

# There must be a better way – The case against the New Zealand Literacy Strategy and some examples of how we can help students who fall by the wayside

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Literate cultural capital is a phrase used to describe the literacy knowledge and skills children have on school entry (Prochnow, Tunmer & Arrow, 2015; Tunmer & Nicholson, 2011). Literacy knowledge and skills include oral language, vocabulary, an awareness of how books operate, letter name knowledge, letter sound knowledge, phonological awareness, and invented spelling (Prochnow, Tunmer & Arrow, 2015). Children who commence school with a good level of literate cultural capital are advantaged and are more likely to develop age-appropriate reading skills as they progress through school compared to children who commence school with little literate cultural capital.

In addition to having literate cultural capital children also need teachers who have an excellent understanding of the reading process, the history of written English, and are able to implement research-based and research-tested reading practices (Duke & Martin, 2011; Henry, 2010; Pressley, 2008; Prochnow, Tunmer, & Chapman, 2013; Tunmer & Chapman, 2015a). According to Henry:

Teachers who comprehend the origins of the English language along with the primary structural patterns within

words can improve their assessment skills, enhance their understanding of reading and spelling curricula, communicate clearly about specific features of language, and effectively teach useful strategies to students. (2010, p. 39)

## **The problem in New Zealand**

Teachers must also have a good understanding of research-based decoding and comprehension strategies, as well as how to teach them. While the New Zealand Ministry of Education multiple-cues constructivist approach to teaching beginning readers has been effective for some children it has not been effective for all (Tunmer & Chapman, 2015a; Tunmer, Nicholson, Greaney, Prochnow, Chapman, & Arrow, 2008). New Zealand has a significant gap between good and poor readers with the tail being one of the largest in the world as illustrated in the Progress in International Reading Literacy Survey reports (PIRLS; Mullis, Martin, Kennedy, Foy, 2007; Mullis, Martin, Foy & Drucker, 2012). For years the international research community has called for “evidence-based differentiated instruction” in order to ensure all children learn to read yet the New Zealand Ministry of Education

has largely ignored this call (Tunmer & Chapman, 2015a).

An extensive week long 2016 report in the New Zealand Herald (6 May) reported that 25% of students were not making age-appropriate progress in reading.

The primary school system is in trouble. It is failing some of the young pupils who can least afford to be left behind, and it is struggling to attract talented young New Zealanders to a career in the country's classrooms. Out of nearly 60,000 youngsters who finished Year 8 in 2014 - 12-year-olds on the cusp of their high school years - a staggering 17,900 could not meet writing requirements, 18,500 were behind in maths and 12,700 struggled with reading. These distressing figures emerged from our important series this week, The Primary Issue. They should concern every parent, and they ought to be sounding alarm bells in Wellington.

## The importance of literate cultural capital

Upon school entry children who lack knowledge about how books work, phonological awareness, letter knowledge, and the alphabetic principle are less likely to develop age-appropriate decoding skills (National Reading Panel, 2000). Children who do begin school with an understanding of how books work, have developed phonological awareness, etc. are more likely to get off to a good start in reading. The National Early Literacy Panel [NELP] meta-analysis (NELP, 2009, p. vii-viii ) also identified a number of key areas children upon entry to school should have in order to develop the necessary

reading skills to become proficient readers. These include knowing the names and sounds of the alphabet, phonological awareness, rapid letter naming, rapid naming of familiar objects, writing letters in isolation or ability to write their name, and able to remember oral language for a short period. Altogether the NELP (2009) report identified, based on their research synthesis, 11 variables that predicted later literacy achievement.

