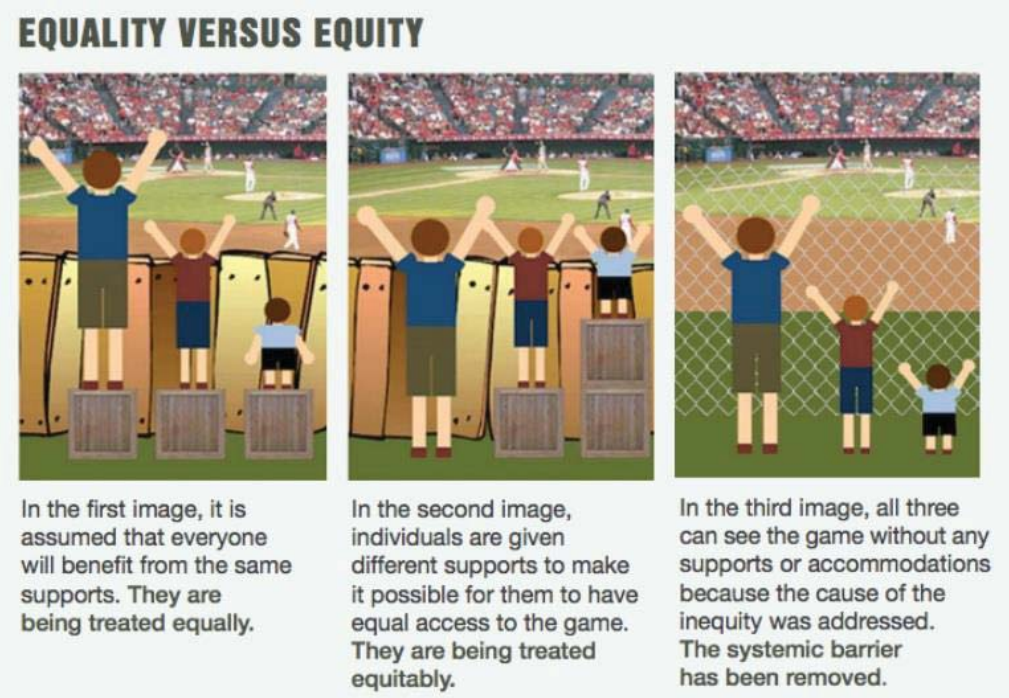

Figure 6: Equality Versus Equity (City for All Women Initiative, 2015) Reproduced by permission of right's holder.

approach by removing barriers to learning, enabling equal access to all. UDL is an inclusive framework for instruction, with a focus on underpinning cognitive factors. It is based on principles which map onto three groups of brain networks: strategic (communication/organisation); recognition (receptive) and affective (social/emotional) learning networks (T. E. Hall et al., 2012).

UDL is endorsed by the Ministry of Education (2017a), whose website has guidelines for applying the framework in a NZ context.

Special Assessment Conditions

To accommodate students with LLD during senior assessments, they may be granted the use of a computer, or a Reader (and/or Writer) and/or extra time to complete the task. Schools must apply to NZQA on behalf of their students to seek these Special Assessment Conditions (SACs). In 2012 a review of SACs was carried out in NZ in response to claims of lack of access and equity (Ministry of Education, 2014). Key findings and recommendations from the review were that, in spite of moves towards using technology to assist with assessments in the future, early identification of students with specific learning disabilities and sensory needs was still important. Furthermore, it was strongly suggested that support be provided to further develop the 'alternative evidence' process within schools, rather than students being required to obtain costly independent IQ assessments.

1.18 An ecological approach to gathering assessment data

In terms of equity for students who require the most assistance, it is important that teaching practice is inclusive. Marginalised students, including those with LLD, Māori and Pasifika students, or indivdiuals from a low socio-economic background, must have their specific needs met. In order to do this, teachers are obligated to seek to identify these needs.

In Bronfenbrenner's (1979) Ecological Systems Theory, he proposed that an individual's development is affected by everything in their surrounding environment. Therefore teachers need to understand the various environments of their students, including their home, community and culture. The Office of the Auditor-General (2016) promotes the collection, sharing and use of student information by schools in order to enhance their prospects of success.

1.19 Professional Development to enhance teacher self-efficacy

Teachers in NZ classrooms are faced with responding to the needs of a wide variety of abilities. When providing differentiated programmes of teaching and learning, teachers require skills in providing scaffolds and structures to support struggling learners, as well as catering for the needs of proficient or advanced learners. Evidence demonstrates that teachers often have difficulty addressing this spectrum of academic diversity in mixed-ability classrooms (Huang, Moon, & Boren, 2014). Due to complexities involving the origin, symptoms and co-morbidity of LLD, this area of education has often remained the domain of specialist teachers. Ongoing PD is important to equip teachers with the skills to provide differentiated learning opportunities which meet the various needs of individual students. They must also be adept in using assessment tools to determine what these needs are.

An Education Review Office (2010) report into schools' ability to provide an inclusive education for students with high needs, called for the need for more school-wide PD – for teachers, teacher aides as well as school management – in order to accommodate the needs of a diverse range of abilities. A review of Special Education policy (Ministry of Education, 2015b) has also identified a need for improved guidance and training for teachers, to equip them to teach students with a diverse range of learning needs. Following the review, a Special Education Update Action Plan (Ministry of Education, 2015d) aimed to strive towards the Ministry of Education's vision of all children and students achieving personal and educational success. In addition to goals aimed at

improving the way information is gathered, analysed and shared, the Update has pledged to review teacher training and PD, to strengthen practice and provision of inclusive education resources (Ministry of Education, 2015d).

Ciampa and Gallagher (2016) found that school-based teacher collaborative inquiry contributed to levels of teacher self-efficacy when engaging in AFL practice. Teachers reported increases in professional satisfaction, intrinsic motivation and reflective practice.

A recent initiative in Professional Learning and Development (Ministry of Education, 2016c) aimed at providing centrally-funded training opportunities for teachers and schools, with the goal of improving student outcomes in "National Priority" areas, including literacy. PD aimed at enhancing teacher's ability to providing inclusive learning environments as well as analysing, interpreting and responding to assessment data was hoped to contribute towards meeting these goals.

Summary

This review of the literature regarding theory and practice of assessment and remediation for LLD in NZ has established that there are a variety of theories being subscribed to. The literature identifies shortfalls in the National Literacy Strategy, which may account for the gaps in literacy learning achievement between different groups of learners. There is a wide variety of reasons why students may struggle with literacy learning – many of them proximal, such as poor word recognition, listening comprehension or vocabulary skills. There appears to be equally as many distal factors which underpin LLD, including familial background, cognitive functioning, and social/emotional factors. Any investigation into LLD assessment practice in NZ schools is likely to find a diverse array of tools and methods. One explanation for this is that schools have traditionally followed a whole language theoretical orientation which favours more holistic assessments such as running records. For example a review of school assessments by the Education Review Office (2007) found that 90% of teachers in Years 1 and 2 used running records.

In recent years, however, the Ministry of Education has moved to support more phonological assessments, as seen in the Literacy Learning Progressions. The influence of the SVR model may also have led to more use of phonological assessments. Finally, many secondary schools, have used accommodations or SACs to provide support to students with LLD, to improve their chances of success in formal NCEA assessments. All of these factors were taken into account in the design of the current study, which examines current practice in assessment and remediation of learners with literacy difficulties in NZ schools.

Research Questions

1. What is current practice in New Zealand/Aotearoa schools for assessing the specific needs of students who have literacy learning difficulties?
2. How are assessment data being used to ensure that students' specific literacy learning needs are being met in New Zealand/Aotearoa schools?

Chapter 2: Methodology

Introduction

The methodology and design considerations for this research study are outlined in this chapter, beginning with an outline of the research questions and the approach used. The use of an online survey questionnaire and semi-structured interviews are explained. This is followed by an outline of the process used to analyse both the quantitative and qualitative data collected. Ethical considerations are then discussed.**Research design: Mixed methodology**

When reviewing the most appropriate paradigm and outcome measures for this study it was decided that a sequential QUAN→QUAL design should be adopted, as this would provide a wider understanding of the findings (Creswell, 2015a; Onwuegbuzie & Mallette, 2011).

For this study, a sequential QUAN→QUAL mixed method design, using both quantitative as well as qualitative data, allowed the different phenomenon occurring in a variety of schools, with a diverse range of educators, to be explored. The mixed methodology design combines the rigorous analysis of quantitative and qualitative approaches, whereby statistical trends can be combined with personal experiences (Creswell, 2015a). It allows for a more in-depth investigation, richer interpretation and development of a deeper understanding of phenomenon, compared to using just one approach (Creswell & Plano Clark, 2011; Onwuegbuzie & Mallette, 2011).

2.2 Data analysis

The analysis of data followed a sequence. When quantitative data is first gathered and analysed, followed by the collection of qualitative data, with an equal emphasis on both sources of data, it is known as a sequential QUAN→QUAL design (Creswell, 2015a). Figure 7 gives an outline of this linear procedure was applied to this study.

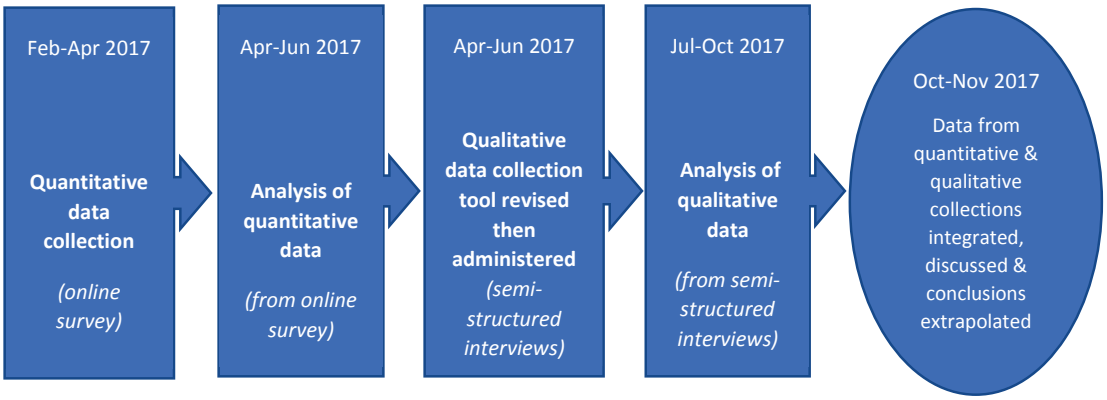

Figure 7: Mixed methodology research using a sequential explanatory QUAN→QUAL design (adapted from Creswell, 2015a)

While quantitative data is often very objective and scientific, in this case, due to several open-ended questions being used in the survey, more subjective data were included as well.

This study used an online questionnaire, through Survey Monkey. Respondents to the survey were invited to indicate their willingness to participate in a follow-up interview. Semi-structured interviews were conducted with a representative sample of those participants. This research design allowed participants to complete the questionnaire anonymously, then to share their experiences and provide a deeper understanding of their current practice regarding assessment and intervention for students experiencing LLD. Each of the participants revealed some similar information about their practice, thus providing a level of validity to the findings. In contrast to this, several participants had unique experiences with assessment and intervention tools and methods in the schools or clusters they were employed in. The data collected during the semi-structured interviews enabled the nature of many of these differences to be clarified.

2.3 Methods: Quantitative and qualitative phases

2.3.1 Methodology of quantitative phase – Online survey

The survey was sent to all schools and RT:LB clusters in NZ (see Table 1).

Table 1: Data collection tools, methods and participants

Data Collection Phase	Data Collection Tool and Method	Participants
Phase One (quantitative)	Questionnaire – disseminated by way of the Survey Monkey online survey tool to all schools and clusters in NZ (n=2557)	Teachers, SENCos, RT:LB and RT:Lit (n=208)
Phase Two (qualitative)	Interviews – with those respondents to the online survey who indicated willingness to participate in this phase – some face-to-face, others by telephone or Skype (n=27)	A diverse range of Teachers, SENCos, RT:LB selected from those willing to participate (n=13)

Contact information for schools was obtained from the Education Counts (2017) online database of NZ Schools. As this database only contains email addresses for schools that agreed to have their email publicly released, some contact information was gathered by going directly to the school website. Contact information for the RT:LB clusters was obtained from the Resource Teacher: Learning & Behaviour website (Ministry of Education, 2017c). The researcher ensured that email communication to all schools and clusters complied with the requirements of the Unsolicited Electronic Messages Act (2007).

School Principals (n=2517) and RT:LB Cluster Managers (n=40) were emailed and invited to forward the information sheet to teachers, SENCos, RT:Lit or RT:LB within their school or cluster. The email contained information for educators regarding the study and a hyperlink leading to the online questionnaire (See Appendix C). At the end of the online questionnaire, participants interested in being interviewed for Phase Two of the study could either contact the researcher directly via a hyperlinked email address, while retaining the anonymity of their questionnaire data, or indicate their willingness within the

survey by providing contact details. Completion of the online questionnaire was entirely voluntary, so the research avoided the use of coercion. Follow-up reminder emails were sent to all schools and clusters a week after the first invitation had been sent.

Some assessment tools mentioned in the questionnaire were the English assessment tools listed on the Ministry of Education's (2015a) online "Assessment Tool Selector". It should be noted that inclusion of assessment tools on this list "does not indicate endorsement by the Ministry of Education" (Ministry of Education, 2015a). Other assessment tools included on the questionnaire were the tools for literacy, spelling and specific learning difficulties promoted for school use by the NZ Council for Educational Research (Psychological Test Services, 2016), as well as those from Nicholson and Dymock's (2015) "NZ Dyslexia Handbook".

A range of questions were included in the questionnaire, including multiple choice, matrix, rating scale and ranking questions. Comment boxes were provided for many of the questions, to allow respondents to elaborate on their answers, or provide alternative responses if the tool the used was not listed. The wide range of comments elicited resulted in the questionnaire providing both quantitative as well as qualitative data. Demographic information about respondents' age, years of experience, roles and types of schools they worked in was limited to information which would ensure their anonymity.

2.3.2 Methodology of qualitative phase – Interviews

Phase Two of the study involved semi-structured interviews with a selection of the survey respondents (see Table 2 on page 80). Participants were chosen from survey respondents who had indicated that they were willing to take part in a follow-up interview. When using an explanatory sequential design, individuals selected for the qualitative sample should be drawn from the pool of participants in the quantitative sample (Creswell, 2015a).

The sample chosen represented a mix of educators from different levels and types of schools (Primary, Intermediate and Secondary, as well as State, Integrated and Independent) and RT:LBs. Participants were also selected from various locations around NZ, and from a mix of school decile ratings. Questions asked in the interviews were based on themes that emerged from the literature review, as well as following up on concepts that emerged from the Phase One data, to gain more in-depth understanding regarding why some of the choices were being made.

Semi-structured interviews use pre-selected questions, however also allow researchers the flexibility to focus on particular themes and keep the interview focused. A skilled interviewer will endeavor to pick up on issues for further elaboration, as well as determine the respondents' ability and willingness to provide further clarification or reflection (Gibson, 2010; Opie, 1999). The intention was that participants would only be interviewed once, therefore a semi-structured approach was considered appropriate.

Some advantages of conducting interviews include receiving information from participants that directly answers some research questions, the ability to seek clarification of any ambiguous responses, and the increased likelihood that responses are credible (i.e. not just guessed or falsified) (Baumann & Bason, 2011; Hobson & Townsend, 2010). Several positive aspects can be experienced by participants as a result of their involvement in research interviews, including opportunities to share and connect with others, self-reflect, and become more knowledgeable about a topic. A number of participants in this study indicated that this was the reason that they were keen to be involved in the study.

Some of the disadvantages to using interviews to collect qualitative data include: difficulties gaining access to willing participants; the time-intensive nature of the data collection; and the lengthy process of transcribing the data (Creswell, 2015b). Hobson and Townsend (2010) caution that data collected through interviewing may be deemed unreliable, as it can be subject to interviewer bias. The interviewer may be viewed as a

'co-producer' of knowledge, therefore having an influence on the data generated. Hobson and Townsend (2010) also note that, due to issues of 'social desirability' (i.e. not wanting to be seen in an unfavourable manner), participants may not always give accurate or honest responses to questions asked.

2.4 Responses to the first and second phases of the study

2.4.1 Responses to Phase One: Online survey

The questionnaire was comprehensive, due to the researcher's aim of gathering a broad picture of current practice regarding literacy difficulties. As the majority of respondents would not be expected to be familiar with all of the tools and methods listed on the survey, it was anticipated that they would not find the task too laborious, as they would not have to respond to all of the items listed, and "skip-logic" (a feature of the Survey Monkey tool) would ensure that these items would not appear in subsequent questions. It was anticipated that most respondents should be able to complete the questionnaire in less than 30 minutes. Data collected by the Survey Monkey tool regarding the time taken to complete the questionnaire indicated that this was the case. Phase One of the data collection gathered 208 responses in total, which were all deemed useable, as all of the essential questions which required a response had been answered.

2.4.2 Responses to Phase Two: Interviews

From the 27 respondents to the Phase One survey who had indicated that they were willing to participate in Phase Two, the interview phase, 13 were selected as being a representative sample of regions in NZ, levels, deciles and types of school or cluster. These 13 participants were contacted by the researcher by email and were sent an information sheet, containing the interview purpose and procedures (see Appendix D), along with an individual participant consent form (see Appendix E). Once participants had replied to this email to confirm their participation, and had signed and returned the consent form, appointments were scheduled for the interviews to take place.

Participants were invited to choose their preferred setting for the interview. Due to geographic location restricting the possibility of face to face interviews, only three interviews were conducted in this manner. Two took place in a private office in the participant's school, while one took place in a café. The remainder of the interviews were conducted by telephone or Skype (an online video-conferencing tool). While a face-to-face interview can incur less technical difficulties and will often allow researchers more chances of developing a positive rapport with participants, the telephone and Skype interviews for this study were still able to be conducted in a congenial manner. An interview process for gathering research data requires a sufficient level of trust, (Creswell, 2015b), therefore participants were provided with full, transparent details of the purpose and nature of the research, and appeared to trust the researcher enough in order to be able to disclose possibly sensitive information. No technical issues were encountered during interviews in regards to the quality of transmission or recording of data.

Interviews were recorded (with permission from the participants) using the Smart Recorder (by SmartMob) application on the researcher's Samsung Galaxy S6 smart phone. This tool was selected for its ease of use, portability, and ability to store data remotely and securely, with password access being required for retrieval. Interviews lasted approximately thirty-five minutes to one hour in length. Recorded interview data was transcribed and returned to each participant for them to review to ensure accuracy. Checking accuracy is important as errors can significantly affect the validity and reliability of any study (Creswell, 2015b). Once participants had checked (and modified, in some cases) their transcript, they signed and returned an "Authority for the Release of Transcripts" form (see Appendix F).

When analysing research data, Gibson (2010) refers to priori theorising and empirical theorising as being two approaches to theory development and generation of conceptual ideas. The core interview questions (which are listed at the end of the Online Survey -

see Appendix C) were developed from themes which arose during the Literature Review (priori theorising) and were then refined after themes were identified from the responses to the Phase One online questionnaire, once they had been collated and analyses (empirical theorising).

2.5 Data analysis for quantitative and qualitative phases

2.5.1 Data analysis for Phase One: Quantitative data

The data gathered from the online questionnaire was analysed using descriptive statistics to identify main themes. MS Excel 2016 was used to present the data in charts to provide visual representations to support the findings. Qualitative statements generated by way of open-ended questions were summarised and reported.

2.5.2 Data analysis for Phase Two: Qualitative data

A thematic analysis of the qualitative data gathered from the interviews was undertaken using NVivo 11 for Windows software. This software is designed to support the organisation and analysis of qualitative and mixed methods research (M. Ryan, 2009). After the data had been checked for reliability and accuracy, it was coded using regularly occurring themes and stored as “Nodes” in the software application. Demographic information of the participants was organised as “Case Classifications”. Nodes were then examined for frequency, and then prioritised in order of importance. Nodes were then categorised under emerging common themes. Categories of these themes were then defined, refined, and reduced in order to address the research questions succinctly.

2.6 The role of the researcher, possibility of bias or conflict of interest

As humans are the primary instruments in the collection and analysis of qualitative data, a researcher’s own perspectives, values and worldview may affect the analysis of the research (Hartas, 2010). It can be difficult to separate a researcher’s axiological beliefs (including personal views, intuitions and reflections) from the interpretations they make of the findings (Creswell & Poth, 2018). The researcher must, therefore, identify their

position, in order to identify (and thereby minimise) any bias when interpreting data (Creswell, 2015b).

In order to minimise researcher bias and enhance reliability of the interviews, the questionnaire was based on themes that emerged from the literature review, and was trialled with peers before being disseminated. In addition, the researcher used an identical set of core questions for each participant being interviewed. While other interview questions were added on an ad hoc basis to prompt participants and clarify responses, adhering to the same core questions when conducting the interviews added a level of dependability to the study. The interviewer usually holds a prominent role and leads the interview process (Hobson & Townsend, 2010), however, for this study, the researcher encouraged participants to speak freely about situations that they deemed pertinent to the topic. The author's professional affiliations were disclosed.

2.7 Ethical Considerations

Any type of research involving human participants must carefully consider all issues which may impact on these individuals. Researchers must be aware of and anticipate any ethical issues to ensure that there is no danger of potential harm – to the participants, the researcher, or the institution connected to the research (Creswell, 2015b). The fundamental principles of ethical conduct in research are:

- To show respect for participants;
- To ensure the process is just, and
- To maximise good outcomes and minimise risk.

Following the identification of all ethical considerations relevant to this study, in line with the Massey University Code of Ethical Conduct for Research, Teaching and Evaluations involving Human Participants (Massey University, 2015), a full ethics application was completed, submitted, reviewed and approved by the Massey University Human Ethics Committee: Northern, Application NOR 16/47.

An information sheet was emailed to all school principals and cluster managers prior to data collection for Phase One (See Appendix G). Possible implications from participating in the survey that were acknowledged included the fact that some educators may not be familiar with all of the assessment materials mentioned in the questionnaire, and that all survey respondents would not be able to be identified in any way. Respondents were informed that, by completing the survey and submitting it, their informed, voluntary consent was implied.

Phase Two participants were also provided with an additional information sheet (see Appendix D), which outlined the purpose and nature of the interview process. Written consent was obtained from all participants prior to the interviews taking place. None of the participants were known personally to the researcher.

Summary

The research methodology and methods used for data collection in this study have been outlined in this chapter. The quantitative data collected from the questionnaire were analysed using descriptive statistics, while the more qualitative data from the same source were analysed using thematic analysis. The qualitative data collected from the interviews were also thematically analysed, with the assistance of the NVivo research software, to develop themes that addressed the research questions. The researcher's bias was identified. Ethical considerations were identified and full approval for the study was granted by the Massey University Human Ethics Committee.

Chapter 3: Results

3.1 Introduction

The first section of this chapter presents the results from the online survey (Phase One) which was completed by 208 teachers, SENCos, RT:LB and RT:Lit from all over NZ. Results from the interviews with 13 of these participants (Phase Two) are presented in the second section. Both sections begin with an overview of the demographics of the participants and the schools or cluster they work in, followed by some of the most interesting findings which assist in answering the research questions:

1. What is the current practice in New Zealand/Aotearoa schools for assessing the specific needs of students who have literacy learning difficulties?
2. How are the assessment data being used to ensure that students' specific literacy learning needs are being met in New Zealand/Aotearoa schools?

As previously mentioned in the methodology section, the assessment tools and methods, along with the intervention programmes or methods which were included in the survey represented those which are promoted by the Ministry of Education and the NZ Council for Educational Research, as well as others known to be commonly used in NZ schools. A wide range of additional assessment tools/methods and interventions were also mentioned by respondents and are summarised in Appendix H.

3.2 Results from Phase One: Quantitative research

3.2.1 Phase One demographics

Questionnaire responses were obtained using the Survey Monkey online survey tool. The 208 participants who responded to the online survey represented a wide cross-section of educators in NZ schools and RT:LB clusters (see Figure 8). Most of the responses were from educators working in State (or Public) schools, while the others were from a range of schools or clusters, including Integrated schools, RT:LB clusters,

Independent (Private) schools, Kura Kaupapa Māori/Wharekura, Special schools or "Other"[1].

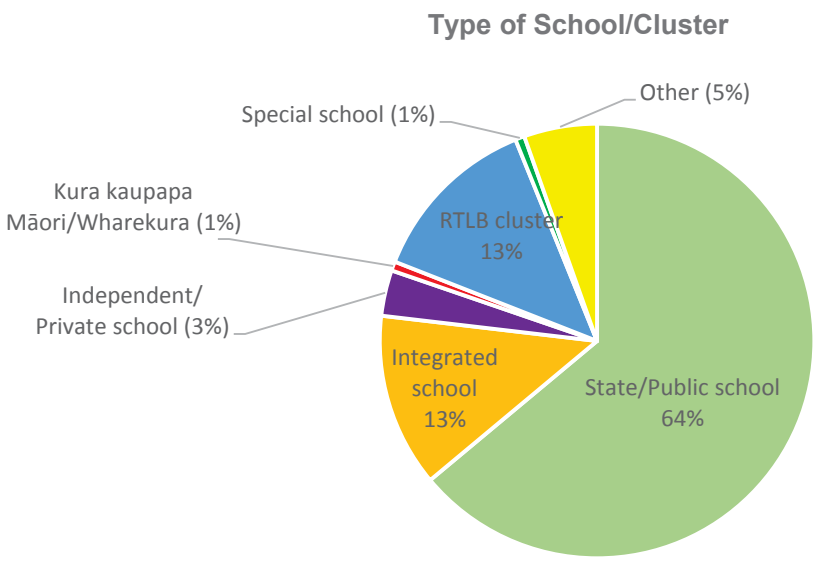

Figure 8: Types of School or Cluster Where Respondents Are Employed

Respondents were employed in a wide variety of different school levels (see Figure 9), with the majority working in a Full Primary School with Year 0-8 students.

