



Effective literacy instruction for all students: A time for change

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Australia's 2016 Senate report is highly critical of current Australian government support for children with disabilities, including children with reading and literacy difficulties, and children with language weakness and communication difficulties (Senate Standing Committee on Education and Employment, 2016). It reveals serious inadequacies of current instructional supports, inappropriate lack of transparency by education systems, and a major need to improve instruction and increasing government transparency. This paper explores the Senate report in the context of children's rights and Australian legal requirements for supporting children with literacy learning difficulties. It discusses the complexities facing Australia and other Anglophone nations endeavouring to provide effective instruction for at-risk and struggling readers.

Introduction

Access to education is a basic human right, but for many students with disability in Australia, it is a right which they are prevented from accessing.

(Australian Senate Standing Committee on Education and Employment, 2016, p.2)

This paper firstly sets the context of the need for change so as to enable students with disabilities, including those with literacy and learning difficulties in Australia and other Anglophone nations, to improve their literacy skills. The context establishes the serious inadequacies of current literacy instruction, and hence the need for change if students' rights for effective education are to be met. The next section explores Australian legal requirements for educating students and the rights of these students to educational support in light of the Australian Senate report's findings (2016) that Australia is not meeting those requirements. It does this through summarising and discussing key points of relevant Acts of Parliament and associated documents. The third section explores the challenges present for state and federal governments seeking to optimise literacy instruction for children with literacy difficulties. The final section discusses issues that offer the potential for change to optimise literacy education to benefit all students from Australia and other Anglophone nations.

As part of its focus on literacy development and effective literacy instruction, this paper includes a particular focus on word reading (ability to read words as isolated words or in connected text), as improving word-reading instruction is one of the critical factors (in addition to language skills and reading comprehension instruction) in optimising literacy instruction for children with literacy learning difficulties (Hempenstall, 2016; Knight & Galletly, 2011).

The Context

International reading and literacy studies such as *Progress in International Reading and Literacy Study* (PIRLS) conducted with Year 4 students and *Program for International Student Assessment* (PISA), conducted with 15-year-old readers, show that Australia,

New Zealand, and other nations have high numbers of struggling readers, whereas the highest-achieving nations have relatively few struggling readers (Mullis, Martin, Foy, & Drucker, 2012; Thomson, De Bortoli, & Buckley, 2013).

Australia's major weaknesses relative to high achieving nations include too many weak readers, failure to improve reading outcomes, and significantly poorer achievement by indigenous children and children from low socio-economic status (SES) backgrounds (Mullis et al., 2012; Thomson et al., 2013). In PIRLS 2011 for example, Australia had approximately one quarter of children (24%) achieving at Low and Below Low levels, whereas Hong Kong and Finland had 7% and 8% respectively. In PISA 2012, Australia had 14% of children below Level 2 (baseline literacy), whilst China and Hong Kong had 3% and 6% respectively (see Figure 1). Australia uses Level 3 as its PISA benchmark goal, and Figure 1 shows cohort percentages achieving in the categories below Level 3. Whereas Australia had 36% of students achieving below this Level 3 benchmark, China and Hong Kong had 14% and 20%, respectively.