The NELP (2009) findings are in contrast with New Zealand's early childhood curriculum *Te Whāriki* (Ministry of Education, 1996). New Zealand's early childhood curriculum for children, from birth to school entry (typically at age 5), focuses on the enjoyment of language rather than the early understandings children need in order to develop literacy skills. A number of New Zealand academics have called into question the instructional approach in *Te Whāriki* (Ministry of Education, 1996) (see McLachlan & Arrow, 2015). McLachlan and Arrow (2015) hold the view that it is a "curriculum document that emphasizes the learning environment, not what is learned" (p. 95). And while there is scope within *Te Whāriki* to include the teaching of pre-literacy skills in order to do so teachers must have a good understanding of the literacy development. As put by McLachlan and Arrow (2015),

For teachers with strong understandings of literacy, *Te Whāriki* offers maximum flexibility and scope. For teachers with poor understandings, it is a potentially a recipe for few or poor literacy practices, especially in regard to those children who most need early

supports for literacy-related language development. (p. 99)

*Te Whāriki's* (Ministry of Education, 1996) 'vague' literacy suggestions does not bode well for the thousands of children who commence school without the necessary literate cultural capital required for reading success. If all children who attend preschools are to develop literate cultural capital including alphabet knowledge, phonological awareness, invented spelling etc., then early childhood educators must have an understanding of how to develop the knowledge and skills, and then to help their students to develop it.

Home experiences also play a critical role in developing literate cultural capital. Research shows that not all children have the same home experiences and the most vulnerable (i.e., children living in poverty or low-income homes) are exposed to less linguistically rich conversations and enter school hearing 30,000,000 less words than their middle- and upper-class counterparts (Hart & Risley, 1995). If pre-school and kindergarten teachers are going to close the literate cultural gap, changes to their teaching practice need to be made. Wasik and Iannone-Campbell (2012, p. 323) report that kindergarten teachers spend on average "only five minutes per day explicitly developing oral language and vocabulary skills." Most of their interaction is teacher-directed or aimed at behaviour management (Wasik & Iannone-Campbell, 2012).

### **The importance of assessment**

Appropriate assessments, however, are critical to determining, very early on (i.e., upon school entry), if a child has the

necessary prerequisite literacy knowledge. The assessments should be "relevant, reliable, and valid" (Chapman et al., 2015, p. 232). Chapman et al., (2015, p. 230) claim that "knowledge and use of appropriate literacy-related assessments in both pre-school and primary school settings is very limited in New Zealand." Primary school teachers should have a good understanding of which assessments to administer, and when, and how to analyse the assessments to determine the learning needs of the child and therefore what to teach/develop. Assessments include knowledge about letter names and the sounds they represent; syllable, onset-rime and phonemic awareness; the ability to name objects rapidly; and the ability to write their name or letters. Children's concepts about print, vocabulary, oral language and visual processing should also be assessed.

### **Causes of reading success and difficulty**

Decoding is one of the two necessary skills for good reading. Good reading is dependent upon good decoding and good comprehension (Gough & Tunmer, 1986). Gough and Tunmer's (1986) simple view of reading predicts that problems with decoding yet good language comprehension (i.e., dyslexia) is one of three types of reading difficulties. Decoding difficulties rather than language comprehension are preventing this group of readers from becoming good readers. Children with reading difficulties can also have difficulty with language comprehension, or decoding and language comprehension' – the most common type of reading difficulty.

Has New Zealand's literacy strategy, from preschool to primary, contributed to a significant number of children, including children with dyslexia, with poor reading skills? The evidence suggests that New Zealand's literacy strategy has contributed to a significant number of children, including children with dyslexia, having poor reading skills (for an extensive review see Tunmer & Chapman, 2015b).

Patel (2010) calls for up-skilling teachers on research based practices for teaching early reading. Her analysis of *Effective Literacy Practice: Years 1-4*, the Ministry of Education (2003) handbook for teaching reading during the first four years at school, found that a whole language reading programme that used the same teaching approaches supported by the then Department of Education (1985) continued to be promoted. The teaching approaches of shared reading and guided reading in *Effective Literacy Practice: Years 1-4*, are fundamentally context driven and are not addressing the gap between high and low achievers. The handbook does not draw on, nor reflect, decades of scientific reading research. Research, as defined by Duke and Martin (2011, p. 11), "is the systematic collection and analysis of data to address a question." Research is the slow "accumulation of knowledge", knowledge that is gathered from multiple studies, conducted with different age groups, in different contexts, over many years (Duke & Martin, 2011). The National Reading Panel's (2000) meta-analysis of hundreds of studies is an example of scientific knowledge accumulation and analysis.