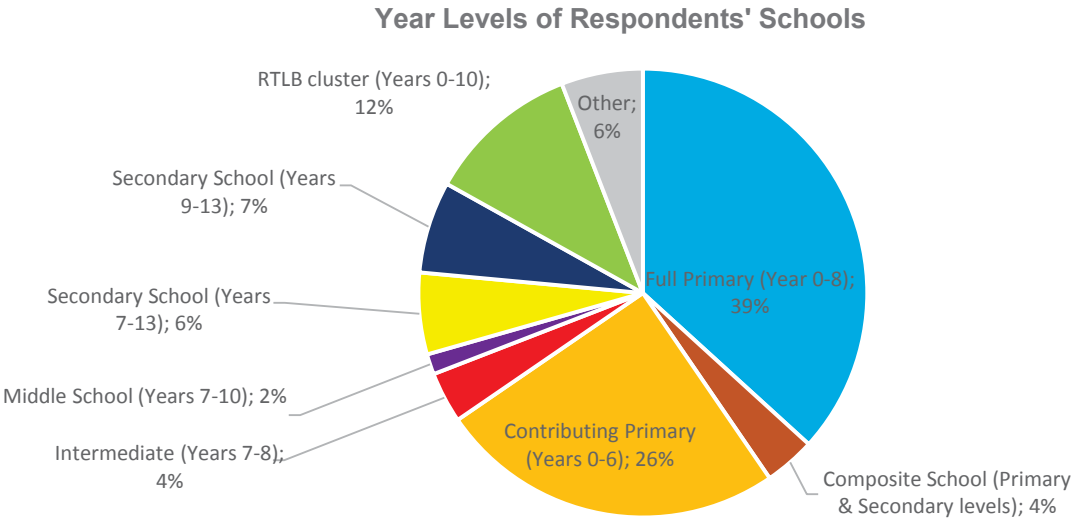

Figure 9: Year Level of Respondents' Schools/Clusters

[1] Area schools, Maori immersion, Teen Parent Unit, Health school, Special Character school, Sole Charge U1 school, purpose-built Innovative Learning Environment.

The decile rating of respondents' schools also varied – from Decile 1 to Decile 10 (see Figure 10). Resource Teachers are responsible for providing services to several schools in their cluster, therefore work with a range of deciles. The spread of deciles closely reflects the national distribution of school decile ratings, which are evenly divided across ten groups which are. based on the socio-economic indicators for their geographic area (Ministry of Education, 2017d) [2].

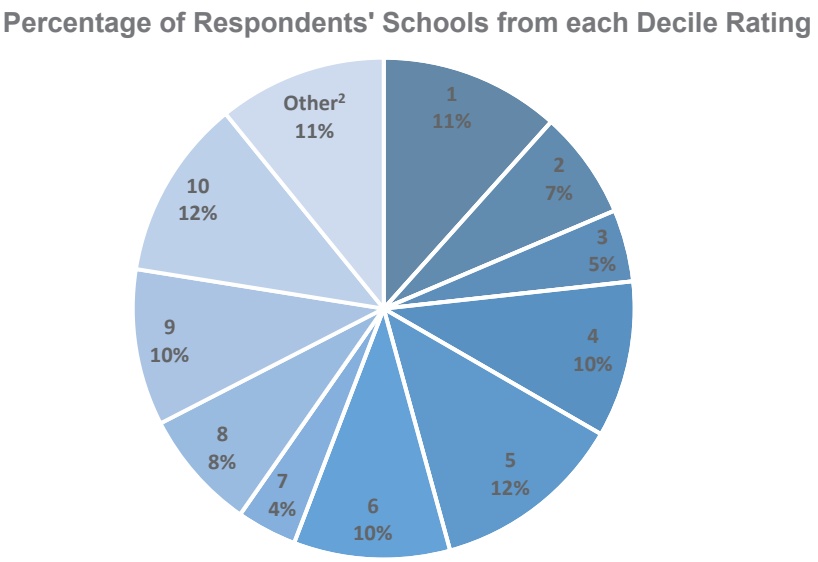

Figure 10: Percentage of Respondents' Schools/Clusters from each Decile Rating

Reflecting the demographic representation of teacher gender in State and State-Integrated schools in NZ (Ministry of Education, 2017f), respondents were predominantly female (88%) while 12% were male.

There was a range of teaching experience represented by the respondents, however the majority of educators had over ten years full-time (or equivalent) teaching experience (see Figure 11).

[2] "Other" represents the RT:LB and RT:Lit participants (Deciles 1-10) and an Area Health school (Decile 1).

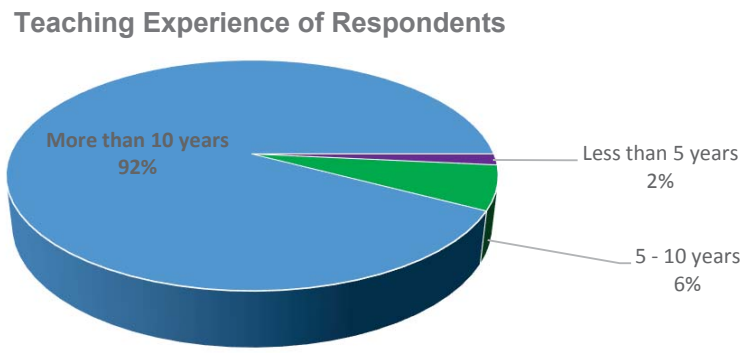

Figure 11: Teaching Experience of Respondents

Most (90%) of the educators who responded were over 40 years of age or above, while the remainder (10%) were aged between 25-40 years of age. 53% of respondents stated that they were not responsible for teaching (and/or assessing) any specialised curriculum areas. Several respondents had a range of curriculum responsibilities.

The majority of respondents were employed as SENCos or Kaiako/Teachers (see Figure 12). Other respondents' roles ranged from Tumuaki/Principals, Deputy or Associate Principals, Team Leaders, Learning Support. Resource Teachers included RT:LB and RT:Lit.

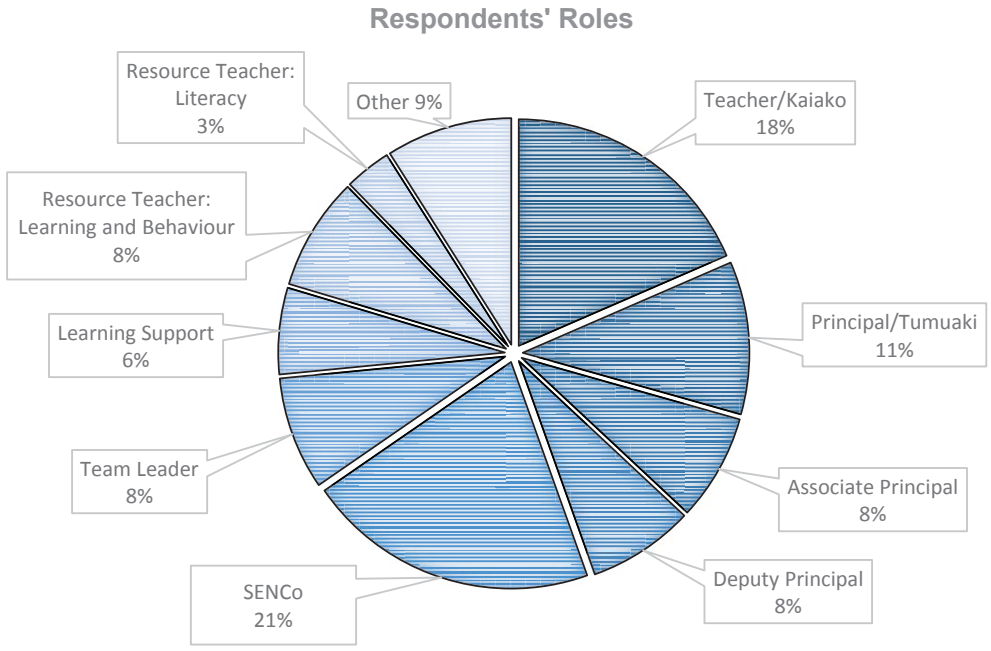

Figure 12: Roles of Respondents

The respondents represented educators from every region of NZ, with the majority coming from highly populated urban regions such as Auckland, Canterbury and Wellington (see Figure 13).

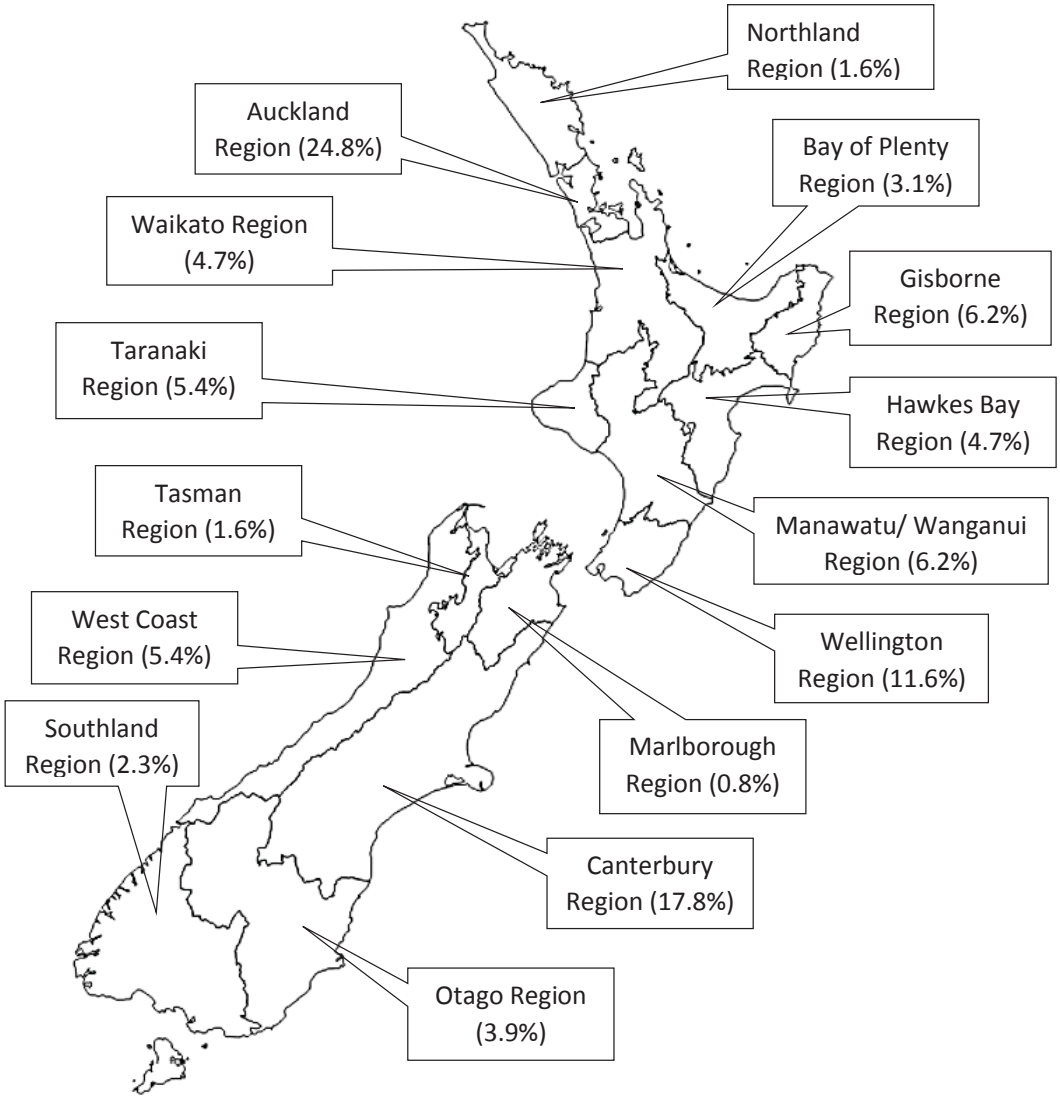

Figure 13: Percentages of Respondents from Regions of New Zealand/Aotearoa

The average percentage of Māori students in respondents' schools or clusters was 30.1%, with a range of 0-100%. 15% of the total population of NZ identify with Māori ethnicity, with 5% of the total population aged 0-14 years being Māori, (Stats NZ, 2017).

The average percentage of Pasifika students in respondents' schools or clusters was 15.8%, with a range of 0-96%. 7% of the total population of NZ identify with Pacific ethnicity, with 3% of the total population aged 0-14 being of Pacific ethnicity (Stats NZ, 2017).

3.2.2 Phase One results: Assessment

Respondents to the online survey indicated the variety and frequency of use of assessment tools and methods being used for determining the literacy abilities and needs of students. Results have been organised into the assessment tools or methods being used for different areas of the literacy curriculum. The same tests were identified as being used for assessing LLD students as for assessing all students across the board.

Reading assessment

The most frequently used method for assessing reading was Running Records, with 75.5% of respondents stating that they used this assessment method often (see Figure 14). Other forms of running recording, i.e. PROBE and PM Benchmarks were also used relatively frequently. Several other tools, not listed in the survey, were mentioned as being used in schools.

There was a notable difference in the types of assessment tools used for Reading between Primary/Intermediate schools and Secondary schools (see Figure 14). The most often used assessment tool for Reading in Secondary schools was e-asTTle Reading (68%) while 33% of respondents from Primary and Intermediate schools used this tool often. The second most frequently-used tools for assessing Reading in Secondary schools were the PATs – in both Reading Comprehension and Reading Vocabulary. Running Records and PM Benchmarks were not used as frequently in Secondary Schools compared to Primary/Intermediate schools, however the PROBE Assessments were often used.

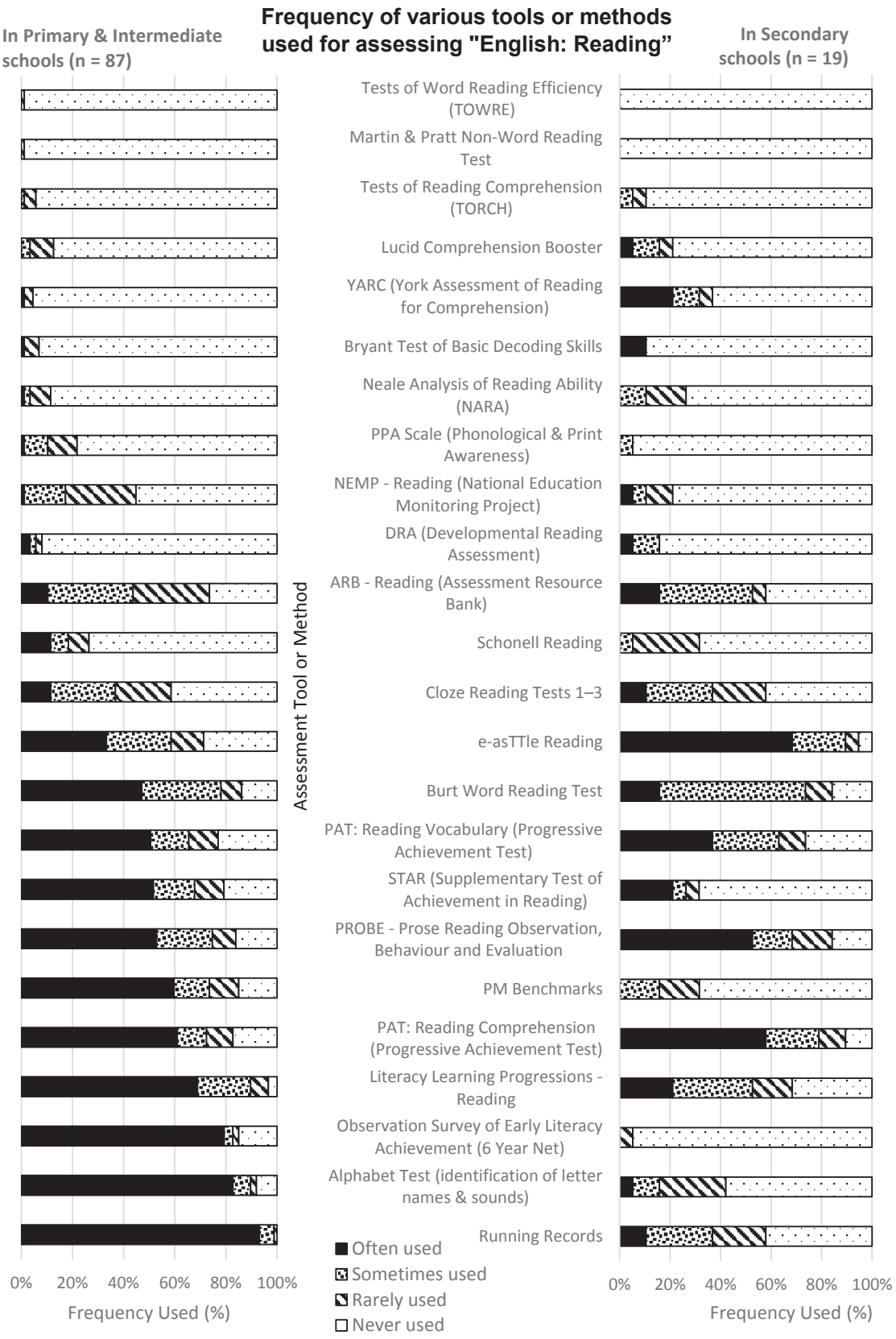

Figure 14: Comparison of the frequency of use of various assessment tools & methods (shown as a percentage) in Primary/Intermediate Schools, compared with Secondary Schools

Writing assessment

Tools available in NZ for assessing Writing are less abundant as those for assessing Reading ability. Of the 195 educators who responded to this question, the most frequent tool being used appears to be the Literacy Learning Progressions, followed by the NZ Curriculum Exemplars for Written Language, then e-asTTle Writing Assessment and Clay's Writing Vocabulary Test (see Figure 15).

The main difference between assessments conducted in Primary/Intermediate schools, compared to Secondary schools, was that the PATOSS assessment was used a lot less frequently in Primary/Intermediate schools. The main use of PATOSS is to determine eligibility for SACs (such as use of a computer, Reader/Writer, or additional time) in senior external examinations.

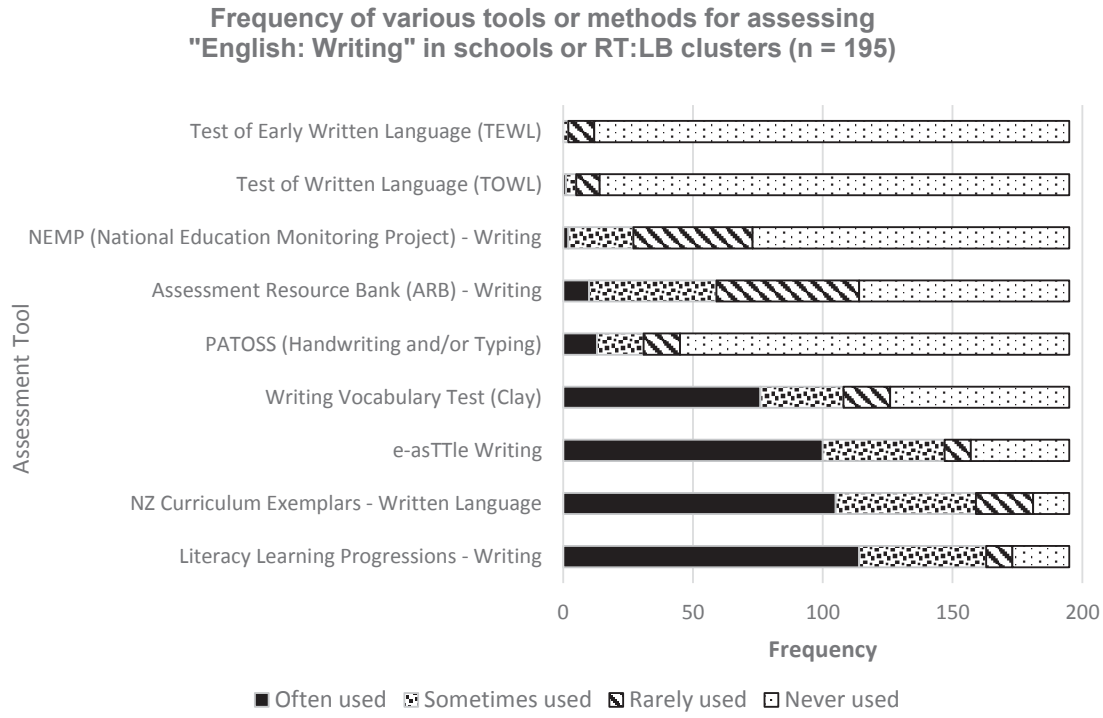

Figure 15: Frequency of Assessment Tools or Methods used for Assessment of English: Writing (n = 195)

Spelling assessment

Many of the assessments for spelling listed on the survey were not being used in schools at all (see Figure 16). Of those being used, the most common was the Schonell Spelling

Test, followed by the South Australian Spelling Test (SAST). These results were similar across all levels, from Primary/Intermediate to Secondary schools.

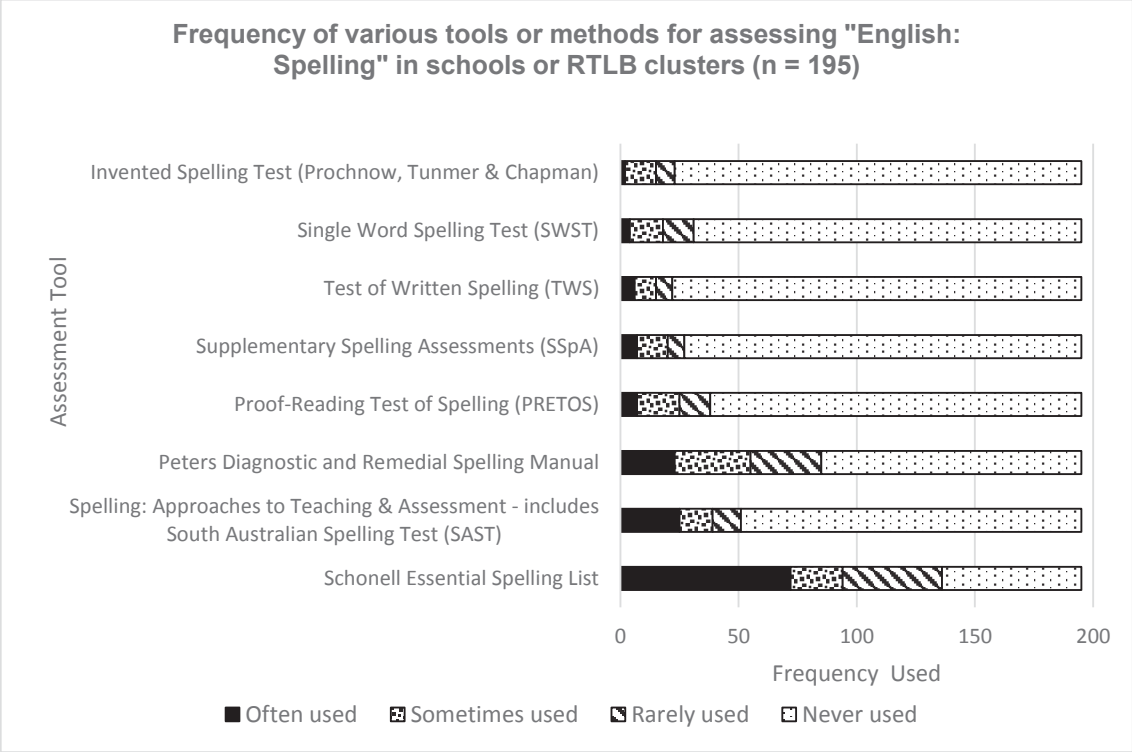

Figure 16: Frequency of Assessment Tools or Methods used for Assessment of English: Spelling (n = 195)

Spelling assessment tools which weren't listed on the survey, but rated in the top four preferred assessments, were those from Joy Allcock's (2012, 2016) "Spelling Under Scrutiny" and "Switched on to Spelling" teacher manuals. Allcock's manuals contain "Gap Analysis" and "Pseudo-Word" tests, which were being used frequently in schools and RT:LB clusters. 10% of all respondents stated that they were using these tools, equating with the numbers of respondents using SAST and Peters spelling tests. Many respondents stated that they were using the NZ Council for Educational Research (NZCER) Essential Word List for assessment of spelling and others were using Yolanda Soryl's "Phonics Stages" assessment from her teacher manual. A few respondents also mentioned they were using assessments which are part of remedial programmes, such as Lucid, MultiLit, Spell-Write and SmartWords.

Oral language: Speaking assessment

Respondents indicated that they were using a variety of assessment tools/methods for assessing students' Oral Language ability in Speaking (see Figure 17). The most frequently-used assessment was the Record of Oral Language, with 53% of all respondents using this tool "Often" or "Sometimes". The second most frequently-used assessment (43%) was the Junior Oral Language Screening Tool (JOST). These tools, being designed to assess students at the junior school level, were very rarely used in Secondary schools.

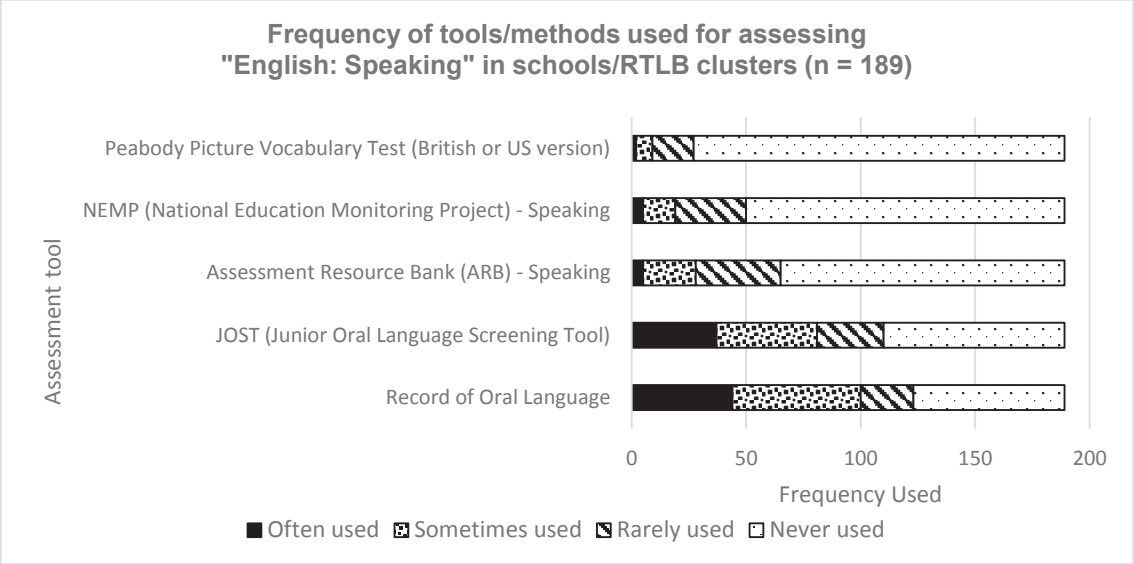

Figure 17: Frequency of Assessment Tools or Methods used for Assessment of English: Speaking (n = 189)

A number of respondents were using other assessment tools/methods which were not listed on the survey. Some were integrating the assessment of Speaking skills into other curriculum areas, such as science, social sciences, poetry or drama.

