

Bulletin



**SMART Reading:
Making effective
comprehension
instruction
simpler**

LDA Council 2015-16

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EXECUTIVE/ADMINISTRATION

Alison McMurtrie

PUBLICATIONS

Wendy Moore

WEBSITE

Pye Twaddell

CONSULTANTS

Jan Roberts

PROFESSIONAL DEVELOPMENT

Lorraine Hammond

LDA Contacts

CORRESPONDENCE ADDRESS

PO BOX 4013

Box Hill South VIC 3128

ADMINISTRATION & MEMBERSHIP

Kerrie McMahon Idaquery@bigpond.net.au

GENERAL ENQUIRIES

Lorraine Hammond Idaquery@bigpond.net.au

Journal Editors

Dr Sarah McDonagh and Dr Lisa Limbrick

ajld@csu.edu.au

BULLETIN AND eNEWS EDITOR

Wendy Moore wordsforlearning@gmail.com

WEBSITE EDITOR

Pye Twaddell thelearn@bigpond.net.au

LDA MISSION

Learning Difficulties Australia is an association of teachers and other professionals dedicated to assisting students with learning difficulties through effective teaching practices based on scientific research, both in the classroom and through individualised instruction.

THE BULLETIN

The Bulletin is produced by the publications committee of Learning Difficulties Australia. Members of the committee are Wendy Moore, Alison McMurtrie, Nicole Todd, Roslyn Neilson and Molly de Lemos. We welcome the submission of articles from LDA members and others with an interest in learning difficulties for possible inclusion in upcoming editions of this Bulletin.

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From the President

"My son is ten years old, he hates reading and finds it incredibly difficult... he is being told to look at the pictures when he reads and guess at words... the teacher tells me that I should hire a tutor... should we move him to a different school?"

"Hi, I am a mature aged student with dyslexia. I have managed to get myself into a post grad course but I need help to help me get through this. I desperately want to achieve this degree to help me achieve a dream in life to advance in my field of work but I cannot do this without help..."

As a university academic with an interest in literacy based learning difficulties, roughly an email a month, for the last 15 years, has landed in my inbox from parents, family members and individuals with reading difficulties, asking the same basic questions: does my child have a problem, why do literacy difficulties occur and what can be done to help?

I answer the same emails for LDA; providing information and referring parents and individuals on to organisations across Australia.

Sadly, many of the parents and individuals that I correspond with have been elsewhere first, and they are often at risk of being led up various garden paths. There is a proliferation of confusing information online. I tested this for myself by paying \$29.99 (reduced from \$499) to become a Dyslexia Therapist. I was travelling recently, so I ploughed through most of the course while in transit at an airport reading the modules and completing some poorly constructed multiple choice questions that were hard to get wrong. What concerned me the most was not the ease at which a lay person could pass the tests that followed each module and become 'certified', but the question I got wrong. Here it is:

Phonological Awareness refers to:

- The ability to identify and manipulate the parts of speech sounds.
- The awareness of context cues that signify the meaning of words within a sentence or paragraph.
- The ability to sing nursery rhymes.
- The knowledge of letter sounds to read unfamiliar printed words.

If you are playing along at home, the closest answer is 'a' (despite the rather unfortunate wording of the definition). However, the course writers thought otherwise and told me the answer was d. Over the last five years I have given a Teacher Knowledge Test to over 400 educators and confusion about the nomenclature of reading, particularly terms related to phonological awareness, remains high in Australia. Just over half of the teachers I recently surveyed confused phonics with phonological awareness. Courses like this don't help.

After submitting my final answer and returning a score of 99% I received a congratulatory email, a convincing looking certificate and the opportunity to 'rate' the course. Please keep in mind I was jetlagged and grumpy by this point, so with another two hours to wait before boarding, I set about pointing out the serious theoretical and conceptual inaccuracies with the course as well as the various spelling and grammatical errors I encountered along the way.

Imagine my surprise at getting an email some 12 hours later thanking me for my feedback and assuring me that they would attend to the spelling errors! I responded that fixing the superficial errors would not do and implored the course organisers to stop spreading misinformation. I sincerely hope that the course writers will be able to update their own knowledge – there is a lot of work to be done in our educational communities to improve the quality of information available to the public about dyslexia and reading difficulties.

Sunday 16 October through Saturday 22 October 2016 is Dyslexia Empowerment Week, and LDA will join organisations across Australia promoting the facts and dispelling myths in this public awareness campaign, co-ordinated by AUSPELD. There will be a Dyslexia Empowerment Website and Facebook page where all events planned by individual organisations will be communicated.

In September, Professor Maryanne Wolf will be visiting Brisbane, Sydney and Melbourne to speak for LDA. Details are on our website <https://www.ldaustralia.org/>

In 2011 Maryanne told *The Guardian Newspaper* about being the parent of a child with dyslexia.

No one can ever prepare a parent for two things: the immeasurable love that comes with having a child; and the sorrow and confusion that comes when your child appears to learn in a different way from other children. I am an educator and neuroscientist, who studies how the brain learns to read and what happens when a young brain can't learn to read easily, as in the childhood learning challenge, developmental dyslexia. Yet, despite this knowledge, I was unprepared to realise that my first son, Ben, was dyslexic. He was five years old when I put all the pieces together, and I wept as soundlessly and deeply as every other parent. I wept not because of his dyslexia, which I understood very well, but because I knew the long, difficult road Ben faced in an educational system ill-prepared then to meet his needs. That was the first thing I did 16 years and eight schools ago.

The second thing was to concentrate my work on ways to help our society understand two huge things: first, the complex, unnatural miracle that takes place every time a brain learns to read; and second, the fact that many children with dyslexia have a different brain organisation – one that poises them for greatness in many areas; but makes them inefficient at learning written language.

<http://www.theguardian.com/education/mortarboard/2011/may/09/dyslexic-children-brains-struggle-reading>

Helping every child meet his or her potential, not only children with challenges, has driven Maryanne's work as a researcher and we look forward to welcoming her to Australia.

LDA's president, Dr Lorraine Hammond, is a senior lecturer at Edith Cowan University. She has a particular interest in preventing literacy based learning difficulties. Lorraine lectures in Direct Instruction and Learning Difficulties and is currently conducting research on Explicit Instruction.

Reporting from the Battlelines

Shoulder-to-Shoulder in the Systematic Synthetic Phonics Trenches by speech pathologist and former Council member Roslyn Neilson

Reading War combatants tend to be only too well aware of the battle line that the main two armies have drawn for themselves. The trenches line up on either side of a general approach to literacy education. On one side are the constructivists, who argue that students should be allowed to master the alphabetic code 'naturally', through engagement in 'authentic' texts. On the other side of the divide are those who argue that teaching of the alphabetic code should involve explicit, direct instruction of sub-skills. Those educators who are working shoulder-to-shoulder in the 'explicit' trenches tend to cite publications by Ehri, Nunes, Stahl & Willows (2001) and Torgeson, Brooks & Hall (2006), which provide general empirical evidence in favour of teaching children in a systematic way to sound out words and blend the sounds together as they learn to read. This general support is based on meta-analyses of research involving a range of different phonics programs. At this stage, however, there are many commercial phonics programs available, and this means that the trench-fellows on the systematic synthetic phonics side are faced with a problem when they are asked to recommend a specific program – a problem that really should be solved by further empirical research. What exactly should be seen as best practice in systematic synthetic phonics teaching?

A journal article has been published recently that offers a good example of an attempt to grapple with that problem. Shapiro and Solity (2015) carried out a head-to-head comparison of two different systematic synthetic phonics programs: *Letter and Sounds (L&S)*, which was produced by the UK Department for Education and Skills (2007), and the researchers' own program (Shapiro & Solity, 2008), *Early Reading Research (ERR)*.

In the spirit of continuing to report from the battlelines for the LDA Bulletin, this present review will critique the Shapiro and Solity (2015) article, using the same criteria I mentioned in an earlier publication (Neilson, 2016):

- Is the research reputable?
- Is the article relevant?
- What was involved in the research?
- What were the outcomes?
- And, finally, what can we learn?

A disclaimer to start off with: I don't have personal experience of working with either of the particular phonics programs, so I have to rely on the researchers' characterisations of the program differences. Letters to the editor, with comments based on actual classroom experience, will be welcome.

Is this a reputable piece of research?

The journal in which the Shapiro and Solity (2015) article appeared is a well-established, peer-reviewed publication: the *British Journal of Education Psychology*. The authors describe this research as 'quasi-experimental', which means that it does not have the status, in terms of evidence-based practice, of a fully randomised control trial. Treatments were not allocated at random, because the researchers (showing quite reasonable pragmatism) approached schools that had already chosen one or other of the two programs. One of the authors has disclosed a financial interest in one of the programs (*ERR*); this lack of independence is sadly almost inevitable in research that evaluates programs. The potential for bias has to be counteracted, of course,

by as rigorous adherence as possible to experimental procedures. Was this adherence achieved?

Fidelity questionnaires were used at each stage of the research to check that teachers were indeed implementing the programs as specified by the publishers, but teacher fidelity was not documented directly. Research assistants did all the data collection, but no information is given about the extent to which the research assistants were 'blind' to the program that students were experiencing. All tests used, however, were standardised, which gives much stronger control than purpose-designed tests might have done. The number of participants in the study is impressive: between 800 and 900 children participated, and they were followed up from school entry to the end of Year 2. The sample, based in Birmingham, is a useful one: participating schools included large proportions of students who were eligible for free lunches, and who spoke English as an additional language (EAL). This sampling allows generalisation of the results to a range of communities and contexts. In all, the article may not be gold standard, but it certainly deserves a careful reading.

Is the article relevant?

The research obviously addresses an important practical question in the field of education. In fact, given the researchers' descriptions of the two programs, the question is absolutely critical. One program, *L&S*, involves a classic, 'purist' synthetic phonics approach, and the other, *ERR*, teaches phonics systematically but also includes a few hybrid features. The non-purist features of *ERR*, such as non-decodable books and sight words, are actually very likely to be in common use in classrooms. Many of us here in the trenches will really want



to know the outcomes of this particular research study.

Relying on the researchers' descriptions, I have summarised the distinguishing features of the two programs in Table 1.

Interestingly, as well as measuring reading outcomes, the researchers also measured several other cognitive factors that might be important to interpretation of the results. One only of these factors is actually discussed in the article being reviewed, but it is a major one: phonological awareness (PA).

In all, therefore, the relevance of this particular article is very high indeed.

What was involved in the research?

Of the 17 participating schools, seven delivered L&S and ten delivered ERR. Students were recruited at the beginning of their first year of schooling (UK Reception; average age 4 years 6 months). Recruitment was carried out over two years, with one intake in 2009 and one in 2010. The initial sample had 925 participants, and with attrition, 877 were followed up at the end of Reception and 799 at the end of Year 1. Only the first intake was followed up at the end of Year 2; this sample involved 382 students and seven schools.

Table 2 summarises the assessments reported on in this study.

What were the outcomes?

The data were analysed in a very complex way in this study, given the need to account for school variability, and the results are unfortunately quite difficult to follow. Briefly: EAL status and Free Lunch status were used as covariates, and the researchers attempted to check that the effects of the phonics programs were robust across schools as well as across students. The interaction between PA and phonics program was addressed at all stages.

Shapiro and Solity (2015) report that for students who had started school with strong PA, the effect of the two different programs was not significantly different. For both programs, PA was highly associated with reading ability (no surprises there). In general, therefore, neither program overrode the strong association between PA and reading outcome.

The kind of reading skill being assessed, however, did make a difference when it came to the strength of the association between PA and reading program. For nonword reading, the relationship between PA and reading ability was the same for both programs: those students with higher PA did better at reading nonwords, no matter how they had been taught. For exception word reading, however, PA interacted with phonics program, and at the end of Year 1 students with weaker PA were at a relative advantage on reading exception words if they had been in the *ERR* program.

How to interpret the advantage given by the *ERR* program for reading exception words? It may simply reflect the fact that, as part of their sight word practice in the classroom, the *ERR* students had actually practised many of the exception words used in the YARC reading test, and this meant that even students with weak PA could do quite well on reading these exception words. It might also possibly have been that the relative simplicity of the initial grapheme-phoneme correspondence teaching in the *ERR* program set the weaker learners off on a better footing in terms of confidence and motivation. On the other hand, there might be a more interesting process at work: *ERR* students might have been showing signs of early development of a flexible approach to reading, in which words or word chunks were being recognised directly. It would have been really

neither program overrode the strong association between phonological awareness and reading outcome

interesting to know if *ERR* students were leaving behind laborious sounding out in favour of automatic word recognition a little earlier than the *L&S* students. The data, however, doesn't tell us.

What can we learn?

At the outset it must be recognised that a head-to-head comparison of two programs is inherently difficult when it is clear that not only will students be making progress over time due to maturation and normal classroom and home experiences, but also that both programs are likely to be effective. The chances of finding significant differences between programs are actually rather small - and this, indeed, was the clearest outcome of the study. The programs did not lead to dramatically different outcomes for the majority of students.