Thousands of children leave school with poor literacy skills (Tunmer & Chapman, 2015b). These poor literacy

skills can be identified in a child's first year at school but it is evident that either they are not identified or if they are, an adequate intervention is not available. Juel's (1988) landmark study showed that where a child's reading and writing skills are compared to their peers after their first year at school, will be where they are after four years of school without some form of intervention. A child with poor decoding skills after one year at school will continue to have poor decoding skills when they are in year 4, year 5, year 6 and in year 11, if the child does not receive an appropriate intervention (Juel, 1988). What is an appropriate intervention? Can poor reading skills be improved after year 4 (aged 9-10) when decoding strategies for many readers are at the stage where they are ready for the Latin layer of English (Henry, 2010)?

### **Three examples of alternative instruction for students who have fallen by the wayside**

This study investigates three students who were decoding well below their chronological age after four or more years of school yet had high receptive vocabulary scores. The students' parents contacted me as they were at a loss as to how to address their reading needs. The three students met the entry criteria for attending the Hamilton Children's Reading Centre. The aim of the Centre is to provide research based diagnosis and tuition for children reading below their chronological age. The Centre is a collaborative effort between the University of Waikato and the community. The community, through Trusts and Foundations, as well as private donations, funds the Centre.

The three students were reading 2.5-4.0 years below year level when they arrived at the Reading Centre. When I met William he was 10 years 1 month and was reading 2.5 years below his chronological age; Ryan was 9 years 8 months and was reading 3 years 7 months below; Carl (not his real name) was 11 years 2 months and was reading 4 years below his chronological age. The three boys were born into print-rich homes where they were given every opportunity so they could succeed at school. Upon school entry they have been exposed to the Ministry of Education's constructivist approach. They did not develop age-appropriate reading (and spelling) skills. By the end of their first, second, third, and fourth year at school it was clear to their teachers and parents that they were not making the literacy progress they should. What lessons can we learn from William, Ryan and Carl? Did New Zealand's literacy strategy let them down? Can they be taught the necessary decoding strategies to enable them to read age-appropriate text?

## **William, Ryan and Carl, an overview**

### *William*

When William was in year 1 his parents expressed concern that he was not developing the necessary decoding skills to become a proficient reader. William's teacher told his parents not to worry as his reading would soon "take off". A similar response came from his year 2 teacher. His year 3 and 4 teachers were "at a loss" as to why William's reading was below year level. William's teachers

were not able to identify what was 'wrong' with William nor did they know what to do about it. It is possible that William's teachers did not have the necessary knowledge to assess William's reading skills nor did they have the necessary skills to teach William to read. Instead, from time-to-time, William was 'punished' for not completing his work and was made to stay in during play and lunch time to finish his work. When he made spelling errors in his writing he was told to use one of two resources to correct his mistakes (see Figure 1). Understandably by the end of year 4 school was no longer an enjoyable experience for William. He had developed anxiety and stress and his self-esteem was low.

