DEVELOPMENT OF READING SKILLS
RESEARCH PAPER
By our 2014 Graduate of Certificate Course for Teachers of
Students with Specific Learning Difficulties

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Reading and literacy skills are vital for the ability to function, contribute and develop in today’s society. The acquisition of these skills is relatively easy for some children, however, there is a significant proportion of learners who experience difficulty with the reading process. This paper will discuss current research on the development of reading skills. Firstly the practice of teaching reading using the “whole language” approach will be considered and the barriers to best reading instruction will be discussed. Consideration will then be given to the aspects of phonemic awareness, phonics, fluency, vocabulary and comprehension that contribute to successful reading interventions. The paper will then conclude with a summary of reading instruction recommendations based on current evidence.

The “whole language” approach to reading has become the major model for educational practice in Australia over the past decades (Hempenstall, 1996). Children are seen as active self-governed learners who construct their knowledge of reading by themselves with minimal instruction in decoding. Children guess freely at the words they fail to recognise (Coltheart & Prior, 2006). This approach to reading has been firmly rejected by the scientific community as it fails to recognise that skills and strategies involving phonological information, that is, the sound structure of spoken words, are of primary importance in beginning literacy development (Pressley in Tunmer, Chapman, Greanery, Prochnow & Arrow, 2013).

Before progressing to the reading instruction strategies that the scientific community supports, it is important to consider some of the barriers to best instruction. Adams (1990) asserts that student engagement in reading depended on the atmosphere, the momentum, support and expectations created by the classroom teacher. The teacher must be skilled to carefully pitch the pace of the lesson in the delicate interval between ease and difficulty (Adams, 1990). The skill, confidence and training that teacher’s receive are seen as pivotal to delivering successful reading programs. Coltheart and Prior (2006) report that less than 10% of course time was devoted to preparing student teachers to teach reading. This inadequacy coupled with poor literacy skills of the teachers themselves paints a grave picture of poorly prepared and equipped teachers who are charged with the responsibility of teaching students to read. The concept of “literate cultural capital” is referred by Tunmer et al (2013) as the literacy related knowledge and abilities at school entry that come from activities in the home environment. These abilities support early literacy development and those students who lack this capital may avoid reading and experience a lack of success in class.
Phonemic awareness is an understanding of how sounds of spoken language work to form words; the brain processes the sounds in the correct order (Carnine, Silbert, Kame’enui & Tarver, 2010). The absence or lack of phonemic awareness appears to be characteristic of children who are failing or have failed to read (Adams, 1990). The following table lists the tasks that develop phonemic awareness and some examples of their use.

**Table 1: Phonemic Awareness Skill Development**

<table>
<thead>
<tr>
<th>Tasks that address the development of phonemic awareness skills (Adams, 1990)</th>
<th>Examples of their use</th>
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<tbody>
<tr>
<td>• <strong>Demonstrate:</strong> “Some words rhyme. That means they sound a lot the same. Let’s find the word that rhymes with ‘boat’. Is it ‘goat’ or ‘house’? (point to each picture). ‘Boat’ and ‘goat’ rhyme, they sound a lot the same.”</td>
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<td>• <strong>Practice item:</strong> “Listen to these words and find the rhyming word. Which word rhymes with ‘whale’ – ‘foot’ or ‘tail’?” (point to the pictures as you say the words).</td>
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<tr>
<td>• <strong>Test items:</strong> “Which word rhymes with ............ - ....... or ............?”</td>
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<td>2. Comparing and contrasting the sounds of words for rhyme and alliteration</td>
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<tr>
<td>3. Blending and syllable splitting - words can be divided into small meaningless sounds that correspond to phonemes (the smallest unit in the spoken word)</td>
<td><strong>Blending sounds:</strong></td>
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<td>• <strong>Demonstrate:</strong> “I am going to say a word but I am going to break it up into separate sounds. Listen to these sounds, ‘h – a – t’. Those sounds make the word ‘hat’. Make sure you say each sound, not the letter name.”</td>
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<tr>
<td>• <strong>Practice item:</strong> “Let’s do another one. Tell me the word these sounds make ‘c – o – t’.”</td>
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<td>• <strong>Syllable Splitting:</strong></td>
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<tr>
<td>• <strong>Demonstrate:</strong> “When we say words we can say them in beats. Listen: ‘butterfly’ has 3 beats ‘bu-tter-fly’.”</td>
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<tr>
<td>• As you say each beat touch a coloured dot. For ‘butterfly’ you would tap 3 dots, one for each syllable.</td>
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<tr>
<td>• <strong>Practice item:</strong> “Let’s practice with the word ‘caravan’. Tap a coloured dot for each beat you hear in ‘caravan’.”</td>
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<tr>
<td>• <strong>Test items:</strong> “Now, tap out the beats in these words.”</td>
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</table>
4. Phonemic segmentation tasks