Is this reassuring for us in the trenches? Does it mean we can evaluate systematic synthetic phonics programs in terms of external factors like cost and ease of implementation, rather than being concerned about the teaching details of the programs themselves? I suspect that there will be many purists who feel strongly about particular features of phonics programs, who might want further evaluation of these issues - evaluation carried out in a study that had fewer of the multi-school complexities with which Shapiro and Solity (2015) had to grapple. These details would very likely include the use of decodable texts, and the issue of simplicity as a component of the initial introduction of sound-letter correspondences.

Areas of Difference	Program	
	Letters and Sounds (L&S)	Early Reading Research (ERR)
Strategy for identifying words	Decode by sounding out and blending	Either decode or attempt to recognise as a sight word
Number of phoneme-grapheme mappings taught	Alternative pronunciations for each grapheme (e.g. a as in hat, acorn and want)	Only the most frequent pronunciation of each grapheme
Sight word learning of high-frequency words	No: Always sound out regular words and as much as possible of irregular words.	Yes: High-frequency regular and irregular words are learned as sight words
Use of decodable texts	Yes	Not necessarily
How segmentation and blending are taught	Initially practised orally, but soon practised only in the context of print	Oral segmentation and blending practice continues for two years, as well as phonic decoding
Implementation in the classroom	One hour per day	Three 15 minute blocks per day

Table 1. Distinguishing features of the two programs

Beginning of Reception	Phonological awareness (PA): <ul style="list-style-type: none"> • PAT Sound Deletion • YARC Early Reading: Sound Isolation • YARC Early Reading: Sound Deletion YARC Letter-Sound Knowledge YARC Early Word Recognition (15 regular, 15 exception words).
End of Reception and End of Year 1	Phonological awareness (PA): <ul style="list-style-type: none"> • YARC Sound Isolation • YARC Sound Deletion YARC Early Word Reading PhAB Nonword Reading
End of Year 2	PhAB Nonword Reading British Ability Scales Word Reading

Table 2. Assessments reported on in the study

It is interesting that neither program over-rode the effects of poor initial PA - although it is possible that both programs did relatively better in this area than a less explicit, constructivist program might have done. (The researchers, of course, did not have a control group that allowed that question to be asked.) But why did the effects of poor PA at school entry not disappear, given explicit phonics teaching? There are at least two possible answers about which one could speculate. Firstly, it might be that PA was not adequately taught. There is accumulating evidence that teachers tend to need a good deal of support in making their own implicit PA explicit so that they can teach it to students. Moreover, some phonics programs unwittingly take it for granted that PA automatically accompanies attention to grapheme-phoneme correspondences; in the present study, the descriptions of the programs suggest that this might have been more likely to occur in *L&S* than in *ERR* (although no obvious difference of this kind emerged in the reported outcomes). Secondly, there may be confounding factors; in particular, it might be that initial poor PA also serves as a marker for other causal influences, such as general language learning ability. Poor PA, that is, might be a symptom of individual differences that may be compensated for, but that may never really be overcome, no matter how good the teaching program is.

Trench warfare was never meant to be easy.

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Former LDA Council member Dr Roslyn Neilson is a private speech-language pathologist, specialising in children with reading difficulties. She completed a Ph.D. in 1998 on the topic of phonological awareness and word recognition skills in children with reading difficulties. She has retired from her private clinical practice, but still works in local schools and schools in remote Indigenous communities, provides university lectures and professional in-services, and devotes time to research.

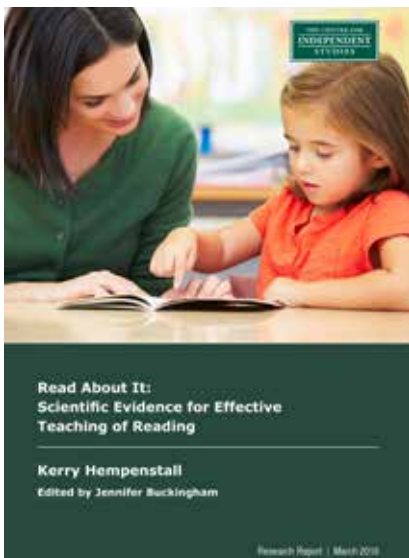
Five from Five

Jennifer Buckingham on the [Five from Five](#) project

The FIVE from FIVE project is an initiative of the Centre for Independent Studies. It is so called because it promotes teaching of the five essential aspects of reading from the first year of school, when most children turn five years old.

The aim of the project is to bridge the gap between research and practice on reading instruction. It is working to achieve this in a variety of ways, including:

- A website with information and resources on effective, evidence-based reading instruction.
- Speaking with policy-makers and politicians to encourage them to adopt policies that reflect the evidence on effective reading instruction.
- Hosting and speaking at public events, seminars and professional development days
- Expert roundtables to provide policy advice
- Engaging with print and broadcast media and social media
- Producing research publications



- Building a network of organizations and individuals who support the aims of Five from Five

The Five from Five project and website were launched in March this year at NSW Parliament House. Speakers included NSW Education Minister Adrian Piccoli, Senator Bridget McKenzie, ACARA chairman Professor Steven Schwartz, Dr Kerry Hempenstall, and author Jackie French. Videos of some of the speeches are on the Five from Five website.

The website also has information about the five essential components of reading instruction – phonemic awareness, phonics, fluency, vocabulary and comprehension – including major studies and recent research.

It also has information about the most effective way to teach reading, especially phonics. The Five from Five project advocates strongly for systematic synthetic phonics instruction embedded in an integrated reading program that includes all of the other elements.

The first publication for the Five from Five project was a research report that outlines the evidence-base that underpins the project. *Read About It: Scientific Evidence for the Effective Teaching of Reading* by Dr Kerry Hempenstall updates the evidence on the five 'keys' to reading since the systematic reviews published 10 and 15 years ago in the US, UK and Australia and is a valuable resource.

Despite the strong evidence in its favour, the most contested element of the five is phonics. Many teachers say they teach phonics; however this claim is not supported by literacy policies and programs in use in schools around Australia, and the explicit teaching of phonics is not consistently taught in education degrees. Numerous studies of pre-service teachers have found low knowledge of language structures and surveys of principals have found that they have little confidence in the ability of new teachers to teach reading.

One way to find out whether or not children are learning phonics is to test phonics knowledge in the early years of school. A Phonics Screening Check either the same as, or similar to, the assessment used in England would reveal which schools are teaching phonics well and which students need

intervention if they are to make good progress in reading. I have been discussing this policy with state and federal ministers, and the Australian government announced its



intention to introduce a phonics test in its latest budget. The objective now is to make sure the test is implemented as intended. Expert roundtables will be held in Sydney and Melbourne to inform the policy development process.

The Five from Five Alliance is a very important part of the project. Learning Difficulties Australia is part of the alliance and the support of LDA is very valuable and much appreciated. In September this year, LDA will be presenting a series of speaking events and seminars with Professor Maryanne Wolf, including one at Sydney University at which I am delighted to be speaking as well.

My colleague Lucinda Beaman and I have been developing a new section of the FIVE from FIVE website, which will be launched soon. It will have information about early language and literacy development as well as tips and activities for parents to help their children with reading before they begin school and when they are at school. We have carefully chosen the videos, online games and apps that best reflect the evidence on early reading development.

Readers are invited to bookmark the Five From Five website, to explore it, and to download any resources that might be useful: <http://www.fivefromfive.org.au>

Dr Jennifer Buckingham is Senior Research Fellow and Director of the FIVE from FIVE reading project at The Centre for Independent Studies. She is co-author of the policy paper 'Why Jaydon Can't Read'. She has published papers on school choice, school funding, literacy, international assessments (including PISA), NAPLAN and My School, religious schools, boys' education, teacher training and employment, class size, and educational disadvantage.

Reading is a verb. Literacy is not.

Pamela Snow

Talking about reading has become a bit passé and unfashionable in education circles, but reading is high-stakes for the young people who are the focus of my research – those who have exited education early and empty-handed when it comes to reading skills. No form of literacy, whether traditional or postmodern, is possible unless children achieve the ability to read. Children do not sit down and literate a book, a newspaper article, an online blog, or the instructions for a new game. They read them. If they are lucky, that is.

Recently, Robyn Ewing, Professor of Teacher Education and the Arts at the University of Sydney, wrote a blogpost (Ewing, 2016) critical of the Centre for Independent Studies' Five from Five Initiative. Five from Five focuses on the key skills of phonemic awareness, phonics, fluency, vocabulary and comprehension. Professor Ewing asserts that literacy consists of more than "simple reading skills", and that it can't be done in "five easy steps". I wish to respond to some of Professor Ewing's assertions.

The fact that the Australian Curriculum, Assessment and Reporting Authority (ACARA) has a particular definition of literacy is all well and good, but that does not necessarily translate into useful classroom practices that in turn translate into useful skills for children. The catch-cry "it's already in the curriculum" is a hollow defence against the evidence that indicates that too many Australian children exit primary school with under-done reading (and writing) skills. There, I used that word again. Reading.

Where is the evidence that Five from Five is touted as "all-encompassing"? It is ironic (and logically inconsistent) that Professor Ewing describes this

approach as "simplistic" when there is abundant evidence to indicate that primary teachers in Australia and overseas lack basic explicit knowledge of the complexity of how language works in order to teach reading*. Dr Louisa Moats has stated through the title of one of her publications, that "Teaching Reading IS Rocket Science". However, too few teachers exit their pre-service education equipped with explicit language knowledge and an understanding of the science of reading instruction. Instead, they are fed a steady diet of Whole-Language based approaches such as the Three Cueing system referred to in Prof. Ewing's blogpost. This approach is used widely throughout Australian schools, yet was not featured in any of the 20 recommendations of the 2005 National Inquiry into the Teaching of Literacy.

Teacher knowledge is the elephant in the room that has to be admitted. Taboos do not make useful contributions to solving complex problems. There is a sad irony in the fact that much of the literature on teacher knowledge is situated in journals that concern learning difficulties in children.

Similarly, it is not enough that literacy educators "don't deny the importance of phonics and phonemic awareness". Literacy educators need more than a lack of denial in order for their students to succeed. They need knowledge and skills that give them access to decades of cognitive science research on how reading is acquired. How on earth can teachers be expected to enhance phonemic awareness skills when they don't reliably know what a phoneme is, or how to count them in simple words?

Education is remarkable in two respects: for its capacity to turn its back on evidence in favour of ideology, and for its wasteful approach to the evidence already sitting at its feet and being ignored. Both of these ingrained and indoctrinated responses occur at the expense of the educational livelihoods of children – most notably those who are starting from behind. When education academics get on an aeroplane, do they expect the pilot to say

"Good afternoon ladies and gentleman; there's probably a particular way that I'm meant to get this Airbus A380 off the ground, but I'd like to try out a few ideas of my own on you today. After all, I'm the pilot, and you're my passengers".

Similarly, when education academics go to hospital with a suspected heart attack, do they expect that an evidence-based protocol will be followed, or that the doctors in the emergency department are free to interpret the evidence as they wish? In these examples, of course, there is a clear link between practitioner actions and outcomes, but when teachers fail to apply evidence in early years classrooms (because they were not equipped with it in the first place), there is a creeping, insidious poisoning of a child's potential, that decades later is either explained away as a function of the child's background, or of the child being "unteachable" for some intrinsic reason.

Unlike pilots and doctors, teachers do not receive confronting and immediate feedback about erroneous practices. This seems to perpetuate a flat-earth belief-system that is impenetrable by those on the outside begging to be heard.

I am part of an Australian Research Council Linkage Project research team which reported last year, consistent with a number of earlier Australian and international studies, that primary teachers' explicit and implicit knowledge of basic linguistic constructs was limited and highly variable (see Stark, Snow, Eadie & Goldfeld, 2015).

The 78 teachers who participated had a wide range of experience, and were most likely to rate their ability to teach skills including spelling, phonics, comprehension and vocabulary as either "moderate" or "very good". However most of them demonstrated limited knowledge and stated that they did not feel confident answering questions about their knowledge in these areas.

Bear in mind that these teachers worked in disadvantaged schools where staff were sufficiently interested and motivated to respond to a call for Expressions of Interest to take part in

a research study on literacy teaching. A random sample may have produced even more concerning results. It must be stressed, however, that these findings should not invite criticism of teachers themselves. They are doing the best they can with their available knowledge and skill toolkits. We can only imagine the greater reach of their efforts, however, if they were properly equipped with systematic skills regarding the phonics and phonemic awareness aspects of the “Big Five”.

How can a child who receives solid, teacher-guided instruction ranging across phonemic awareness, phonics, vocabulary, comprehension and fluency be “short-changed”? Seriously?! Many children can but dream of having these basics in place in their classroom. Having them in evidence is one thing. Having them based on robust evidence, is another thing altogether. And where is the evidence that children exposed to phonemic awareness, phonics, vocabulary, comprehension and fluency “disengage from the learning process”? What about the possibility that systematic attention to these features might have the very opposite effect for many at-risk learners?