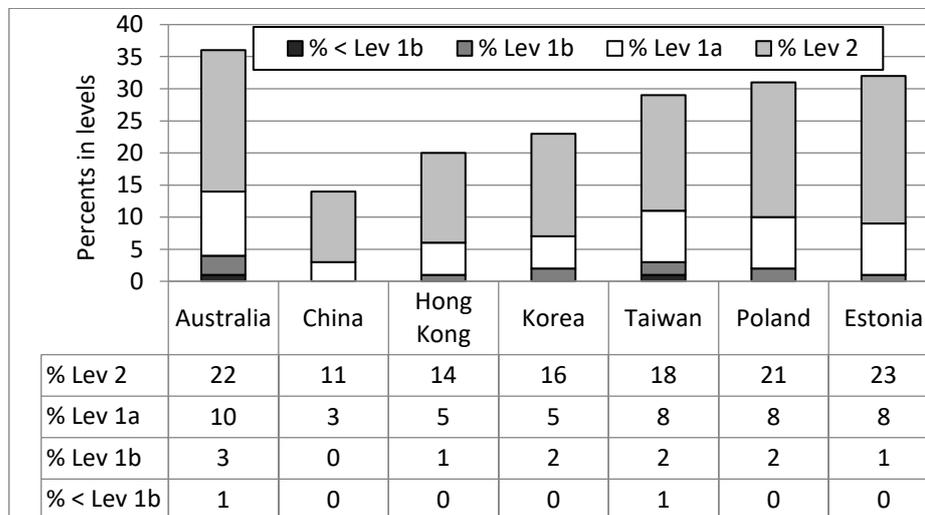


Figure 1. Distribution of low reading achievers in PISA 2012 (Thomson et al., 2013)

The PISA results in Figure 1 also show Australia to be a very low-progress nation, having made no improvement in reading scores since PISA 2000, with our scores in fact dropping 16 points. This result is in contrast to Poland and Estonia, for example, who gained 39 and 15 points respectively. Poland and Estonia are

comparatively poor nations with much lower education funding than Australia, yet they achieved similar results to Australia in PISA 2012.

Table 1 below shows OECD demographic data available for nations discussed in the paper in *Education at a Glance 2015* (China, Taiwan and Hong Kong did not participate in this study so are not included in Table 1). As shown in Table 1, Australian children spend vastly more hours at school than children in many higher-achieving nations (e.g., Australia’s 1010 hours of primary school learning is more than 300 hours per year more than Poland, Estonia, Korea and Finland), and Australian teachers have far more teaching hours than teachers in those nations (e.g., Australia’s 879 teaching hours is over 200 hours more than Poland, Estonia, Korea and Finland). Australian funding of education is respectable, as are Australian teacher salaries. Yet outcomes are not improving.

Table 1: Factors impacting student learning (OECD, 2015)

Nation	Spending Prim Ed (\$US)	Spending All Ed (% GDP)	Salary Tchr (\$US)	Prim Stud Instruction Time	Schl Tchr TeachTime	Stud: Tchr Ratio	Class Size Prim
Australia	\$7705	5.6	56335	1010	879	15.6	17.9
Poland	\$6721	4.8	24921	635	629	11.1	11.2
Estonia	\$5668	4.9	13233	661	619	13	13.9
Korea	\$7395	6.7	51594	648	667	17.3	16.8
Finland	\$8316	5.8	39701	632	677	13.2	12.3
Japan	\$8595	5.0	48546	762	736	17.4	17.4

It can be seen from Table 1 that Australian primary-school teaching conditions are challenging given our high learning and teaching hours. Our student: teacher ratio (15.6) and class sizes (17.9) are considerably higher than those of Poland (11.1, 11.2), Finland (13.2, 12.3) and Estonia (13.0, 13.9). They are, however, somewhat lower than Korea (17.3, 16.8) and Japan (17.4, 17.4).

The PISA and PIRLS studies show that Australia, with its deep and complex orthography, is experiencing major difficulties optimising reading and literacy instruction for all of its students. Failure to address students’ instructional needs has major long-term ramifications (Anderson, Hawes & Snow, 2016).

Australia's 2016 Senate report

Australia's 2016 Senate report is very condemning of current Australian support for children with disabilities, including children with reading and literacy difficulties (Senate Standing Committee on Education and Employment, 2016). The report reveals serious inadequacies of current instructional supports, inappropriate lack of transparency by education systems, and a major need to improve instruction as well as increase government transparency. It discusses reading difficulties, specifically dyslexia, as a "forgotten learning disability" omitted from current government funding models (p.50). The Senate report's findings are in keeping with previous calls from principals for increased funding due to an inability to adequately support struggling learners (Angus, Olney, & Ainley, 2007), and papers discussing at-risk children's educational needs not being met (Knight & Galletly, 2011).

This paper focuses on reading and literacy development using two groups of students. The first group is students with reading difficulties, including at-risk students, and those with mild, moderate and severe reading difficulties. The second group are students who have a language weakness, including vocabulary; language comprehension skills used in speaking, listening and reasoning; and language expression skills used in speaking and writing.