### *Ryan*

Ryan's parents were also at a loss. They believed Ryan was capable of learning to read but like William the gap between his chronological and reading age widened each year. His primary and intermediate schools were aware of this. Ryan was 'pulled out' of his class for extra tutoring but the tutoring was not effective in closing the gap. The gap between Ryan's chronological age and reading age continued to widen. By the time he was in his 7<sup>th</sup> year at school Ryan said to his parents "no more pull outs". Ryan did not want to be pulled out of class for extra tutoring as he felt the extra help was both ineffective and disruptive to his learning in other curriculum areas. He felt the eyes of his classmates on him when he left the room and when he returned. What is more he had missed the teaching the rest of the class had received while he was out of the class so he was further behind in not only

On Friday I comit went to the cool  
 Aids kitchen Pound u Plas mat  
 Kids kitchen. IFOER we did put out Dre Plas mat  
 WE COOD them cannot was inced

Use a spellwrite or your green spelling sheet to  
 correct your mistakes

Figure 1. Teacher's feedback on Williams writing

reading but the curriculum area he missed by being away from class.

### Carl

Carl was in year 7. The gap between his chronological and reading age continued to widen as he progressed through school. By the time he was 11 years old the gap was four years. In other words, in six years of schooling Carl had made two years progress in decoding (and therefore reading). Carl's poor decoding skills meant that his reading comprehension was also well below his chronological age. His parents were at a loss.

## The University of Waikato Reading Centre

William, Ryan and Carl's parents contacted the Reading Centre associated with the Faculty of Education, University of Waikato. The Centre opened in 2003 and provides research based tuition for children, aged 7-15, experiencing reading difficulties. Tuition is provided free enabling all children to attend. William, Ryan and Carl met the entry criteria

of reading at least six months below chronological age. Upon arrival at the Reading Centre each child's phonemic awareness, letter knowledge, letter-sound knowledge, decoding, word recognition, reading comprehension, receptive vocabulary, attitude towards reading, and spelling knowledge are assessed and analysed using both standardised and non-standardised measures.

Phonemic awareness is assessed using the 42 item Gough-Kastler-Roper phonemic awareness test (Roper, 1984). Decoding is assessed using the Bryant Test of Basic Decoding Skills (Bryant, 1975). Word recognition is assessed using the Burt Word Reading Test (Gilmore, Croft & Reid, 1981) and the word reading subtest of Wide Range Achievement Test - 4 (WRAT4; Wilkinson, 2006). Reading comprehension is assessed using Neale Analysis of Reading (Neale, McKay & Barnard (1999). The Peabody Picture Vocabulary Test (PPVT; Dunn & Dunn, 2007) is used to measure receptive vocabulary.

The results of the assessments form the intervention. Tutors, either fully registered or provisionally registered teachers, many who are studying at the postgraduate level with an interest in working with children experiencing reading difficulties, continue to assess each week by observation. Children are tutored once a week, for an hour, during the school term. This equates to approximately 32 hours of tuition a year. In addition, three to four hours (i.e., 3-4 sessions) are spent assessing children's reading.

### **William, Ryan and Carl's reading development**

In this next section William, Ryan and Carl's reading development, during their time at the Reading Centre, will be described.

#### ***William***

When William arrived at the Reading Centre he was 10 years 1 month old and was decoding 2.5 years below his chronological age. Assessment results showed that he knew the letter names but not all letter sounds. Phonemic awareness was low (that of a "better six year old reader"); he scored 20/50 on the non-word assessment where, given his age, William should have scored between 45-50; his ability to decode words in isolation was at the 8 year 1 month level; and his ability to read words in context was 7 years 5 months (stanine 2). William's reading comprehension was also stanine 2. His spelling level was 7 years 3 month. In contrast his score on a standardised receptive vocabulary measure (Peabody Picture Vocabulary

Test – PPVT; Dunn & Dunn, 2007) put his vocabulary level at 15 years 9 months (percentile ranking of 98 and stanine 9).

Following the assessments a reading intervention programme was developed for William. He received an hour of tuition, after school, for 32 weeks for two years. The hour long programme included reading connected text, instruction in phonemic awareness (i.e., blending phonemes and substituting the last phoneme), learning all letter sounds, and specific decoding strategies (e.g., short e and u vowels, all long vowel sounds; end consonants in CVC (consonant-vowel-consonant) words – *p, c, v, t, k* and *z; bh, fh, pl* and *sm* blends). Twice a year formal assessments were administered to determine future teaching. After two years William was able to read words in isolation at his chronological age, and over 14 months above his age when reading words in context (stanine 5). His reading comprehension was at stanine 9 – now matching his receptive vocabulary. Because William's decoding skills had developed to at least age-appropriate his reading comprehension reflected what he was capable of comprehending. William is on track to successfully complete high school. And while math and science are his strengths he is also studying history and English.