- **Demonstrate:** “We can break the word ‘slip’ into sounds: ‘s - l - i – p’.” Make sure you say each sound, not the letter name. Point to each of the coloured counters for each sound you say.
- **Practice item:** “Let’s do some more. Remember to touch a dot for each sound you say. Tell me the sounds in ‘grab’.”
- **Test items:** “Tell me the sounds in these words.”

   *If the child does not separate the sounds clearly, say “Break up the sounds a bit more, like this....” (demonstrate again).*

5. Phoneme manipulation tasks - proficiency with phonemic structure of words to be able to add, delete or move any designated phoneme and regenerate a word (or non word)

- **Demonstrate:** “We can take a sound away from a word to make a new word. Listen, to the word ‘gate’. Now I’ll say the word again and take away ‘g’, ‘gate’ becomes ...... ‘ate’.” Make sure you say the sound, not the letter name.
- **Practice item:** “Let’s do some more. Listen to this word – ‘meat’. Now say the word again and take away ‘m’, ‘meat’ becomes ...... (‘eat’).”
- **Test items:** “Listen to this word - .......... and take away........... What word does it make now?”

There is an impressive consistency in the results of programs that include the systematic instruction on letter to sound correspondences. Adams (1990) reports that the explicit teaching of phonics has led to higher achievement in both word recognition and spelling. She further adds that skilful readers process virtually every individual letter of every word as they read and that they can recognise the spelling, sound, and meaning of a familiar word almost instantly. Treiman, Tincoff, Rodriguez, Mouzaki and Francis (1998) adds that the knowledge of letter sounds helps children to decode printed words and to construct the spellings of words in their spoken vocabularies. There are many ways to teach children about phonics, the following image comes from the Jolly Phonics page:

**Jolly Phonics Actions**

**Group 1**
- s: Weave hand in an s shape, like a snake, and say sssssss.
- a: Wiggle fingers above elbow as if ants crawling on you and say a, a, a.
- t: Turn head from side to side as if watching tennis and say t, t, t.
- i: Pretend to be a mouse by wriggling fingers at end of noise and squeak i, i, i.
- p: Pretend to puff out candles and say p, p, p.
- n: Make a noise, as if you are a plane – hold arms out and say nnnnnnn.

**Group 2**
- c k: Raise hands and snap fingers as if playing castanets and say ck, ck, ck.
- e: Pretend to tap an egg on the side of a pan and crack it into the pan, saying eh, eh, eh.
- h: Hold hand in front of mouth panting as if you are shaking out of breath and say h, h, h.
- r: Pretend to be a puppy holding a piece of rag, shaking head from side to side, and say rrrrr.
- m: Rub tummy as if seeing tasty food and say mmmmmmm.
- d: Beat hands up and down as if playing a drum and say d, d, d.

See more at [http://jollylearning.co.uk/2010/11/03/jolly-phonics-actions/](http://jollylearning.co.uk/2010/11/03/jolly-phonics-actions/)
Fluency is the ability to read orally with speed, accuracy and proper expression (Pikulski & Chard, 2003). Center (2005) asserts that fluency is important because of the influence it exerts on comprehension. The following strategies aid with the acquisition of reading fluency:

- modelled reading
- repeated reading of familiar text
- wide independent reading
- coached reading of appropriate selected materials
- Chunking of text (reading phrase units rather than conventional texts)

Pikulski and Chard (2003)

Tan, Wheldall, Madelaine and Lee (2007) found that the use of repeated readings until a satisfactory level of fluency is achieved and training at single-word, phrase and sentence level can promote text reading fluency as well as reading comprehension. Kuhn and Stahl (2003) propose that children need to have some knowledge about words to benefit from the effective approach of re-reading.