Oral language: Listening assessment

The Progressive Achievement Test: (PAT) Listening Comprehension was by far the most common assessment tool being used by respondents (in both Primary/Intermediate and Secondary schools) for assessing students' Listening skills (see Figure 18).

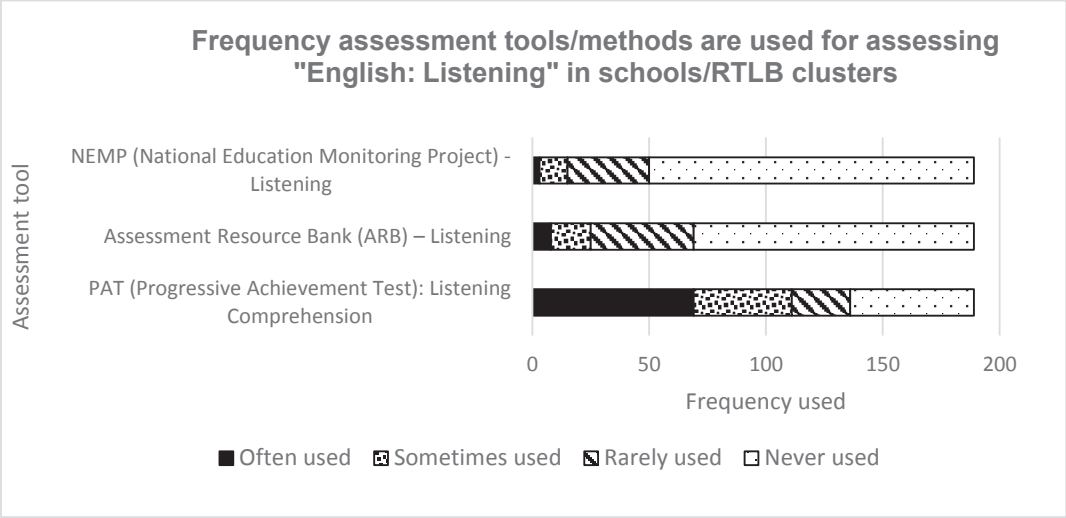

Figure 18: Frequency of Assessment Tools or Methods used for Assessment of English: Listening (n=189)

Over 50% of Respondents stated they used this assessment “Often” or “Sometimes”. Most respondents stated that they never used any of these assessments, however, several other assessment tools/methods that had not been listed on the survey were reported as being used in schools and RT:LB clusters to assess Listening ability. Some respondents stated that they assessed auditory processing skills using the Test of Auditory Processing – 3 (TAPS-3) or Lucid Assessments (auditory memory and processing tasks).

Visual language: Viewing and presenting assessment

The frequency of which respondents are using tools/methods for assessing students’ ability in Viewing and Presenting is shown in Figure 19. The most commonly used tools, in both Primary/Intermediate and Secondary schools, are the NZ Curriculum Exemplars for Visual Language, with 75.7% of respondents using these tools at least some of the time.

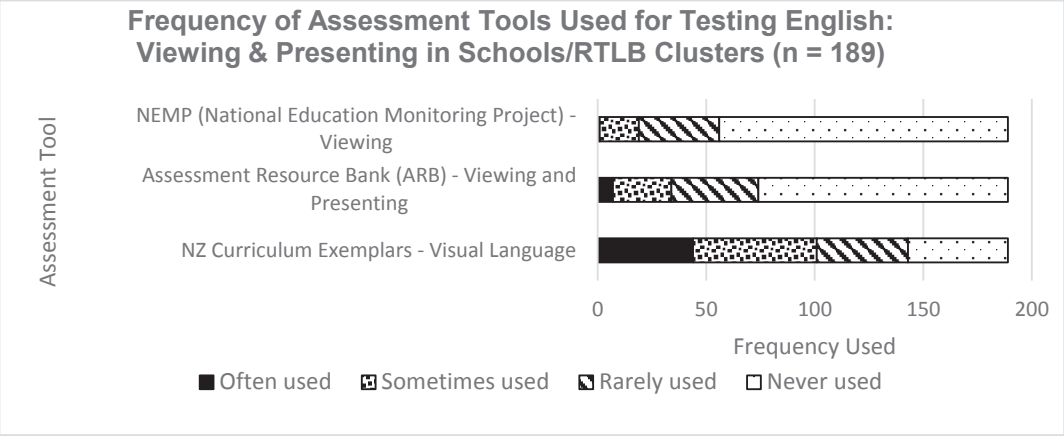

Figure 19: Frequency of Assessment Tools or Methods used for Assessment of English: Viewing and Presenting (n=189)

Other assessment tools or methods

Some respondents indicated that they are also using other assessment tools which do not neatly fit under the strands of the English Curriculum (Reading, Writing, Speaking, Listening, Viewing and Presenting). Some of these assessment tools are designed to measure specific skills required for literacy learning, e.g. Handwriting, and cognitive functions such as Visual and Auditory Processing, Working Memory and Phonological Processing. Other assessment tools are used to assess a combination of strands or cognitive functions. While most respondents stated that they never used these other methods of assessment (see Figure 20), the most frequently-used tool of this "combined" nature is the School Entry Assessment (SEA), which is designed to gather information about a new entrant's level of literacy, numeracy and oral language ability.

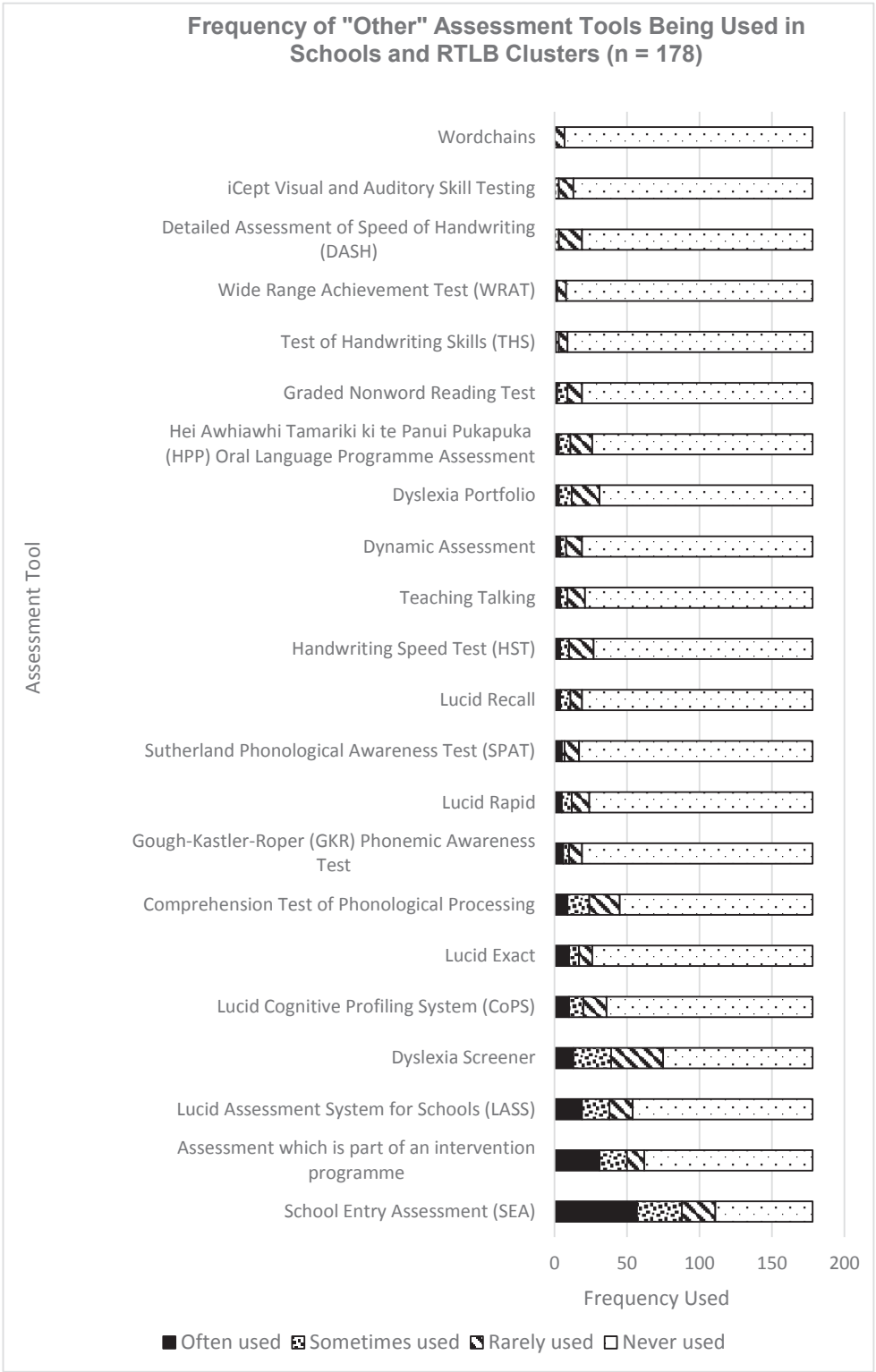

Figure 20: Frequency of "Other" Assessment Tools or Methods Being Used in Schools/Clusters (n = 178)

The Lucid suite of specialist computer-based assessments (and interventions) appear to be popular with some schools and RT:LB clusters, with 21.3% of all respondents using the Lucid Assessment System for Schools (LASS) either “Often” or “Sometimes”. Other Lucid assessments being used “Often” or “Sometimes” include the Lucid Cognitive Profiling System (11.2%), Lucid Exact (9.6%), Lucid Rapid (6.7%) and Lucid Recall (6.1%). The Lucid CoPS was very rarely used in Primary/Intermediate schools while the others were used in both Primary/Intermediate and Secondary schools.

Many respondents are using assessment tools which come as part of an intervention programme. Some respondents had created their own, purpose-built assessment tools, e.g. a handwriting test or adapted SEA test. Quite a number of respondents stated that they had support from Resource Teachers, including RT:LB, RT:Lit and Speech & Language Therapists (SLT) who bring other resources and assessments from their broad range of tools, when working one on one with a student, or loan specialist assessment tools for teachers to use.

Assessing literacy learning needs: The Simple View of Reading

The Simple View of Reading (SVR) by Gough and Tunmer (1986) is a model which can be used a means to identify the needs of students with LLD. Only 8% of the 165 educators who responded to this question were familiar with the SVR (see Figure 21).

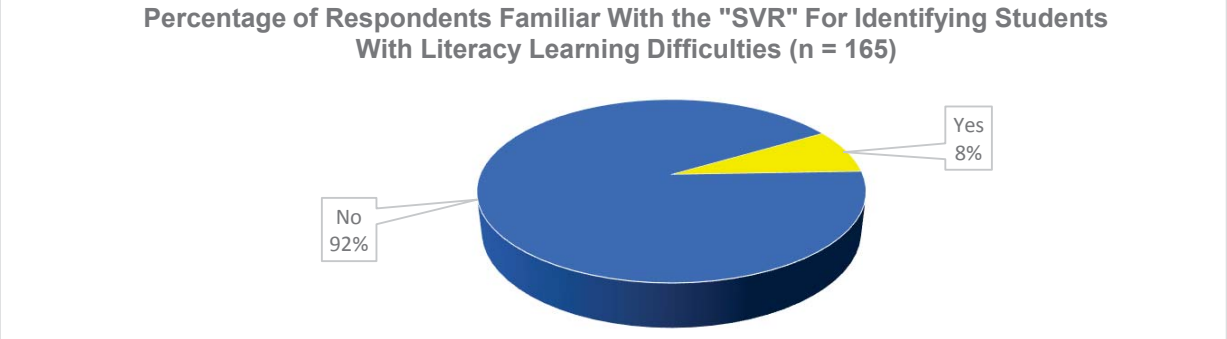

Figure 21: Percentage of respondents familiar with the “Simple View of Reading” (n = 165)

Of those who were familiar with the SVR, several were using the model to assist in identifying students with LLD. Reasons for using the SVR model included: “simplifying areas to focus on”; and “determining the specific nature of the difficulty for effective remediation or support”. Respondents were using the SVR model in a variety of ways, including: “explaining the implications of reading difficulties to teachers and parents”; “screening for dyslexia or remedial classes/programmes”; “building student literacy profiles”; and “identifying specific areas for remediation”. Some used the SVR model when referring students to RT:LBs for support with LLD, or difficulties with self-esteem and engagement.

Wider approach to assessment and identification

Some schools adopted a wider, or ‘ecological’ approach to assessment, with the aim of creating a "Learning Profile" or "Individual Education Plan" for students requiring special assistance. Figure 22 demonstrates the percentage of respondents’ schools or RT:LB clusters who are collecting this type of information, as well as the level of use in assisting with identification of appropriate programmes of instruction for students.

Among the various methods used for gathering this information, many respondents stated that it is part of the enrolment process when students are starting school, or transitioning to new schools. Several schools gathered the information during Term One teacher/parent/student interviews, while others stated that the information is collected through informal conversations with students and/or their caregivers, as they have close relationships with students and their whanau. A few respondents mentioned the “Spiral of Inquiry” approach (Halbert & Kaser, 2013) of scanning for information to determine what is happening for learners in order to create powerful learning environments for all.

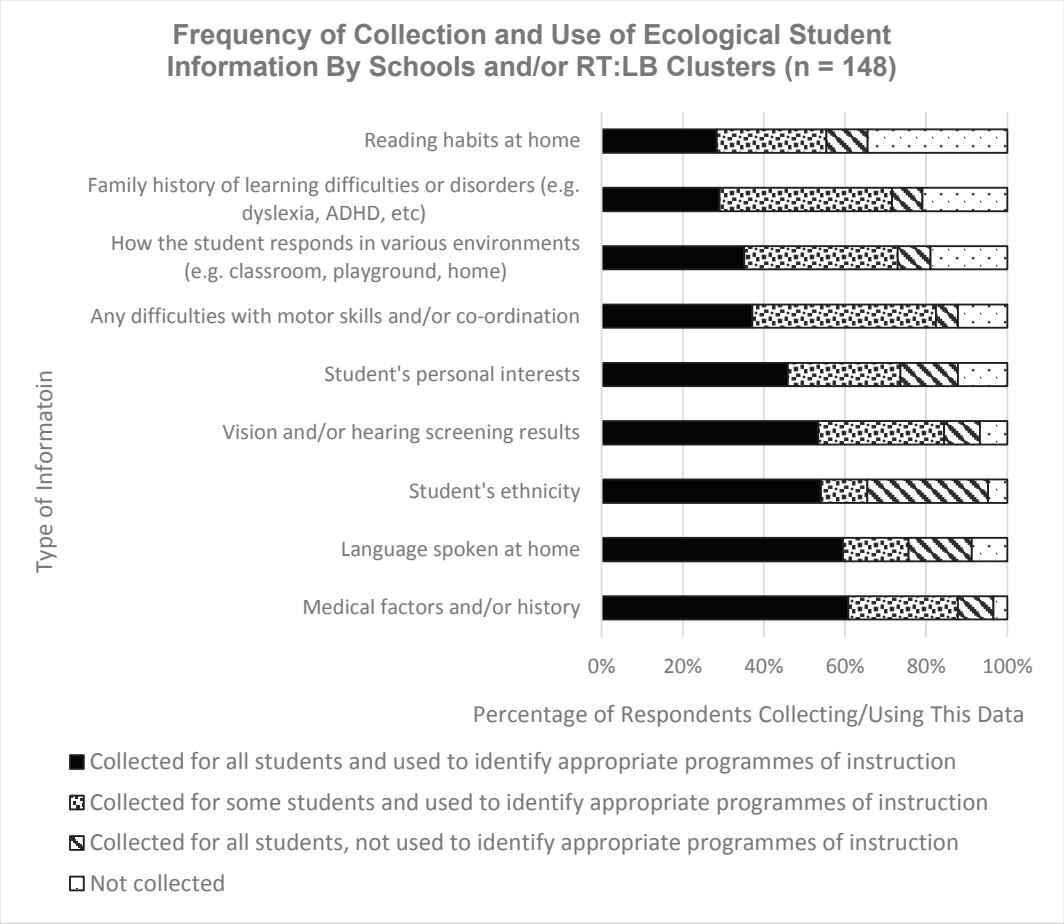

Figure 22: Frequency of collection and use of ecological student information by schools and/or RT:LB clusters (n = 148)

Other approaches to assessment and instruction

Several respondents (40%) use a Test/Teach/Retest approach to assessment and instruction for students with LLD – e.g. spelling test on Monday; teach the words from Tuesday–Thursday; retest the same list on Friday (see Figure 23).

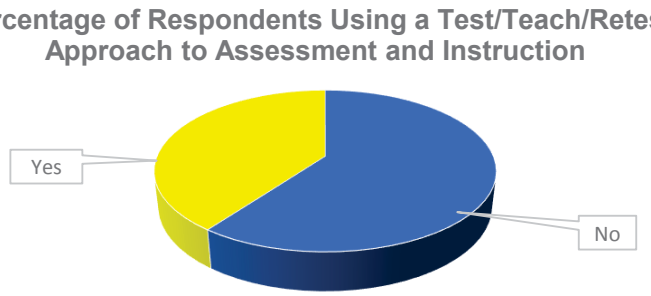

Figure 23: Percentage of respondents' schools/clusters using a Test/Teach/Retest Approach (n = 148)

Over half (63%) of the schools/clusters who responded stated that they used a Response to Intervention (RTI) approach to assessment and remediation, where levels of instruction are separated into three tiers, depending on students' response to instruction (see Figure 24).

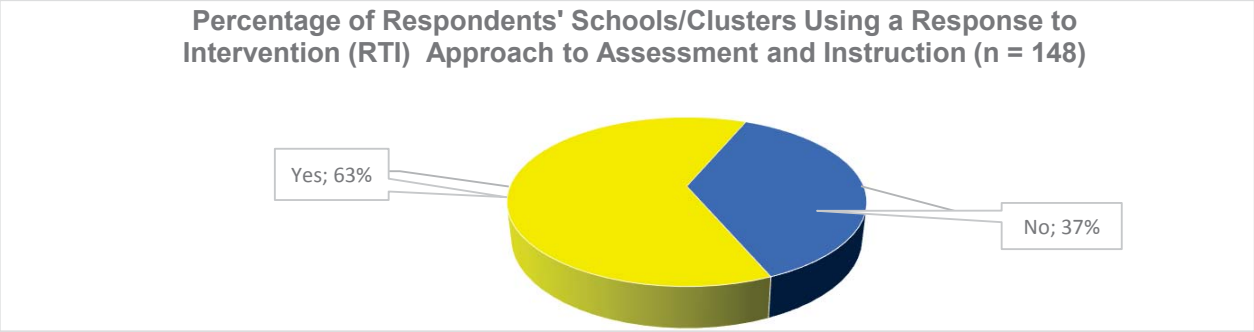

Figure 24: Percentage of schools/clusters using an (RTI) approach to literacy remediation (n = 148)

External specialised assessments

Many schools and/or clusters reported the advantages of referring students who struggle with literacy learning, to an external, specialist assessor, such as an Educational Psychologist, or a Registered Level C Assessor. 84% of respondents' schools or clusters had, at some time, referred students to an external, specialist assessor (see Figure 25).

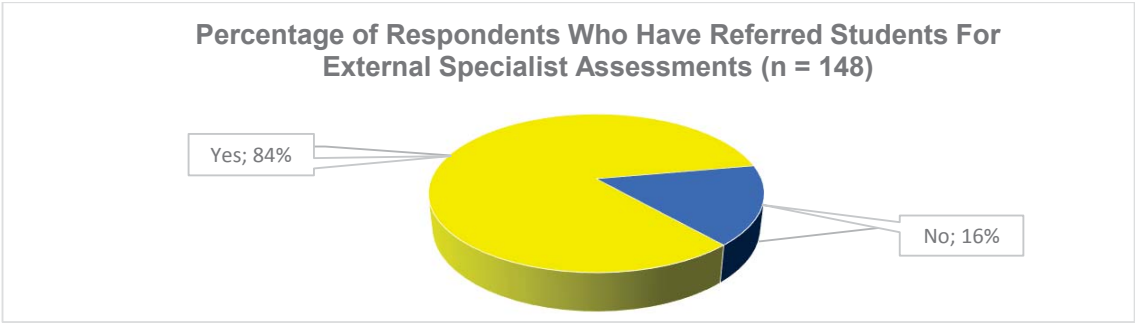

Figure 25: Percentage of schools/clusters who have referred students for external specialist assessments (n = 148)

Types of assessments used by these external, specialist assessors were mainly cognitive assessments, such as the Weschler Intelligence Scale for Children, or the Woodcock Johnson Tests of Cognitive Abilities. These cognitive assessments were

often used to assist with applications for Ongoing Resourcing Scheme (ORS) funding (for students with high/complex needs), or for applications for Special Assessment Conditions (SACs). Other types of specialist assessment referrals included Occupational Therapists, Behavioural Optometrists, Speech and Language Therapist, screening for Auditory Processing Disorder and assessments to determine emotional or behavioural needs. Most respondents found these specialist assessment reports useful for determining any underpinning weaknesses that were contributing towards the LLD. Many of these specialist assessments resulted in the provision of suitable interventions and/or accommodations to effectively cater for students' specific literacy needs.

The financial cost of these external, specialist assessments is sometimes covered by the Ministry of Education (i.e. Educational Psychologists, RT:LB, Intensive Wraparound Service), however was often funded by the parents/caregivers/whanau of students with LLD (see Figure 26).

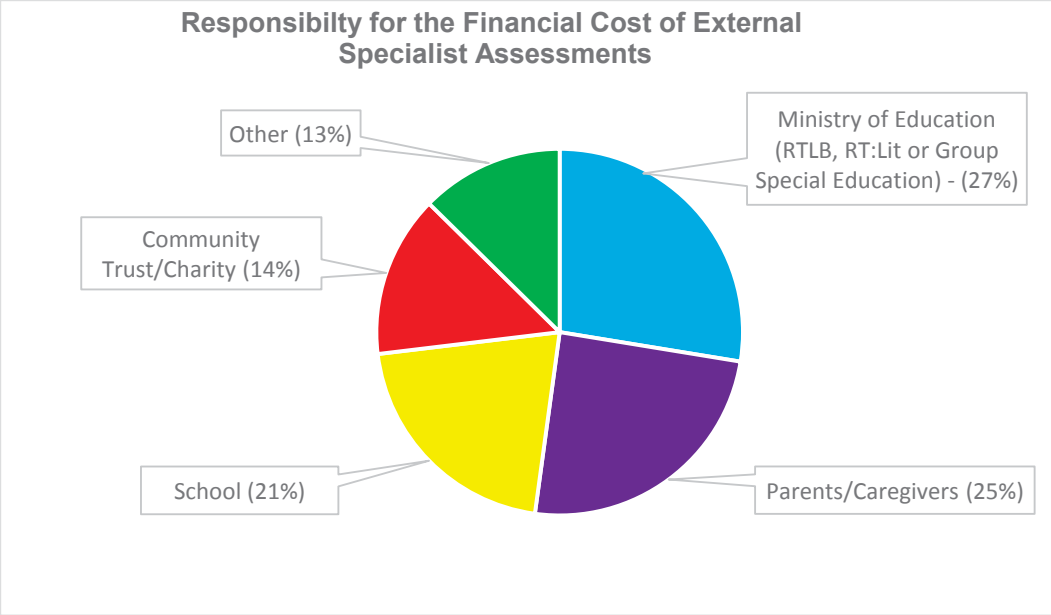

Figure 26: Responsibility for the cost of external specialist assessments

Costs of specialist assessments were sometimes borne by the school, or occasionally funding was obtained from a community or charitable trust. Other methods of financing

these assessments included the Ministry of Health – e.g. Child Adolescent Metal Health Services (CAMHS), District Health Boards (DHBs), Kidz First, etc, or by splitting the cost (e.g. between the parents and the school).

For these specialist assessments to be useful for providing appropriate interventions and accommodations for students with LLD, educators must be able to interpret the findings. A large percentage of respondents stated that they had either never seen, or were not confident in interpreting and using data from the specialist assessments listed on the survey (see Figure 27). Only a small percentage (approximately 10%) of respondents stated that they were very confident in using this assessment information from these external sources.