One of the tired and hoary old chestnuts that is regularly trotted out against those who argue for better and more systematic phonics instruction is that there's more to reading than simply decoding text. That's a bit like saying that there's more to making a cup of tea than boiling the kettle. Advocates for evidence-based phonics instruction have always seen learning to decode as a necessary but not sufficient part of literacy learning. The Simple View of Reading (Gough & Tunmer, 1986) asserts the importance of both decoding and comprehension. So if you can't get words on and off the page, what hope do you have of participating in digital, critical, multi or any other sort of literacy?

Some children have more limited “past experiences and knowledge of language” to bring to the task of reading than others. Who, pray tell, is suggesting an “over-emphasis” on letter-sound relationships? What would an “over-emphasis” actually look like? It's hard to escape the conclusion that for many teacher educators, phonics is anything other than incidental, third out of three, last resort assistance, as per the sacred Three Cueing doctrine.

The young people in my research, those in the tail of the education curve, can “interact” all they like with a range of literacy materials. If they cannot read, however, such interaction counts for nought in the real world, in which they will be permanently socially and economically marginalised.

I do agree with Prof. Ewing that “ongoing teacher professional learning” is needed in this space, because there is an enormous short-fall to be made up.

Instead of parking ambulances at the bottom of the cliff, however, let's start building fences at the top, in the form of more rigorous teacher pre-service education. One day, a university somewhere will break ranks with the zeitgeist and the wheels of change will start to turn.

Just imagine.

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Adapted with kind permission from Professor Snow's blog post of the same name published in 'The Snow Report', 21 May 2016. <http://pamelasnow.blogspot.com.au/>

Dyslexia, Genuine Classroom Strategies

Chris Robertson | @
brooksbrokid

“He has been at school or under tutors since he was 7 years old, and the greatest efforts have been made to teach him to read, but, in spite of this laborious and persistent training, he can only with difficulty spell out words of one syllable” — W. Pringle Morgan, M.B. (1896), “A Case of Congenital Word Blindness,” The British Medical Journal

This 120-year-old quote may be the earliest record of a medical practitioner identifying the symptoms of a condition we now know as dyslexia. This also accurately describes our son who was born in Sydney just 15 years ago. Scott was diagnosed with dyslexia at six years of age.

Unfortunately, both of the schools he attended knew nothing about dyslexia. Nothing. We heard what many parents of dyslexics hear repeatedly, “Give him time, he’ll catch on in his own time...”

In the dyslexia community, we call this passive attitude “wait to fail.”

“Wait to fail” is destroying lives.

We were forced to explore alternatives ourselves. We were funnelled through tutors and programs, coloured paper and lenses, fail safe diets, paediatricians, ophthalmologists, behavioural optometrists, more non-evidence based dyslexia “solutions,” and MRI scans. The list is bewildering and the costs have been astronomical. No standards or structure were available to help us filter out non-evidence-based interventions.

By the beginning of 2012 our son (aged 11) had been retained a year and probably should have been held back another (academically). He couldn’t

read, he wasn’t learning, he was being teased and bullied, his confidence was in tatters, he had to leave school daily for external evidence-based tutoring adding to his peers noticing a difference. Teachers (we love them!) didn’t know what to do with him. He was taken out of the things he loved... drama, dance, art... for time extensions and testing.

To add insult to injury, the principal suddenly declared external instruction would no longer be allowed during school hours (without adopting any evidence-based strategies to compensate).

All the while, the school and community had no genuine awareness of the humiliation our son was experiencing on a daily basis. Mum had to drop off a distressed and crying boy most mornings, never a dry eye herself.

We researched and steadily, and accurately, came to the conclusion there were no genuinely sustainable education options for our son’s case in Australia. In 2012, we pulled the plug. We quit our jobs and moved to Austin, Texas so our son could attend a school calibrated for students with dyslexia. There he was guaranteed to be surrounded by trained experts in global best-practice.

Our son has flourished since.

His reading has improved. He’s discovered a love for learning thanks to the unhesitating use of evidence-based classroom strategies and technologies. He has restored the energy and optimism he displayed before his humiliating Australian primary school experience. We now get enthusiastic emails & photos of 100% marks in maths and science (his growing passions). His school and the community deliver empowerment, vitality and growing influence.

Scott’s artwork was featured on the cover of the International Dyslexia Association quarterly journal,

Perspectives. He’s been embraced by Henry Winkler (a fellow dyslexic). The school’s reputation for employing best-practice, evidence-based pedagogies has garnered national credibility.

In 2015 Texas Representative Lamar Smith attended the school’s annual

fundraiser.

Lamar Smith is the Chair of the US House of Representatives Committee on Science, Space and Technology. He sponsored the Research Excellence & Advancements for Dyslexia Act, recently passed by both houses of congress and just now, as I edit this, signed by President Obama! Yay! This has the potential to help globally.

We, personally, are indebted to the global community of scientists who have methodically identified best-practice literacy pedagogies for dyslexic students and the educators at his school who are dedicated to applying and advocating for them.

Begs the question, So why the lack of help in Australia?

Dyslexia in Australia

“Where words lose their meaning, people lose their lives.” – Confucius

“Dyslexia” is, in my practical experience, an utterly useless word in Australia. I think we collectively make it useless by refusing to standardise and adhere to a scientific, evidenced-based, definition that describes the very real learning challenges faced by 10% of Australians, 2.3 million of us.

Case in Point: In February 2015 and again in March 2015, Educational Technology Solutions Australia, contributed further to the perversion of the word “dyslexia” by publishing “10 Achievable Strategies to Tackle Dyslexia in Your Classroom and School” and “10 Achievable Strategies To Tackle Dyslexia”, both by Michael Guy Clark. The articles promote strategies for students with dyslexia that are not science, not evidence-based and not recommended by our world’s most educated, principled and ethical literacy experts.

In Australia we actually have some colossally fantastic experts to guide us



including researchers who have advanced world knowledge in the fields of cognition and literacy and educators who tirelessly dedicate themselves to the adoption of best practice literacy pedagogies in a quest to maximise the number of literate Australians. These include:

- [The Macquarie University Department of Cognitive Science](#) — The entire team including Max Coltheart, Emeritus Professor, who kindly reviewed this article for accuracy.
- [Learning Difficulties Australia](#), “LDA is an association of teachers and other professionals dedicated to assisting students with learning difficulties through effective teaching practices based on scientific research”. I invite you to visit their website and read their Code of Ethics
- The [Specific Learning Difficulties Association \(SPELD\)](#) state organisations federated under AUSPELD (SPELD New South Wales, SPELD Queensland, SPELD South Australia, SPELD Victoria, SPELD West Australia)
- [Australia Dyslexia Association](#), official partner of the International Dyslexia Association
- [Dyslexia Support Australia Facebook Group](#) – “This group is EVIDENCE BASED and was founded on the principles of the promotion of EVIDENCE BASED practices for dyslexia.”

Evidently, we are struggling to prioritise these good folks as our primary sources of knowledge, strategies, tools and technologies. Instead, we remain poorly informed and trained and continue to allow the term “dyslexia” and dyslexia interventions to be perverted by imitators.

Here are a few practical points to note:

- There is no mandatory dyslexia training in the required curriculum for our University graduates in Education.
- We’re not grounded in the facts & fundamentals.
- Whilst dyslexia is covered under the [Disability Standards for Education](#), there is no specific legal definition and schools have no mandatory intervention standards (never mind best-practice) for students with dyslexia.
- The [2005 Report](#) of the National Inquiry into the Teaching of Literacy was ignored.
- Best practice, evidence-based literacy pedagogies are currently not being employed.

- Our community of experts made recommendations 10 years ago that would have improved (and still will improve) literacy outcomes for all Australians, including students with dyslexia.

We are a free society and we tolerate alternative philosophies. But in the field of medical practice, we enforce rigorous standards of practice that promote genuine evidence and efficacy above mere research and/or anecdote. Unfortunately, we’ve refused to adopt and enforce similar standards of practice for interventions in the dyslexia community. Students, parents, teachers and other professionals (e.g. optometrists) struggle to discern the difference between evidence-based interventions and the imitators. Given our less than ideal state of affairs, here are some classroom strategies to get us back on an evidence-based footing and genuinely improve the situation for students with learning difficulties including dyslexia.

Strategy #1: Complete Best-Practice Professional Development Training And Apply It

“I want to lift the barrier of ignorance surrounding dyslexia and replace it with the wonderful comfort of knowledge.” – Sally Shaywitz, M.D., Professor of Paediatrics at Yale, “Overcoming Dyslexia”, October 2002.

To best serve students, teachers must have ready access to knowledge about dyslexia that is evidence-based and best-practice. We all should benefit from the comfort and efficacy of genuine knowledge and be able to apply it confidently. The good news is there is dyslexia training available to teachers that is recognised as best-practice amongst our experts, fulfils professional development requirements and, in many cases, is free. Teachers in a number of states can enrol in the BOSTES accredited online course [Understanding Dyslexia and Significant Difficulties in Reading](#) through their departments of education. Try a web search for availability in your area.

Of the *Understanding Dyslexia and Significant Difficulties in Reading* course, a North Queensland speech-language pathologist noted: ‘It has confirmed my current practice and extended my knowledge in the area of adolescents with reading difficulties. It has focused my attention on the Big 6 of reading

and that gathering data on all aspects is vital in building a comprehensive profile of students with reading difficulties. I have learned so much from the group sessions and from reading contributions from the group members.’ Overall, 90 per cent of participants reported a high level of confidence in meeting the educational needs of students with dyslexia and significant difficulties in reading. Before starting the training, 38 per cent of participants reported having limited confidence.”

Queensland Department of Education and Training Website.

If, for any reason, you don’t have access to this particular training course, here are some other low cost resources your school should consider investing in immediately:

1. [Understanding Learning Difficulties, A Practical Guide](#) from AUSPELD
2. [Outside The Square](#) Video Series

Strategy #2: Accommodate and Fulfil Your Duty of Care

“Educational neglect: characterised by a caregiver’s failure to provide an education and the tools required to participate in the education system;” “What is child abuse and neglect?”, CFCA Resource Sheet, September 2015.

Schools have a duty of care to all students and must “provide an education and the tools required to participate in the education system.” Legislation also continues to tighten. For example, on 22 December 2015, Victorian Ministerial Order 870 was signed which explicitly binds “children with a disability” to a principle of inclusion. (The government also knows it has insufficient data on students with disabilities so ensure your school is actively participating in the mandated Nationally Consistent Collection of Data).

Children with learning disabilities are frequently at risk of unnecessary humiliation in traditional classroom situations. Furthermore, children who are well behind their peers in literacy skills cannot be expected to “read to learn”. Some students who struggle to read are, nevertheless, bright learners. Teachers need to decouple the old adage “Learn to Read, Read to Learn”.

Susan Barton suggests classroom strategies to deal with these two challenges in an excerpt from the freely available video [Embracing Dyslexia](#). (Indeed, this video is an example of how we can deliver valuable educational content in formats other than the written

word.) The entire *Embracing Dyslexia* video is a fantastic resource.

Strategy #3: Don't Introduce Imitations

"Let's solve the problem but let's not make it any worse by guessin'" – Gene Crazz, Flight Director, Apollo 13

We personally wasted a lot of time and money on interventions that were not evidence-based. The imitations we tried cost our son years we will never get back. They were all no better than guesses and by wasting our time on them we made our situation worse.

"Children with reading problems can overcome their difficulties only if they are identified early and provided with systematic, explicit, and intensive instruction in phonemic awareness, phonics, reading fluency, vocabulary and reading comprehension strategies. Early identification, coupled with comprehensive early reading interventions can reduce the percentage of children reading below basic level in fourth grade from the current national average of 38% to less than 6%."

- Dr. Reid Lyon, Chief of the Child Development and Behavior Branch within the National Institute of Child Health and Human Development (NICHD) testified before the subcommittee on Education Reform, Washington, DC on March 8, 2001.

If you have students with dyslexia in your classroom, it is likely their parents are being funnelled through imitators just like we were. I wish we would have had teachers and schools reinforcing expert knowledge. Sadly, some schools are working with imitators. Here is a report that identifies some imitators:

[*Behavioural Interventions to Remediate Learning Disorders: A Technical Report.*](#)

Please avoid them.

Strategy # 4: Don't Bring Headline Controversy Into Your Classroom

"Dyslexia may not exist, warn academics" — The Telegraph

This headline is a shocker and there have been many like it. In this case, the media misrepresented [Professor Julian Elliot](#) who is challenging best-practice based on his own genuine scientific enquiry.

Professor Elliot is attempting to advance our knowledge of learning difficulties. Reading the full article

reveals what is genuinely going on:

"...While the researchers do not question the existence of the real, sometimes complex, problems some people have with reading, they are critical of the term "dyslexia" because it is too imprecise."

The global scientific community has not yet come to this conclusion and they may not. Here is a [more nuanced introduction](#) from Sir Jim Rose.

I do hope we can all dedicate ourselves to learning from and deferring to our best and brightest.