These two groups of students have common struggles. Firstly, it is common for those with language weakness to have reading weakness, and vice versa. Secondly, with reading comprehension building from integration of language skills with word-reading skills (Gough & Tunmer, 1986), and written expression building from integration of language skills with word-writing skills, students in both these groups are likely to have reading comprehension and written expression difficulties. As such, the two groups may well cover the full range of students with weak reading and literacy skills in Australian classrooms whose needs are not being met using current instruction (Senate Committee, 2016). In this paper, therefore, the two groups are referred to collectively as "children with literacy learning difficulties".

Legal requirements for educating children with literacy learning difficulties

Australia is signatory to, and has ratified, two United Nations Conventions which establish baseline parameters for children's rights for education: *the Conventions on the Rights of the Child* and the *Convention on the Rights of Persons with Disabilities* (United

Nations, 1989, 2006). Under Australian law, Australian education is also bound by the *Disability Discrimination Act 1992*, the *Disability Standards for Education 2005*, and the *Australian Education Act 2013* (Australian Government, 2005a, 2005b, 2015).

These acts all require students to be provided with effective education, e.g., (Australian Government, 2005a, Section 22, p.21),

It is unlawful for an educational authority to discriminate against a student on the ground of the student's disability ... (a) by denying the student access, or limiting the student's access, to any benefit provided by the educational authority; or... (c) by subjecting the student to any other detriment.

The 2013 Act commits Australian education systems and schools to providing a high quality and highly equitable education for all students, and providing a needs-based funding model for schools applied consistently across all schools. It also commits federal and state governments to reform focused on meeting students' needs by improving the quality of teaching and learning, transparency and accountability and data collection using detailed, consistent measures.

The definition of disability in the *Disability Discrimination Act 1992*, and *Disability Standards for Education (2005)* is general, not quantified or categorical. Its terms clearly include students with literacy learning difficulties and any trauma associated with those difficulties (Australian Government, 2005a, Section 1.5, p.7; 2005b, Section 4, p.10):

Disability, in relation to a person, means...

(f) a disorder or malfunction that results in the person learning differently from a person without the disorder or malfunction; or

(g) a disorder, illness or disease that affects a person's thought processes, perception of reality, emotions or judgment or that results in disturbed behaviour;

and includes a disability that (h) presently exists; or (i) previously existed but no longer exists; or (j) may exist in the future; or (k) is imputed to a person.

At the current time, some, if not most Australian states currently provide disability funding on the basis of diagnostic labelling. Funding is provided only for children diagnosed with eligible disabilities who meet stringent requirements. Severe reading



and literacy learning difficulties is not a funded category (Senate Committee, 2016; Galletly, Knight, & Dekkers, 2010). However, the acts and documents cited above clearly emphasise requirements for needs-based funding rather than category-based funding, and prioritise meeting the needs of all children with school difficulties (e.g., Australian Government, 2015, Section 8, p.13):

Australian schooling will place the highest priority on a) identifying and addressing the needs of school students, including barriers to learning and wellbeing; and b) providing additional support to school students who require it.

The emphasis of the 2013 Act and the UN Conventions is clearly aimed at equitable education for all students, with support provided as needed. Logically, this suggests students with literacy learning difficulties have rights to have their educational needs met through tailored support provided by schools according to their specific needs. It also logically implies that students' needs should be identified at school level and supported there. However, education systems currently require schools and families to engage in sometimes laborious beyond-school processes towards children being given specific diagnostic labels, for example, of Autism Spectrum Disorder or Speech Language Impairment (Senate Committee, 2016). Our non-legal background reading of the Acts and Conventions suggests that there is no legal basis, for either categorical funding or for schools and families to have to pursue diagnoses. Students with literacy learning difficulties seem entitled to appropriate educational support without the need for diagnostic labelling; students with speech and language difficulties seem entitled to appropriate sufficient Speech Language Pathology input; and students with social and emotional difficulties (e.g., anxiety about literacy difficulties) seem entitled to appropriate sufficient social-emotional supports. Indeed, in the context of the Acts and Conventions, the requirement for diagnostic labelling in order to receive services appears to be almost a barrier to learning.