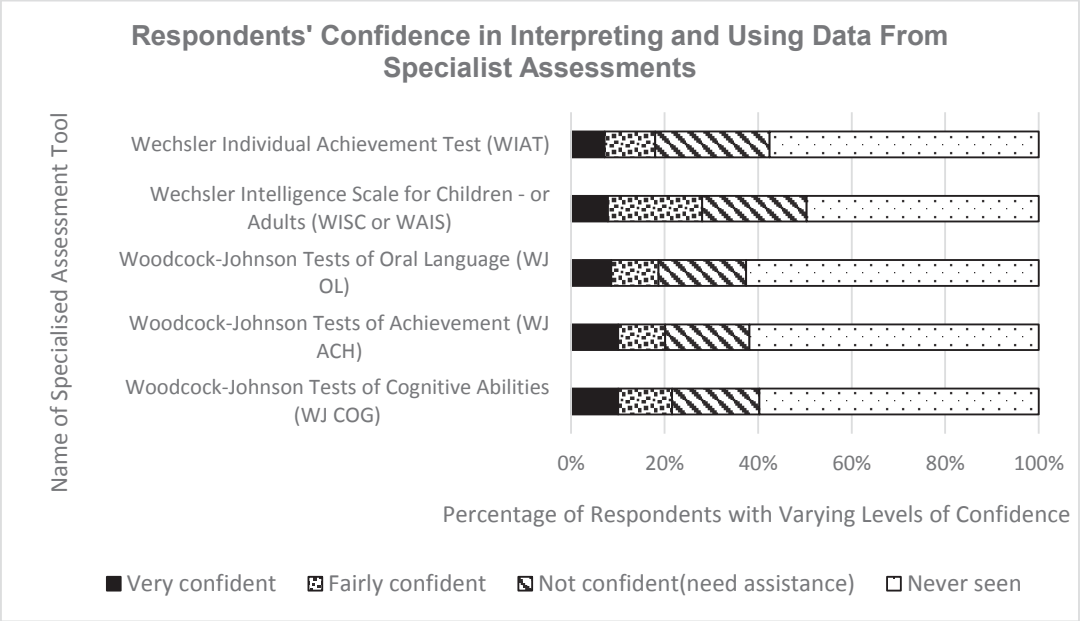

Figure 27: Respondent's confidence in interpreting and using data from specialist assessments

Special Assessment Conditions

Special Assessment Conditions (SACs) including use of a computer, extra time, or provision of a Reading/Writer during assessments are often provided to accommodate the needs of students who struggle with literacy learning. The majority of respondents in this study (71%) had, at some time in their career, arranged for SACs for students with LLD (see Figure 28).

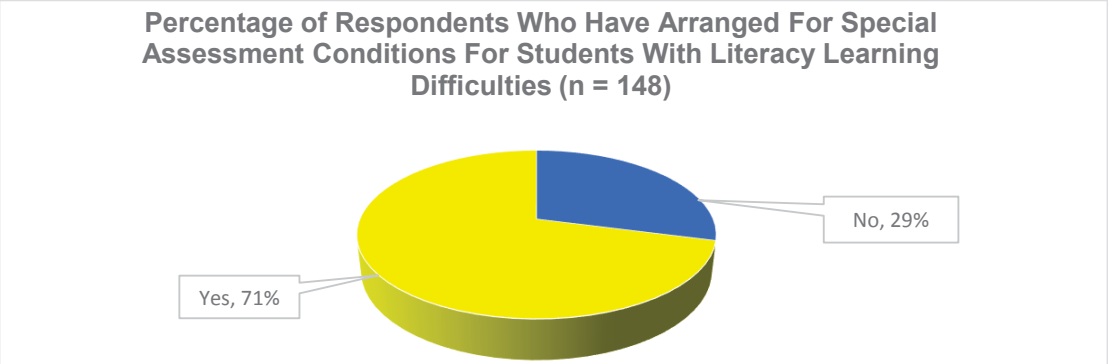

Figure 28: Percentage of respondents who have arranged SACs for students with LLD (n=148)

The frequency of providing SACs to accommodate the needs of students with LLD ranged from once per year to several times a year, for standardised assessments, but was provided more frequently for non-standardised assessments, as shown in Figure 29.

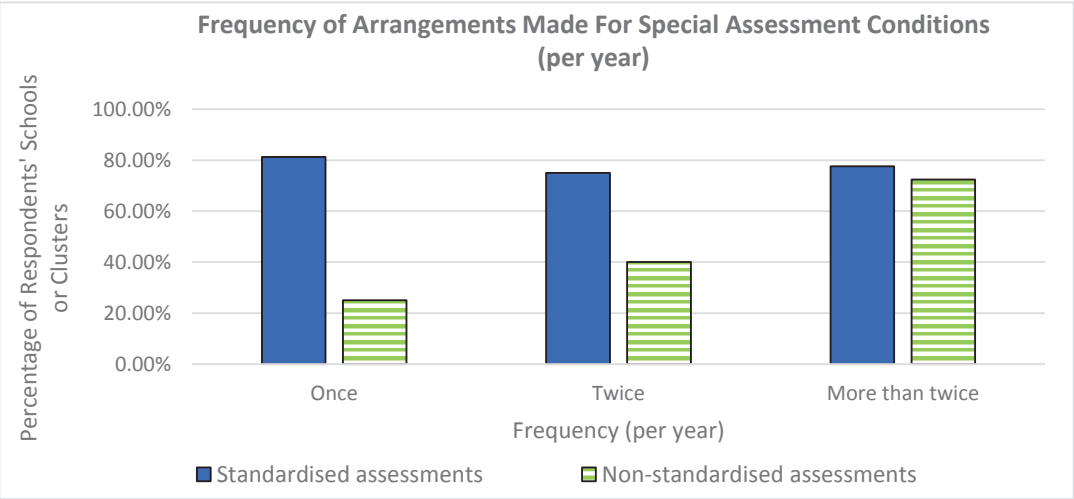

Figure 29: Frequency of arrangements made for SACs in respondents' schools/clusters

The Progress and Consistency Tool (PaCT)

The Progress and Consistency Tool (PaCT) has recently (2016) been introduced to support teachers with making professional assessment judgements and monitoring student progress. Only 9% of respondents in this study stated that their school or cluster was currently using PaCT (see Figure 30), however several mentioned that it was a goal

to begin using it shortly. A few educators stated that they had trialled PaCT, but had not found it useful, so had discontinued using it.

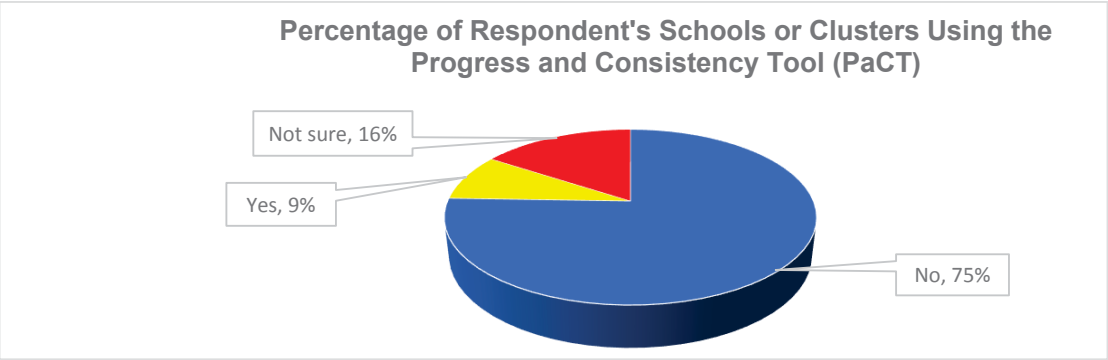

Figure 30: Percentage of respondents' schools/clusters using PaCT

Barriers to effective LLD assessment

Respondents stated that time constraints posed the most significant barrier to accessing or analysing quality literacy assessment data. Over 50% of educators felt that this was their greatest barrier (see Figure 31).

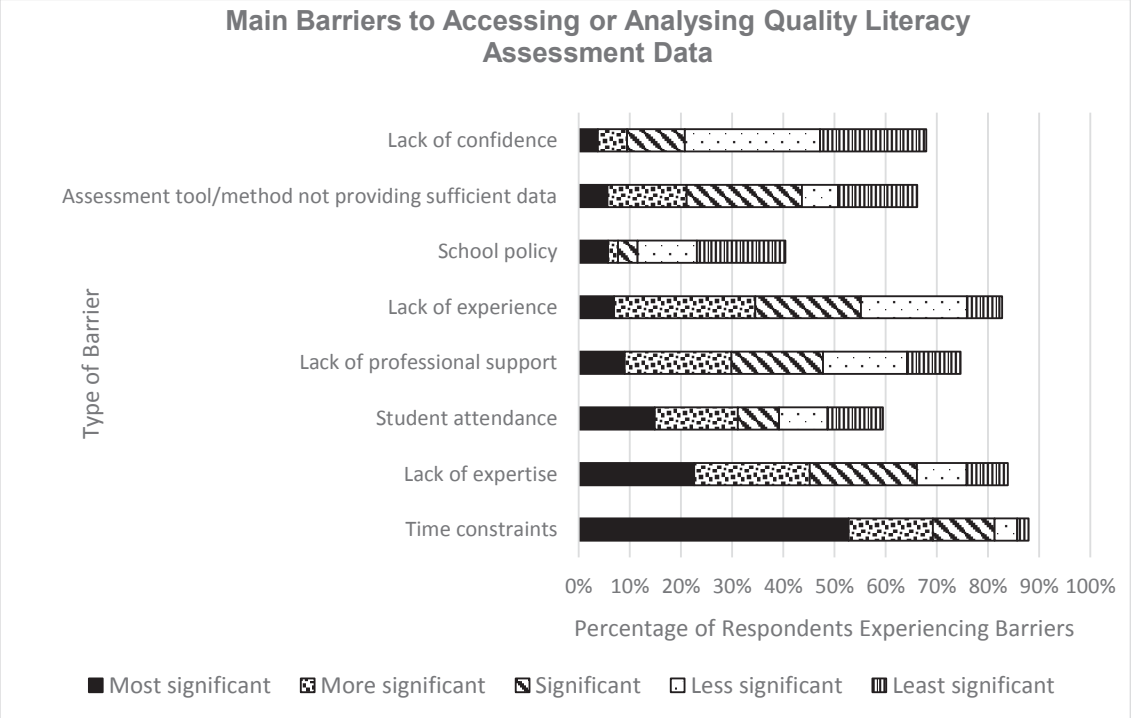

Figure 31: Percentage of respondents experiencing barriers to quality assessment use

Other factors reported to be hindering assessment processes included lack of expertise, student attendance, lack of professional support, lack of experience, school policy or lack of confidence. Some respondents felt that the assessment tools or methods they were using did not provide sufficient data for them to effectively meet the needs of students who were struggling with literacy learning.

3.2.3 Phase One results: Interventions

Educators who responded to the online survey were using a huge range of intervention tools and methods in their various schools or clusters around NZ. The most widely used tool for responding to LLD was RR. 54% of respondents stated that this intervention was used by their school or cluster (see Figure 32). Other popular programmes in use included Yolanda Soryl's Literacy Programmes; Rainbow Reading; Pause, Prompt Praise (PPP); and Steps to Literacy. These 'top five' are all programmes or methods which have been designed in NZ. Intervention programmes/methods being used in schools and clusters vary in content, delivery, nature and age-suitability. Some programmes involve one-to-one tuition, while others cater for small groups, or are independent, computer-based programmes. While some focus mainly on the development of phonological awareness, others are designed to increase word recognition, reading comprehension, and/or oral language development. Some of the programmes or methods are multi-sensory in nature, including hands-on, tactile/kinesthetic learning opportunities or educational games.

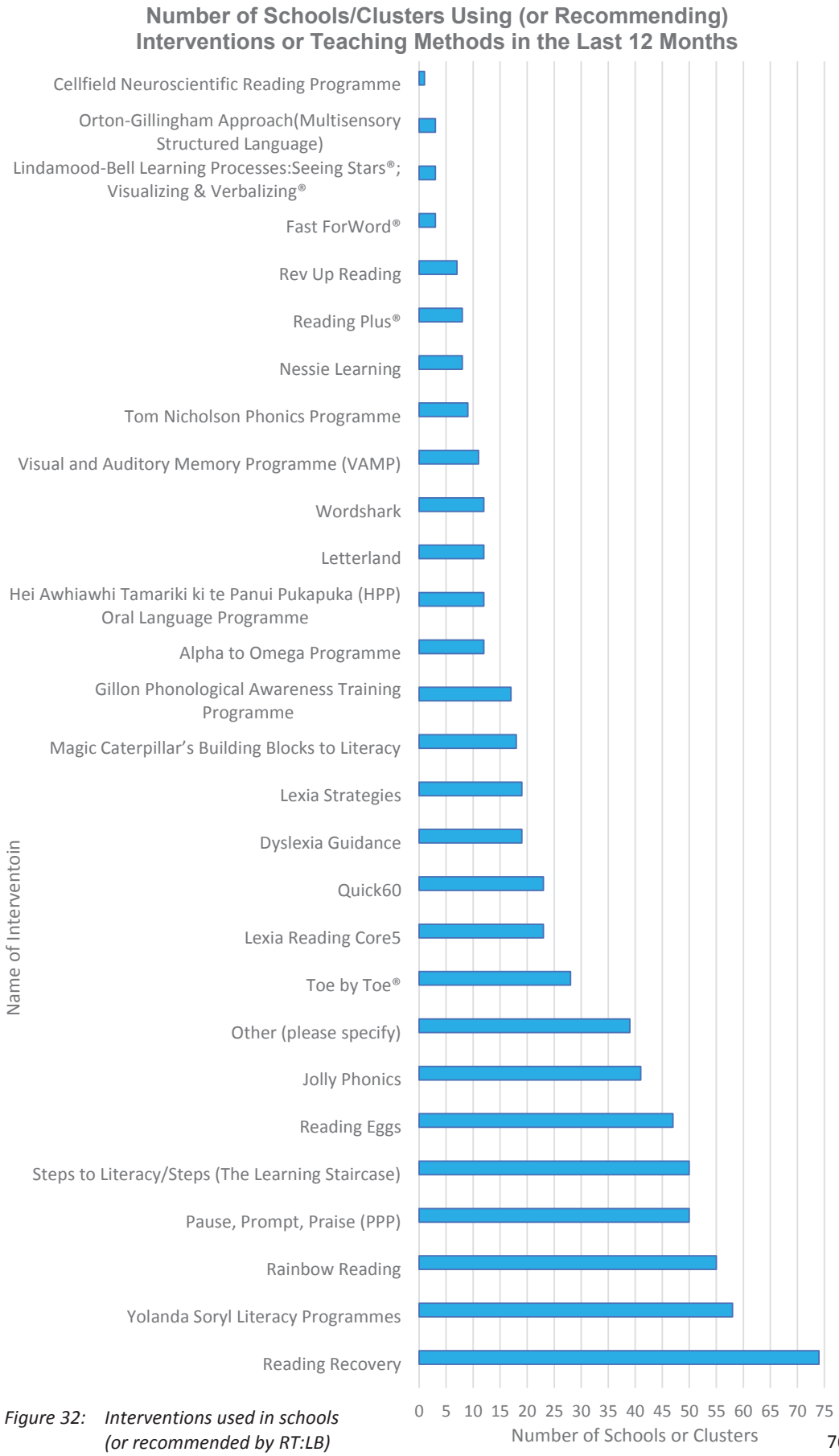

Figure 32: Interventions used in schools (or recommended by RT:LB)

When respondents rated how effective these interventions had been for their students in terms of meeting goals, RR rated highest, once again (see Figure 33).

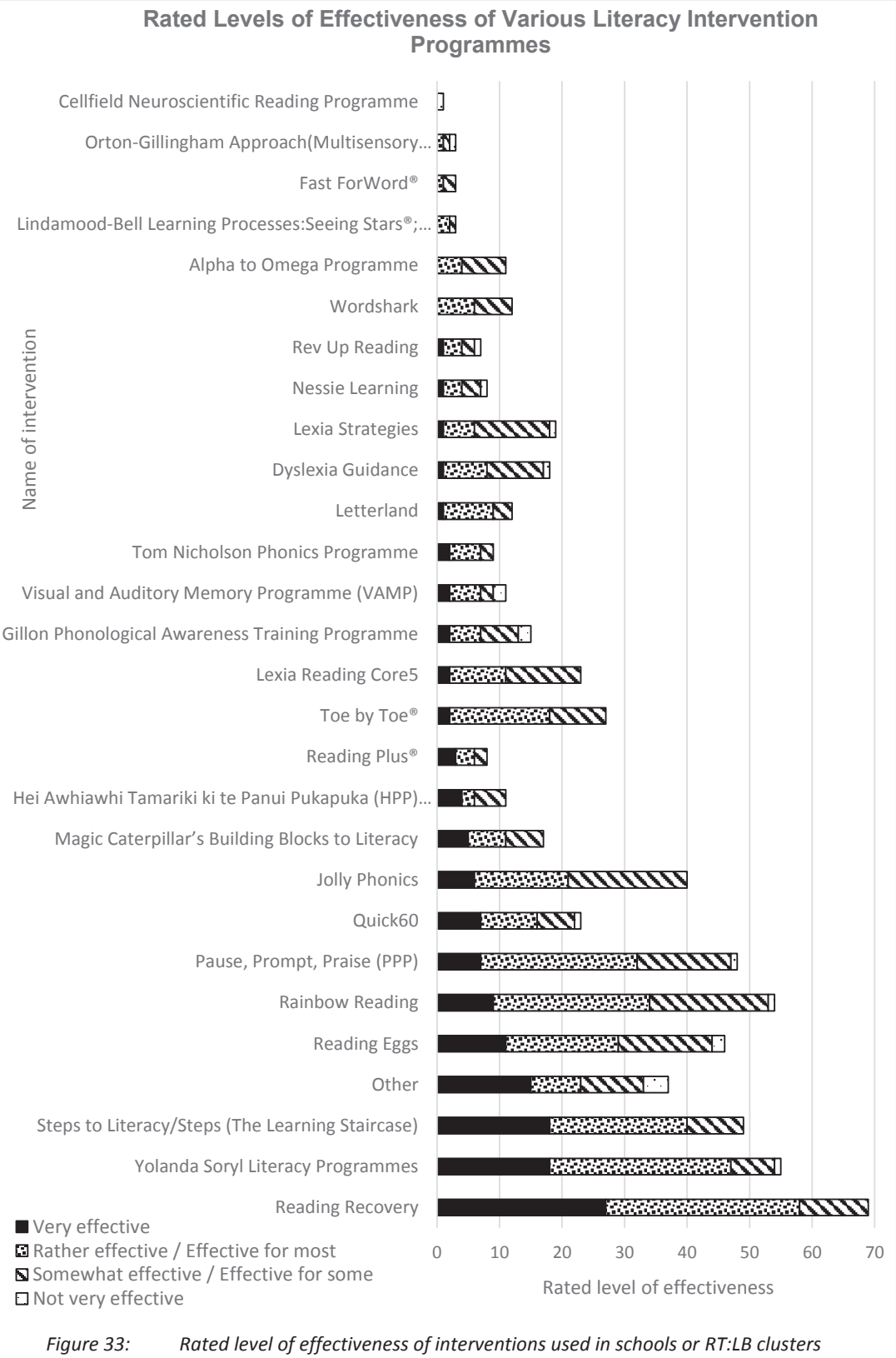

Figure 33: Rated level of effectiveness of interventions used in schools or RT:LB clusters

Of the 131 respondents who answered this question, 39% stated that RR was a very effective programme, while 45% stated it was rather effective (or effective for most). Other programmes that many respondents rated as being very effective included Yolanda Soryl's Literacy Programmes, Steps to Literacy, Reading Eggs, Rainbow Reading, Pause, Prompt, Praise (PPP), Quick 60 and Jolly Phonics.

3.2.4 Phase One results: Meeting the needs of students with SLD

Finally, respondents were invited to share how confident they felt in meeting the needs of students with different types of Specific Learning Difficulties. As shown in Figure 34, over 50% of respondents stated that they felt either very confident, or fairly confident in providing effective, inclusive programmes of instruction which meet the needs of students with the majority of the learning difficulties listed.

Over 50% of respondents felt either mildly confident (needing support) or not confident at all in meeting the needs of students with the following Specific Learning Difficulties:

- Sensory Processing Difficulties (mentally processing taste/temperature/touch, etc.)
- Auditory Processing Disorder - APD (mentally processing auditory information)
- Spatial Orientation Difficulties (awareness of body position in space)
- Dyspraxia (poor co-ordination and planning)
- Visual Processing Difficulties (mentally processing visual information)
- Dysgraphia (poor handwriting)

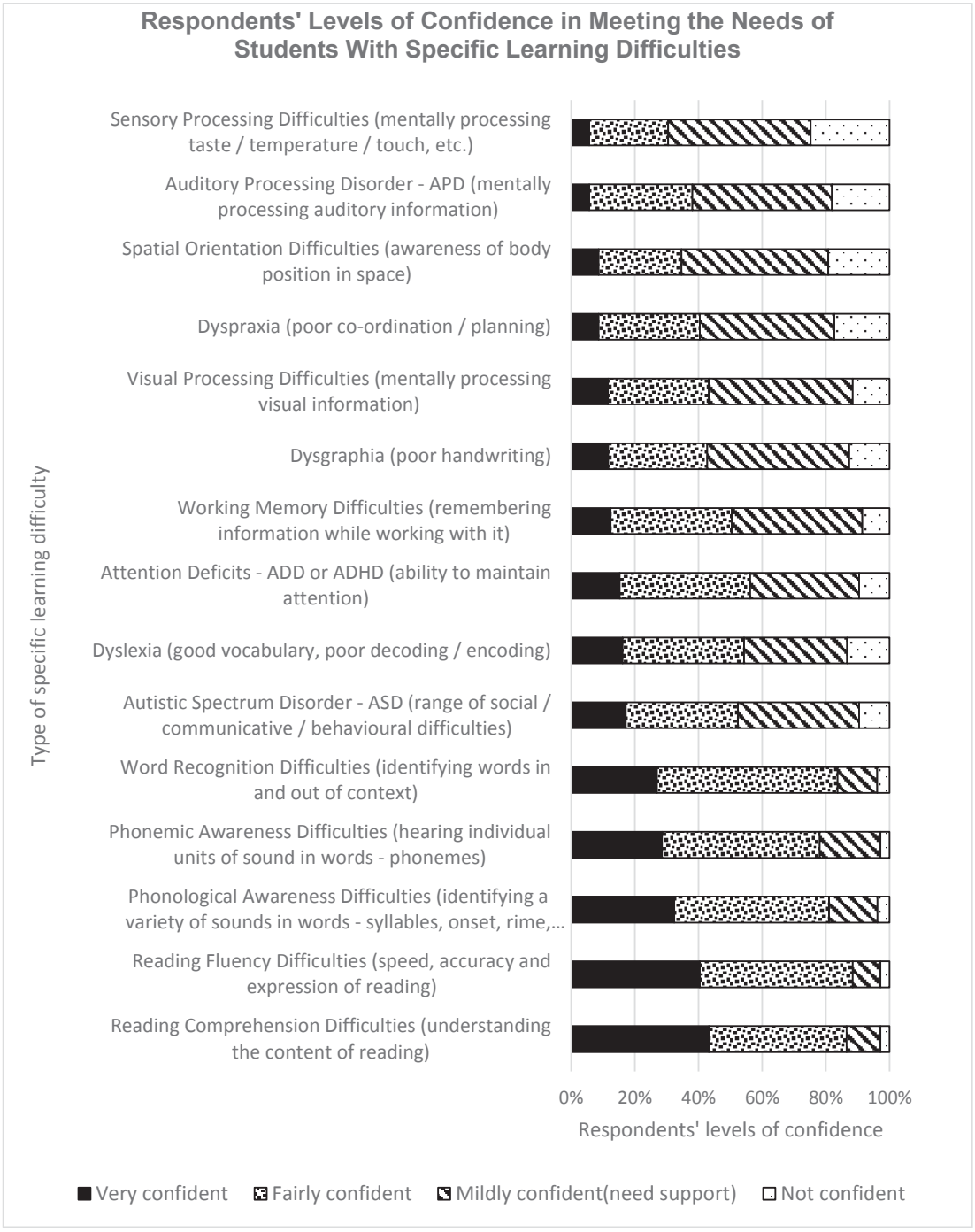

Figure 34: Respondents' levels of confidence in meeting the needs of students with SLD

3.3 Results from Phase Two: Qualitative research

3.3.1 Phase Two demographics

Phase Two of the research involved semi-structured interviews with thirteen of the survey participants. The interview participants represented a cross-section of educators employed in different types, levels and deciles of schools, as well as RT:LB, and were spread throughout the country, from the Auckland region, down to the West Coast and Christchurch (Canterbury) region (see Table 2). All of the participants were over 40 years of age and were had over 10 years teaching experience. Participants will be referred to as numbers (e.g. T5 refers to teacher number five, and R2 refers to RT:LB number two, etc.) for the purpose of this report, to maintain their anonymity.

Table 2: Demographics of Phase Two participants

Name	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	R1	R2	R3
Gender	*F*	*F*	*F*	*F*	*F*	*F*	*F*	*F*	*F*	*F*	*M*	*F*	*F*
Role	*AP S*	*DP S*	*S*	*S LS*	*S*	*S*	*S LS*	*ST*	*ST*	*S LS*	*RT*	*RT*	*RT*
Region	*AKL*	*WC*	*AKL*	*AKL*	*TAS*	*WLG*	*CAN*	*GIS*	*WLG*	*WLG*	*AKL*	*CAN*	*WC*
Type of Institution	*S/P*	*S/P*	*Int*	*S/P*	*Ind*	*Int*	*Int*	*S/P*	*S/P*	*S/P*	*RC*	*RC*	*RC*
School/s Yr Levels	*0-8*	*0-8*	*0-13*	*7-8*	*7-8*	*7-13*	*7-13*	*9-13*	*9-13*	*9-13*	*0-10*	*0-10*	*0-10*
School Decile	*10*	*3*	*9*	*6*	*9*	*6*	*9*	*2*	*8*	*9*	*1-10*	*6-10*	*4*
% Māori Students	*6*	*7*	*5*	*22*	*6*	*12*	*8*	*74*	*17*	*23*	*63*	*18*	*17*
% Pasifika Students	*3*	*0*	*4*	*10*	*3*	*25*	*3*	*16*	*2*	*15*	*56*	*2*	*2*

Key

Roles: AP = Assistant Principal; S = SENCO; DP = Deputy Principal; LS = Learning Support; SL = Specialist Teacher; RT = Resource Teacher, Learning and Behaviour

Regions: AKL = Auckland; WC = West Coast; TAS = Tasman; WLG = Wellington, CAN = Canterbury; GIS = Gisborne

Type: S/P = State/Public; Int = Integrated; Ind = Independent; RC = RT:LB Cluster

3.3.2 Phase Two results

The interviews verified the types of assessment tools/methods being used to identify the needs of learners experiencing literacy difficulties, as well as the interventions being used in participants' schools or clusters. Participants elaborated on which assessment tools or methods they had found the most effective, as well as any specific training required to administer the assessments. They also discussed the types of interventions for LLD that were being used, their views on what was working well and how this was measured. Factors including costs and training for intervention programmes or methods were also discussed.