Resources referred to in this article

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Chris Robertson is Head of Product Development at CompliSpace Pty Ltd, a leading provider of governance solutions. Chris started his professional career as an Aerospace Engineer working for Rockwell International on NASA's Space Shuttle program. He then moved on to a successful career in the financial markets, based in Sydney, working across many disciplines

(programming and quantitative analysis; derivatives trading and risk management; e-trading platform development; sales and marketing). Chris's youngest son is dyslexic and lives in Austin, Texas with mum attending a private school dedicated to evidence-based education for students with dyslexia. Chris and his eldest son (completing his HSC) live in Sydney. The family are looking forward to reuniting back home in Australia soon.



Wendy Moore, on the SMART Reading strategy.

SMART Reading: Making effective comprehension instruction simpler and more consistent for students with LD

Improving reading comprehension can be a challenging task for classroom teachers because of the complexity of the cognitive processes involved. However, teachers need not become bogged down in this complexity. In this article I will describe a simple, flexible, classroom-friendly framework for improving students' comprehension skills. It is based on a 'cognitive strategy' approach, one of the most widely researched methods of supporting reading comprehension, and one that has reliably been shown to be effective for both students in mainstream settings and those with learning disabilities. Group-design studies undertaken since 1982 provide adequate assurance that cognitive strategy instruction is 'evidence-based practice' (Jitendra, Burgess, & Gajria, 2011). Explicit teaching of comprehension strategies using evidence-based practice is requisite for every classroom teacher and tutor. The 'SMART Reading' framework makes this manageable.

Why do students have difficulty with comprehension?

Connor et al. (2011) describe three areas of the reading process which can impact on comprehension: decoding, background knowledge, and oral language competence. For students with learning difficulties, comprehension may be a problem because of difficulties with any or all of these three processes:

- a. **Students are unable to decode text** with adequate accuracy and fluency to allow comprehension. For students experiencing this type of reading difficulty, significant attention needs to be directed to decoding, meaning that there is little capacity left for processing the information in the text (Archer, Gleason, & Vachon, 2003). If the text were to be read aloud to the student, understanding may be adequate; however, when text is tackled independently, the decoding demands threaten comprehension.
- b. **Students do not have adequate content knowledge or vocabulary** to make sense of the text; that is, the topic and language are too unfamiliar. In this case, students may well be able to demonstrate adequate comprehension about some topics – those that they were familiar with – but others might prove too challenging (Hirsch, 2011; Kamhi, 2009). This might occur if students have not been exposed to rich linguistic environments, or

adequate subject-specific teaching, or if they rarely read independently. Lack of self-directed independent reading has a serious impact on students' comprehension in the long run, because this reading provides for exponential growth in general knowledge and vocabulary (Nagy & Townsend, 2012).

- c. **Students are unable to interpret linguistic and logical information effectively.** While they might be able to decode with reasonable accuracy and fluency (or may be able to use assistive technology to allow the text to be decoded for them), students might still not be skilled at independently assimilating the information in a text with their existing knowledge in order to fully understand it (Tiffin-Richards & Schroeder, 2015). In this case, even if the text were read aloud, students would struggle to explain, summarise, or answer questions about it. This difficulty might also be evident in students' oral language comprehension or everyday discourse; on the other hand it might be noticeable only in written texts where complexity increases, such as in subject area texts or literature (Catts, Adlof, & Weismer, 2006). A comprehensive literacy intervention for students with reading comprehension difficulties needs to be capable of addressing each of these three areas.

The evidence suggests that a structured (systematic, synthetic) phonics program within a Response-to-Intervention framework can help address decoding accuracy and fluency (Reynolds, Wheldall, & Madelaine, 2010). For older readers, this should include strategies for reading challenging, multisyllabic words by breaking them into morphemes and syllables. A planned program of vocabulary development using words drawn from sophisticated literature and content area texts is useful to address the second area (Baumann, 2009). Key vocabulary should be taught and revised in the context of subject area learning each week. The *SMART reading* framework described here addresses the third area. It assists students to use a small suite of powerful strategies for tackling the language and logic of complex written texts.

What's *not* working in classrooms at the moment...

Reading comprehension is complex, and for teachers attempting to address

comprehension difficulties in the midst of a classroom full of students with a range of levels of ability and learning needs, the challenge can seem overwhelming. Faced with the prospect of addressing yet another area of student need, even well-meaning teachers may take one of the following three approaches, none of which will significantly improve students' comprehension in the long-term:

1. Setting alternative tasks. Realising that many students with comprehension difficulties also have problems with phonics and lower level literacy tasks, teachers might decide to have these students focus solely on decoding or spelling practice. While extra practice in these areas is certainly of benefit, students also need opportunities to engage with complex texts. Extra phonics practice should not be at the expense of engagement with sophisticated content and practice at making sense of it.
2. Giving students who have comprehension difficulties a much simpler text - one that contains very little new information, and is designed for younger children. This allows students to rely on their existing knowledge to 'comprehend' the material.
3. Reducing the demands of any related classroom task. Instead of being required to summarise or interpret information from a grade-level text, students might be asked to engage with the material at a very superficial level, for example by
 - a. drawing a mind map about the topic (and thus relying on existing knowledge rather than information from the text),
 - b. working on a group task, in which individual accountability for applying new learning is reduced, although the illusion of engagement and learning is achieved, or
 - c. working in a small group with the teacher on proforma 'comprehension questions', with the teacher 'guiding' the students towards the correct answers.

While each of these approaches is a genuine attempt to ensure that students are engaged in meaningful activity in the classroom, each circumvents the critical task of teaching students how to engage with texts more effectively to improve their comprehension. Students need more than the opportunity to practise; they need to be taught how to

improve their skills. A cognitive strategy approach, which allows the same text to be used across the range of students in a classroom while supporting differentiation and increasing independence, provides much better educational value.

What is the research behind SMART Reading?

Cognitive strategies are 'mental routines' for achieving a particular goal (Dole, Nokes, & Drits, 2009). Evidence for the effectiveness of cognitive strategy training in comprehension for students with learning difficulties is substantial. Meta-analyses by Sencibaugh (2007), Berkeley, Scruggs, and Mastropieri (2010), and Ciullo, Lo, Wanzek, and Reed (2016) have all confirmed the efficacy of the approach. The meta-analyses have considered over 100 research studies that have taught students to attend more carefully to text using strategies taught explicitly and systematically, and both short and long term impacts have been positive. The SMART reading framework has been designed to assist teachers to develop confidence in teaching a small number of proven cognitive strategies that can be readily learned and applied by students. No resources need to be purchased, and no special text selections are required.

The five key strategies that students learn as part of the SMART framework are:

Setting up for reading: Predicting and developing graphic organisers

Making mind pictures: Actively visualising detail

Asking questions: Formulating 'wh' questions to ask of oneself or one's peers

Recording information: Writing key words and identifying new information

Testing my brain: Self-monitoring by paraphrasing the main ideas and re-reading if necessary

The SMART Reading framework is suitable for students from around Grade Two or Three (once some 'reading to learn' commences) through to secondary school. It is useful for students at all literacy levels within a classroom, and allows for flexible differentiation, so that students with comprehension difficulties are not using a separate approach to their more able peers.

What does SMART reading look like in the classroom?

The critical feature of SMART reading is that students are shown a small number of cognitive strategies,

and taught to use them flexibly and simultaneously, rather than being taught a dozen or more individual techniques. The strategies that are taught can be applied to any text, and, once internalised, can be revisited to extend their sophistication and provide differentiation for students at varying levels of competence.

Note that students with decoding difficulties are not expected to tackle texts independently. The teacher (or a peer) can read the target text out loud to the student, or text-to-speech software can be employed. Indeed, for students with poor decoding skills, using texts that they could effectively read themselves would be a disservice, because such texts would not provide the lexical complexity or the new content knowledge that it is important for students to engage with. Decoding practice can (and should) occur at a different time during the day.

It is important to remember that for students with learning difficulties, a new strategy requires repeated practice, with high consistency rather than high variation. While the SMART reading framework is simple, it does not provide a 'quick fix'. To maximise the chances of skills being maintained over time, students need to practise the cognitive strategies frequently until they are used independently and automatically (Palincsar & Brown, 1984). While some reproducible materials are provided here to start teachers and students off, the goal is for students to be able to use the strategies without these prompts as soon as possible. The framework thus does not require – and indeed precludes – the use of photocopied pre-prepared worksheets which test, rather than teach, comprehension skills.

How should the strategies be introduced?

1. Modelling and Practising...

In a landmark study, Palincsar and Brown (1984) developed and detailed an effective approach for teachers working with students to support their use of cognitive comprehension strategies. It relied on a gradual release model in which application of a small range of strategies was slowly transferred from the teacher to students working collaboratively in small groups, and then to students applying the strategies independently using a structured process of text interrogation.

Teacher explanation of the purpose and features of the strategy, and the regular use of 'think-alouds' in which

the steps and the reasoning are shared, are both important. The strategies can be modelled for a whole class, a small group, or an individual, and effect sizes are robust in each of these contexts (Baker & Beall, 2009). Subsequent meta-analyses have confirmed that once students have been shown a cognitive strategy, peer tutoring can be effective in supporting student adoption and practice of that technique. This is the recommended method of introduction for the SMART Reading framework.

2. One strategy first, then build from there...

Students might need to practise a cognitive strategy a number of times before it becomes internalised. Indeed, Palincsar and Brown's original study included 20 sessions practising cognitive strategies. However, it is not necessary to wait until students use the first strategy independently before introducing the second. The SMART framework is premised on the idea that students learn to use a range of strategies flexibly and simultaneously, moving between them to decide on the best way of ensuring maximal comprehension of the text.

New strategies should be introduced one at a time to allow students to explore the way in which each strategy helps them to process information and monitor comprehension. Previous strategies should be reviewed as new ones are introduced, so that the new strategy is incorporated into the process of engaging with text rather than in isolation. It might take a teacher a full term to introduce all five strategies to a class.

3. Differentiation can be introduced once strategies have been learned.

Once teachers and students are familiar with the strategies, teachers and tutors can begin the process of differentiating and refining the strategies. For example, the questioning strategy should initially focus on locating and paraphrasing literal information. As students develop capacity with the strategy, the teacher can focus on modelling use of the question and answer procedure to develop inferential skills and identify the sections of text which justify responses.

4. The strategy should be used across subject areas to teach essential content

The most efficient and effective way to both improve content area learning is to use the SMART reading strategy in subject areas beyond English or the literacy block. The SMART strategy can be applied to text presented in written form, orally or via image. Cognitive

strategy approaches have been used to improve learning in Science and Humanities subjects, and allow for the core competency of literacy to be addressed while improving content area understanding.

5. Teach and practise, then let students read....

Some students will take longer to internalise the strategies than others, and will need more guidance to get there. Once students have been taught to integrate cognitive strategies to support comprehension, there is little evidence that teaching additional strategies, or teaching them for a longer period of time, adds much value to students' comprehension skills. Rather, students need to be provided with appropriate texts to read: those that will allow them to practise their skills while acquiring the critical vocabulary and subject area content knowledge necessary for ongoing academic engagement and success.

The five SMART strategies

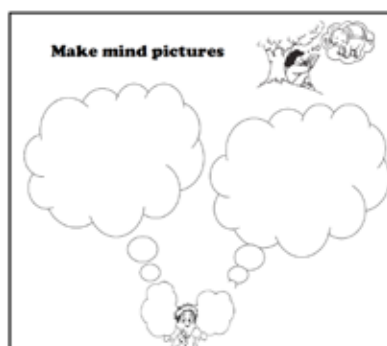
The individual strategies and suggestions for introducing them will be described below. Classroom experience dictates that it is preferable to introduce 'making mind pictures' or 'asking questions' as the first strategy when beginning with the SMART Reading framework. The reproducible pages reproduced at the end of this article can act as a cue to employ each strategy, and can be provided to students one at a time or in a booklet to allow for simultaneous use of more than one strategy. Icons and prompts should be faded out as students internalise the framework and its five components.

Making mind pictures

The benefit of creating mental images to strengthen comprehension has been investigated since the early days of cognitive strategy instruction (e.g., Pressley, 1979), and is still being used to good effect (e.g., Schmeck, Mayer, Opfermann, Pfeiffer, & Leutner, 2014). It is also a strategy that many students enjoy applying. In the context of the SMART framework, teachers model the process of 'making a mind picture' by engaging with the text one sentence at a time.

Teachers should not be tempted to read a whole paragraph or section before visualising. The purpose is to slow students down and ask them to spend time processing the information in the text. This is because even material designed for children in

junior or middle primary school is lexically and conceptually dense in comparison to spoken discourse, and less experienced readers and those with weak oral comprehension skills need plenty of practice at processing it. The following section from a classroom text (Macquitty, 2008) is an example of a text suitable for introducing the strategy.



The teacher would read the first sentence, then describe a mental image, and begin a drawing on paper or a whiteboard:

I have got a picture in my mind of some coral that looks a bit like deer antlers. It doesn't say that in the text, but I've seen coral like that before. I'm using what I already know. Now I am thinking about tiny animals trying to build it... What are they called again? Polyps! I don't know what they look like, but I imagine them building coral a bit like this (T draws a quick illustration). I might have to change the picture in my head a bit as I read some more, but for now, I know that that sentence is about some little creatures building some coral, and that's the picture I have got in my mind...