There appears to be an irregularity when the provisions of support for students are compared to the Disability standards. The Standards' Exceptions document states, for example, that "*it is not unlawful for an education provider to fail to comply with a standard if, and to the extent that, compliance would impose unjustifiable hardship on the provider*" (Australian Government, 2005b, Section 10, pp.21-22). However, unjustifiable

hardship does not appear to be a factor to be considered in the Disability Discrimination Act 1999, 1C).

If our understanding of the Acts is correct, two conclusions are important. Firstly, Australian governments have a legislated requirement to provide effective, sufficient, non-discriminatory education for students with literacy learning difficulties. Secondly, these students should not need complex procedures and diagnostic labelling to be able to access relevant, effective, support.

Findings and recommendations of the 2016 Senate Report

The Australian Senate report (2016) indicates that Australian state and federal governments have not been, and are not, providing funding and support commensurate with their obligation to provide appropriate educational supports for all students, including those with literacy learning difficulties. It discusses educational supports being seriously inadequate and in major need of improvement, including the need to increase funding on the basis of students' needs rather than diagnostic labels; gathering more data on students' needs; having more transparency of data on the extent of disabilities and learning difficulties and support provided; and for schools to make adequate adjustments and provide acceptable levels of support. The Senate report makes recommendations calling for government action to improve instruction for students with a disability and prioritising development of a national approach to curriculum modification and best practice to ensure students are supported to learn to their fullest potential.

It is apparent from the report that the lack of support is occurring both at federal level and in multiple Australian states. With respect to literacy learning difficulties, the Senate report discusses dyslexia, word-reading, reading and literacy difficulties being 'the forgotten disability' (p.50), not recognised by state and federal governments in their disability funding models, with funding of severe literacy learning difficulties not happening to any respectable extent.

The Senate Committee's findings are in keeping with other studies calling for improved support for school instruction for children with disabilities (Angus et al., 2007; Galletly, Knight, & Dekkers, 2010), which have established that current school

instruction for students with literacy difficulties are inadequate. There is a need for change to occur now.

The challenges of optimising literacy instruction for students in Australia

Orthographic Complexity

Orthographically, nearly all of the highest achieving nations in international literacy comparisons use highly regular orthographies (spelling systems), or have high multilingual proficiency, both of which confer literacy-development advantages on young students (Kuo & Anderson, 2010; Mullis et al., 2012; Thomson et al., 2013). In high-achieving nations, regular orthographies may be the nation's sole orthography (as in Finland, Poland and Estonia) or an orthography used in parallel with complex orthographies (for example Japanese and Chinese students learn to read and write fully-regular Hiragana and Pinyin, then later self-teach to master highly complex Kanji through words being written in both orthographies). Finnish students learn to read in a matter of weeks (Aro, 2004) and are able to read and write all words accurately. They can then steadily and confidently move into reading fluency, independent reading and written expression without further word reading or spelling instruction. These students experience much lower cognitive load during literacy tasks than Australian and other Anglophone students. This is evident in the findings of Seymour, Aro and Erskine's (2003) cross-sectional study of word reading in fourteen nations (see Table 2). The results show that students of nations with highest-regularity orthographies were the most proficient word readers at the end of Year 1 (whilst English readers achieved only 31.6%, on average, at the end of Year 1). The results show that after twice the amount of instruction (at the end Year 2), English readers' 70% achievement is still lower than the Year 1 students' results of all nations except Denmark.