Tools and methods for assessing LLD

Interview participants were very keen to share their methods for assessing the needs of students with LLD. Tools and methods used closely reflected the findings of the online survey. Of the 13 interview participants, nine favoured Running Records as a method for determining a student's reading ability.

- *"A very easy, very quick, very accurate diagnostic tool" and "Running Records are our No. 1". (R3)*
- *"There's still a hang of a lot of value in doing a one-off running record… It shows their strengths and the key strategies they're using, and then from there, any obviously gaping voids… It does inform your practice, it really does." (T1)*

Reasons for choosing this tool over and above the others, included doing a miscue analysis, gauging fluency, examining comprehension strategies and ability, as well as analysing the reading behavior in context, rather than just looking at the reading level attained. Participants also liked the one-to-one administration of this tool, which allows them to get to know the students and build relationships. Some used Running Records as a form of Dynamic Assessment, stopping to discuss some of the tasks or concepts which students struggled with, using them as "on-the-spot" teaching opportunities.

Screening for LLD

All of the Primary, Intermediate and Secondary school staff interviewed gave details of their school's methods of screening all students across the board, to get a broad indication of general literacy abilities. This often occurred at the beginning or end of the year, or when the student first enrolled (if assessment data from the previous school was not available). Most of the assessments used for screening were standardised tests, including the PATs, STAR Reading and e-AsTTle tools. Running Records, as mentioned previously, were the most popular tool for screening students for literacy difficulties.

Assessment data

Besides the data being used for reporting purposes to the Ministry of Education and school stakeholders, most schools had some form of system in place where the information gained from these screening assessments was used to inform decision making, such as class placement and grouping within classrooms.

- *"We gather all that information using the Gap Analysis and the Pseudo Words assessments, then we can break the classes up and stream them properly. Then we can also flag the kids that need help. We'd probably get about 25% flagged – high to low needs." (T5)*

Students who achieved low scores on the screening tests were "Targeted" or "Flagged" as being "At Risk" of not achieving, or requiring extra support.

- *"… it alerts the teacher to the fact that this child is not achieving, so they all have their place, as far as the teacher is concerned. It's when they have identified a child at risk or having difficulty so therefore I'm in there." (R2)*

Several of the participants interviewed mentioned that the assessment data was used for streaming purposes and two schools (one Intermediate school and one Secondary school) had separate classes which catered for the specific needs of students with specific learning needs such as dyslexia.

- *"Students that are very low, or that we know have Specific Learning Difficulties, have the chance to be placed in a "Booster" class. There's a full-time TA in that room as well as a teacher who is skilled in both Literacy and Numeracy and has had some PD with working with kids that are dyslexic or ADHD, or any learning difficulties." (T4)*

- *"… we've got 10 teachers teaching dyslexic-specific classes – we've got whole classes of dyslexic students at Year 9, 10 and 11, so all of their core subjects are taught together… These classes are smaller and have an attached Teacher Aide and they're taught very much in a dyslexia-friendly way … The students thrive in these classes, they do really well, academically, socially and emotionally" (T9)*

Discrepancies used to inform decisions

Some educators were comparing results from a student's assessments to determine whether there was a discrepancy between the two.

- *"The* [PAT] *Reading Comprehension is really helpful, especially when analysed in conjunction with the PAT Listening Comprehension assessment, because if there is a mis-match between the Stanines of those two tests, that will often be an indicator that there's a learning disability… in general terms, we're looking at the information between the reasoning score and the literacy scores, and if there's a mis-match, that's raising flags straight away, and so we then make recommendations to follow up on that" (T10)*

- *"Sometimes I will refer students* [for a specialist cognitive assessment]*, but they would have to be showing really high cognitive ability, and their literacy just not happening, for me to do that." (R2)*

Tools and methods for assessing SLD learning needs

After screening all students to determine overall literacy abilities, all participants then felt the need to use various tools for determining the specific needs of students who they had deemed "At Risk" of not achieving in reading, spelling or writing.

- *"e-AsTTle won't give you whether the child timed out because they're slower to read and decode, or if it's about processing." (T4)*

The three RT:LB interviewed mentioned access to more specialised types of assessment tools compared to teaching staff, including the Dyslexia Portfolio, the Language Processing Test 3 (LPT 3 Elementary), and the Lucid suite of assessment tools.

As found with the results of the online survey, most of the educators interviewed used a variety of tools to delve deeper into investigating students' literacy difficulties, to determine their specific areas of need. Assessments ranged from those testing Phonological Awareness, Oral Language, Vocabulary, Spelling Ability, Word Recognition, Reading Comprehension and Reading Fluency. Joy Allcock's Gap Analysis tests were frequently used by those interviewed, as was her Pseudo Non-Words test.

- *"The Gap Analysis is very helpful – what it does is it actually shows us where the gaps are in the spelling … Pseudo Words are really good because it picks up kids that, even though they're good readers, it picks up their spelling errors as well." (T5)*

The NZ Dyslexia Handbook (Nicholson & Dymock, 2015) was mentioned by two of the participants interviewed (one RT:LB and one Secondary school educator) as being a source for literacy assessment tools, including the Bryant Test of Basic Decoding Skills, the Burt Word Reading test and the Gough-Kastler-Roper (GKR) Phonemic Awareness Test.

Tools and methods for assessing specific underpinning weaknesses

Most participants who were interviewed seemed familiar with Specific Learning Difficulties such as Dyslexia and Dyspraxia.

- *"There's more kids coming to us that have difficulty with reading, spelling, all sorts of things happening. Dyslexia mainly, dyspraxia is coming through, dyscalculia is coming through." (T5)*
- *"We've got about 140 students who are diagnosed with dyslexia at the college at the moment." (T9)*
- *"Most of our kids* [in Learning Support] *have dyslexia, or dyspraxia, or dyscalculia, or what-have-you." (T10)*

Participants were using various tools aimed at determining some of the underpinning weaknesses linked to literacy difficulties. These areas of weakness include cognitive functions such as working memory; auditory processing; visual processing; phonological awareness; reasoning; and processing speed. The Lucid suite of assessments were the main tools being used to assess for these underpinning cognitive weaknesses (8 of the 13 participants were using Lucid tools).

- *"Lucid Recall is the one about looking at Working Memory, and that's useful, because it does then give us an indication around dyslexia. So does LASS, Ability and Exact." (T6)*
- *"Lucid helped with those ones, to work out what it was – some of it was working memory, one of them identified dyslexia … it told you … what they weren't so good at. It looked at visual memory, auditory memory (I think), and working memory." (T2)*

One Intermediate school participant used the Dyslexia Screening Test to screen for underlying cognitive difficulties. One RT:LB was using an Auditory Processing Assessment, and the Aston Index for visual processing difficulties. One Secondary

school educator had received training in using the iCept visual and auditory processing screening tool, while another teacher, who had trained with SPELD NZ, used a battery of tests including an Irlens screening with target students.

- *"I do a reading test, an Irlen check, I get them to give me a writing sample, we talk about specific issues such as getting ideas out of their heads and onto paper, copying from the board, remembering instructions, I ask them questions about familial history, if there's any history of dyslexia in the family, if they have issues with co-ordination, memory, organisation, knowing left from right and directions, balance. There's many indicators that we go through. We talk about how they learn best, do they think in pictures, do they see 3D images in their heads etc." (T9)*

Other areas which can contribute towards literacy difficulties, include gross and fine motor skills, sensory processing disorders, attention deficits and behavior difficulties. These types of difficulties were mentioned by some of the participants interviewed, however few of them mentioned any formal assessments that were being used in schools to determine students' needs in these areas.

Social emotional factors

Other areas recognised by participants as being linked to students' difficulties with literacy were their low levels of self-efficacy, confidence, motivation, self-esteem, engagement and other social emotional concerns. Comments included

- ***"****I often find that with these target kids, it's their confidence (more than anything), that they've struggled with, and self-belief"; (T4)*
- *"The biggest thing for me has been the self-efficacy – if a kid thinks they're dumb, or if they can't do it, then there's no way they can actually get their mind to start settling on the task"; (T2)*
- *"… what is most important is allowing the students to believe in themselves and*

knowing that they're not stupid, and that they can achieve. With this belief and intact self-esteem, we've minimised negative behaviour." (T9)

Referrals for specialist assessments

Participants typically referred students with these "non-academic" difficulties for specialist assessments – from either the Ministry of Education Special Education team, the Ministry of Health Mental Health team, or to other specialists such as Occupational Therapists, Behavioural Optometrists, Audiologists (specialising in Auditory Processing Disorder), Pediatricians, Counsellors or Educational Psychologists.

- *"… then I think 'Oh gosh, they're not seeing letters in the right way', you know, 'there's something really going on for this child, just with the visual processing', so I really need to look at that further – perhaps refer them to a behavioural optometrist. The same with auditory processing – if that's really obvious with how they're managing in the classroom, we'll refer them on for that as well." (R2)*

Specialist referrals for cognitive assessments were also frequently made by all of the participants interviewed. These referrals were for students suspected of having a Specific Learning Disability such as Dyslexia or Dyspraxia and were made to either an Educational Psychologist, or Level C Registered Assessor (such as a SPELD NZ Assessor).

- *"What we do then, is we recommend a Cognitive Assessment be completed, because that will give us that detailed information, and it will also give additional information in terms of processing speed and working memory and all sorts of other things." (T10)*

The cost of these specialist assessments was usually borne by the students' parents, which was a barrier for some to be able to access these types of assessments.

- *"I would give 2 or 3 different names of EdPsychs to the parents and then let the*

parents go. The parents fund the assessments themselves." (T3)

- *"Those* [assessments] *come at a cost, and while most parents in our area will endeavour to do that, sometimes it's just not financially possible, so we do a number of things to try and help parents with that … As well as some families qualifying for subsidies from SPELD, some of the assessors will allow parents to pay it off, bit by bit." (T10)*
- *"We have very few SPELD students in* [this city] *– we should have loads more, but most of them just don't get past finding out how much the cost is … We were disappointed with that* [local fund-raising wasn't accessible]*, because it means SPELD in* [this city] *is very much a white, middle-class, elite group." (T8)*

Participants stated that some of the schools had systems in place where they can apply for subsidies or funding from trusts, etc., or the school may pay for part of the specialist assessment.

- *"We're lucky, because we have an Educational Psychologist who comes into the school, so that makes it very accessible. She's been fantastic, and has tried to keep her cost as low as possible, in fact she's donated some free as well, to the lower income families." (T9)*
- *"Funding for an Ed Psych depends – sometimes the parents pay, sometimes the school will go halves with parents and support them. There's a Mayoral fund, we also have a registered psychologist in our team, so she will do them for us if we think it's really needed." (R2)*

As found in the online survey in Phase One, some educators were less than confident interpreting the results of these specialist assessments, in order to provide an appropriate programme which caters for the student's specific needs.

- *"Sometimes, a child comes with an EdPsych report, and we know that they're having SPELD tutoring, and there are recommendations in the report, but the*

teacher doesn't know how to then transfer that into how they should help the child in the classroom." (T4)

Interventions provided for students with LLD

The 13 participants mentioned interventions for students with LLD in their schools or clusters which were not dissimilar to those mentioned in the online survey. Interview participants were, however, able to elaborate on how and why they used these tools or methods of intervention.

- Intervention format

While most of the interventions appeared to be taking place in small withdrawal groups, with a Teacher Aide or Specialist Teacher, some students were receiving one-to-one assistance. Some schools were adopting a more 'inclusive' approach, and providing assistance within the classroom setting.

- *"In the Primary School, if it's a higher reading need, then we put them onto 'Toe-by-Toe' on a one-on-one basis." (T3)*
- *"Schools use it* [Yolanda Soryl's programme] *in their own way - at new entrants they'll often do it whole class, and then, as needs change (especially with MLE now), they'll break off into phonics groups and the different levels." (R2)*

- Teacher Aides

While one RT:LB mentioned that Teacher Aides (TAs) are sometimes just used to give the teacher some "respite", most of the participants interviewed spoke about how the Teacher Aides were an excellent asset to enable interventions to work successfully. Some Teacher Aides had received explicit training in literacy intervention, while others received direction from the teacher in charge of the class.

- *"One of the things the TA does is monitor groups, or students that are working individually, while the teacher is doing the group teaching. They also help the kids when needed." (T4)*

Several participants mentioned how the use of Teacher Aides assisting one student in the classroom was not the most effective use of this valuable resource.

- *"Often then* [when Teacher Aides work with a student in the classroom] *they're just working on the curriculum issue, and helping them with the curriculum, and it's not addressing the underlying needs of that student." (T7)*

The provision for Teacher Aides from the Ministry of Education was, however, reported as being never enough to fulfil the need, with most schools supplementing the cost of Teacher Aide time.

- Tuakana-teina Methods

Several of the participants interviewed stated that they were promoting a buddy system, similar to the tuakana-teina concept, where an older or more experienced tuakana (sibling, cousin or other older student) assists and guides a younger, less experienced teina, or younger learner (Ministry of Education, 2017e). Following with the Māori tradition of ako, this teaching/learning relationship can be reciprocal.

- *"… so she was able to give support (as in the tuakana-teina system), and that gave her a great deal of confidence and that self-efficacy, if you can build that up, that works really well." (T2)*
- *Other interventions include quite a lot of peer reading, sometimes using older students with younger, doing repeated reading, if it's a fluency issue. That seems to work really well, because teachers can manage that. (R1)*

- Oral Language Support

Several of the participants interviewed mentioned how oral language development was a focus for remediating students with a limited vocabulary, to enhance their literacy learning.

- *"And a lot of our kids don't have a wide range of experiences, so their vocab is quite poor … I think that's a big thing when it comes to comprehension, because*

they don't know what a lot of things are – you know, they might be able to say the word, but they've no idea what it is…" (T8)

- *"… it's also got to with the literate cultural capital that the child has, and oral language and understanding, … what's the point of … doing some complicated literacy stuff' if, developmentally, the child's language is not there." (R1)*

- Interventions for Underpinning Weaknesses

A few participants mentioned methods and resources they were using/recommending to target students' underpinning difficulties, such as auditory processing and fine motor skills.

Multisensory approach

Another way participants were adapting their teaching programmes to cater for the needs of students with underpinning weaknesses was to adopt a multisensory approach to teaching and learning.

- *"We also run small group literacy (reading, writing and spelling) tuition, and in that we use a Nessy based approach – systematic and explicit teaching of phoneme awareness and phonics using multisensory strategies." (T9)*

- *"I think that what I like about Lexia is that they're hearing and seeing – you've got that aural as well as the visual." (T4)*

- *"Mostly I use a lot of Joy Allcock's resources – her cards that you can get from her book, that you can photocopy and laminate and stuff – I use a lot of those … her vowel cards and things like that – I do use that a lot with the lower students." (T8)*

Metacognition

Encouraging students to become independent learners, by teaching metacognitive strategies for literacy learning was a focus for several of the participants.

- *"… they're all very different, and one size doesn't fit all, and there's not one magic silver bullet that's going to work for all of the students. So, one of the big things focus on is metacognition – we teach students to understand how they learn best. We teach them about their brain, and how their brain works, so they own their own learning, and have an understanding of the strategies which work best for them as individuals. (T9)*
- *"We will also talk to the young person about strategies they can use to help themselves – for example, students who are dyslexic are very often creative, and very often visual learners, so we'll talk about how you can make notes that are diagrams, or pictures, and that you use highlighters." (T10)*
- *"Which means that, once we've talked it over, there's that degree of independence 'What do I need to do now?' – they can check the SOLO rubric. So, a lot of it is just gaining the confidence to be able to make steps by themselves, getting independent learning going on." (T2)*

Structured literacy intervention programmes

Most of the participants interviewed mentioned at least one intervention programme that they had found to be successful for raising their students' abilities in literacy. Appendix H includes the selection of programmes recommended by participants.

- Reading Recovery

Some of the participants mentioned the use of RR for literacy intervention, however didn't always adhere to the prescribed guidelines. One participant often delayed entry to RR by six months until students have some phonics knowledge behind them, so are ready. Some participants mentioned that there was little value in RR when the gains cannot be transferred back in the classroom context.

- *"… we've found that, looking back across the four-five years, kids don't maintain it back in the classroom, so therefore, what's the value there for us?" (T1)*

- *"… I still have to see that there is good communication and that there is congruency between the intervention and the classroom programme." (R1)*

Other intervention methods

Other participants felt that a focus on particular programmes was not a good approach.

- *"We don't focus on any particular programme, they're more strategies." (R2)*
- *"We've developed a variety of resources over the years, so we can be really responsive to the needs, and not just shove them into one programme." (T7)*

Two participants stated that some parents seek tuition for their children outside of the school system, while others offered support and advice to parents about how they could help.

- *"… some parents that are willing – the ones that are financially able, they seem to take children to a reading tutor." (R1)*

Accommodations provided for students with LLD

Most participants mentioned strategies they were using to accommodate the needs of students who were struggling with their literacy learning. While this was mainly happening in Secondary schools, some Primary and Intermediate schools were also offering accommodations to give students a temporary helping hand while they strived to remediate their learning difficulties.

- *"… when you're at College, you're fitting in within the curriculum requirements, and so, a lot of what we do is strategies and accommodations." (T9)*

- Special Assessment Conditions

Often, the assessments used to test Secondary students with LLD were chosen to fulfill the requirement of the New Zealand Qualifications Authority (NZQA) applications for Special Assessment Conditions (SACs). Some participants mentioned the onerous task of SAC applications, hence recommending students seek specialist assessments.

- *"… a lot of it has probably been led now by SAC criteria. That's had quite an influence on the tools we use – the way we do the literacy." (T6)*
- *"… it's a huge task. The applications are massive – a truckload of work." (T10)*

- Other accommodations

Several of the participants interviewed stated that they were enhancing students' learning by enabling access to Assistive Technology.

Other accommodations being offered for students with LLD included providing them with extra time in class assessments, Reader/Writers and using different teaching and learning modalities.

- *"Patience, understanding, pace, delivery, multisensory strategies, giving the students many possible different opportunities to show what they know – so they might be submitting work for assessments as a 3D model, or presenting orally, or a poster, or as a Google Slides presentation, etc., so they get a huge array of different ways of being assessed and can work to their strengths. We aim for minimal distractions in the classroom; making sure that your projection colour is appropriate, so it might be light blue, or it might be yellow/cream colour. Printing on the appropriate colour paper; using the right font; put borders around the text; make sure line spacing on your worksheets is appropriate; use bullet points rather than great wads of text; use lots of visuals; explaining things in multiple different ways; allowing students to move around the classroom." (T9)*

Four of the participants from Secondary schools mentioned that their schools have pathways of courses available for students who prefer to be internally assessed rather than sit external exams. Students are also able to gain their Literacy and Numeracy credits (towards NCEA) through identified Achievement Standards within other curriculum areas.

- *"… classes go at a slightly slower pace. So the dyslexic students often choose*

not to do exams, because it doesn't suit the way they learn. They can be successful without having to sit an external exam. Although, of course, they still have a choice …" (T9)

Te Kura Pounamu

Several of the participants from Secondary schools also mentioned dual-enrolling students in correspondence courses, through Te Aho o Te Kura Pounamu (The Correspondence School), to allow them to work at a lower literacy level than their peers, to achieve success.

- *"I do have a couple of students who are doing Te Kura for high needs English and Maths, but literally only one or two – it's not huge. They would work on the correspondence lessons during their English or Maths class." (T3)*

Enablers to assisting students with LLD

All of the participants interviewed were able to share instances where their interventions had been successful in raising students' achievement in literacy. Some of them mentioned particular strategies or methods which had contributed to this success. Some of them mentioned particular strategies or methods which had contributed to this success, including: gathering comprehensive data from families/whanau or contributing schools; using a database for analysing assessment data; collaboration with colleagues; accessing funding; promoting an inclusive learning environment; teacher training and professional development; and support from family/whanau and the community.

Some schools had attracted more students with Specific Learning Difficulties due to gaining a reputation for providing a high level of support:

- *"… there's more kids coming to us that have difficulty with reading, spelling, all sorts of things happening … So we're getting a name for ourselves out in the community (which is great) so that means that more kids are coming in and we're helping them more." (T5)*

- *"We've got about 140 students who are diagnosed with dyslexia at the College at the moment. We're a bit of a magnet for students with Specific Learning Differences … We've had families moving here from the South Island to come to the school, and even some from overseas!" (T9)*

- Database for analysis

Several participants stated that the use of a database of assessment data was particularly helpful.

- *Based on the outcome of this screening process I inform the student, parents and teachers. We then implement the strategies – we put all those onto KAMAR, which goes out to all the teachers. (T9)*
- *"We use a programme called the Beagle Assessment Tool … It's definitely worked well. When we put the data in, you can click on a student and look at 'Where are his gaps?' … its actually brilliant – like 'Wow!' … I would be lost without it ... makes us accountable to actually shift these kids." (T5)*

- Gathering comprehensive information about students

Several participants mentioned how most of the enrolment data, or information gained from speaking to parents, caregivers or whanau, was valuable in enabling teachers' understanding regarding students' specific needs.

- *"I do the DST only after I've spoken to the child and the parent, and so they come in and I find out a bit of background and history and what interventions they've had in the past." (T4)*

- Collaboration

Most participants were working collaboratively with colleagues, other schools, SENCos or RT:LB to share ideas about strategies and resources to enhance the learning opportunities for students with LLD:

- *"We're part of a Community of Learning (CoL) and we have one of our 'across*

school' teachers here who is leading Writing across the CoL ... so we sit down and discuss what we want to purchase and then look at the budget …" (T4)

- *"… we're a group of SENCos … We get together regularly and share information, share ideas, and its invaluable – it's a really good professional support system. (T7)*

- Funding

Most participants mentioned funding as being a barrier (or a challenge) to providing assistance, however some schools managed to overcome this barrier in different ways, including: borrowing assessment/remediation tools from Resource Teachers and 'juggling' the budgets:

- Inclusive learning environments

Nearly all participants spoke about adopting an inclusive approach to supporting students with LLD. This frequently was achieved through minimising barriers to learning to offer all students equitable resources and opportunities to learn in the same environment as their peers. Rather than exiling "Priority" students to withdrawal groups, some Teacher Aides were being utilised in various ways within the classroom. Integrated planning (including SOLO rubrics) and creative timetabling were other methods of ensuring that these students spent more time with suitably-trained teachers rather than less-qualified Teacher Aides. Specialised resources were also being made available for all students to use.

- *"… Universal Design for Learning … providing the opportunity for different ways of expressing yourself." (R1)*

- *"We have a whole-school approach to dyslexia and neurodiversity … 'Teach well for dyslexics, and you teach well for everybody'. So even if a child isn't in a dyslexic-focused class, they will still be having their needs met outside of that … all the classes are taught in a dyslexia-friendly way … still get access to*

Reader/Writers for assessments, extra time, computer use. Any student can use the Dragon software, if they want to ..." (T9)

- *"… so* [the Reading Pen] *became not just 'the special needs kids use it', this is a tool that everyone can use, which is something we push a lot in our school." (T2)*
- *"… some of those recommendations are universal – they would work for students who are not dyslexic – it could work for students that have got all kinds of problems … we are trying to move more towards inclusion, therefore moving away from withdrawal groups." (R1)*

- Teacher training and professional development

While all of the participants were teachers, with at least 10 year's experience, all were involved in ongoing PD. Appendix I provides an outline of some of the PD that interview participants had undertaken, or planned. Most of the Secondary school participants, who now had SENCo, or Specialist Literacy Teachers positions, had previously been Primary school teachers. Two participants from Secondary schools had completed the SPELD NZ teacher training in Specific Learning Disabilities, while another teacher had attended SPELD NZ conferences.

Several of the RT:LB, SENCos or Specialist Literacy Teachers interviewed were instrumental in providing PD and support for teachers in their schools or clusters.

- *"So, I've done PD with the staff, so that they're on board with that as well – explaining the nature of the difficulty that these students are having, and these are some strategies that you can use." (T10)*

Other participants mentioned various PD opportunities that they had found successful or were planning to attend. Often the providers would come to their schools to do school-wide (or department-wide) PD, while other courses were attended on an individual basis.

- Support from family, whanau and community

Having support from family/whanau and the community was mentioned as advantageous to supporting students with literacy difficulties.

- *"I've got six community volunteers … so a lot of the lower decoders … they'll spend half an hour with a volunteer …" (T8)*
- *"If home are buying into it* [the intervention] *as well, then you're doubling your impact, really." (R2)*

Barriers to assisting students with LLD

While participants mentioned enablers to increasing student literacy achievement, several stated barriers or challenges.

- Time constraints

Several participants mentioned that one of the greatest barriers to gathering assessment data and providing effective interventions was the time factor:

- *"It did take a long time out of the classroom programme to do that* [PROBE]*. It was really valuable, but we don't always have that luxury." (T7)*
- *"… I don't have the students for long enough … just trying to fit it all in, really!" (T8)*
- *"Reading Plus costs us a huge amount of time, but if you don't do it 3 times a week, it's not going to make much difference." (T3)*

- Lack of support from family, whanau or community
  - *"They just don't come from families where supporting them is like that … They don't have books – a lot of them won't take a book home because it'll only get ripped or something." (T8)*
  - *"The issue is, I think most parents are just too busy, and they also themselves*

don't have that type of skill of doing that." (R1)

- Insufficient training, experience or qualifications

Several participants mentioned the need for more pre-service training and PD to enable teachers to support learners with literacy needs:

- *"The student teachers definitely don't get the training they need." (R1)*
- *"… some teachers just have no idea on how to do certain skills … we're getting more and more PostGrad teachers and one lesson on reading is not enough." (T1)*
- *"… I do think there needs to be more emphasis on how to meet the Special Needs of students." (T7)*
- *"… most of them* [RT:Lit] *absolutely and totally approach things from a Reading Recovery, whole language approach …." (R1)*
- *"Secondary English teachers do not have the background … These people really do need upskilling." (T6)*
- *"There were these kids in my Intermediate class who couldn't read, but I had no idea what to do about it. So, it definitely needs to be part of the training for both Secondary and Primary teachers – all levels." (T7)*

- Necessity for early intervention

Two participants from Secondary schools stated that they felt that struggling students were not getting picked up early enough, therefore more should be done at Primary school level:

- *"This is definitely important at Primary schools as the children would be identified and have their needs met, they would not start to fail, and then we wouldn't have to undo a lot of the damage that's been done by the time the students get to us." (T9)*

- Need for context and transfer

One RT:LB stressed how difficult it is for interventions to succeed unless they are contextual and followed through into the classroom programme.