For the second sentence, the teacher might both 'talk aloud', and encourage students to join him or her in making a drawing. The *Make mind pictures* proforma page can be used, or teachers might prefer to use a blank sheet of paper folded or divided into four or more sections.

Now I am thinking about this: a cup-shaped shelter. I am thinking of something a bit like a jelly cup... it says the polyp has a soft body. I think the cup might go upside down, like a turtle shell, over the polyp. The

polyp might be inside. I am going to draw it now. You can draw what you imagine too.

It is important, at this point, that students *describe* what they have drawn. The purpose of the drawing is for them to spend time on visualising, and then to be able to *re-tell* the information using the key ideas... for example, that the polyp is a tiny animal, covered in a shelter that is shaped like a cup. They may require some prompting, for example:

Tell me/your partner what you drew, and why you drew it like that....

Being able to verbalise and restate the information is the goal, because eventually students will not need to make a physical drawing, but will, instead, visualise 'in their minds' eye' only. It may be necessary to challenge students about their drawings, to ensure that they are informed by the information in the text.

Which word in the text gives you the hint that it would look like that?

Asking Questions

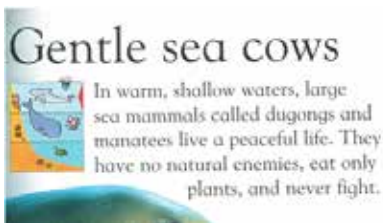
Self-questioning has been identified as consistently the most successful cognitive strategy for improving comprehension (Sencibaugh, 2007). However, students need to be trained to ask effective questions of themselves and of their peers. Initially, they may be tempted to ask questions about the topic which are not addressed in the text, such as 'Why does coral die?', and need to be shown how to use self-questioning to summarise the information that is available to them in the text. Again, modelling is critical. A teacher modelling the strategy will demonstrate to students that, after reading, he or she will be asking particular questions, such as Who, When, Where and What questions to test his or her own understanding.



I think I will ask myself a 'who' question first... Who hides at daytime? I know the answer... an octopus. It says so right here. Now I'll ask a 'where' question. I wonder if you know the 'where' question that I will ask... Yes! Where do octopuses hide? Now for a 'when' question... Now I have got a lot of the information stuck in my brain... Okay, you test me now...

Students can then practise asking themselves (and each other) these types of factual questions, supported by practice with visualisation. It is important that the teacher provides feedback about whether questions are appropriate. Asking 'Why do octopuses have eight legs?' is irrelevant here, as it is not addressed by the text. In a small group, students can reflect on whether each others' attempts are good questions or not, based on whether they can be answered using information in the text.

The question prompts on the proforma page address question types and modality to allow for differentiation. A 'when did...' question might be selected to probe for literal information, but for more capable or experienced students, teachers might model and encourage the use of inferential (e.g., why did...) or evaluative (e.g., why should...) questions, in each case encouraging students to use increasingly sophisticated evidence in the text to respond appropriately. As always, the teacher will continue to assist students to develop comprehension by using 'think-alouds' to model the way in which he or she might genuinely interrogate a text to make sense of it. For example:



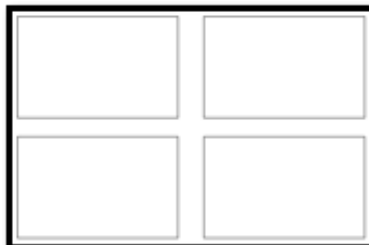
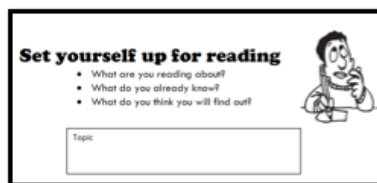
This is an interesting section. I can see that it's about dugongs, but the heading says 'gentle sea cows'. I am going to ask myself a question... Why did the author call them 'sea cows' when cows don't live in the sea? Now that I have read the section three times to help get a picture in my mind, I think I can give the answer using information from the text. I am making an inference here.

Setting up for Reading and Recording Information

Set up for reading and record information are complementary strategies that help students to organise their new learning and distinguish background information from information contained in the text. This is important, because students with comprehension difficulties tend to rely on existing knowledge to respond to comprehension tasks rather processing and integrating new information. *Setting up for reading* is typically used at the beginning stages of reading a new text or section of text, while *recording information* is used after students have employed visualising and questioning strategies.

When modelling *setting up for reading*, a teacher might begin with a 'brainstorm' series of unrelated pieces of information and then begin to sort the data into categories or sequences, or might instead use an established graphic organizer to help stimulate existing knowledge. For example:

Today, the section we are going to read is about volcanoes. I already know a lot about them. I am going to *set up for reading* by listing all the things I already know and organising the information into categories: where volcanoes can be found, what types there are, how they erupt, and what parts they have. Then I will be ready to *record* when I come across some new information that I didn't already know.



or
We read the first page of 'The BFG' yesterday, and are going to *set up for reading* today. I am going to think about what I know about stories to help me. They have characters and a setting, an initiating event, a conflict, some episodes, and a resolution. At the beginning of a

story, we usually get to know about the characters and the setting, and maybe the initiating event. I am going to think about what I know about those story features based on what we have already read in the BFG, then think about what I might find out next.

After students have undertaken some visualising and self-questioning strategies, they will re-visit the text and begin to *record information*. The teacher will model identification of key words, as well as the use of simple post-reading graphic organisers to structure the recording of information. This structure will likely be similar to the *set up for reading* categories or sequence, but may differ if new events or categories have emerged as important.



I know that **magma** is an important word for this section, because it is not a word I use in everyday conversation, and because it is explained here in the text and it is here again in this caption. I am going to write it here, and I know I could write down its meaning if I needed to explain it.

or

Okay, I've read that section, and I think that the word **erosion** is important. It says that it was caused by **erosion** but I can't make a mind picture about that because I am not sure what **erosion** means. It is not explained in the surrounding sentences or anywhere else on the page. It sounds like 'explosion,' and looks like 'Eros', but I don't think that makes sense. I think I need to check the meaning by looking in the glossary or by asking someone.

As students finish reading each section, they ask themselves what new information they have learned, and record

this in the simple graphic organiser that they designed for this purpose during *setting up for reading*. They need to ensure that they are not including background knowledge that they had recorded prior to reading. Modelling the use of key words and phrases rather than entire sentences will be an important focus as students become more adept at this strategy. The inefficient 'write whole sentence answers' mantra which is often associated with the completion of prepared comprehension worksheets may need to be unlearned at this point.

Testing one's brain

The last strategy in the SMART reading framework is a 'meta' cognitive strategy. Again, it relies on explicit and genuine teacher modelling of strategies that involve 'thinking about thinking'. It asks students to reflect on how they have applied the previous four strategies, and to determine whether their own comprehension is adequate. Students need to ask themselves: 'Can I say what that bit was about in my own words?' Students can be taught to prompt themselves with the SMART cues: 'What did I make a mind picture about? What questions did I ask myself about that part, and what were my answers? What were the key words in that section, and what new facts did I find out?' If they find that their responses are partial or tentative, they will need to decide which section or which strategy they need to revisit to help clarify the details. Both the *recording information* and the summarising component of *testing one's brain* provide notes that students can use for study notes or to plan writing tasks in response to text.

It seems that as students become better at comprehending text, their metacognition also improves, and this further enhances effective comprehension (Baker & Beall, 2009). Extended opportunities for guided practice are thus critical. As students gain skills in each of the strategies, the *test your brain* phase will increasingly become embedded in each of the other strategies and be applied simultaneously with them. This component of the framework is essential if work on comprehension doesn't become a mere checklist of activities for students to engage in as busywork in response to text.

Using the SMART Reading prompt sheets

The worksheet pages included here can be freely reproduced, and allow for teachers and students to become familiar with the strategies. The aim of the worksheets is to provide an initial scaffold. The last two pages deliberately

reduce this scaffolding, and are designed to replace the sheets aligned to the individual strategies once students become more familiar with applying them. This allows and encourages students to move flexibly between the strategies, while still providing some prompting. Once teachers and students have internalised the framework, the prompt sheets are no longer required. A blank page will suffice.

This strategy has been used effectively by teachers in both mainstream and learning support settings across primary and secondary classes. The poorer a student's initial comprehension, the more repetitions and modelling required, but the greater the potential gains of teaching cognitive strategies for comprehension. This simple framework provides a no-cost, low-fuss place for teachers to start.

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Smart Reading



- S**et up for reading
- M**ake mind pictures
- A**sk questions
- R**ecord information
- T**est your brain

Name: _____

Set yourself up for reading

- What are you reading about?
- What do you already know?
- What do you think you will find out?

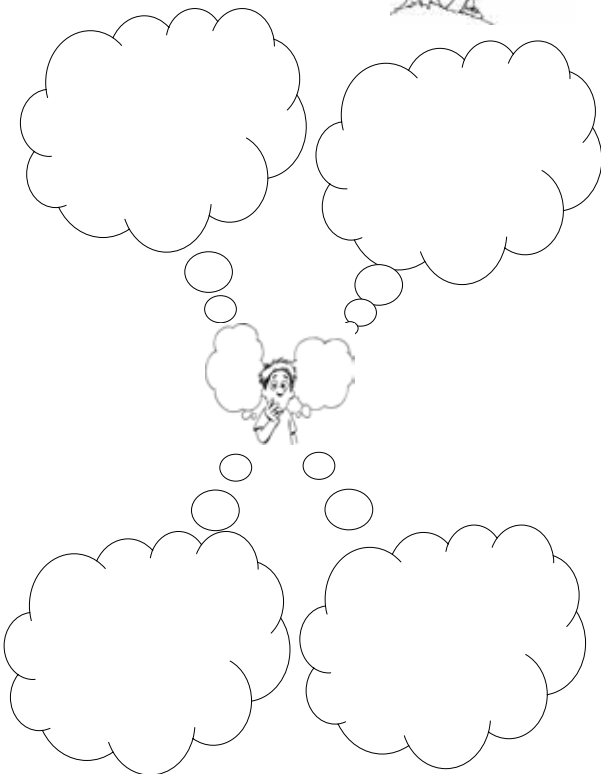


Topic

Things I already know about the topic

Things I might find out

Make mind pictures




Ask questions about your reading




What Who When Where Why How

is will was can could do did should might


Record information 


Special words


New information


Test your brain 


- What did that part mean?
- Should I read it again?
- Did I use the headings and pictures to help me?
- Did I understand all the words?
- Can I make a mind picture?
- Can I ask and answer questions?
- Can I say it in my own words?


Set up for reading 

Make mind pictures 

Ask questions 

Record information 

Test your brain 

S M A R T 

Maryanne Wolf and RAVE-O

Mary Height

Many times during my teaching career following up on a request or a comment has led to an inspirational change or journeying along a new path. Such was the case when Dr Lorraine Hammond from Edith Cowan University asked if I would like to attend a Dyslexia SPELD conference in Adelaide in the early 2000s, at which Professor Maryanne Wolf was the dynamic, keynote speaker.

Listening to Professor Maryanne Wolf speak fills one with enthusiasm for – and deep appreciation of – the dynamics of teaching Literacy. I took away three main points from her presentation: firstly, that no part of our brain was designed to take on the complex task of reading which humans, over thousands of years, have imposed on neural circuits designed for listening and speaking; secondly, that struggling readers with double deficits have poor phonological processing and slow rapid automatic naming skills; and thirdly, the answer to a question that someone in the audience asked Prof. Wolf. The question was: *how many presentations should it take for a child to learn something?* and her response was: *from five to five hundred.* The answer seemed alarming at the time but it has also been a source of comfort over the years. Much to my excitement I was also invited, along with other colleagues, to share a meal with her.

Proust and the Squid

In 2007 *Proust and the Squid* was published. In a nutshell this amazing text examines the development of reading both from a historical and a neurological perspective. Prof.

Maryanne Wolf's first degree was in literature, and so *Proust and the Squid* not only contains astonishing information about the reading process but it is magnificently written with quality quotations from a variety of authors. At the International Dyslexia Conference in Seattle, 2008, I was fortunate enough to hear Prof. Maryanne Wolf speak again. At the end of the presentation I remarked that I had just finished reading *Proust and the Squid* and that it was so beautifully written that reading it was similar to hearing a symphony orchestra play. She was so pleased that I was hugged and she called over her fellow researchers to hear my comment.

Returning home in my suitcase was another of her co-publications, the *Rapid Automated Naming and Alternating Stimulus Tests* (Wolf & Denckla, 2005) arming me with a tool to look at the sub-word level of processing in order to detect one of the key deficits mentioned above. I could, therefore, use it as a tool for predicting reading disability. It is an excellent diagnostic tool due to its student friendly presentation and ease of use.

Using RAVE-O in the clinic

Five years later in 2013, three young children came to my clinic with severe reading fluency problems. At the time I was using the *MultiLit* Reading Tutor Program, *Reading Doctor* (CD ROM version) and materials produced by Western Australian speech pathologist Diana Rigg, as well as materials that I had written myself. All three of the children had severe reading difficulties and various comorbid medical or psychological conditions. While they progressed through the *MultiLit* Accuracy lists at a reasonable pace, it was a different story when it came to reading fluency. I can remember composing one reading fluency page for one of the students consisting of her own name, two CVC words, and a fourth word which was easily recognisable because of its interesting shape, with each word repeated three times on a page. A new support program was

needed with a different presentation and a component of 'novelty' to re-motivate these students and lessen their anxiety about reading. An element of fun was needed!