Table 2. Word-reading achievement in nations with varying orthographic complexity

Nation	Orthographic Regularity	Age (Years)	Ortho Gp Mean % All wds	Nat Mean % All words	% Correct Common Real Wds	% Correct 1 & 2 syllable Pseudowords	Age Gap UK Yr1	Age Gap UK Yr2
Finland	Very High	7.9	95.9	96.7	98.3	95.0	2.3	1.3
Greece	Very High	6.8	95.9	94.8	97.6	92.1	1.2	0.2
Italy	Very High	6.9	95.9	92.4	95.3	89.4	1.3	0.3
Spain	Very High	6.8	95.9	91.8	94.7	88.8	1.2	0.2
Austria	Very High	7.6	95.9	94.7	97.5	91.9	2.0	1.0
Germany	Very High	7.4	95.9	96.0	97.7	94.4	1.8	0.8
Norway	Very High	7.9	95.9	91.3	91.8	90.8	2.3	1.3
Iceland	Very High	6.9	95.9	90.3	94.1	86.5	1.3	0.3
Portugal	High	7.0	88.0	75.2	73.5	76.9	1.4	0.4
Sweden	High	7.5	88.0	91.4	95.1	87.7	1.9	0.9
Netherlands	High	7.0	88.0	88.8	95.4	82.2	1.4	0.4
Den Yr1	Moderate Yr1	7.7	75.1	62.4	71.1	53.7	2.1	1.1
France Yr1	Moderate Yr1	6.7	75.1	82.0	79.1	84.9	1.1	0.1
Den Yr2	Moderate Yr2	8.6	95.9	86.9	92.6	81.3	3.0	2.0
France Yr2	Moderate Yr2	7.9	95.9	98.3	99.2	97.4	2.3	1.3
UK Yr1	Very Low Yr1	5.6	31.6	31.6	33.9	29.3	--	--
UK Yr2	Very Low Yr2	6.6	70.0	70.0	76.4	63.5	--	--

Word Reading

For many, if not most nations (including the high PIRLS and PISA performers) other than Anglophone nations, word-reading instruction needs a relatively minimal focus (Share, 2008). This is because most high performing nations use regular shallow orthographies which expedite word-reading development. Therefore, with minimal word-reading subskills to be mastered (often just letter-sounds and phonemic recoding) word-reading development in regular-orthography nations is characterised by low cognitive load, ease of self-teaching once phonemic recoding is mastered, and thus relatively minimal needs for adult support across early literacy development. Word reading and spelling are mastered very quickly and efficiently by most students using a shallow orthography (Seymour, Aro & Erskine, 2003; Cossu, 1999). Word-reading development and instruction is thus comparatively a non-issue for the world's many regular-orthography nations when compared to Anglophone nations such as Australia.

For Australia, English orthographic complexity creates a very high cognitive load for beginning readers, and this impedes students' self-teaching and creates the need

for thorough skilled instruction. Relative to regular-orthography nations, optimising word-reading development and instruction is a very challenging issue for teachers in Anglophone nations.

Because Anglophone reading and literacy development are highly complex, literacy progress is much more dependent on students having proficient verbal working memory. In addition, as Anglophone nations commence reading instruction at much younger ages than regular-orthography nations; this creates an additional disadvantage as working memory is significantly lower at younger ages. Working memory can also be further sapped when students are anxious or have learning difficulties. Together, these circumstances create the likelihood that Anglophone schools have far more at-risk readers in their early years' classrooms than regular-orthography nations. As such, relative to regular-orthography nations, Australian and other Anglophone students are confronted with highly complex learning when extremely young.

Clearly then, the optimising of reading and literacy instruction for at-risk Anglophone students is a core issue. Relative to regular-orthography nations, Anglophone nations face major challenges when seeking to optimise reading and literacy instruction.

Orthographic Advantage Theory

Elsewhere we have developed Orthographic Advantage Theory as a tool for considering the challenges of optimising Anglophone word-reading and literacy instruction (Galletly & Knight, 2011; Knight, Galletly & Gargett, 2017). It proposes that orthographic complexity dictates the level of ease or difficulty with which students master reading and literacy, and that this level of ease or difficulty flows through to the level of ease or difficulty a nation experiences in trying to optimise literacy instruction.