- *"… if it's just withdrawal, with no follow-up, then no, it's not going to work." (R1)*

- A need for rigour was also highlighted.
  - *"I believe very strongly, that unless you're doing this regularly, in the week … twice a week is just not going to work – and that's for any intervention." (T3)*

3.3.3 Summary of key findings from Phase Two

In spite of the barriers to assisting students with LLD mentioned above, all participants interviewed were optimistic about their ability to make a difference. Most had seen tangible evidence of the benefits of the assessment and intervention methods they were currently using or recommending – either in literacy skills, or overall confidence and self-esteem. Many of the approaches that teachers were using to assess and remediate students with LLD were founded on a sound evidence base, however, as with the results of the online survey, the approaches were not consisent across schools. Some of the enabling factors mentioned by participants demonstrate that there is an awareness of the need to take a holistic approach to assessment and remediation.

Chapter 4: Discussion

What is current practice in regards to assessing the specific needs of students with literacy learning difficulties in New Zealand/Aotearoa schools, and how are the assessment data being used to meet their needs?

Not all children get the same chance to achieve literacy success in school (OECD, 2016). This study has investigated the current situation in NZ in terms of assessment and remediation of LLD, with some comparisons made with overseas practice. Literature regarding assessments comparing literacy achievement between countries indicates that students who are achieving the lowest results in literacy in NZ are predominantly those from low income families and those from a non-English speaking family (UNESCO, 2017). In addition, there are students whose LLD are due to other factors including genetics and neurocognitive differences, such as dyslexia, dyspraxia and ADHD. The United Nations Convention on the Rights of Persons with Disabilities (United Nations, 2006) outlines everyone's human right to an inclusive education. The United Nations Convention on the Rights of the Child (UNCROC), aspires to guarantee basic and fundamental rights to all children, including access to education, with the aim of ensuring that all of the world's children are safe, happy and fulfilled. In a report by the Office for the Children's Commission (2017), concerns were expressed about NZ's lack of progress towards meeting UNCROC's recommendations, including the disparate achievement tail for children with disabilities and those of Māori and Pasifika ethnicity (Office for the Children's Commission, 2017). Schools in NZ have binding obligations under the Education Act, 1989 and the NZ Disability Strategy (Ministry of Social Development, 2016) to provide an inclusive education system, with access to an excellent education, recognising individual strengths and allowing everyone the ability to achieve to their potential.

In spite of a wealth of evidence to suggest that NZ's current literacy strategy is not providing learners with a fair chance at success, the whole language paradigm predominates. Literature from England, Australia and the USA demonstrates that, while the "reading wars" continue, with strong proponents on each side of the fence, a broader approach to literacy instruction is preferable, with the solution not being in a "one-size-fits-all" curriculum. Phonics programmes which include early screening for beginning readers have emerged in these countries overseas, however in NZ, critics of whole language-based programmes have yet been unsuccessful in their quest to influence education policy makers (Soler & Openshaw, 2007).

Evidence from the data collected from schools around NZ in this study confirms that whole language tools and methods, such as running records for assessment and RR interventions, prevail. Only small percentage (8%) of teachers in this study, in prominent positions such as SENCO, Literacy Specialist and RT:LB, had heard of the evidence-based Simple View of Reading. The emphasis on fluency at the Primary school level indicates that the specific needs of students with LLD are not being addressed in the most appropriate manner. In order to put pressure on the current status quo regarding the whole language versus phonological approach, teachers must take notice of the research which indicates that a more balanced, broader approach to literacy is needed. We need to persist with advocating that policies are updated in order to meet the needs of our struggling learners.

Exercising their right to provide a curriculum which is autonomous to the needs of their individual school or cluster, participants were using a multitude of different assessment tools and methods, as well as a wide range of interventions for learners struggling with literacy. While some of these tools and methods have been scientifically proven to be effective, and others are based on sound evidence, others are not.

In spite of the apparent whole language domination, a large number of schools appear to be breaking this mould. Data from this study has revealed a great number of PD

programmes being undertaken around the country in evidence-based assessment and teaching practice, including phonological awareness, metacognition and assistive technology. The apparent inclination to engage in PD appears to be due to two factors that emerged from this study. The first is the dearth of skills, experience and/or qualifications to identify, accommodate and support learners with Specific Learning Difficulties. Lack of expertise was identified by respondents as being the second most significant barrier (after time constraints) to accessing or analysing quality literacy assessment data A Master's dissertation by Elias (2014), which investigated Secondary school teacher knowledge and attitudes of dyslexia in NZ, revealed a great need for further support and training to enable teachers with the knowledge of what resources and modalities best respond to the needs of dyslexic learners. A Select Committee inquiry into the identification and support for students with significant challenges including dyslexia, dyspraxia and autism spectrum disorder (House of Representatives, 2016) also identified a need for enhanced pre-service and ongoing teacher training to both detect and respond to the specific learning needs of these students.

Another apparent motivation for taking part in PD is the availability of research into effective programmes of assessment, remediation and general pedagogical practice. Teachers in the study said they wanted to learn more about these latest advancements in education. Several PD providers in NZ are providing workshops in phonological awareness, the merits of which have been discussed. Providers of educational and remedial software programmes often facilitate workshops for teachers or whole-school PD.

Recent study in education suggests that it is possible to distinguish among various intervention approaches. In Hattie's (2009) meta-analysis of successful teaching practice, from a list of 138 different approaches, 'Reciprocal Teaching' ranked 9th (with a mean effect size of 0.74), Metacognitive strategies ranked 13th (0.69) and PD ranked 19th (0.62). This study has demonstrated that teachers are favouring reciprocal teaching and

metacognitive approaches for students with LLD. PD, as previously mentioned, has shown to be very necessary to bring about change in the right direction. It is important, however, that PD opportunities are planned and focused towards the most effective, evidence-based approaches.

In Hattie's study, traditional, proximal approaches to literacy instruction ranked only slightly above the average mark in Hattie's study, including Writing programmes (0.44), Comprehension programmes (0.58), Phonics instruction (0.60), Repeated reading (0.67), Vocabulary (0.67). Some ranked just below (or well below) average, including Exposure to reading (0.36), Sentence combining programmes (0.15), and Whole language (0.06). This demonstrates that teaching programmes can be more effective if the focus is more on the distal than the proximal factors.

Other tools or methods focussing on the distal factors contributing towards LLD, rather than proximal factors, were cited by participants in this study. The Lucid suite of online assessments were the most common tools of this nature, measuring students' cognitive functions such as working memory, processing speed and auditory processing.

Several of the participants in this study alluded to the principles of UDL when they discussed their policies of inclusion, such as devoting entire classes to groups of students with LLD and allowing all students access to remedial resources. These approaches were reported to be of benefit all learners, not only those with LLD or other impairments. Providing students with different modalities for learning, as well as allowing them to presenting their knowledge in alternative methods can remove the barriers that many LLD students face. The UDL approaches beginning to appear in schools in NZ are setting a commendable example of inclusion for others to follow.

While overseas assessment practice has seen an increased use of Dynamic Assessment, which is a scaffolded assessment approach such as Test/Teach/Retest, and Response to Intervention methods, a large percentage of teachers in this study did not use these types of formative assessment. In contrast to this, the majority of

respondents (84%) stated that they refer students with LLD for external, specialist assessments, although they also mentioned that many students were unable to access these assessments, due to the prohibitive cost. In spite of the large percentage of teachers referring their students for external, specialist reports, most respondents had never seen a specialist assessment report, and many were not confident in interpreting the results. Participants stated that students who obtain a LLD diagnosis following a specialist assessment will often go on to seek private tuition. Teachers currently do not appear to be equipped to serve the specific needs of these learners.

It appears that, a lot of the time, specialist cognitive assessments were being sought for the principle purpose of assisting with NZQA applications for SACs. In a 2014 review (Ministry of Education), however, issues of equity were raised when it was found that students at lower decile schools could not access SACs as frequently as those from higher decile schools due to the cost involved in obtaining a cognitive assessment. The huge amount of work involved for teachers and SENCOs in preparing applications for SACs also appeared to be a prohibitive factor in many LLD students missing out on accommodations for their senior assessments.

This study revealed that most schools are collecting ecological information about their students, including ethnicity, culture, language, interests, medical history and developmental milestones. Many are using this information to assist with identifying appropriate programmes of instruction for students who are struggling. Many respondents mentioned their focus on maintaining strong relationships with students and their families/whanau, which assisted with the collection of this ecological data. Alton-Lee (2003, 2015), Bevan-Brown (2006), Macfarlane (2004), Mentis, Quinn, and Ryba (2005) and Whyte (2005) all espouse whakawhanaungatanga principles of collaboration with parents and whanau of learners from diverse cultures, to enable inclusive programmes of learning to occur, which meet the needs of all learners. The Māori

concept of ako (learning/teaching) acknowledges that the learner and their whanau are inseparable (Ministry of Education, 2013a).

Another culturally inclusive learning strategy used successfully by participants in this study also promotes the Māori principles of whakawhanaungatanga and ako. The tuakana-teina strategy was mentioned by several teachers as being an effective way of promoting literacy learning and student collaboration, especially for students from disadvantaged backgrounds. Again, these teachers are making a praiseworthy contribution to inclusive environments in our schools, which others can aspire to.

Collaboration with colleagues to share ideas and expertise was also mentioned by several participants as being an enabler to assist with supporting struggling learners. Teachers were achieving goals for student advancement through working collaboratively within schools, with RT:LB and RT:Lit and within Communities of Learning. This practice can not only encourage an atmosphere of whakawhanaungatanga, but can see teachers working more efficiently and productively by sharing the load as well as sharing resources.

Future possible directions for supporting students with LLD

Policies in NZ education that may influence future progress in this area continue to be developed. The new Labour Government (2017) have pledged to provide a more competency-focused education system with a broad and varied curriculum which is not measured by national standards. With the recent introduction of Communities of Learning/Kāhui Ako (Ministry of Education, 2016a) to encourage collaboration, as well as a centrally-funded system of Professional Learning and Development (Ministry of Education, 2017b), schools in NZ may begin to adopt a more unified approach to programme planning and assessment, rather than the disparate, autonomous manner with which this study finds them operating. When teachers become more knowledgeable about what the specific needs of LLD learners are, as well as being encouraged and nurtured along their pathway through a collaborative approach, hopefully we will see

more goals being achieved towards enhancing the learning opportunities of our struggling learners.

Limitations

This study used an online survey, so was not a random sample. It also had a limited number of participants. Thus, generalisations to a wider sample cannot be made on the findings. However, most of the respondents to the survey, as well as the interview participants, were experienced teachers who appeared confident in their work, so the sample did have some social validity. Less experienced teachers may not have felt as confident in sharing information about their practice. Nevertheless, future research will need a much larger sample to verify these initial findings.

Concluding Statement

The conclusions to be drawn from this study are that one size does not, and will not, fit all learners in our schools. A resolution to the 'reading wars' needs to be found. A whole language approach to literacy may well suit many learners, however there are around 20% of learners for whom this approach is failing to serve. With targeted PLD, our teachers will be empowered with the tools, skills and knowledge to encourage all learners to achieve to the best of their potential. Early identification can lead to early intervention for LLD. Through collaboration with families/whanau, colleagues and schools, teachers may also be able to work co-operatively to develop differentiated, inclusive programmes of instruction that meet the individual needs of every child/tamariki in our schools. By ensuring that their curriculum is guided by current research regarding effective practice, schools will ensure that they are equipped to support the individual needs of every learner, including those with literacy learning difficulties. Because no child deserves to be left behind.

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Appendix A: Outline of Cognitive Assessment Tools Available in New Zealand

NOTE: This list outlines some of the more commonly-used tools for assessment of cognitive abilities in New Zealand/Aotearoa schools. There are more available that are not listed here.

Name of Assessment Tool	Assesses:	Age Level:	Country of Origin (in te reo Maori?)	Computer Based?	Individual or Group Administration?	Approximate Cost?
Comprehensive Test of Phonological Processing (CTOPP-2)	Phonological awareness and memory	4-24	USA (×)	×	Ind	$790
Dyslexia Screener	Initial screening tool for dyslexia	5-16	UK (×)	✓	Ind	$165
Dyslexia Portfolio	Diagnostic assessment for dyslexia	6-16	UK (×)	×	Ind	$650
iCept	Visual and auditory processing screener	7-17	NZ (×)	✓	Ind	No cost
Lucid COPS	Cognitive profiling system	4-8	UK (×)	✓	Ind/ Grp	$275
Lucid LASS 8-11	Identify learning strengths & weaknesses	8-11	UK (×)	✓	Ind/ Grp	$265
Lucid LASS 11-15	Identify learning strengths & weaknesses	11-15	UK (×)	✓	Ind/ Grp	$340
Lucid Exact	Exam access & literacy assessment	11-24	UK (×)	✓	Ind/ Grp	$325
Lucid Ability	Assess verbal & non-verbal reasoning	4-16	UK (×)	✓	Ind/ Grp	$210
Lucid Recall	Working memory assessment	7-16	UK (×)	✓	Ind/ Grp	$205
Lucid Rapid	Quick dyslexia screening	4-15	UK (×)	✓	Ind/ Grp	$230
Lucid LADS Plus	Quick dyslexia screening for all abilities	15+	UK (×)	✓	Ind/ Grp	$495
Lucid Viss	Visual stress screening	7-adult	UK (×)	✓	Ind	$160
Sutherland Phonological Awareness Test (SPAT)	Phonological awareness skills	Yr1-4	Aus (×)	×	Ind/ Grp	$405
Teaching Talking	Identification of language difficulties	2-11	UK (×)	×	Ind/ Grp	$311
Test of Handwriting Skills – Revised (THS-R)	Assessment of neurosensory integration	6-18	USA (×)	×	Ind/ Grp	$455
Wordchains	Early identification of specific learning difficulties	7+	UK (×)	×	Grp	$88

Key: **Ind** = Individual administration **Grp** = Group administration
Aus = Australia **UK** = United Kingdom **USA** = United States of America
NZ = New Zealand

Appendix B: Outline of Literacy Assessment Tools Available in New Zealand

NOTE: This list outlines some of the more commonly-used tools for literacy assessment in New Zealand/Aotearoa schools. There are many more available that are not listed here.

1. Tools Available for the Assessment of English: Reading

Name of Assessment Tool	Assesses:	Year Level:	Country of Origin (in te reo Maori? [3])	Standardised?	Individual or Group Administration?	Validity	Reliability	Approximate Cost? [4]	"What Next" Strategies Incl? [5]
Assessment Resource Bank (ARB) – Reading	Making of meaning through text	3-10	NZ (×)	×	Ind/ Grp	✓	✓	No cost	✓
Burt Word Reading Test	Word recognition and decoding skills	2-9	NZ (×)	✓	Ind	✓	✓	Starter Kit test $9.50	×
e-asTTle Reading	Reading comprehension	5-10	NZ (✓)	✓	Ind/ Grp	✓	NA	No cost	✓
Learning Progression Frameworks – Reading	Exemplars of reading steps	0-10	NZ (×)	×	Ind	✓	NA	No cost	✓
Literacy Learning Progressions – Reading	Describe reading knowledge & skills needed at each level	0-10	NZ (×)	×	Ind/ Grp	NA	NA	No cost	×
Martin & Pratt Non-Word Reading Test	Phonological awareness & skills (non-words will all be unfamiliar)	2-10	Aus (×)	✓	Ind	NA	NA	$202.40 (Set)	×
National Standards – Reading	Standards outlining knowledge & skills	0-8	NZ (✓)	×	Ind/ Grp	NA	NA	No cost	✓
Neale Reading Analysis: Third Edition	Text reading fluency, accuracy & comprehension	2-9	Aus (×)	✓	Ind	✓	✓	$310 (Set & DVD)	✓
NEMP (National Education Monitoring Project) – Reading	A range of assessment tasks in Reading	4, 8	NZ (✓)	✓	Grp	✓	✓	No cost	×
Observation Survey of Early Literacy Achievement	Letter identification, word test, concepts about print, writing vocabulary, sounds in words, text level reading	0-2	NZ (✓)	✓	Ind	✓	✓	$30	×
Phonological & Print Awareness Scale (PPA)	Early phonological and print awareness	3-8	USA (×)	✓	Ind	NA	NA	NA	✓

P.T.O…

Key: **NA** = Not available (or not applicable – e.g. for the NZ Curriculum exemplars)
Ind = Individual administration **Grp** = Group administration
Aus = Australia **USA** = United States of America

[3] While some assessment tools are not published completely in te reo Maori, some have additional tasks available in te reo, on request.
[4] With some assessment tools, there is no cost involved as the material is freely available online. For some tools which are of no cost to schools, registration may be necessary (e.g. with NZCER)
[5] While "Next steps" strategies may not be explicitly provided for all items, some tools include them implicitly, or for some items only.

Tools Available for the Assessment of English: Reading (continued)

PAT (Progressive Achievement Test): Reading Comprehension	Reading comprehension	4-10	NZ (×)	✓	Ind/ Grp	✓	✓	$50 (Starter Kit)	✓
PAT (Progressive Achievement Test): Reading Vocabulary	Reading vocabulary	4-10	NZ (×)	✓	Ind/ Grp	✓	✓	$50 (Starter Kit)	✓
PAT (Progressive Achievement Test): Gramma & Punctuation	Ability to recognise and use grammar and punctuation in context	4-10	NZ (×)	✓	Ind/ Grp	✓	✓	$47.50 (Starter Kit)	✓
PM Benchmarks	Miscue analysis and comprehension; retelling	1-8	Aus (×)	×	Ind	✓	×	$485	✓
PROBE 2 – Prose Reading Observation, Behaviour & Evaluation	Reading accuracy, behaviour and comprehension	3-10	NZ (✓)	×	Ind	✓	NA	$280 (Kit)	✓
Progress and Consistency Tool (PaCT)	Teacher tool to assist with 'best fit' OTJ judgements	0-8	NZ (×)	×	Ind/ Grp	✓	✓	No cost	✓
Schonell Reading	Basic decoding and comprehension skills	0-5	Aus (×)	✓	Ind/ Grp	NA	NA	NA	✓
STAR (Supplementary Test of Achievement)	Aspects of reading – a range of reading skills	3-9	NZ (×)	✓	Ind/ Grp	✓	✓	$60 (Kit)	✓
Tests of Reading Comprehension – 3rd Edition (TORCH:3)	Reading comprehension	3-10	Aus (×)	✓	Ind/ Grp	NA	NA	$240 (Set)	×
York Assessment of Reading for Comprehension (YARC)	Reading and comprehension ability	5-18	UK (×)	✓	Ind/ Grp	NA	NA	$680 (Set)	×

Key: **NA** = Not available (or not applicable – e.g. for the NZ Curriculum exemplars)
Ind = Individual administration **Grp** = Group administration
Aus = Australia **UK** = United Kingdom

2. Tools Available for the Assessment of English: Writing

Name of Assessment Tool	Assesses:	Year Level:	Country of Origin (in te reo Maori?[1])	Standardised?	Individual or Group Administration?	Validity	Reliability	Approximate Cost?[2]	"What Next" Strategies Incl?[3]
Assessment Resource Bank (ARB) – Writing	Creation of meaning through text	3-10	NZ (×)	×	Ind/ Grp	✓	✓	No cost	✓
e-asTTle Writing	Features of writing	1-10	NZ (✓)	Y	Ind/ Grp	✓	✓	No cost	✓
Language Progression Frameworks – Writing	Exemplars of writing steps	0-10	NZ (×)	×	Ind	✓	NA	No cost	✓
Literacy Learning Progressions – Writing	Writing knowledge & skills needed at each level	0-10	NZ (×)	×	Ind/ Grp	NA	NA	No cost	×
National Standards – Writing	Standards outlining knowledge & skills	0-8	NZ (✓)	×	Ind/ Grp	NA	NA	No cost	✓
Tests of Early Written Language (TEWL-3)	Basic and contextual writing ability	4-11	USA (×)	✓	Ind	✓	✓	$725 (Kit)	×
Tests of Written Language (TOWL-4)	Comprehensive test of written expression	9-17	USA (×)	✓	Ind/ Grp	✓	✓	$700 (Kit)	×

3. Tools Available for the Assessment of English: Spelling

Name of Assessment Tool	Assesses:	Year Level:	Country of Origin (in te reo Maori?[1])	Standardised?	Individual or Group Administration?	Validity	Reliability	Approximate Cost?[2]	"What Next" Strategies Incl?[3]
Graded Word Spelling Test – Third Edition	Spelling ability	2-10	UK (×)	✓	Ind/ Grp	NA	NA	$79.12 (Starter Kit)	×
Peters Diagnostic and Remedial Spelling Manual	Dictated spelling	4-7	UK (×)	×	Ind/ Grp	NA	NA	NA	✓
Schonell Essential Spelling List	Dictated spelling	0-10	Aus (×)	✓	Ind/ Grp	NA	NA	Varies	✓
Single Word Spelling Test (SWST)	Spelling everyday words	2-10	UK (×)	✓	Ind/ Grp	NA	NA	$380 (Set)	✓
Spelling – Approaches to Teaching & Assessment (incl Sth Aus Spelling Test)	Spelling ability	2-10	Aus (×)	✓	Ind/ Grp	NA	NA	$60	×
Supplementary Spelling Assessments (SSpA)	Spelling skills achievement	4-6	NZ (×)	✓	Grp	✓	✓	$52.50 (Starter Kit)	✓
Test of Written Spelling – 5 (TWS-5)	Spelling ability (sound patterns)	2-10	USA (×)	✓	Grp	✓	✓	$290 (Starter Kit)	×

Key: **NA** = Not available (or not applicable – e.g. for the NZ Curriculum exemplars)
Ind = Individual administration **Grp** = Group administration
Aus = Australia **USA** = United States of America

4. Tools Available for the Assessment of English: Speaking

Name of Assessment Tool	Assesses:	Year Level:	Country of Origin (in te reo Maori?[1])	Standardised?	Individual or Group Administration?	Validity	Reliability	Approximate Cost?[2]	"What Next" Strategies Incl?[3]
Assessment Resource Bank (ARB) - Speaking	Creation of meaning through text	3-10	NZ (×)	×	Ind/ Grp	✓	✓	No cost	✓
Junior Oral Language Screening Tool (JOST)	Oral language development	0-2	NZ (×)	×	Ind	NA	NA	No cost	×
NEMP (National Education Monitoring Project) – Speaking	Reading and/or speaking	4, 8	NZ (✓)	✓	Grp	✓	✓	No cost	×
NZ Curriculum Exemplars – Oral Language	Exemplars of group discussion	0-10	NZ (✓)	×	Ind/ Grp	✓	NA	No cost	✓
Record of Oral Language – 2007 Edition	Oral language development	0-3	NZ (×)	×	Ind	✓	✓	$20	✓

5. Tools Available for the Assessment of English: Listening

Name of Assessment Tool	Assesses:	Year Level:	Country of Origin (in te reo Maori?[1])	Standardised?	Individual or Group Administration?	Validity	Reliability	Approximate Cost?[2]	"What Next" Strategies Incl?[3]
Assessment Resource Bank (ARB) – Listening	Creation of meaning through oral text	3-10	NZ (×)	×	Ind/ Grp	✓	✓	No cost	✓
NEMP (National Education Monitoring Project) – Listening	A range of listening tasks	4, 8	NZ (✓)	✓	Grp	✓	✓	No cost	×
PAT (Progressive Achievement Test): Listening Comprehension	Comprehension of orally-presented text	3-10	NZ (×)	✓	Ind/ Grp	✓	✓	$18.50 (Manual)	×

Key: **NA** = Not available (or not applicable – e.g. for the NZ Curriculum exemplars)
Ind = Individual administration **Grp** = Group administration

6. Tools Available for the Assessment of English: Viewing and Presenting

Name of Assessment Tool	Assesses:	Year Level:	Country of Origin (in te reo Maori?[1])	Standardised?	Individual or Group Administration?	Validity	Reliability	Approximate Cost?[2]	"What Next" Strategies Incl?[3]
Assessment Resource Bank (ARB) – Viewing and Presenting	Making & creating meaning through text	3-10	NZ (×)	×	Ind/ Grp	✓	✓	No cost	✓
NEMP (National Education Monitoring Project) – Viewing	Range of viewing assessment tasks	4, 8	NZ (✓)	✓	Grp	✓	✓	No cost	×
NZ Curriculum Exemplars – Visual Language	Exemplars of presenting: static images; moving images	0-10	NZ (✓)	×	Ind/ Grp	✓	NA	No cost	✓

Key: **NA** = Not available (or not applicable – e.g. for the NZ Curriculum exemplars)
Ind = Individual administration **Grp** = Group administration

NOTE: While some items have not been formally standardised, or been formally evaluated for validity or reliability, some items have some evidence of these measures, which others may have had less formal measures taken to trial them.

Appendix C: Survey Monkey Online Survey - Questionnaire

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

What Assistance is Needed? Assessment for Literacy Learning Difficulties in Aotearoa/New Zealand Schools

Thank you for helping with our research study on current assessment practice in New Zealand schools

Kia ora

My name is Angela Neville and I am undertaking a research project about assessment for literacy learning difficulties as part of my Master's degree in Educational Psychology at Massey University. My supervisors are Professor Tom Nicholson and Dr Alison Arrow.

Project Description and Invitation

This research aims to identify classroom-tested strategies that can be used by teachers and other educators to identify any underlying difficulties that students may be experiencing in literacy learning, in order to provide them with appropriate remedial interventions.

I would like to invite you to participate in this research project, which should be of great benefit, not only to educators (who will gain insights on proven methods for enhancing learning opportunities), as well as the students themselves, who should benefit from the strategies adopted and applied by their teachers.