I recalled that Prof. Maryanne Wolf had been working on a program called *RAVE-O* for some years and much to my relief an investigation showed that it had been published. *RAVE-O* proved to be an answer to my prayers. Two of the students had consecutive lessons so I was able to overlap one half of each of their teaching sessions so that they could work on *RAVE-O* together. They loved it! It was such a joy to teach and as I read the explicit instructions and asked questions I could hear Maryanne Wolf's passion for reading coming through.

RAVE-O is based on twelve years of research and it encompasses phonology, morphology, orthography, semantics and syntax in an integrated manner. *RAVE-O* is presented to children on a colourful map and they became detectives looking for the characters who will help them to read. These include Miss MIM, the spider who introduces many interesting meanings and Mr MIC the mayor who knows many interesting connecting words, along with Sam Sleuth, the word detective. The attractive Toolkit box comes equipped with explicit instruction manuals, a teacher resource manual, magnifying glasses, a set of instruction posters, word slides and egg timers. The reading texts come in a novel format with small amounts of clearly written and spaced text and thought-stimulating illustrations. The scope and sequence is broken into teaching units with accompanying tests. The unit tests examine far more than reading so they gave a deep insight as to exactly what the children were learning as far as semantics, grammar and syntax were concerned.

The presentation of new words follows a prescribed pattern. The two students removed new words from the treasure chest with excitement, and read, segmented and blended them. One of the most significant tasks involved making semantic webs to go with each of the words using the MIMs (Many Interesting Meanings) picture cards and placing them on the spider's web. So, a word like 'ram' could have as many as five different meanings, each presented in a pictorial form. The students provided their own connecting words or MICs (Many Interesting Connections) which were written on post-it notes and added to the web. At the same time I made word webs for each of my students, including their favourite food, game, book and so on. Consequently it was explained that when I read their name on the web it had a much deeper meaning now because I knew a vast amount of information about them and not just their names. In return one of the boys went home and made one about me! The students started to understand that simple words could be treasured and that they had a depth of meaning. The children wanted me to keep each word web, because they loved going back and rereading them. They took ownership of the 'connecting words' that they had provided because sometimes they reflected a special event in their lives. So I drew my own webs on paper and attached the semantic pictures and the connecting words. The webs were placed in an A3 file that students could access.

Integrating RAVE-O and MultiLit

The teaching of the *MultiLit Reading Tutor Program* continued, because it provided a greater selection of words

containing specific phonic patterns. Surprisingly, I noticed that when completing the fluency component of *MultiLit*, the students started to 'whole word read' the words that they had been taught on the *RAVE-O* program first. It seemed to me that perhaps the semantic webs were enabling stronger whole word reading consolidation.

The presentation of the fluency lists and one minute stories in the children's work books were appealing and the children enjoyed completing the associated tasks. We set up special *RAVE-O* files for them to take home so that they could practise their reading at home. The children loved making words with the letter cards and completing the pages in the workbooks which are highly suited to children with specific learning difficulties. Spelling and written expression tasks were included in the program in a very non-threatening manner, which is important for children with anxiety issues.

The students' enthusiasm for the program continued until the end of the school year. By that stage they had completed the accuracy and sight word components of the *MultiLit Reading Tutor Program*. Their end of year assessments showed that they were ready to be taught more advanced multisyllabic words so when they returned the following year they required a new program of instruction. As they progressed through the *MultiLit* Fluency lists, the times decreased from being over one minute per fifteen words to passing the list on the first attempt in less than 20 seconds. Recently I have had two similar students come to the clinic so I am eagerly looking forward to using these comprehensive resources again.

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- Mary Height qualified as a primary school teacher in 1972, and in 1992 completed additional training in learning disabilities. This background was the catalyst for Mary's passion to learn about the neurological aspects of reading. She established a clinic, Light to Learning, in 1996 in order to offer students with specific learning difficulties quality literacy and numeracy intervention.*



What more could you want?

A trip to Oxford and the chance to see some top researchers at the British Dyslexia Association Conference by Tom Nicholson

Going to England as an invited presenter at the British Dyslexia Association (BDA) conference in March this year was an opportunity for me to find answers to several questions that are relevant to Learning Difficulties Australia (LDA). So let's start with the questions and my answers.

1. **Is early systematic phonics proving effective in England now that it is mandatory in schools?** To me, even though the statistics indicate that achievement levels have improved, some children still struggle with reading. This may indicate that classroom instruction on its own is not enough. There is also a north/

south divide in that schools in the north of England fare worse in reading surveys, possibly due to the worse economic conditions in the north. So although the average is improving, some children are still not making enough progress.

2. **Is the discourse about reading instruction and learning difficulties in England different to that in Australia?** Looking over the range of talks given at the conference, the discourse did not seem so different. There is still the search for causes of dyslexia with lots of differing opinions.

3. **Is there much difference between what the British Dyslexia Association advocates and what is happening in schools?** I could not see a remarkable difference but perhaps it is because reading instruction in England is very much 100% phonics so it is a very different landscape without the imbalance that is common in Australia. It was interesting to browse curriculum manuals and to see that phonics is required of teachers. Talking with university staff, it was clear that even if they are not advocates of phonics, they do have to teach it. Whole language is definitely out in the cold, like

phonics once was.

4. **What is happening with teacher training?**

I was surprised to hear that the government is almost certainly going to transfer training from the Universities to schools (called "academies") so that trainees are taught completely in schools. The argument is that teachers need to know how to teach and that schools are the best place to do this. This is on the horizon with many Education academics likely to lose their jobs if it goes ahead.



Now to the conference itself

The British Dyslexia Association conference this year was held over three days. They certainly chose a great location. Oxford is known as the city of spires. The buildings are incredibly old and beautiful. Oxford itself was swarming with tourists, mostly visitors from schools and other places all over the world. This was in March earlier this year when it was really cold and you would think that tourists would be put off – but no.

The conference was opened by Lord Addington which added a prestigious note. The Chief Executive Officer of BDA is Dr. Kate Saunders who also spoke. Two things struck me about the conference. The first was the emphasis on research. Just about every talk was a research study. I thought that this was unusual since many of the participants were specialist teachers and I thought that they would want mostly practical topics but I was told that this has been a feature of the conference for some time and that teachers like to hear about research. There were a lot of researchers attending the conference which also might explain the emphasis on research. The second thing that struck me was that so many well-



known researchers were there. There were many symposium and workshop sessions to select from; for example, I counted nearly 40 presentations on Day 1, as well as poster presentations. These were nearly all research studies with many researchers from Europe and elsewhere.

Workshops and exhibitions

There were some interesting innovations in the exhibition room such as the C-pen which you run along the line of print and it reads the line aloud to you. This could be really helpful for students with dyslexia sitting high school examinations. There were also digital recorders that could read word files and other documents aloud once you loaded them onto the recorder which would certainly help with studying. The cost was very reasonable as well.

One interesting session was on writing. Professor Vince Connelly from Oxford Brookes University studied the writing of dyslexic students using technology where students write on tablets and the software records exactly what they do: the stroke patterns, the pauses, the number of words written, and the time taken to write.

A surprising (to me) poster was about the use of blue and yellow filters to help poor readers. It was by researchers in Physiology, Anatomy, and Genetics at the University of Oxford. Contrary to much previous research, they found in their double blind randomized study that yellow filters were of benefit to poor readers who complained of blurry words and that blue filters were of benefit to children who complained that the words jumped around. The filters improved their reading of words a little. For some reason, the effects were not the other way, that is, yellow filters made jumping words worse; blue filters made blurring worse. There have been many studies in the past showing no effects for filters so perhaps this one needs to be replicated before taking it fully on board.

Keynote Presentations

The keynote topics were all quite different. On Day 1, Professor Julia Carroll from Coventry University spoke about her research on the importance of morphological knowledge in reading words. Professor Susan Gathercole spoke about her work with 130 children attending their research clinic at Cambridge University where they are training working memory to see if this can improve areas such as dyslexia. Professor Esther Geva from University of



Toronto spoke on dyslexia and second language learners and research done at her lab with typical and atypical English language Learners (ELLs). My talk (I can say more about it because I gave it!) was on phonology and reading difficulties. I was a bit nervous in front of a very big audience so decided to calm myself by telling some jokes before presenting a review of the current debate about the role of phonemic awareness in learning to read, and whether it is necessary or not. There are strong research arguments both ways. I presented some recent work we have done that combined phonemic awareness training with shared book reading and phonics with good results, indicating that maybe we need to keep all three of these elements as part of classroom instruction.

On Day 2 Professor Karin Landerl from University of Graz spoke on her research with children who were showing dissociation, that is, spelling at age level but reading below age level, and vice versa. Professor Don Compton from Florida Centre for Reading Research spoke about his research on knowledge transfer with fifth grade children in relation to assessment of reading comprehension using analyses that incorporated classic text based and situation models. Professor Peter de Jong from University of Amsterdam spoke about issues in diagnosing dyslexia with his research showing that some students with dyslexia do not show the usual profile of difficulties with phonemic awareness and rapid automatized naming (RAN). He described family risk studies and the link between parents' and their children's reading ability. Professor Elena Grigorenko from Yale University

spoke about her research with 250 fifth grade children looking at knowledge needed for reading comprehension.

On Day 3, Professor Maggie Snowling, President of St John's College, University of Oxford, presented research following children from the time they were three until eight years of age showing several risk factors, especially language impairment. Professor Usha Goswami talked about research she is doing in her neuroscience lab at Cambridge University on the link between rhythm and reading difficulties, which relates to her long time interest in the link between rime and reading. Professor Victor van Daal spoke on research in his lab at Edge Hill University on orthographic learning in typical and atypical readers. He examined factors that most affect our ability to store written words in memory and retrieve them, for example, children doing their own orthographic learning through phonological recoding.

Lastly, the tourist perspective

Although the BDA conference was fun, it was also my first trip to Oxford and it was very exciting to be there, in amongst buildings that go back a thousand years. After the conference, I was able to spend a short time in the library of St John's College which was very nostalgic for me, the kind of library where there are no distractions and you read books. Across the road from the College is the Eagle and Child pub where C.S. Lewis, J. R. Tolkien and others used to talk and read their writing to each other. How good is that? There is something special about the city; it is quite unique and made the time at the conference even more worthwhile.

ResearchED Arrives in Melbourne: Working out what works

Kristin Anthian

Australia was once again graced with an eclectic and knowledgeable group of highly regarded and passionate speakers for the recent ResearchED Conference, following on from a successful event in Sydney in 2015 (see the review in the Autumn 2015 edition of the LDA Bulletin). ResearchED describes itself as a 'grass-roots, teacher-led organisation aimed at improving research literacy in the educational communities, dismantling myths in education, getting the best research where it is needed most, and providing a platform for educators, academics, and all other parties to meet and discuss what does and doesn't work in the great project of raising our children'. ResearchED began its story in the United Kingdom with a single conference, but has since become an international organisation with conferences held worldwide.

This year's Australian event took place on Saturday the 21st May at Brighton Grammar school in Melbourne. As the group of 200 teachers and researchers eagerly joined together on a frosty autumn Melbourne morning, Tom Bennett, founder of ResearchED, took us on the journey of his vision for a collaborative approach to the sharing of educational knowledge that is research driven. He aimed to strengthen the bridge between research evidence and pedagogical practice, so that educators could continue to learn how to critically evaluate what they read, as well as to identify some of the limitations

of questionable methodologies. He explained that the relationship between research and education is a complex one. However, reflecting on evidence, on our values and on our own biases can lead to better informed decisions for our students. Sound research can lead us to question what we have often believed intuitively to be true.

Tom described how ResearchED evolved from a single Twitter tweet, and explained the important role that social media has played in its continuing development, allowing information to reach educators and researchers alike, on a shoe string budget with no financial assistance. For this conference, speakers freely donated their time and expertise in their fields of research, as did many staff from Brighton Grammar school. This not only made the event possible, it also kept costs to a minimum. The ideology of evidence-based practice, highlighted by ResearchED, is consistent with LDA's position statement. Evidence based approaches to instruction are vital for students who are experiencing learning difficulties, and equally important for those who are not.

I suspect that I was like many of the registered attendees: there was a smorgasbord of 24 speakers and I wanted to hear from so many of them. These ranged from Dr Kerry Hempenstall speaking on Direct Instruction, Professor Mark Rickinson and Kate de Bruin on what 'evidence use in practice' can learn from 'evidence use in policy', and Professor Pamela Snow on the relationship between reading instruction and justice reinvestment. Presenters also included a number of practicing teachers, including Ray Swann speaking on improving the quality of decision making in schools using evidence. A full list of presenters can be viewed on the ResearchED website. What follows is but a brief overview of some of the presentations I was privileged to attend.