Australia and other Anglophone nations are orthographically disadvantaged when compared to nations which have a shallow orthography. Firstly there is an early education disadvantage as it is difficult to develop effective word reading and early literacy skills in at-risk children. There is then a flow on to later educational disadvantage as high numbers of children with literacy learning difficulties make

teaching and learning in later-years classrooms highly challenging because of the significant range of literacy skills and achievement of individuals within classrooms. If students' skills are not improved and their literacy difficulties persist, this can ultimately lead to a generational disadvantage whereby the parents with literacy difficulties struggle to support their own children's development of Literate Cultural Capital prior to school (Knight et al., 2017). According to Orthographic Advantage Theory, Anglophone students with at-risk factors are differentially disadvantaged and experience far greater impacts (Galletly & Knight, 2011)

Optimising Instruction

Philosophically, the role of word reading in literacy education has been highly controversial. Ongoing for at least the past half-century, these controversies are often termed the Reading Wars. It is probable that English orthography makes it difficult to improve reading outcomes and is a major basis of the Reading Wars controversies across the decades (Burt, 1969, p. vii):

Reading is by far the most important subject that the young child learns at school. It is also the most difficult to teach. 'One in six of our boys and girls', so a recent report assures us, 'leaves school unable to read as that phrase is ordinarily understood – a higher proportion than any other civilised country.' Nor are the reasons far to seek. English, owing to its composite origin, partly Anglo-Saxon, partly Norman-French, with later borrowings from a dozen different tongues, has a more erratic orthography than any other contemporary language. As a result, 'the problem of the best reading method' has formed a scholastic battleground for generations – 'a field strewn with lost causes and littered with exploded ideas'.

Ongoing philosophical dissension on reading instruction results in Anglophone education systems and schools using inadequate word-reading instruction. Whilst there is a need for applied research further establishing the effectiveness of principles of word reading and literacy instruction at school for at-risk and struggling readers (Compton, Miller, Elleman & Stacey, 2014), there is already vast amounts of research establishing the principles of effective word reading and literacy instruction which provide a rigorous basis for developing optimal school-level instruction (DEST, 2005; Hemenstall, 2016). Other Anglophone nations such as the UK and USA are currently focussed on achieving effective word reading instruction which



appear to be delivering improved literacy outcomes (Dougherty Stahl, 2016; Mullis et al., 2012; Rose, 2006; UK DfES, 2006). In contrast, Australian and New Zealand education systems are inadequately focussed on word-reading (DEST, 2005; Tunmer, Chapman, Greaney, Prochnow, & Arrow, 2013). This is evidenced by their being minimal data on the word-reading of Australian students (Galletly, Knight, Dekkers & Galletly, 2009; Knight et al., 2017), and word-reading assessments not being included in Australia's national literacy tests. It also seems evident in the underwhelming impact of Australia's *National Inquiry into the Teaching of Literacy* (DEST, 2005), which focussed on word reading, and made strong recommendations for improving Australian word-reading instruction.

Inappropriate philosophical orientation may also mean that funding is not used for best purposes. For example, considerable funds are spent on the intervention program Reading Recovery (Clay, 1993), which is insufficiently focused on word reading, and reported as being ineffective for many students needing on-going learning support (Baker, Berninger, Bruck, Chapman, Eden & Tunmer, 2002; Reynolds & Wheldall, 2007; Tunmer et al., 2013).

The easier reading and literacy development of regular-orthography nations implies education spending to achieve effective literacy instruction can be lower than that of Anglophone nations. For example, high-progress nations like Estonia and Poland spend far less than Australia on education (OECD, 2015; Thomson et al., 2013). In contrast, Australia needs to spend more on reading instruction in the early years if it is to achieve effective early literacy development for at-risk students.

Calculating the high cost of optimising Australian literacy instruction for at-risk readers is difficult for at least three reasons. Firstly, Australia and New Zealand need to be using best-practice evidence-based reading instruction, but it seems that this is not currently occurring (DEST, 2005; Hempenstall, 2016; Tunmer et al., 2013). Secondly, calculations need to be built from instruction which is proved to be optimally effective, but no Anglophone nation has yet achieved optimal reading and literacy instruction for struggling readers (Compton et al., 2014; Mullis et al., 2012; Thomson et al., 2013). Thirdly, research studies of Anglophone struggling readers consistently show that even with highest-intensity, best-practice reading instruction, a sizeable number of students still make negligible progress (Compton et al., 2014).