How I am Doing the Study and What This Means for You

First Stage: I am conducting an online survey with teachers, SENCos and RT:LBs across the country. Invitations have been sent to all schools and RT:LB clusters in New Zealand to invite teachers/educators (employed either full-time and part-time) to participate. The online survey should take no longer than 20-25 minutes to complete.

I am offering an incentive of going into a draw to receive a FREE one-two hour professional development workshop for your school/cluster staff or community. Every survey submitted will receive an entry into the draw. This PD workshop will be conducted by myself, at a time and place negotiated with the school or cluster. I am a qualified classroom teacher and SPELD NZ teacher, with extensive experience in learning and behaviour difficulties. I have also provided several professional development workshops to teachers and support staff. My qualifications include a Bachelor of Education (Teaching), Post Graduate Diploma in Education (Educational Psychology) and I am registered as a Level C Assessor with the New Zealand Council for Educational Research. I am conducting this research study as part of my post graduate studies towards a Master of Educational Psychology, and the research project is not connected in any way to my private practice. The PD workshop can be a choice between "Teaching Strategies for Students with Specific Learning Difficulties" or "Managing Challenging Behaviour in the Classroom". I hope to gain over 100 responses from around the country, from a range of different schools, deciles and areas, in order to get a good representative sample of teachers/educators in New Zealand.

Second Stage: Following the online survey, I will approach teachers/educators who have indicated that they are willing to participate in a follow-up interview. This qualitative stage of

my study aims to find out more about how educators have made a difference in students' learning by successfully identifying their learning difficulties and providing appropriate remediation. All teachers who participate in these second stage interviews (of up to one hour's duration) will be provided with a koha, in the way of a gift, to thank them for their participation and time.

If you agree to take part in the second stage of the study, it will involve a semi-structured in-depth interview, asking you to share your strategies and successes, guided by questions. A list outlining these questions is shown at the end of this survey. The interview will take up to an hour, at a time and place that is convenient to you (or possibly by Skype or telephone if more appropriate). It is envisaged that that interviews will take place between April and July 2017. If you give consent, the interview will be electronically recorded and later transcribed by myself. I will then follow up with emails and/or telephone calls to ensure the shared meaning and understanding I have gleaned from your interview is accurate and you are happy with what was recorded. All personal information gathered will be kept confidential between myself and my supervisors, and only non-identifiable information will be presented in the research report.

Possible Implications

We do not expect teachers/educators to be familiar with all of these assessment materials. Some of the materials, however, may be known or used by specialist teachers, which is why they have been included – the lists are extensive to ensure that all potential resources are noted in our data.

As the survey data is being collected separately from the identifying information (which is being collected in order to enter participants into the draw, and also to record those willing to be interviewed), none of the survey responses will be able to be identified with participants, schools or clusters.

Please be assured that all participant and school/cluster information collected will remain confidential between myself and my Massey University supervisors and will not be disclosed on the research report.

Conflict of Interest

I declare that I have no conflict of interest situation in regards to this research project. I have applied for grants and/or research funding, however any sources of funding will not present any conflict of interest with regard to the research topic.

Data Management

No information will be obtained from any sources other than the participant and no information will be given to any person outside the research team that may describe participants or their school.

- The identity of participating schools will be collected separately from the survey responses. This information will be collected for the purpose of determining eligibility for going into the draw for the professional development workshop incentive.

- Participant information, including their identity will be kept confidential and secure from interception or appropriation by unauthorised persons or for purposes other than the approved research. This will include coding of data and removal and destruction of identificatory material from questionnaires and other documents. Identification codes will be stored separately from the data.

- Principal supervisor, Professor Tom Nicholson, will be responsible for the safekeeping

and disposal of all data collected. A summary of the project findings will be sent to the principals of all schools who participated in the research project.

Participant's Statement of Rights

You are under no obligation to accept this invitation to participate in the research study. If you decide to participate, you have the right to:

- decline to answer any particular question;
- withdraw from the study at any time, provided that written notice is given of your intention to withdraw by the last day of July, 2017;
- ask any questions about the study at any time during participation;
- ask for the recording device to be turned off at any stage of the interview;
- provide information on the understanding that your name and your school's name will not be used in the research report; be given access to a summary of the project findings when it is concluded.

Consent

Completing this survey and submitting it implies that you have read and understood the information on this page and you have given consent to participating in Stage One of this research study.

Please feel free to contact either the researcher and/or supervisor if you have any questions about the research project.

Researcher: Angela Neville

Postgraduate Student, Institute of Education,
Massey University, Albany Phone: 021 024 04164
Email: angela.neville.2@uni.massey.ac.nz

Supervisor: Professor Tom Nicholson

Professor of Literacy Education, Institute of Education,
Massey University, Albany Phone: 09 414 0800 ext.
43519 Email: T.Nicholson@massey.ac.nz

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application 16/47. If you have any concerns about the conduct of this research, please contact Dr Brian Finch, Acting Chair, Massey University Human Ethics Committee: Northern, email: humanethicsnorth@massey.ac.nz.

Please state how often you use the following literacy assessment tools/methods with students (including mainstream, and/or special needs students) in your school or cluster

NOTE: Rarely = less than annually; Sometimes = at least annually; Often = several times a year

* 1. How often do you use the following tools or methods for assessing "English: Reading" at your school or in your cluster?

	Never used	Rarely used	Sometimes used	Often used
Alphabet Test (identification of letter names and sounds)	○	○	○	○
Assessment Resource Bank (ARB) - Reading	○	○	○	○
Bryant Test of Basic Decoding Skills	○	○	○	○
Burt Word Reading Test	○	○	○	○
Cloze Reading Tests 1–3	○	○	○	○
Developmental Reading Assessment (DRA)	○	○	○	○
e-asTTle Reading	○	○	○	○
Literacy Learning Progressions - Reading	○	○	○	○
Lucid Comprehension Booster	○	○	○	○
Martin & Pratt Non-Word Reading Test	○	○	○	○
Neale Analysis of Reading Ability (NARA)	○	○	○	○
NEMP (National Education Monitoring Project) - Reading	○	○	○	○
Observation Survey of Early Literacy Achievement (6 Year Net)	○	○	○	○
PAT (Progressive Achievement Test): Reading Comprehension	○	○	○	○
PAT (Progressive Achievement Test): Reading Vocabulary	○	○	○	○
Phonological and Print Awareness Scale (PPA Scale)	○	○	○	○
PM Benchmarks	○	○	○	○

	Never used	Rarely used	Sometimes used	Often used
PROBE (or PROBE 2) - Prose Reading Observation, Behaviour and Evaluation	◯	◯	◯	◯
Running Records	◯	◯	◯	◯
Schonell Reading	◯	◯	◯	◯
STAR (Supplementary Test of Achievement in Reading)	◯	◯	◯	◯
Tests of Reading Comprehension (TORCH)	◯	◯	◯	◯
Tests of Word Reading Efficiency (TOWRE)	◯	◯	◯	◯
York Assessment of Reading for Comprehension (YARC)	◯	◯	◯	◯

Other (please specify)

Assessment Tools and Methods

Please state how often you use the following literacy assessment tools/methods with students (including mainstream, and/or special needs students) in your school or cluster

NOTE: Rarely = less than annually; Sometimes = at least annually; Often = several times a year

* 2. How often do you use the following tools or methods for assessing "English: Writing" at your school or in your cluster?

	Never used	Rarely used	Sometimes used	Often used
Assessment Resource Bank (ARB) - Writing	○	○	○	○
e-asTTle Writing	○	○	○	○
Literacy Learning Progressions - Writing	○	○	○	○
NEMP (National Education Monitoring Project) - Writing	○	○	○	○
NZ Curriculum Exemplars - Written Language	○	○	○	○
PATOSS (Handwriting and/or Typing)	○	○	○	○
Test of Early Written Language (TEWL)	○	○	○	○
Test of Written Language (TOWL)	○	○	○	○
Writing Vocabulary Test (Clay)	○	○	○	○

Other (please specify)

* 3. How often do you use the following tools or methods for assessing "English: Spelling" at your school or in your cluster?

	Never used	Rarely used	Sometimes used	Often used
Invented Spelling Test (Prochnow, Tunmer & Chapman)	○	○	○	○
Peters Diagnostic and Remedial Spelling Manual	○	○	○	○
Proof-Reading Test of Spelling (PRETOS)	○	○	○	○
Schonell Essential Spelling List	○	○	○	○
Single Word Spelling Test (SWST)	○	○	○	○
Spelling: Approaches to Teaching & Assessment - includes South Australian Spelling Test (SAST)	○	○	○	○
Supplementary Spelling Assessments (SSpA)	○	○	○	○
Test of Written Spelling (TWS)	○	○	○	○

Other (please specify)

Assessment Tools and Methods

Please state how often you use the following literacy assessment tools/methods with students (including mainstream, and/or special needs students) in your school or cluster

NOTE: Rarely = less than annually; Sometimes = at least annually; Often = several times a year

* 4. How often do you use the following tools or methods for assessing "English: Speaking" at your school or in your cluster?

	Never used	Rarely used	Sometimes used	Often used
Assessment Resource Bank (ARB) - Speaking	○	○	○	○
JOST (Junior Oral Language Screening Tool)	○	○	○	○
NEMP (National Education Monitoring Project) - Speaking	○	○	○	○
Peabody Picture Vocabulary Test (British or US version)	○	○	○	○
Record of Oral Language	○	○	○	○

Other (please specify)

* 5. How often do you use the following tools or methods for assessing "English: Listening" at your school or in your cluster?

	Never used	Rarely used	Sometimes used	Often used
Assessment Resource Bank (ARB) – Listening	○	○	○	○
NEMP (National Education Monitoring Project) - Listening	○	○	○	○
PAT (Progressive Achievement Test): Listening Comprehension	○	○	○	○

Other (please specify)

* 6. How often do you use the following tools or methods for assessing "English: Viewing & Presenting" at your school or in your cluster?

	Never used	Rarely used	Sometimes used	Often used
Assessment Resource Bank (ARB) - Viewing and Presenting	○	○	○	○
NEMP (National Education Monitoring Project) - Viewing	○	○	○	○
NZ Curriculum Exemplars - Visual Language	○	○	○	○

Other (please specify)

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

What Assistance is Needed? Assessment for Literacy Learning Difficulties in Aotearoa/New Zealand Schools

Assessment Tools and Methods

Please state how often you use the following literacy (and/or cognitive) assessment tools/methods with students (including mainstream, and/or special needs students) in your school or cluster

NOTE: Rarely = less than annually; Sometimes = at least annually; Often = several times a year

* 7. How often do you use any of these other assessment tools or methods at your school or in your cluster?

	Never used	Rarely used	Sometimes used	Often used
Comprehension Test of Phonological Processing	○	○	○	○
Detailed Assessment of Speed of Handwriting (DASH)	○	○	○	○
Dynamic Assessment	○	○	○	○
Dyslexia Screener	○	○	○	○
Dyslexia Portfolio	○	○	○	○

	Never used	Rarely used	Sometimes used	Often used
Gough-Kastler-Roper (GKR) Phonemic Awareness Test	○	○	○	○
Graded Nonword Reading Test	○	○	○	○
Handwriting Speed Test (HST)	○	○	○	○
Hei Awhiawhi Tamariki ki te Panui Pukapuka (HPP) Oral Language Programme Assessment	○	○	○	○
iCept Visual and Auditory Skill Testing	○	○	○	○
Lucid Assessment System for Schools (LASS)	○	○	○	○
Lucid Cognitive Profiling System (CoPS)	○	○	○	○
Lucid Exact	○	○	○	○
Lucid Rapid	○	○	○	○
Lucid Recall	○	○	○	○
School Entry Assessment (SEA)	○	○	○	○
Sutherland Phonological Awareness Test (SPAT)	○	○	○	○
Teaching Talking	○	○	○	○
Test of Handwriting Skills (THS)	○	○	○	○
Wide Range Achievement Test (WRAT)	○	○	○	○
Wordchains	○	○	○	○
Assessment which is part of an intervention programme (please state which one/s in the "Other" box below)	○	○	○	○

Other (please specify)

Assessing for Literacy Learning Difficulties

The majority of this page will only apply to you if you are in a position where you specifically assess students who appear to have literacy learning difficulties. You may be an RTLB, RTLit, SENCo, Deputy Principal, Team Leader or Learning Support Teacher, etc. You may also be a classroom teacher who is involved in undertaking these types of assessments.
Please continue on to Page 7 (Question 16) after responding to Question 8, if you are NOT involved in specifically assessing for literacy learning difficulties at all.

* 8. Do you use any of the assessment tools or methods previously listed in Questions 1-7 to specifically assess the needs of students who appear to have literacy learning difficulties?

- ◯ Yes
- ◯ No - Please indicate any methods you do use to specifically assess the needs of students who appear to have literacy learning difficulties

9. If you answered "Yes" to the previous question, which of the following tools or methods for assessing "English: Reading" do you use to specifically assess the needs of students who appear to have literacy learning difficulties?

- ☐ Alphabet Test (identification of letter names and sounds)
- ☐ Assessment Resource Bank (ARB) - Reading
- ☐ Bryant Test of Basic Decoding Skills
- ☐ Burt Word Reading Test
- ☐ Cloze Reading Tests 1–3
- ☐ Developmental Reading Assessment (DRA)
- ☐ e-asTTle Reading
- ☐ Literacy Learning Progressions - Reading
- ☐ Lucid Comprehension Booster
- ☐ Martin & Pratt Non-Word Reading Test
- ☐ Neale Analysis of Reading Ability (NARA)
- ☐ NEMP (National Education Monitoring Project) - Reading
- ☐ Observation Survey of Early Literacy Achievement (6 Year Net)
- ☐ PAT (Progressive Achievement Test): Reading Comprehension
- ☐ PAT (Progressive Achievement Test): Reading Vocabulary
- ☐ Phonological and Print Awareness Scale (PPA Scale)
- ☐ PM Benchmarks
- ☐ PROBE (or PROBE 2) - Prose Reading Observation, Behaviour and Evaluation
- ☐ Running Records
- ☐ Schonell Reading
- ☐ STAR (Supplementary Test of Achievement in Reading)
- ☐ Tests of Reading Comprehension (TORCH)
- ☐ Tests of Word Reading Efficiency (TOWRE)
- ☐ York Assessment of Reading for Comprehension (YARC)
- ☐ Other (please specify)

10. If you answered "Yes" to Question 8 which of the following tools or methods for assessing "English: Writing" do you use to specifically assess the needs of students who appear to have literacy learning difficulties?

- [ ] Assessment Resource Bank (ARB) - Writing
- [ ] e-asTTle Writing
- [ ] Literacy Learning Progressions - Writing
- [ ] NEMP (National Education Monitoring Project) - Writing
- [ ] NZ Curriculum Exemplars - Written Language
- [ ] PATOSS (Handwriting and/or Typing)
- [ ] Test of Early Written Language (TEWL)
- [ ] Test of Written Language (TOWL)
- [ ] Writing Vocabulary Test (Clay)
- [ ] Other (please specify)

11. If you answered "Yes" to Question 8, which of the following tools or methods for assessing "English: Spelling" do you use to specifically assess the needs of students who appear to have literacy learning difficulties?

- [ ] Invented Spelling Test (Prochnow, Tunmer & Chapman)
- [ ] Peters Diagnostic and Remedial Spelling Manual
- [ ] Proof-Reading Test of Spelling (PRETOS)
- [ ] Schonell Essential Spelling List
- [ ] Single Word Spelling Test (SWST)
- [ ] Spelling: Approaches to Teaching & Assessment - includes South Australian Spelling Test (SAST)
- [ ] Supplementary Spelling Assessments (SSpA)
- [ ] Test of Written Spelling (TWS)
- [ ] Other (please specify)

12. If you answered "Yes" to Question 8, which of the following tools or methods for assessing "English: Speaking" do you use to specifically assess the needs of students who appear to have literacy learning difficulties?

- [ ] Assessment Resource Bank (ARB) - Speaking
- [ ] JOST (Junior Oral Language Screening Tool)
- [ ] NEMP (National Education Monitoring Project) - Speaking
- [ ] Other (please specify)
- [ ] Peabody Picture Vocabulary Test (British or US version)
- [ ] Record of Oral Language

13. If you answered "Yes" to Question 8, which of the following tools or methods for assessing "English: Listening" do you use to specifically assess the needs of students who appear to have literacy learning difficulties?

- [ ] Assessment Resource Bank (ARB) – Listening
- [ ] NEMP (National Education Monitoring Project) - Listening
- [ ] Other (please specify)
- [ ] PAT (Progressive Achievement Test): Listening Comprehension

14. If you answered "Yes" to Question 8, which of the following tools or methods for assessing "English: Viewing & Presenting" do you use to specifically assess the needs of students who appear to have literacy learning difficulties?

- [ ] Assessment Resource Bank (ARB) - Viewing and Presenting
- [ ] NZ Curriculum Exemplars - Visual Language
- [ ] NEMP (National Education Monitoring Project) - Viewing
- [ ] Other (please specify)

15. If you answered "Yes" to Question 8, which of the other assessment tools or methods do you use to specifically assess the needs of students who appear to have literacy learning difficulties?

- [ ] Comprehension Test of Phonological Processing
- [ ] Detailed Assessment of Speed of Handwriting (DASH)
- [ ] Dynamic Assessment
- [ ] Dyslexia Screener
- [ ] Dyslexia Portfolio
- [ ] Gough-Kastler-Roper (GKR) Phonemic Awareness Test
- [ ] Graded Nonword Reading Test
- [ ] Handwriting Speed Test (HST)
- [ ] Hei Awhiawhi Tamariki ki te Panui Pukapuka (HPP) Oral Language Programme Assessment
- [ ] iCept Visual and Auditory Skill Testing
- [ ] Lucid Assessment System for Schools (LASS)
- [ ] Lucid Cognitive Profiling System (CoPS)
- [ ] Lucid Exact
- [ ] Lucid Rapid
- [ ] Lucid Recall
- [ ] School Entry Assessment (SEA)
- [ ] Sutherland Phonological Awareness Test (SPAT)
- [ ] Teaching Talking
- [ ] Test of Handwriting Skills (THS)
- [ ] Wide Range Achievement Test (WRAT)
- [ ] Wordchains
- [ ] Assessment which is part of an intervention programme (please state which one/s in the "Other" box below)
- [ ] Other (please specify)

* 16. Are you familiar with the Simple View of Reading (SVR) and Writing (proposed by Gough and Tunmer, 1986) for identifying students with literacy learning difficulties?

- ( ) No
- ( ) Yes - please state whether you use this model to identify students with literacy learning difficulties (Yes/No), and if so, please elaborate on why you use this model, who you use it with, and how

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Other Methods of Assessment

* 17. Some schools adopt a wider approach to assessment, with the aim of creating a "Learning Profile" or "Individual Education Plan" for students requiring special assistance. Please indicate below if any of the following student information is collected within your school or cluster, and if it is used to assist in identifying appropriate programmes of instruction for students.

	Not collected	Collected for all students, not used to identify appropriate programmes of instruction	Collected for some students and used to identify appropriate programmes of instruction	Collected for all students and used to identify appropriate programmes of instruction
Student's ethnicity	○	○	○	○
Language spoken at home	○	○	○	○
Reading habits at home	○	○	○	○
Student's personal interests	○	○	○	○
How the student responds in various environments (e.g. classroom, playground, home)	○	○	○	○
Any difficulties with motor skills and/or co-ordination	○	○	○	○
Medical factors and/or history	○	○	○	○
Vision and/or hearing screening results	○	○	○	○
Family history of learning difficulties or disorders (e.g. dyslexia, ADHD, etc)	○	○	○	○

If this information is collected, please comment briefly on why and how it is used.
Please also add details of any other pertinent information collected and used.

* 18. Does your school or cluster use a Test/Teach/Retest approach to assessment and instruction for students with literacy learning difficulties? (for example: Spelling test on Monday; Teach the words Tuesday-Thursday; Retest the same list on Friday)

- ◯ No
- ◯ Yes (please provide a brief explanation)

* 19. Does your school or cluster use a Response to Intervention (RTI) approach to assessment and instruction for students with literacy learning difficulties? (i.e. Tier 1 – quality classroom teaching for all learners; Tier 2 – small group teaching to those struggling; Tier 3 – one-to-one assistance for those who do not respond to Tier 2 teaching)

- ◯ No
- ◯ Yes (please provide a brief explanation)

* 20. Have you ever referred a student for assessment outside of your school (or cluster) to determine their specific literacy learning needs, or eligibility for Special Assessment Conditions? (e.g. Educational Psychologist, SPELD NZ Assessor, Level C Assessor, RTLB or Ministry of Education Group Special Education)

- ◯ No
- ◯ Yes (please state who the referral/s were made to, and why)

21. If you answered "Yes" to the previous question, please state (using Yes/No) who was responsible for the financial cost of the assessments (if more than one referral, please state "Yes" and the approximate percentage of assessments that each group would have been responsible for financing over the last 12 months - for example: "Yes - 20%")

Ministry of Education (RTLB or Group Special Education)	
School	
Parents/Caregivers	
Community Trust/Charity	
Other	

22. If you have ever referred a student for assessment outside of your school (or cluster), what was the general outcome of the referral/s? (i.e. what type of assessment was used with the student/s and did it result in suitable interventions or accommodations being accessed or provided?)

Type of assessment:

Result:

23. Have you ever arranged for special assessment conditions (for example: providing extra time, use of a computer, or a reader/writer) for a student with literacy learning difficulties, in order to accommodate their difficulties, and determine their ability in a particular area?

- ◯ No
- ◯ Yes

24. If you answered "Yes" in the previous question, please specify approximately how often per year this would happen for any one student, and whether this would happen for standardised or non-standardised assessments.

	Standardised assessments	Non-standardised assessments
Once	☐	☐
Twice	☐	☐
More than twice	☐	☐

Please specify the range of accommodations provided for special assessment conditions in your school or cluster.

Confidence Using Assessment Tools and Methods

Please tell me about your level of confidence when it comes to analysing and using data from literacy (and cognitive) assessment tools/methods, in order to plan (or recommend) appropriate programmes of instruction

* 25. How confident are you in interpreting and using data from the following specialist assessments in order to plan or recommend appropriate programmes of instruction at your school or in your cluster?

	Never seen	Not confident (need assistance)	Fairly confident	Very confident
Wechsler Intelligence Scale for Children - or Adults (WISC or WAIS)	○	○	○	○
Wechsler Individual Achievement Test (WIAT)	○	○	○	○
Woodcock-Johnson Tests of Cognitive Abilities (WJ COG)	○	○	○	○
Woodcock-Johnson Tests of Achievement (WJ ACH)	○	○	○	○
Woodcock-Johnson Tests of Oral Language (WJ OL)	○	○	○	○

Are there any other specialist assessments you'd like to comment on? (please specify)

* 26. Does your school or cluster use the Progress and Consistency Tool (PaCT) to co-ordinate your assessment data and support teacher judgments of student achievement and progress?

- ☐ No
- ☐ Yes
- ☐ Not sure

Please comment how effective you have found PaCT (if used)

* 27. How much responsibility do you have for choosing the tools or methods for assessing literacy learning in your school or cluster?

No responsibility (others make the decisions)	Some input into choosing which tools/methods are used	Ultimately responsible for deciding which tools/methods are used

28. Please rank (in order of significance) any barriers to accessing or analysing quality literacy assessment data that you have experienced in the past year.
For example, if you have experienced the majority of difficulties due to School policy, rank it "1" and then the next highest "2", etc. If you haven't experienced any barriers due to these factors, please leave them blank.

- Time constraints
- Lack of expertise
- Lack of experience
- Lack of confidence
- School policy
- Lack of professional support
- Student attendance
- Assessment tool/method not providing sufficient data

29. Please provide brief details of your main barriers to accessing or analysing quality literacy assessment data that you have experienced in the past year (for example, have you experienced any difficulties in determining what the assessment information gathered actually means, in regards to planning/reporting?)

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Interventions for Students with Literacy Learning Difficulties

Please could you outline any interventions that your school or cluster has used (or recommended) in the last 12 months for students with literacy learning difficulties, to assist them with making progress in literacy?

* 30. Which of the following interventions or teaching methods has your school or cluster used (or recommended) in the last 12 months to assist students with literacy learning difficulties?

- [ ] Alpha to Omega Programme
- [ ] Cellfield Neuroscientific Reading Programme
- [ ] Dyslexia Guidance
- [ ] Fast ForWord®
- [ ] Gillon Phonological Awareness Training Programme
- [ ] Hei Awhiawhi Tamariki ki te Panui Pukapuka (HPP) Oral Language Programme
- [ ] Jolly Phonics
- [ ] Letterland
- [ ] Lexia Reading Core5
- [ ] Lexia Strategies
- [ ] Lindamood-Bell Learning Processes: Seeing Stars®; Visualizing & Verbalizing®
- [ ] Magic Caterpillar's Building Blocks to Literacy
- [ ] Nessie Learning
- [ ] Orton-Gillingham Approach (Multisensory Structured Language)
- [ ] Pause, Prompt, Praise (PPP)
- [ ] Quick60
- [ ] Rainbow Reading
- [ ] Reading Eggs
- [ ] Reading Plus®
- [ ] Reading Recovery
- [ ] Rev Up Reading
- [ ] Steps to Literacy/Steps (The Learning Staircase)
- [ ] Toe by Toe®
- [ ] Tom Nicholson Phonics Programme
- [ ] Visual and Auditory Memory Programme (VAMP)
- [ ] Wordshark
- [ ] Yolanda Soryl Literacy Programmes
- [ ] Other (please specify)

* 31. For the each of the interventions or methods you checked on the previous page (Question 30), please indicate the year levels of the students you are using them with.