<https://www.tes.com/news/blog/researched-melbourne-part-1-high-hopes-research-down-under>



Explicit teaching: What is it good for? Greg Ashman

Greg spoke passionately about the role of explicit instruction (EI), sometimes known as 'little di', and explained that EI should not be perceived as learning in which students are not actively engaged. Explicit instruction is not about teachers lecturing. While EI is teacher-led, it is highly interactive, with dynamic questioning being considered a crucial component. Greg presented research by Rosenshine relating to the principles of EI lessons. These included reviewing previous learning at the commencement of a lesson, presenting information in small steps with student practice after each step, extensive questioning and checking responses of all students, providing models, guiding student practice, checking frequently for student understanding, ensuring a high success rate, providing scaffolding for complex and difficult tasks, expecting independent practice and monitoring this, and engaging students in weekly and monthly reviews.

Greg offered information on Project Follow Through and DISTAR as one of the largest educational experiments undertaken on explicit teaching. He also pointed out some of the challenges and limitations of EI and that cognitive load theory can have an impact, so that EI is better suited to novice learners rather than those that are more experienced or experts, who are able to extend their foundational

knowledge through collaborative work with peers. Motivation, variety and expertise reversal effect can influence the efficacy of EI. EI appears to be more useful for struggling students than those who are highly competent, but is equally effective for the development of foundation skills for all learners. Greg responded to a question about the need for collaborative skills in the workforce; this issue was explored in terms of the difficulty of being able to engage in collaborative work without basic literacy and numeracy skills necessary for both knowledge and collaboration.

<https://gregashman.wordpress.com>

Think tanks and educational research: Policy or politics?

Dr Jennifer Buckingham

Think tanks have been closely scrutinized recently in academic media circles so Jennifer's presentation was timely, and left me pondering a range of issues. 'Think tank' is a colloquial term for an independent organisation that participates in research. Think tanks typically comment on, and engage in, public debate about social and economic policy and issues. Some think tanks are directly connected to political parties while others are non-partisan, such as the Centre for Independent Studies (CIS) that Jennifer is involved with. Jennifer restricted her presentation to those think tanks that explore educational policy but do not provide consultancy work or paid research. She explained that a true think tank develops its research priorities and then seeks financial support to make this possible. In this way, its research direction is not driven by its financial contributors.

The CIS does not receive government funding, such as that obtained by the Grattan Institute, and as such is able to freely criticise or support government policy without bias. Additionally, decisions for research directions are not affected by a change in government. The CIS receives its funding entirely through philanthropic donations. Jennifer explained that much of the current Australian academic writing critiquing think tanks is based on the operation of think tanks in the United States, where they tend to be connected with political parties, which is less common in Australia. Jennifer pointed out that various groups in Australia contribute to educational debate.

Jennifer argued that continuing to chase policies that do not improve educational quality has both an economic and a human consequence.

She explored the tension between teacher professional autonomy and the rights of the child to learn to read, and related this to accountability within education. For students who don't learn to read, due to poor educational policies, this is time they will never get back. Jennifer made a poignant statement towards the end of her presentation about the value of 'persuading' teachers to consider implementing evidence based alternatives to beginning reading instruction, to include systematic synthetic phonics, rather than relying on 'coercion'. She explained that teachers who feel coerced are less likely to be successful teachers of phonics, as they may not be committed or dedicated to its effective implementation with rigor. Jennifer touched briefly on the CIS project Five from Five, which is firmly embedded in evidence based policy. She concluded by stating that the CIS is very much evidence and research focused with the ability to bring about positive change in educational policy, in significant and powerful ways.

Reading Instruction: What can justice reinvestment teach education? Professor Pamela Snow

Pamela presented an approach to preventing school disengagement and its possible flow-on to youth criminal behaviour. She explained that reinvestment should occur in the teaching of reading so that fewer instructional casualties result, particularly in disadvantaged communities. Justice reinvestment redirects money spent on prisons to community based initiatives which aim to address the underlying causes of crime. Instead of calls for expensive ambulances at the bottom of a steep cliff, she argued, we should look at building better fences at the top of the hill to avoid the downward spiral. Justice reinvestment is the redirection of funds from a downstream to an upstream prevention approach.

The educational risk factors for the sadly named education-to-prison-pipeline include poor oral language skills, a history of behaviour or conduct disturbance, low educational attainment, a history of school suspensions and exclusions, and developmental disability (diagnosed or not). We can have a profound influence on oral language and literacy risk factors by employing evidence based practices, adopting a Response To Intervention

model (RTI), and teaching the five big ideas in reading instruction with rigor (phonological and phonemic awareness, phonics, fluency, comprehension and vocabulary). The current orthodox teaching methodology for beginning reading instruction, namely 'whole language,' is firmly embedded in our schools. However this approach predisposes our most vulnerable students to reading failure and is a current barrier to avoiding instructional casualties in reading.

Beyond third grade, a student's level of reading ability is likely to remain relatively stable, so it is difficult to escape a pattern of reading failure in the later years of primary school. The ability to transition from 'learning to read' to 'reading to learn' is significantly compromised. Pam implores educationalists to endorse what 40 years of reading research has provided us with, and to ensure that our pre-service teachers receive better training to be able to apply scientific evidence rather than ideology when they select models of teaching reading.

<http://pamelasnow.blogspot.com.au>

Direct Instruction: Explicit, systematic, detailed and complex. Dr Kerry Hempenstall

Kerry argued that Direct Instruction (DI) methodology, encompassing the work of Siegfried Engelmann, is an often misunderstood model of explicit teaching. He explained that DI involves the following: attention to detail in the formulation of the tasks developed, examples presented to students, particular attention to the way that lessons are sequenced and organised, and the avoidance of ambiguity in the content that students access.

"Learning is learning, and once something is learnt, the method by which it is learnt is largely irrelevant," Kerry stated. Making sure it is learnt at a level of mastery in the first place is where explicit teaching can have a strong hold. Kerry compared the work of Barak Rosenshine (little di or explicit teaching) and that of big DI. Rosenshine's work was based on the behavioural characteristics of effective teaching, including clear learning goals, sufficient time for instruction, extensive content coverage, careful monitoring of student performance, cognitive questioning pitched to elicit correct responses, and immediate feedback which is academically oriented. An explicit instruction lesson is teacher led, with the pace of the lesson and the

choice of material carefully matched to ability level.

Visible Learning researcher, John Hattie, has deemed that explicit teaching or 'little di' has an effect size of .60, with the ability to move students who may be sitting at the 50th percentile up to the 72nd percentile. Kerry explained while the success of little di or explicit instruction was contingent predominantly on teacher behaviour, big DI was further refined to include carefully scripted lessons and content. For low progress learners this attention to detail is required for them to make accelerated gains. Kerry also pointed out that just because an explicit teaching approach is employed does not necessarily mean the content of the program used, or material presented, is particularly good. The content is as equally important as the delivery method. DI programs are extensively field tested prior to distribution to yield the best outcomes.

Kerry gave a run through of a DI lesson that included information on the instructional design such as placement testing to determine a starting point, that units of work incorporate various components to develop an overall body of knowledge, that the teacher learns how to use the same wording and instructional formats, and that there are a range of principles that inform design and instruction (e.g., the sameness and difference principle where various colours, fonts, sizes, and thicknesses of a letter do not change the phoneme represented by the letter). Scripting in DI can sometimes be a contentious issue for teachers, but Kerry explained that when interventions are not implemented as designed then variability in outcomes and effectiveness result. Maintaining fidelity is of high importance in program administration and many teachers have not had enough exposure or instruction themselves of how to deliver explicit instruction in the teaching of reading. With 20% of our year 7 students reading at a year 3-4 level, Kerry made some important points worthy of consideration. For further information on DI, Kerry suggested exploring Engelmann and Carnine's 'Theory of Instruction' or visiting the National Institute for Direct Instruction (NIFDI) website.

At the conclusion of ResearchED I was left with a real sense of collegial enthusiasm. With many questions answered and a whole range of new ones raised. I am keen to continue my research informed learning journey as an educator. While there was not always

consensus, the passionate debates and questions raised provided the prospect for further intellectual growth, respectful collaboration, and the opportunity to challenge our preconceived ideas and thinking. No doubt remained that empirical evidence can empower our educational approaches.

To sum up in Tom Bennet's wise words "Teaching is a profession heavily reliant on craft, or practical wisdom. But like everything it can be augmented by evidence, and that evidence can take many forms; randomized control trials, case studies, literature reviews and so on. These all have their strengths and their weaknesses, and there is nothing to be feared from understanding this. The intersectional soil where craft and evidence meet is where the flower of professionalism will bloom."

Papers and presentations from past speakers can be downloaded from the ResearchED website. I look forward to ResearchED visiting Australian shores again, hopefully in the not too distant future.

Kristin Anthian is special education trained teacher and a consultant and council member of LDA. She has her own private practice supporting learners experiencing difficulties and provides professional development for teaching staff. Email kristin.anthian@gmail.com



Kerry Hempenstall and Greg Ashman share a moment while presenting at ResearchED

LDA Awards for 2016

LDA is delighted to announce the 2016 recipients of the Mona Tobias Award and the Bruce Wicking Award.

The Mona Tobias Award has been awarded to Dr Roslyn Neilson in recognition of her significant contribution to research, practice and community education in the area of language and learning difficulties. Dr Neilson also served on LDA Council for two years.

The Bruce Wicking Award has been awarded to Lynne Ivcevic, a WA secondary Learning Support Teacher and co-ordinator of PROPEL, a program to support students with diverse abilities. Lynne has positively impacted the lives of many students over her career, identifying and realising the true potential of students who may have otherwise been over-looked.

Profiles of 2016 Award Recipients will appear in the next edition of the Bulletin, after the Awards Presentation has taken place.

LDA congratulates both Ros and Lynne, worthy recipients of these awards.

Nationally Consistent Collection of Data on School Students with Disability

Tanya Forbes

The Nationally Consistent Collection of Data on School Students with Disability (NCCD) is a joint initiative between federal, state and territory departments and education authorities. It has been progressively implemented from 2013 and became mandatory in schools from 2015.

In the past, each state and territory has counted its students with disability on a different basis. The NCCD initiative has been designed to address a lack of comprehensive and nationally comparable data about school students with disability. The data is collected annually to identify the number of school students with disability, where these students are located, and the level of reasonable educational adjustment provided to them. The aim of the NCCD is to assist schools to identify and to support students with disability so they can access and participate in education on the same basis as their peers.

The model for the national data collection on students with disability consists of four steps which schools are required to follow.

Step 1: Is there an adjustment?

Schools determine which students are eligible based on whether they are receiving reasonable adjustments to access education because of disability, consistent with the *Disability Discrimination Act 1992* (DDA) and *Disability Standards for Education 2005* (the Standards).

Students with dyslexia and other related learning difficulties are protected under section (f) of both the Disability Discrimination Act (1992)

and Disability Standards for Education (2005) as they have:

"a disorder or malfunction that results in the person learning differently from a person without the disorder or malfunction."

Students with disability as defined under the DDA and the Standards may be in mainstream classrooms, or may be enrolled in special schools or participating in specialist support classes.

The definition of disability includes:

- students who have been formally diagnosed with a disability by a health or allied health practitioner
- students who may not have a formal disability diagnosis but have impairment that requires an adjustment
- students with intellectual, physical, sensory and social/emotional disability as well as students with difficulties in learning or behaviour due to disability
- students who are gifted and talented and who are impacted by disability

The school must have evidence that ongoing adjustments have been provided for a minimum of one school term (or at least 10 weeks) in the 12 months preceding the national data collection.

Students with a confirmed or verified disability are only a subset of those students who will be included in the national data collection. The data collection must include students with disability without a formal diagnosis, including those with unverified learning disabilities. It is important for schools to have processes in place to identify whether a student who is receiving an adjustment meets the DDA definition of disability, and also whether the school is meeting its obligations under the Standards.

Step 2: What level of adjustment is being provided to the student?

Teachers and school teams use their professional judgement to determine what level of adjustment is being

provided to each student with disability from the following four adjustment categories:

- Support provided within quality differentiated teaching practice
- Supplementary adjustment
- Substantial adjustment
- Extensive adjustment

Where schools are having difficulty deciding between the levels of adjustment, it may also be helpful to consider the frequency, intensity and range of adjustments or support being provided.

Differentiated teaching practice

is quality inclusive education to cater to the diverse needs of students. Adjustments to teaching practice enable students with disability to access learning on the same basis as their peers. Considerations include the methods of curriculum delivery; assessment; personalised learning; ongoing monitoring; and whole school professional learning.

Supplementary adjustments

are designed to address the nature and impact of the student's disability and any associated barriers to their learning. Supplementary adjustments allow students to access their grade level curriculum on the same basis as their peers and might include tailored instruction; modified programs; the provision of course materials in accessible forms; separate supervision or extra time to complete assessment tasks; the provision of specialist teacher support; assistive technology; and the provision of support services.

Substantial adjustments are provided to address the *specific* nature and *significant* impact of the student's disability and the more significant barriers to their engagement, learning,



participation and achievement. Substantial adjustments include frequent teacher-directed individual instruction; regular support; ongoing monitoring; close supervision; adjustments to delivery modes; differentiated curriculum; significantly modified study materials; access to bridging programs; adapted assessment procedures (adjustments in content, mode of presentation and/or outcomes); assistive technology and technical aids; specialist support from external providers; frequent assistance with mobility and personal hygiene; and close playground supervision.