When no Anglophone nation is high-achieving in PISA and PIRLS studies, it suggests it is difficult to calculate the likely resource levels that schools need to achieve optimal instruction and literacy outcomes for at-risk and struggling readers.

Clearly, it is no simple matter for Australia to achieve highly effective, efficient literacy instruction which meets the rights of all children, including at-risk and struggling readers. The next section outlines some of the issues which need to be considered in improving instruction.

Issues in optimising literacy education

Towards optimising literacy education, there is value in exploring both commonly-considered improvement directions as well as paradigmatically-different, relevant, new directions. This section discusses four issues warranting investigation towards improving Australian literacy education for at-risk and struggling readers. These include making transparent the directions towards reading instruction being more effective; establishing word reading and language skills as priority literacy areas; exploring children's rights from orthographic complexity and legal requirement perspectives; and ensuring effective school instruction and timely intervention.

Transparency

Australia and other Anglophone nations need to move towards making school reading and literacy instruction more effective and less expensive.

There is a necessity to investigate 'needs-based' and other models of funding for reading difficulties, and their strengths and weaknesses (Angus et al., 2007; Cirrin, Schooling, Nelson, Diehl, Flynn, Staskowski & Adamczyk, 2010). The current Australian system of providing additional funding for students on the basis of diagnostic labels seems inappropriate and discriminatory, such that it should be discontinued. This is especially the case for students whose only 'disability' may be their misfortune in being born into an Anglophone nation, and one providing inadequate instruction to meet their needs. It is essential to establish the extent of word-reading and language weakness that contribute to literacy learning difficulties. There is value in exploring the well-researched Response to Intervention model used for students with or at-risk of difficulties (Dougherty Stahl, 2016). It uses three tiers of intervention, namely core instruction (best practice classroom instruction by



expert teachers and teacher aides skilled in reading instruction and working with at-risk and struggling readers); skill-building intervention (focussed more-intensive instruction for students not progressing with core instruction alone), and intensive remediation (highly-intensive intervention for students not progressing with intervention, and showing indicators of developing severely delayed reading skills).

Whilst considerable experimental research establishes general principles of reading and literacy instruction, these principles need to be applied in schools (Knight, Galletly & Gargett, 2016).

There also seems value in making instructional support for students and their achievement more transparent. In addition to finding it impossible to gather information on differences between Australian states on instructional supports for children with reading difficulties and verbal communication difficulties, the writers also experienced difficulties getting comparable data from PISA, PIRLS and OECD reports to enable a comparison of Australia with other nations. Therefore, there may be value in establishing a central website containing information which compares state and international education provisions to determine best practice.

Word-reading and language skills

The rate at which word reading and spelling develop to a proficient, self-teaching level seems a pivotal issue differentiating resourcing needs in Anglophone and regular-orthography nations. Whereas regular-orthography word-reading and spelling development is measured in weeks and months, word-reading and spelling test norms show Anglophone word-reading and spelling development takes many years.

Australian and New Zealand education systems still appear philosophically opposed to word reading being an important factor in literacy development (DEST, 2005; Tunmer et al., 2013). This suggests there is a need to establish the importance of word reading for education leaders and teachers. This can be done by gathering data on the word-reading levels of struggling, average, and healthy-progress readers (similar to the new phonics skill measure of all Australian 6 year olds announced in 2017 by the Federal Education Minister), to establish definitively the extent to which word reading is important. This establishes the relationship between students' word-

reading levels to their skills in other areas, including phonics, reading comprehension, independent reading, spelling, written expression, vocabulary, literacy and achievement in other academic learning. The impact of students' levels of vocabulary and language-comprehension skills can be similarly explored. When established as important, education systems should then move towards developing a strong focus on word reading development and outcomes within effective balanced literacy instruction to target learners' needs.

The linkages of word reading and language skills to reading and literacy development are particularly important towards establishing school resourcing needs. If they are important sub-skills expediting literacy development as is well-established by research, then Anglophone early-years classes need high levels of adult support, including proficient, specialist reading teachers and speech language pathologists.