#### ***Ryan***

Ryan was 9 years 8 months when he arrived at the Reading Centre. His reading age on a word reading test was 6 years 2 months. Ryan's reading age was the same on a standardised reading measure when decoding words in context (stanine 1). His reading comprehension

on the same measure was also stanine 1. His score on a standardised receptive vocabulary measure (PPVT, Dunn & Dunn, 2007) was 14 years 6 months (percentile ranking of 97 and stanine 9).

Following the assessments a reading intervention was developed for Ryan. Ryan received tuition in decoding strategies. Initially the teaching focus was on short *e* and *u* vowels in CVC words; single consonants *b* and *d* in CVC words; initial consonant *y* and *g* and final consonants *g* and *b*. Ryan's decoding age, after 21 months at the Reading Centre, increased by 2 years 4 months. Ryan's decoding skills continued to develop. His reading comprehension levels improved as his decoding skills developed. Because Ryan could not access the text (i.e., decode) his reading comprehension was poor. Decoding was the cause of his poor comprehension, not language comprehension. Ryan is now on track to complete a Master's degree majoring in chemistry.

### **Carl**

Carl was 11 years 2 months when he arrived at the Reading Centre. He did not know all the sounds of the alphabet (i.e., upper case U, Y, X, Y and lower case u, and y); he had difficulty blending phonemes (2/7) and substituting the last phoneme (2/7). His reading age when decoding words in isolation was 7 years 1 month; and 7 years 3 months when decoding words in context (stanine 1). Carl's reading comprehension was 6 years 2 months (stanine 1). Carl's score on a standardised receptive vocabulary (PPVT, Dunn & Dunn, 2007) measure was 99.9 percentile ranking (stanine 9). His age

equivalent score is 25 years and his grade equivalent is beyond high school. Carl is presently receiving tuition at the Reading Centre where he is developing phonemic awareness and learning the necessary decoding strategies to enable him to access the curriculum. It is hard to imagine what it would be like to have a receptive vocabulary such as Carl's yet only be able to decode material at the 7 year level.

### **Implications for the classroom teacher**

These case studies are positive examples of what can be achieved. This is not to say that all children with severe difficulties will overcome their difficulties to the same extent but in the hundreds of students we

*"... the vast majority have made substantive improvements and very few have not."*

have worked with, the vast majority have made substantive improvements and very few have not. Students with severe reading difficulties do seem to respond to this structured way of teaching. In contrast, they did not respond to the constructivist approach. Our experience is that nearly all children with decoding difficulties yet good language comprehension sometimes referred to as dyslexia can and do learn to read age appropriate text *provided* that they receive systematic decoding instruction as provided in the Reading Centre. Those with severe difficulties may not progress as quickly as those with less difficulties (Nicholson & Dymock, 2011) but they do make steady progress.

While children who attend the Reading Centre read connected text (reading age appropriate stories and articles for 10-15 minutes), the *majority* of the hour long weekly sessions focuses on decoding instruction that is appropriate for their learning needs (including phonological / phonemic awareness development if needed). Clearly all three students in this study had excellent oral language comprehension; however, standardised measures showed that their reading comprehension was low because they were unable to decode the words in the text. Their reading comprehension difficulties were not due to language comprehension deficits – but to poor decoding skills (Gough & Tunmer, 1986).