Extensive adjustments are highly individualised, comprehensive and ongoing to address the *individual* nature and *acute* impact of the student's disability and the associated barriers to their learning and participation. Extensive adjustments are personalised modifications to all courses and programs, school activities and assessment procedures; intensive individual instruction; highly structured approaches; differentiated curriculum; accessible and relevant learning activities; highly specialised assistive technology and technical aids; alternative communication modes; and highly specialised facilities.

Step 3: What is the broad category of disability?

Schools are required to identify the broad category of disability for each student from one of four categories:

- **Physical** – physical impairment; neurological disabilities; the presence in the body of disease-causing organisms. Examples include Cerebral Palsy; Dyspraxia; Motor Dysgraphia; Developmental Coordination Disorder; Diabetes; Epilepsy; Juvenile Arthritis; Asthma; Cancer; Cystic Fibrosis.
- **Cognitive** – intellectual and learning disabilities. Examples include Down's syndrome; William's syndrome; Foetal Alcohol syndrome; Klinefelters syndrome; Angelmans syndrome; Speech Language Impairment; Phonological disorder; Dyslexia; Dyscalculia; Executive Dysgraphia; ADD / ADHD; Autism Spectrum Disorder (where adjustments primarily relate to teaching and learning).
- **Sensory** – vision and hearing impairments.
- **Social/emotional** – psychiatric disorders, which may include Anxiety Disorders; Post Traumatic Stress

Disorder; Obsessive Compulsive Disorder; Oppositional Defiant Disorder; Autism Spectrum Disorder (where adjustments are primarily made for social-emotional support).

Step 4: Is there evidence to support the student's inclusion in the data collection?

The school principal is responsible for verifying that there is evidence to support the inclusion of identified students in the national data collection. It is important that the school maintains accurate records and submits up-to-date data.

The evidence covers four general areas:

- assessment of the individual *needs* of the student
- *adjustments* are being provided to the student to address the disability
- ongoing *monitoring* and *review* of the adjustments
- *consultation* and *collaboration* with the student and/or parents and carers or associates

Consultation with the student and/or their carers during any review of adjustments is important.

This information is drawn from information available on the NCCD website. For more information, please go to: http://www.schooldisabilitydatapl.edu.au/#introduction_1

Tanya Forbes is an LDA Council member, dyslexia advocate and education campaigner. She is the creator of the documentary film Outside the Square and is the founder of the Gold Coast Dyslexia Support Group. She is committed to closing the research to practice gap in our education system and has been working closely with local schools in her area to promote evidence-based practice.

LDA AGM

LDA Council invites all members to the LDA AGM to be held at the Treacy Centre, Melbourne on Saturday, 10 September, starting at 1.00pm.

The Awards Presentation will follow the AGM where we will hear Professor Maryanne Wolf speak. The Mona Tobias Award will also be presented to Dr Ros Neilson and the Bruce Wicking Award to Lynne Ivcevic at this event.

We look forward to seeing as many of our members as possible at these events. It is a great opportunity to meet other members and learn more about the work of LDA. Details will be on the LDA website closer to the time but please save the date.

LDA Nominations for Council

Nominations for Council will open in mid-July 2016.

From 2016 the new constitution comes fully into effect where all Council members are elected for a one-year term of office, with the President eligible to re-nominate for up to three consecutive years of office.

If you know of anyone with the relevant qualifications and expertise who would be able to contribute to the work of LDA, please do consider nominating them for Council. If more people are nominated than there are positions, a ballot will be held. The term of office will commence after the AGM on the Saturday, 10 September 2016 and finish at the AGM in 2017. The Council comprises a President, two Vice-Presidents, a Treasurer, Secretary and nine ordinary members of Council. Each Council member is expected to be active on one or more committees, which oversee the work of LDA.

Details will be available on the LDA website from July.

Consultants' Report

From the Consultants' Committee Convenor, Jan Roberts

It is hard to believe that we are half way through the year already. Welcome to new consultants. For any reader unfamiliar with the work of LDA consultants, these members privately tutor students who have learning difficulties. To become a consultant, the applicant must have the following: current teacher registration with a university special education qualification, with at least a major strand in learning difficulties; experience in teaching students with learning difficulties; and evidence of recent, relevant professional development (PD) activity. Once certified, consultants must meet annual requirements for ongoing professional development, and must be insured.

Consultants commit to the LDA ethics of personally tutoring every student referred to them through LDA on an individual basis. Consultants offer support across a range of specialty areas and levels, from primary to tertiary. The organisation of each consultancy practice is unique. Some consultants tutor from a home office, some in schools, and a few in group practices. Tutoring outside school hours is generally desired by parents and schools, but with such limited time available, some students might attend during school time. In winter, it is often dark when the first student arrives and dark again when the last one leaves.

As you probably know, all LDA Council members are volunteers. One sub-committee is the consultants' committee, consisting of Diane Barwood, Kristin Anthian and me (as co-ordinator). We are supported by Elaine McLean, the consultant administrative assistant, and Kerrie McMahan, the LDA administrator. Many hours are spent on improving systems, updating forms, supporting consultants, sorting problems,

considering new applications, and organising professional development. It helps us greatly if consultants follow required procedures. One recent requirement is for every consultant to be fully insured; consultants must be covered for both public and professional liability. Our reasonably priced group insurance scheme is open only to certified consultants.

New consultants are encouraged to join a local Network. These small groups meet each term and organise their own professional development activities, such as speakers, discussion of relevant professional readings, online PD, and sharing of successful strategies and issues. For interstate members, the option of Face Time networking is available. A consultant support committee is being re-established, consisting of network leaders and others selected for their experience and wisdom. Meeting with these representatives will help us to support all consultant members more effectively and help us to organise support for organising professional events.

Current consultant data provides food for thought. Of the 79 consultant members, 74 live in Victoria, 4 in Queensland and 1 in South Australia. Currently, our OTS registered consultants are all based in Victoria, so we are unable to fulfil requests to help from interstate. There is obviously a serious shortage of LDA consultants in other states. Referrals to consultants are either by word of mouth or via the computerised LDA Online Tutor Search (OTS). Since January this year, we have had 540 requests for tutoring; in the month up to the end of May, there were 145. Even in Victoria, we need more consultants to meet the number of requests. Some consultants have no vacancies at all, so are not OTS listed, while many have very limited sessions available. There is plenty of opportunity for our specialist LDA consultant services all over Australia, so we would encourage qualified teachers from other states with appropriate qualifications and a passion for work in this area to consider becoming an LDA consultant. Those working as consultants would all agree that the gratitude of students, parents and classroom teachers is an

endorsement of the value of this individualised help and, in turn, a boost to our enthusiasm.

One of the challenges for LDA consultants is the competition from glittering, 'magic-wand' programs sold to desperate parents and schools through powerful persuasive techniques. These programs are extremely expensive ('so must be good'), seemingly evidence-based ('so must be good'), and adopt the latest neurological terminology or images ('so must be good'). In comparison, structured tutoring which has been individualised for a student's needs (and which demands effort and perseverance) might appear less exciting. Voices from research experts have been raised to warn parents and schools of the various snake-oil programs, and this critical attention needs to continue as long as these schemes proliferate. In the meantime, LDA consultants will continue to provide one of the best services available to struggling students. Information on becoming a consultant can be found on the website, www.ldaustralia.org.



For details about the process and requirements for becoming an LDA Consultant, please refer to the website www.ldaustralia.org

Letter to the Editor: We need improved provision for dyslexia, but where?

John Munro

The LDA May eNews ran an article in about the announcement of a proposed universal screening for dyslexia in the Prep year in Victoria. Many people would welcome this. We know that a key aspect of the work of learning disability professionals is to collect data about student learning – data that allows us to understand individual students' learning profiles and to plan appropriate learning programs. Assessment can be used for a range of purposes, including screening, in-depth diagnosis, and monitoring of student response to intervention. Access to an early years screening facility would no doubt contribute to improved provision in the early years for students who have dyslexia.

Any innovation like this needs to be seen in terms of the resources that exist. I raise this because there is frequently a motivation to create something new and to ignore or reject what already exists. The Department of Education in Victoria already has in place several on-line resources that are freely available to schools, and it is important that schools and teachers should learn how to use these resources effectively before launching into the use of a newly-developed tool.

The existing Victorian online resources, all freely available by navigating through the landing page <http://www.education.vic.gov.au/school/teachers/teachingresources/discipline/english/reading/pages/default.aspx> include the following:

- General resources that assist schools to deal with dyslexia and reading difficulties

- A word reading test made up of unfamiliar regular words and exception words, spanning Prep to Year 8, which permits the identification of 'phonological' and 'surface' dyslexic profiles
- A set of tasks to assess phonological and phonemic awareness skills
- A developmental pathway that specifies, at six-monthly intervals, the development of word reading skills, phonological awareness and comprehension skills
- The on-line Language Support Program, which provides advice to teachers of students who have oral language problems

There are also two on-line assessment protocols, both supported by very large databases, for assessing a range of literacy and oral language skills in the first three years of schooling, and for assessing reading comprehension and mathematics in Years 3 to 10.

The challenge that faces Victoria and other Australian States and Territories, I would argue, is not that we don't have the necessary resources. Rather, it is that schools and teachers either don't know that they exist or how to use them to solve problems and challenges that children in their school face. Re-inventing resources is often not the answer. Instead, schools and teachers need to learn how to use the existing resources to target the learning profiles and needs of their students and to monitor and evaluate the effectiveness of their teaching.

As I see it, an important role for LDA specialists is to assist teachers and schools in these ways. It is up to us, as the professionals in this area and as part of our role as advocates for students who have learning difficulties, to advise how this can be done and how existing provision can be improved.

I plan to examine in more detail in the next issue of the LDA Bulletin the kinds of resources available for oral language support.

Dr John Munro is Head of Studies in Exceptional Learning and Gifted Education in the Graduate School of Education at the University of Melbourne.



He is a trained primary and secondary teacher and a psychologist. His research interests, teaching and publications are in the areas of literacy and maths learning difficulties, learning internationally, gifted learning, instructional leadership and school improvement. He is a consultant to several school improvement projects throughout Australia. He was chairperson of the College of Educational and Developmental Psychologists (Aus) and is a life member of Learning Difficulties Australia.

We welcome the submission of articles from LDA members and others with an interest in learning difficulties for possible inclusion in upcoming editions of this Bulletin.

Please submit articles, correspondence about the Bulletin, or letters for publication to the editor. For questions about content, deadlines, length or style, please contact the editor. (Email: wendy.m.moore@gmail.com)

Articles in the Bulletin do not necessarily reflect the opinions nor carry the endorsement of Learning Difficulties Australia.

Requests to reprint articles from the Bulletin should be addressed to the editor.

Professor Maryanne Wolf is coming to Australia!

Planning for Professor Wolf's visit is now well underway and registration is open.



Professor Wolf has provided the title: Tales of the Reading Brain – reading development, dyslexia and the Digital Culture for her presentation which will cover the following topics.

- Session 1:**
- Lessons from the reading brain for reading development and dyslexia.
 - Principles of design in the present reading brain
 - Differences amongst writing systems
 - Reading development
 - Principles of reading instruction and intervention
 - A new conceptualization of dyslexia and its prediction
- Session 2:**
- Lessons from the reading brain for a digital culture – a cautionary tale or two
 - The affordances of the print and digital mediums
 - The advantages and disadvantages of each medium
 - Proposal for a bi-literate brain
 - Case studies of digital learning on tablets in Africa, Latin America and India
 - Insights for the future reading brain

Professor Wolf, recipient of the 2016 Taylor and Francis Eminent Researcher Award, will be presenting at four main events:

- DATES:**
- Friday, 2 September: St Margaret's Anglican Girls School, Brisbane
 - Wednesday, 7 September: Parramatta, Sydney (partnering with CIS and Sydney University)
 - Friday, 9 September: Collingwood, Melbourne
 - Saturday, 10 September: Awards Presentation, Treacy Centre, Melbourne
- COST:**
- LDA Members \$240; Non-members \$260; Group of 5 (per person) \$230; Student \$200
 - Proof of student status required at time of registration

LDA has invited additional presenters to share the day. **Dr Lorraine Hammond** will co-present in Brisbane. **Lisa Ridings** from the Association of Independent Schools and **Dr Jennifer Buckingham** will co-present in Sydney. **Professor Pamela Snow, Hannah Stark** and **Alison Clarke** will co-present in Melbourne.

Many of our Bulletin readers will be familiar with Professor Wolf's work. Her very thought-provoking book, *Proust and the Squid: the story and science of the reading brain*, provides a thorough analysis of how our brain has re-arranged itself to cope with the task of learning to read. Professor Wolf has published widely on reading and reading difficulties, bringing academic rigour and practical insights to everything she writes. An opportunity to hear her speak should not be missed!

Visit the LDA website www.ldaustralia.org for further details and to register online or download registration forms.