Students' rights

The Senate report states that students are not having their needs met. There seems value in establishing the rights of struggling readers and students with language and communication difficulties from two perspectives. One is their legal right with regard to Disability Discrimination Acts, Standards, and UN Conventions. The other is their ethical and legal right from an orthographic disadvantage perspective given significant word-reading difficulties are not universal (Cossu, 1999; Landerl et al., 1997; Poskiparta et al., 1999; Seymour et al., 2003).

There also seems a need to precisely specify schools' legal requirements for children with literacy learning and verbal communication difficulties. It is likely that education will benefit from standards and documents specifically focused on reading and literacy difficulties.

The Senate Committee findings signify the need to make definitions in Australian Acts and Disability Standards clearer. Terms such as '*reasonable adjustments*', '*discrimination*', and '*unjustifiable hardship*' would benefit from examples relevant to reading, literacy and verbal communication difficulties.

The term '*all children*' however, seems inappropriate and unrealistic. In all nations there will be a small proportion of children who are unable to achieve proficient, year level, reading comprehension, independent reading and written expression.

There seems value in replacing ‘*all children*’ with quantified terms, e.g., ‘*95% of school children achieving proficient word reading*’, and ‘*at least 90% of children achieving reading comprehension, equivalent to e.g., Level 2, PISA reading*’, and developing these terms using international comparison studies. The percentage estimates could be developed with regard to what high-progress nations routinely achieve.

Students with literacy or verbal communication difficulties often need assessments relating to their hearing, auditory processing, vision, attention and distractibility. Such deficits indicate the need for intervention from specialists including audiologists, optometrists, speech language pathologists, paediatricians, occupational therapists, physiotherapist, psychologists, and counsellors. However, in Australia these are currently individual family responsibilities which mean that some children may miss out because services are expensive or depend on strong parent initiative. Towards meeting students’ rights, there may be value in including such services within school services, as the Senate Committee (2016, Recommendation 9 e) recommends that government work with stakeholders to “ensure all students with disability can access adjustments and interdisciplinary support that will maximise their learning potential”.

Effective instruction

It is likely much easier to prevent entrenched difficulties than to support children to recover from them. For example, studies show word reading achievement in early primary school strongly predicts later school achievement (Christopher, Hulslander, Byrne, Samuelsson, Keenan, Pennington & Olson, 2015), and early language weakness impedes academic progress (Doyle, Harmon, Heckman, & Tremblay, 2009). Timely efficient and evidence-based intervention needs to occur as close as possible to the point when the student’s needs become evident.

For students at risk of reading difficulties, this means highly effective early-years reading instruction, and well resourced, timely, efficient intervention. For struggling readers in all school years, this means skilfully differentiated instruction supporting students to manage class level literacy tasks whilst experiencing no undue hardship relative to their peers. For students with verbal communication difficulties, timely,



efficient, intensive speech language pathology intervention prior to and in the early years of schooling is required.

Conclusion

This paper has discussed the considerable evidence showing that Australia is having major difficulties in optimising reading instruction for at-risk and struggling learners. This evidence is present in international comparison studies such as PIRLS and PISA. It is also present in the 2016 Senate report's findings that Australia has been seriously insufficient in its support of students with disabilities. It becomes even more evident when Acts, Disability Standards and UN Conventions are considered, as they show that all Australian students have the right to receive highly appropriate supported education without undue hardship.

Considerable knowledge-building research is required to establish what are the optimal supports for students at-risk of literacy learning difficulties, and the resourcing needed by schools to administer it. This knowledge building should explore key issues, including the impact of English orthographic complexity; students' young ages when learning to read; the importance of adequate word-reading and language skills in literacy development; the importance of timely efficient intervention; and optimising teaching and learning conditions to meet students' needs.

If we continue to do what has always been done, it is unlikely that we will close current achievement gaps on word-reading, reading-comprehension, literacy and academic-learning between Australia and the world's highest achieving nations. We aspire to policy and action where students are confidently literate, unaware of potential difficulties because timely efficient intervention was provided skilfully and effectively. Changes in policy and practice are needed now!

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