In order to ensure children like William, Ryan, and Carl learn to read classroom teachers must have a clear understanding of the reading process, assessments that identify specifically what students need to learn (e.g., phoneme segmentation and/or blending; specific short vowels, single consonants), how to administer and analyse the assessments in order to identify learning needs. Without targeted teaching that meets the needs of the student, the gap between reading age and chronological age will continue to widen. While William, Ryan and now Carl's tutors have taught (or in the case of Carl) will teach the three children to decode age appropriate text or beyond there is no reason why the classroom teacher cannot teach the strategies these children need to learn. However, if teacher handbooks such as *Effective Literacy Practice: Years 1-4* prevail, New Zealand may have another generation of teachers without the necessary knowledge

to develop literacy programmes that are effective in teaching all children to read. This could result in thousands of children leaving school with poor reading and writing skills, and a lack of employment opportunities that stem from poor literacy skills. This in turn will have an impact on their health and well-being. There is no doubt that our students require higher literacy skills now, than at any other time in human history. Primary teachers must develop the literacy skills of all children in their classroom. The good news from the present case studies is that struggling readers, especially those with dyslexia, can and do learn to read with the right type of intervention. Teaching all children to read is not beyond the capability of schools. William and Ryan received one hour of research based tuition each week for two years (approximately 62 hours of tuition and 6-8 hours of assessment). Many schools do have pull-out programmes but these statistics call into question the effectiveness of these programmes in reducing the gap between chronological and reading age. Nor is leaving reading development to chance an appropriate strategy (e.g., the belief that poor readers are boys, they will catch up one day). The gap can be closed with the right type of intervention.

Early childhood educators also have a critical role to play in developing pre-literacy skills. Pre-literacy skills include oral language, vocabulary, an awareness of how books operate, letter name knowledge, letter sound knowledge, phonological awareness, and invented spelling (National Reading Panel, 2000; Prochnow, Tunmer & Arrow, 2015). William, Ryan and Carl all had low

phonemic-awareness upon school entry. If this had been identified during their pre-school years their teachers could have addressed this knowledge gap.

Children who enter school with an understanding of how books work, phonological awareness, letter knowledge, and the alphabetic principle are more likely to develop age-appropriate decoding skills (National Reading Panel, 2000). Primary teachers who have an understanding of, and how to teach, research-based reading strategies as well as knowledge about how to identify and then reduce the literate cultural capital gap can help to ensure all readers can achieve success at school. The three case studies illustrate that children can and do learn to read provided they receive an appropriate intervention.

## References

- Bryant, D. (1975). *Bryant Test of Basic Decoding Skills*. New York, NY: Teachers College Press.
- Department of Education. (1985). *Reading in junior classes*. Wellington, New Zealand: Author.
- Duke, N. K., & Martin, N. M. (2011). 10 things every literacy educator should know about research. *The Reading Teacher*, 65, 9-22.
- Dunn, L. M., & Dunn, D. M. (2007). *Picture Peabody Vocabulary Test* (4<sup>th</sup> ed.). Minneapolis, MN: Pearson Assessments.
- Gilmore, A., Croft, C., & Reid, N. (1981). *Burt Word Reading Test*. Wellington, New Zealand: New Zealand Council for Educational Research.
- Gough, P., B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education*, 7, 6-10.
- Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experiences of young American children*. Baltimore, MD: Paul H. Brookes
- Henry, M. K. (2010). *Unlocking literacy: Effective decoding and spelling instruction* (2<sup>nd</sup> ed.). Baltimore, MD: Paul H. Brookes.
- Juel, C. (1988). Learning to read and write: A longitudinal study of 54 children from first through fourth grades. *Journal of Educational Psychology*, 80, 437-447.
- McLachan, C. J., & Arrow, A. A. (2015). Literacy and the early education curriculum in New Zealand. In W. E. Tunmer & J. W. Chapman (Eds.), *Excellence and equity in literacy education: The case of New Zealand* (pp. 95-120). Hampshire, England: Palgrave.
- Ministry of Education. (1996). *Te Whāriki: He Whāriki Mātauranga mo nga Mokopuna o Aotearoa. Early Childhood Curriculum*. Wellington, New Zealand: Learning Media.
- Ministry of Education. (2003). *Effective literacy practice: Years 1-4*. Wellington, New Zealand: Learning Media.
- Mullis, I. V. S., Martin, M. O., Kennedy, A. M., & Foy, P. (2007). *PIRLS 2006 International Report*. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Boston College.
- Mullis, I. V. S., Martin, M. O., Foy, P., & Drucker, K. T. (2012). *PIRLS 2011 International Results in Reading*. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Boston College. Retrieved from <http://timss.bc.edu/pirls2011/international-results-pirls.html>.
- National Reading Panel (2000). *Report of the National Reading Panel: Teaching children to implications for reading instruction: Reports of the subgroups* [NIH Publication No. 00-4769]. Washington, DC: U.S. Government Printing Office.
- National Early Literacy Panel [NELP]. (2009). *Developing early literacy: Report of the National Early Literacy Panel*.