Alpha to Omega Programme

Cellfield Neuroscientific Reading Programme

Dyslexia Guidance

Fast ForWord®

Gillon Phonological Awareness Training Programme

Hei Awhiawhi Tamariki ki te Panui Pukapuka (HPP) Oral Language Programme

Jolly Phonics

Letterland

Lexia Reading Core5

Lexia Strategies

Lindamood-Bell Learning Processes:
Seeing Stars®; Visualizing & Verbalizing®

Magic Caterpillar's Building Blocks to Literacy

Nessie Learning

Orton-Gillingham Approach
(Multisensory Structured Language)

Pause, Prompt, Praise (PPP)

Quick60

Rainbow Reading

Reading Eggs

Reading Plus®

Reading Recovery

Rev Up Reading

Steps to Literacy/Steps
(The Learning Staircase)

Toe by Toe®

Tom Nicholson Phonics Programme

Visual and Auditory Memory Programme (VAMP)

Wordshark

Yolanda Soryl Literacy Programmes

[Insert text from Other]

32. Please rate how effective the above programmes have been for your students, in terms of meeting goals.

	Not very effective	Somewhat effective / Effective for some	Rather effective / Effective for most	Very effective
Alpha to Omega Programme	○	○	○	○
Cellfield Neuroscientific Reading Programme	○	○	○	○
Dyslexia Guidance	○	○	○	○
Fast ForWord®	○	○	○	○
Gillon Phonological Awareness Training Programme	○	○	○	○
Hei Awhiawhi Tamariki ki te Panui Pukapuka (HPP) Oral Language Programme	○	○	○	○
Jolly Phonics	○	○	○	○
Letterland	○	○	○	○
Lexia Reading Core5	○	○	○	○
Lexia Strategies	○	○	○	○
Lindamood-Bell Learning Processes: Seeing Stars®; Visualizing & Verbalizing®	○	○	○	○
Magic Caterpillar's Building Blocks to Literacy	○	○	○	○
Nessie Learning	○	○	○	○
Orton-Gillingham Approach (Multisensory Structured Language)	○	○	○	○
Pause, Prompt, Praise (PPP)	○	○	○	○
Quick60	○	○	○	○
Rainbow Reading	○	○	○	○
Reading Eggs	○	○	○	○
Reading Plus®	○	○	○	○
Reading Recovery	○	○	○	○
Rev Up Reading	○	○	○	○
Steps to Literacy/Steps (The Learning Staircase)	○	○	○	○
Toe by Toe®	○	○	○	○

Tom Nicholson Phonics Programme	◯	◯	◯	◯
Visual and Auditory Memory Programme (VAMP)	◯	◯	◯	◯
Wordshark	◯	◯	◯	◯
Yolanda Soryl Literacy Programmes	◯	◯	◯	◯
[Insert text from Other]	◯	◯	◯	◯

Please add any comments to clarify your choice of any of the above ratings, if necessary

Specific Learning Difficulties

33. Please rate your level of confidence in providing effective, inclusive programmes of instruction which meet the needs of students with the following learning difficulties:

	Not confident	Mildly confident (need support)	Fairly confident	Very confident
Dyslexia (good vocabulary, poor decoding / encoding)	◯	◯	◯	◯
Dysgraphia (poor handwriting)	◯	◯	◯	◯
Dyspraxia (poor co-ordination / planning)	◯	◯	◯	◯
Phonemic Awareness Difficulties (hearing individual units of sound in words - phonemes)	◯	◯	◯	◯
Phonological Awareness Difficulties (identifying a variety of sounds in words - syllables, onset, rime, etc.)	◯	◯	◯	◯
Word Recognition Difficulties (identifying words in and out of context)	◯	◯	◯	◯
Reading Fluency Difficulties (speed, accuracy and expression of reading)	◯	◯	◯	◯
Reading Comprehension Difficulties (understanding the content of reading)	◯	◯	◯	◯

	Not confident	Mildly confident (need support)	Fairly confident	Very confident
Working Memory Difficulties (remembering information while working with it)	○	○	○	○
Visual Processing Difficulties (mentally processing visual information)	○	○	○	○
Auditory Processing Disorder - APD (mentally processing auditory information)	○	○	○	○
Attention Deficits - ADD or ADHD (ability to maintain attention)	○	○	○	○
Spatial Orientation Difficulties (awareness of body position in space)	○	○	○	○
Sensory Processing Difficulties (mentally processing taste / temperature / touch, etc.)	○	○	○	○
Autistic Spectrum Disorder - ASD (range of social / communicative / behavioural difficulties)	○	○	○	○

Please comment if you wish to add anything to, or clarify the above responses

34. Would you like to make any further comments regarding assessment for literacy learning difficulties in New Zealand schools, or providing interventions for students who are failing the system?

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Demographic Information

Nearly there - this is the last page of questions!
Please can you tell us a little about yourself and your school or cluster?

* 35. In which region of New Zealand are you currently working in the education sector?

- ◯ Northland region
- ◯ Auckland region
- ◯ Waikato region
- ◯ Taranaki region
- ◯ Bay of Plenty region
- ◯ Gisborne region
- ◯ Hawkes Bay region
- ◯ Manawatu/Wanganui region
- ◯ Wellington region
- ◯ Marlborough region
- ◯ Tasman region
- ◯ West Coast region
- ◯ Canterbury region
- ◯ Otago region
- ◯ Southland region

* 36. What is your role within your school or cluster? (check any that apply)

- ☐ Teacher/Kaiako
- ☐ Principal/Tumuaki
- ☐ Associate Principal
- ☐ Deputy Principal
- ☐ SENCo
- ☐ Other (please specify)
- ☐ Team Leader
- ☐ Learning Support
- ☐ Resource Teacher: Learning and Behaviour
- ☐ Resource Teacher: Literacy

* 37. Are you responsible for teaching (and/or assessing) any specialist curriculum areas? (e.g. English, Science, Mathematics, etc).

- ◯ No
- ◯ Yes (please specify which curriculum area/s)

38. What age range are you in?

- ◯ Under 25 years of age
- ◯ 25-40 years of age
- ◯ Over 40 years of age

* 39. How many years of full-time (or equivalent) teaching experience do you have?

- ◯ Less than 5 years
- ◯ 5 - 10 years
- ◯ More than 10 years

40. Please state your gender

- ◯ Female
- ◯ Male
- ◯ Other

* 41. What decile rating is your school? (please give an approximate decile rating if unsure)

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4
- ◯ 5
- ◯ 6
- ◯ 7
- ◯ 8
- ◯ 9
- ◯ 10
- ◯ Other (please specify the approximate range of deciles for schools in your cluster)

* 42. What is the approximate percentage of Māori students at your school (or in your cluster)?

0 percent 50 percent 100 percent

* 43. What is the approximate percentage of Pasifika students at your school (or in your cluster)?

0 percent 50 percent 100 percent

* 44. What type and/or level of school are you currently working in?

- ☐ Full Primary (Year 0-8)
- ☐ Composite School (Primary and Secondary levels)
- ☐ Contributing Primary (Years 0-6)
- ☐ Intermediate (Years 7-8)
- ☐ Middle School (Years 7-10)
- ☐ Secondary School (Years 7-13)
- ☐ Secondary School (Years 9-13
- ☐ Senior High School (Years 11-13)
- ☐ RTLB cluster (Years 0-10)
- ☐ Other (please specify)

* 45. Please let us know a bit more about your school /cluster (choose as many options that apply)

- [ ] State/Public school
- [ ] Charter School
- [ ] RTLB cluster
- [ ] Integrated school
- [ ] Kura kaupapa Māori/Wharekura
- [ ] Special school
- [ ] Independent/Private school
- [ ] Correspondence school
- [ ] Home school
- [ ] Other (please specify)

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Thank you for your time!

Your contribution to this research study is greatly appreciated, and will hopefully lead towards benefiting other teachers and students in the future. To show our appreciation, once this survey has been completed and submitted, your school/cluster will be automatically entered into a draw to win a FREE 1-2 hour professional development workshop, on "Strategies to Assist Students with Specific Learning Difficulties" or "Understanding and Managing Challenging Behaviour in the Classroom".

STAGE TWO

The Second Stage of this research project involves in-depth interviews, of up to one hour's duration. I am seeking around five to six teachers or educators from around New Zealand who are effectively using assessment tools and/or methods to identify the specific needs of their students. I am hoping that these teachers will share their classroom-tested strategies for assessment and remediation so that other teachers can benefit from this practice. The interview will be on a one-to-one basis with myself, and will be held at a time and place convenient to you, sometime between April and July 2017. A copy of the interview questions is at the bottom of this page, for your information, and to assist with your decision whether or not you would like to participate.

Are you one of these 'gems' of a teacher who is willing to share their expertise with others? Your name and school will remain confidential and, as an acknowledgement of your participation and time, you will receive a koha in the form of a gift.

Is this something that may interest you? If so, please either provide your contact details below, or copy and paste the following message and email it to the researcher at the email address shown. We aim to respond within two weeks, to discuss an appropriate time for an interview, or to answer any questions you may have before proceeding.

Send email to: angela.neville.2@uni.massey.ac.nz
Subject: Massey University Research: What Assistance Is Needed?
Message: Yes, I would like to assist with your research project and take part in a one-hour interview to discuss the assessment and remediation strategies that I have used successfully with students with literacy learning difficulties. Please send me more information.

46. Please provide your contact details below if you would like to discuss participating in Stage Two of this research study (interview)

Name	
City/Town	
Email Address	

This identifying information will not be stored with your responses to the survey, so your previous responses will remain anonymous.

Ngā mihi nui!

Angela Neville

Stage Two - Interview questions (a preview)

It is envisaged that this interview will take no longer than one hour of your time. With your consent, an audio device will be used to record the interview. This recording will be transcribed by myself and then be deleted, so no one else will have access to the recording. Once the interview has been transcribed, it will be returned to you for verification that everything is correct.

Part A: Assessment tools and/or methods for literacy learning

1. Please tell me about the tools or methods for assessing students' literacy achievement and/or potential that you have found to be useful in your teaching practice – please state what level/s of students they were used for.
2. Which tools/methods would you recommend to teachers for identifying the needs of students having difficulty with literacy learning?
3. How have these assessment tools/methods been helpful?
4. What specific literacy learning needs did these assessment tools/methods identify?
5. Where did you access these assessment tools/methods, and approximately how much did they cost?
6. Did you require any specific training in order to use these assessment tools/methods?

Part B: Interventions or remediations for literacy learning

1. Once the assessment tools or methods used had identified specific literacy learning needs, what interventions did you use to assist students with making progress in literacy?
2. How have these interventions been helpful?
3. Where did you access these interventions, and approximately how much did they cost?
4. Did you require any specific training in order to use these interventions?
5. Is there anything else you would like to comment on regarding assessment or interventions for literacy learning difficulties?

NOTE: *As I am using a sequential explanatory approach to my research study, it is possible that these Second Stage interview questions may be altered slightly, depending on the outcome of the First Stage (online survey).*

Appendix D: Interview Participant Information Sheet

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North Shore Mail Centre
AUCKLAND

What Assistance is Needed?
Assessment for Literacy Learning Difficulties
in Aotearoa (New Zealand) Schools

STAGE TWO: INTERVIEW – INFORMATION SHEET

Kia ora

My name is Angela Neville and I am undertaking a research project about assessment for literacy learning difficulties as part of my Master's degree in Educational Psychology at Massey University. My supervisors are Professor Tom Nicholson and Dr Alison Arrow.

This information sheet has been sent to you following your participation in Stage One of this research project. You were kind enough to spare the time to complete the online survey which was distributed to all school and cluster groups in New Zealand, allowing the researcher to gain a good representative sample of educators from around the country. As a result of your participation, your school/cluster group has been included into a draw to receive a free professional development workshop.

At the end of the survey, you expressed an interest in participating in Stage Two of the research project. This qualitative stage of the project aims to find out more about how educators have made a difference in student's learning by successfully identifying their learning difficulties and providing appropriate remediation.

If you participate in one of these second stage interviews (of up to one hour's duration), you will be provided with a small koha, in the way of a gift, to thank you for your participation and time.

Project Description and Invitation

This research aims to identify classroom-tested strategies that can be used by teachers and other educators to identify any underlying difficulties that students may be experiencing in literacy learning, in order to provide them with appropriate remedial interventions.

I am confident that this research should be of great benefit, not only to educators (who will gain insights on proven methods for enhancing learning opportunities), but also to the students themselves, who should benefit from the strategies adopted and applied by their teachers.

Stage Two - Interview

If you agree to take part in the second stage of this research project, it will involve a semi-structured in-depth interview, which will invite you to share your strategies and successes, guided by questions. The interview will take up to an hour, at a time and place that is convenient to you. It is envisaged that interviews will take place between April and July 2017. If you give consent, the interview will be electronically recorded and later transcribed by myself. I will then follow up with emails and/or telephone calls to ensure the shared meaning and understanding I have gleaned from your interview is accurate and you are happy with what was recorded. All personal information gathered will be kept confidential between myself and my supervisors, and only non-identifiable information will be presented in the research report.

Possible Implications

Please be assured that all participant and school/cluster information collected will remain confidential between myself and my Massey University supervisors and will not be disclosed on the research report. If interview participants experience distress or other psychological impairments during the interview process, they will be permitted to withdraw, an appropriate support will be offered.

Conflict of Interest

I declare that I have no conflict of interest situation in regards to this research project. I have applied for grants and/or research funding, however any sources of funding will not present any conflict of interest with regard to the research topic.

Data Management

- No information will be obtained from any sources other than the participant and no information will be given to any person outside the research team that may describe participants or their school.
- The identity of participating schools will be collected separately from the survey responses. This information will be collected for the purpose of determining eligibility for going into the draw for the professional development workshop incentive.
- Participant information, including their identity will be kept confidential and secure from interception or appropriation by unauthorised persons or for purposes other than the approved research. This will include coding of data and removal and destruction of identificatory material from questionnaires and other documents. Identification codes will be stored separately from the data.
- Principal supervisor, Professor Tom Nicholson, will be responsible for the safekeeping and disposal of all data collected.
- A summary of the project findings will be sent to the principals of all schools who participated in the research project.

Participant's Statement of Rights

You are under no obligation to accept this invitation to participate in the research study. If you decide to participate, you have the right to:

- decline to answer any particular question;

- withdraw from the study at any time, provided that written notice is given of your intention to withdraw by the last day of July (31 July 2017).
- ask any questions about the study at any time during participation;
- ask for the recording device to be turned off at any stage of the interview;
- provide information on the understanding that your name and your school's name will not be used in the research report;
- be given access to a summary of the project findings when it is concluded.

Consent

Please take time to read all of the information provided on this information sheet, and clarify anything you would like to follow up on, to ensure you are comfortable with the proposed interview process. Once you have agreed to participate in an interview, please complete the attached consent form, which can then be scanned or photographed and returned electronically, or sent by mail.

Contacts

Please feel free to contact either the researcher and/or supervisor if you have any questions about the research project.

Researcher: Angela Neville

Postgraduate Student, Institute of Education, Massey University, Albany

Phone: 021 024 04164 Email: angela.neville.2@uni.massey.ac.nz

Supervisor: Professor Tom Nicholson
Professor of Literacy Education, Institute of Education, Massey University, Albany

Phone: 09 414 0800 ext. 43519 Email: T.Nicholson@massey.ac.nz

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application 16/47. If you have any concerns about the conduct of this research, please contact Dr Brian Finch, Acting Chair, Massey University Human Ethics Committee: Northern. Email: humanethicsnorth@massey.ac.nz

Kind regards

Angela Neville

Post graduate student

Institute of Education

Massey University

Appendix E: Interview Participant Consent Form

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AUCKLAND

What Assistance is Needed?
Assessment for Literacy Learning Difficulties in Aotearoa (New Zealand) Schools

STAGE TWO: INTERVIEW – PARTICIPANT CONSENT FORM (INDIVIDUAL)

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree/do not agree to the interview being sound recorded.

I wish/do not wish to have my recordings returned to me.

I agree to participate in this study under the conditions set out in the Information Sheet.

(Please delete as necessary)

Signature: ..... **Date:** .....

Full Name - printed .....

Appendix F: Authority for the Release of Transcripts Form

Massey University
Institute of Education
Private Bag 102-904
North Shore Mail Centre
AUCKLAND

What Assistance is Needed?
Assessment for Literacy Learning Difficulties
in Aotearoa (New Zealand) Schools

AUTHORITY FOR THE RELEASE OF TRANSCRIPTS

☑ I confirm that I have had the opportunity to read and amend the transcript of the interview conducted with me.

☑ I agree that the edited transcript and extracts from this may be used (anonymously) in reports and publications arising from the research.

Signature: ..... **Date:** .....

Full Name – printed: .....

Appendix G: Information Sheet for Principals and Cluster Managers

Massey University
Institute of Education
Private Bag 102-904
North Shore Mail Centre
AUCKLAND

What Assistance is Needed? Assessment for Literacy Learning Difficulties in Aotearoa/New Zealand Schools

Kia ora

My name is Angela Neville and I am undertaking a research project about assessment for literacy learning difficulties as part of my Master's degree in Educational Psychology at Massey University. My supervisors are Professor Tom Nicholson and Dr Alison Arrow.

Project Description and Invitation

This research aims to identify classroom-tested strategies that can be used by teachers and other educators to identify any underlying difficulties that students may be experiencing in literacy learning, in order to provide them with appropriate remedial interventions.

I would like to kindly request your assistance with approaching all teaching staff, SENCOs and/or RT:LBs within your school/cluster who are involved in literacy assessment. Please could you extend an invitation to participate in this research project. Please ask them if they could spare 20-25 minutes to complete this survey. I am confident that both you and your staff will recognise that this research study could be of great benefit, not only to educators (who will gain insights on proven methods for enhancing learning opportunities), but also to the students themselves, who should benefit from the strategies adopted and applied by their teachers. If you agree to kindly extend this invitation to staff, further instructions regarding the procedure to be followed are given at the end of this email message.

How I am Doing the Study and What This Means for You or Your Staff

First Stage: I am conducting an online survey with teachers, SENCOs and RT:LBs across the country. Invitations have been sent to all schools in New Zealand to invite teachers (employed either full-time and part-time) to participate. The online survey should take no longer than 20-25 minutes to complete.

As an incentive to participate in this research project, I am offering a FREE one-two hour professional development workshop for a school, cluster or community. Every survey submitted will receive one entry into the draw for this PD workshop, which will be conducted by myself, at a time and place negotiated with the school or cluster. I am a qualified classroom teacher and SPELD NZ teacher, with extensive experience in learning and behaviour difficulties. I have also provided several professional development workshops to teachers and support staff. My qualifications include a Bachelor of Education (Teaching), Post Graduate Diploma in Education (Educational Psychology) and I am registered as a Level C Assessor with the New Zealand Council for Educational Research. I am conducting this research study as part of my post graduate studies towards a Master of Educational Psychology, and the research project is not connected in any way to my private practice. The PD workshop can be a choice

between “Teaching Strategies for Students with Specific Learning Difficulties” or “Managing Challenging Behaviour in the Classroom”.

Second Stage: Following the online survey, I will be approaching educators who have indicated that they are willing to participate in a follow-up interview. This qualitative stage of my study aims to find out more about how teachers/educators have made a difference in student’s learning by successfully identifying their learning difficulties and providing appropriate remediation. The hour-long interview will be undertaken outside of working hours, unless permission is granted by the principal or cluster manager to conduct the interview during school hours.

The Survey Monkey tool collects information regarding who has responded to this survey, which will allow your school/cluster to be entered into the draw for the PD workshop, as well as being eligible to receive a copy of the final research report. This contact information is stored separately from the actual survey data, to ensure that all responses remain completely anonymous. All school/cluster and personal information gathered will be kept confidential between myself and my supervisors, and only non-identifiable information will be presented in the research report.

Further information regarding this research project can be found within the attached survey.

Please could you distribute the survey by forwarding this email to a member of staff who has agreed to participate. To access the survey, they simply click on the blue “Begin Survey” button at the bottom of this page. By following this link, your school/cluster will be automatically entered into the incentive draw for a free professional development workshop, once the survey has been completed.

If other staff from your school/cluster would also like to participate, please ask them to copy and paste the following secure link to access the survey via a web browser: https://www.surveymonkey.com/r/massey_uni-assessment

Please feel free to contact either the researcher and/or supervisor if you have any questions.

Researcher: Angela Neville, Postgraduate Student, Institute of Education, Massey University, Albany. Phone: 021 024 04164 Email: angela.neville.2@uni.massey.ac.nz

Supervisor: Professor Tom Nicholson, Professor of Literacy Education, Institute of Education, Massey University, Albany. Phone: 09 414 0800 ext. 43519 Email: T.Nicholson@massey.ac.nz

Kind regards

Angela Neville
Post graduate student
Massey University

Please click the blue button below to start the survey.

Thank you for your assistance!

Begin Survey

Appendix H: Selection of intervention programmes reported by interview participants to be successful for raising student abilities in literacy

- *"I have definitely seen success with the Quick60 programme. The clusters that have done it, they've found that the data that they've gathered shows 'Yes', that it definitely assists."*
- *"I really like the Yolanda Sorryl programme … I like it because its short, sharp and simple. It's very easy to do, and it's not a big chunk of your literacy teaching, you shouldn't spend more than ten minutes a day – that's why I recommend it."*
- *"I know our RT:Lit pushes Sharp Reading – it's a really good method of unpacking the words, how to use work attack, how to look at for words and looking at meaning within text. It works really well with children who are Years 4 and up."*
- *"We use SELLIPS (Supporting English Language Learning in Primary School) – it's for ESOL learners, it's the steps they learn for language. We use them for all learners needing literacy support… It fills the gap for teachers who don't know what comes next. With our priority learners, we do an inquiry on each one of them – so that's one of the places we go to – what's not working, what comes next, what have we missed – it's one of the tools we use."*
- *"I think Smart Words is actually making a difference… Confidence is a biggie – improved vocabulary helps their writing and reading, so we can see that gains there. And actually, that working in a small group, that peer support, we see that translate a bit too."*
- *"I used a lot of Joy Allcock's worksheets with that class. I use that for grammar work, but I also make up my own kind-of programme."*
- *"…one of the interventions that I've worked with a few times, which is also a withdrawal programme that can be linked to the classroom, is a programme called The Road to Reading, by Blachman and Tangel … that sometimes can establish some reading skills for children that are really, really low."*
- *"Shared books are an awesome tool that we do use for supporting kids with gaps – using the Big Books … Also use modelling books (scrap books to record the guided reading session) which are shared with the groups – keeping the strategies in there, drawing all over it, the kids writing in the margin to annotate it – modelling bits and pieces, practising with them – a lot of co-constructional stuff. That's always handy for them to go back to when they're working on their next steps – after the lesson, or the next day. They can just check what they're supposed to be doing."*

- *"I've also used a few of Sheena Cameron's worksheets, out of her reading comprehension activities book ... she has some really good worksheets in there. She just goes through teaching the comprehension strategies individually and explicitly"*
- *"We've seen very good results with the Lexia programme."*
- *"With the ESOL students, I use Fast ForWord … which I quite like. I have also used it with some non-ESOL students as well".*
- *"We* [RT:LBs] *might trial some students on it, then the school might see it and say "Hey, that's great!". So just about all our schools are using Steps now."*
- *"The other thing I started last year … for the lower literacy kids, is Reading Plus – an online reading programme, which is more for comprehension. It's more just another reading activity – it's good for reading mileage, helps them with their vocabulary … they look forward to it, because it's on a Chromebook – they viewed it as a reward!"*

Appendix I: Professional development attended or proposed by interviewees

Name of Programme/Provider	Details
ALL (Accelerated Literacy Learning)	Consortium for Professional Learning: http://cpl.org.nz/Our-services/Accelerated-Literacy-Learning-ALL
AVAILLL (Audio Visual Achievement in Literacy, Language and Learning)	Literacy Innovators – Chuck Marriott and Louise Douglas (Christchurch) https://literacyinnovators.co.nz/availll/
Dragon NaturallySpeaking software training	Accelerated Learning Associates, Christchurch: www.alaltd.co.nz/
Dyslexia training (run by SENCO using "About Dyslexia" book)	Ministry of Education http://inclusive.tki.org.nz/assets/Uploads/About+Dyslexia.pdf
Feuerstein's Instrumental Enrichment	Campuslink https://bobbieh07.wixsite.com/feuerstein
Jill Eggleton training ("Lighting the Literacy Fire")	Scholastic Education www.scholastic.co.nz/schools/education/
Joy Allcock ("Switched on to Spelling" & "Spelling Under Scrutiny")	MJA Publishing – Professional Development www.spelling.co.nz/professional-development
The Learning Staircase – Steps to Literacy	Ros Lugg (Christchurch) https://learningstaircase.co.nz/professional-development/
Lexia CORE5 (PD co-ordinated by the RT:LB)	The I.T. Education Company – John Kennedy (Motueka) www.itecnz.co.nz/training.html
MultiLit ("Making Up Lost Time In Literacy")	MultiLit – Professional Development (based in Australia) www.multilit.com/professional-development/
Neil McKay – dyslexia expert	Action Dyslexia (England) – Professional Development workshops: www.actiondyslexia.co.uk/what-I-do

Continued over page…

Name of Programme/Provider	Details
PROBE workshop (co-ordinated by SENCO)	Triune Initiatives – Professional Development https://comprehenz.com/prof-development/
Raising Achievement – Jenny Tebbutt	Whole school professional development, full day and half day workshops and online courses www.raisingachievement.co.nz/
Reading Plus	The I.T. Education Company – John Kennedy – school workshops and online training www.itecnz.co.nz/training.html
Reading Recovery	The National Reading Recovery Centre (The University of Auckland Faculty of Education, Epsom Campus) www.readingrecovery.ac.nz/training/
Sheena Cameron - author and presenter New Zealand Literacy Association conferences."	"The Oral Language Book", Teaching Reading Comprehension Strategies", The Reading Activity Handbook", "The Writing Book" http://sheenacameron.com/workshops/
Smart Words (spelling strategies)	Smart Words courses for teachers http://movingsmart.co.nz/home/schools/workshop-schedule-2/
SOLO Taxonomy	HookED – Pam Hook (Education consultant) http://pamhook.com/solo-taxonomy/
SPELD NZ (not for profit organisation supporting individuals with SLD)	Courses in Specific Learning Disabilities www.speld.org.nz/speld-training.aspx
Sue Larkey – author, specialist in autism	Creating Success Limited http://suelarkey.co.nz/Seminars.php
Texthelp Read&Write	Assistive Technology: Text-to-speech, speech-to-text software https://www.texthelp.com/en-us/support/training/
Yolanda Soryl Literacy: New Zealand Early Literacy Resources	Phonics, Early Words and Phonological Awareness training workshops www.yolandasoryl.com/html/course_overview.htm