- Washington, DC: National Institute for Literacy.
- Nicholson, T., & Dymock, S. (2011). Matthew effects and reading interventions. *Perspectives on Language and Literacy*, 37, 28-33.
- Neale, M. D., McKay, M. F., & Barnard, J. (1999). *Neale Analysis of Reading Ability* (3<sup>rd</sup> ed.). Melbourne, Australia: Australian Council for Educational Research.
- Patel, S. (2010). Reading at risk: Why effective literacy practice is not effective. *Waikato Journal of Education*, 15(3), 51-68.
- Pressley, M. (2008). What the future of reading research could be. In C. C. Block & S. R. Parris (Eds.), *Comprehension instruction: Research-based best practices* (2nd ed., pp. 391-413). New York, NY: Guilford Press.
- Prochnow, J.E., Tunmer, W.E., & Chapman, J.W. (2013). A longitudinal investigation of the influence of literacy-related skills, reading self-perceptions, and inattentive behaviours on the development of literacy learning difficulties. *International Journal of Disability, Development, and Education*, 60, 185-207.
- Prochnow, J.E., Tunmer, W.E., & Arrow, A. (2015). Literate cultural capital and Matthew effects in reading. In W. E. Tunmer & J. W. Chapman (Eds.), *Excellence and equity in literacy education: The case of New Zealand* (pp. 145-170). Hampshire, England: Palgrave.
- Roper, H. D. (1984). *Spelling, word recognition and phonemic awareness among first grade students*. Unpublished doctoral dissertation. University of Texas, Austin, TX.
- Tunmer, W. E., & Chapman, J. W. (2015a). The development of New Zealand's national literacy strategy. In W. E. Tunmer & J. W. Chapman (Eds.), *Excellence and equity in literacy education: The case of New Zealand* (pp. 1-20). Hampshire, England: Palgrave.
- Tunmer, W. E., & Chapman, J. W. (2015b). *Excellence and equity in literacy education: The case of New Zealand*. Hampshire, England: Palgrave.
- Tunmer, W. E., & Nicholson, T. (2011). The development and teaching of word recognition skill. In M. L. Kamil, P. D. Pearson, E. B. Moje, & P. Afferbach (Eds.), *Handbook of Reading Research* (Vol. 4, pp. 405-431). New York, NY: Routledge.
- Tunmer, W. E., Nicholson, T., Greaney, K. T., Prochnow, J. E., Chapman, J. W., & Arrow, A. W., (2008). PIRLS before swine: A critique of New Zealand's national literacy strategy. *New Zealand Journal of Educational Studies*, 43, 105-119.
- Wasik, B. A., & Iannone-Campbell, C. (2012). Developing vocabulary through purposeful, strategic conversations. *The Reading Teacher*, 66, 231-332.
- Wilkinson, G. S. (2006). *WRATA. Wide Range Achievement Test*. Lutz, FL: Psychological Assessment Resources.

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