There is unequivocal support for the provision of vocabulary instruction to increase student’s word knowledge and increase student’s reading comprehension (Stahl & Fairbanks (1985) in Adams, 1990). Vocabulary instruction should provide more than a dictionary definition, it should include examples of the word’s usages in context (Adams, 1990). Mazzano (2004) offers the following construct to guide the instruction of vocabulary.

It is discouraging to note that there is little emphasis on the acquisition of vocabulary in school curricula which may halt the reading progress from the third grade onwards (Pikulski & Templeton, 2004).

Comprehension is seen as the central goal of reading instruction and it depends critically on the ability to recognise letters, spelling patterns and whole words effortlessly, automatically and visually (Adams, 1990). The Texas Education Agency (1996) adds that fluent reading, as well as the ability to figure new words, is also crucial skills that will aid comprehension. When comprehension is successful, learners are left with a sense of satisfaction from having understood the meaning of a text (NSW Dept. Ed, 2010). The NSW Department of Education (2010) provides the following strategies to use for the teaching of comprehension skills.
Table 2: Strategies to Teach Comprehension

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<th>Strategy</th>
<th>Example</th>
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| Making Connections| Learners make personal connections from the text with:  
• something in their own life (text to self)  
• another text (text to text)  
• something occurring in the world (text to world). |
| Predicting        | Learners use information from graphics, text and experiences to anticipate what will be read/viewed/heard and to actively adjust comprehension while reading/viewing/listening. |
| Questioning       | Learners pose and answer questions that clarify meaning and promote deeper understanding of the text. Questions can be generated by the learner, a peer or the teacher. |
| Monitoring        | Learners stop and think about the text and know what to do when meaning is disrupted.                                                     |
| Visualising       | Learners create a mental image from a text read/viewed/heard. Visualising brings the text to life, engages the imagination and uses all of the senses. |
| Summarising       | Learners identify and accumulate the most important ideas and restate them in their own words.                                             |


This paper thus far has examined the evidence based reading instruction skills as identified by Buckingham, Wheldall and Wheldall (2013) namely, Phonemic Awareness, Phonics, Fluency, Vocabulary and Comprehension. These authors state further that the evidence suggests that the best way to teach these skills is through explicit instruction by clearly explaining, demonstrating and guiding students to develop these skills. Many authors have emphasised the importance of the implementation of research based practices that require collaboration and appropriate professional development (Foorman, Chen, Carlson, Moats, Francis and Fletcher, 2003 and Buckingham et al, 2013). Many school systems fail to implement scientific knowledge into their practices as there is an outright resistance due to a lack of time and the perception that government policies will dictate future teaching guidelines rather than evidence based research (Buckingham et al, 2013).

In Australia today it is conservatively estimated that 20 per cent of Australian children are struggling with learning difficulties, some have a developmental learning disability like dyslexia; the rest are suffering from poor instruction (Wilkinson, 2013). A national enquiry into the teaching of literacy in Australia found that:

*The resulting report highlighted the importance of teaching phonological awareness (the ability to understand, identify and manipulate the sounds of spoken words) and phonics (the relationship between a letter and its corresponding sound) — as part of an integrated reading program that supports the development of oral language, vocabulary, reading fluency and comprehension.*

*Report of the National Enquiry into Literacy (2005)*
The following recommendations summarise Wilkinson’s (2013) response as a result of the 2011 Progress in International Reading Literacy Study (PIRLS) which examines reading comprehension amongst Grade 4 students, where Australia was ranked the lowest of all English speaking nations.

- reading tuition in every primary school includes direct, explicit and systematic phonics instruction as part of an integrated reading program;
- every primary teacher training degree includes a substantial component dedicated to training student teachers to provide such tuition;
- all practising primary teachers are trained in the required teaching methods; and
- all state and territory education departments are able to verify high quality reading instruction in every school.

To conclude, this paper has reviewed the shortcomings of “whole language” reading instruction and discussed some of the barriers to effective reading instruction. It has included an explanation of the best strategies for reading instruction as determined by evidence based research. Finally, the paper has made some general recommendations to improve reading instruction in Australia identifying the notable flaws in the current way students are taught to read. With exemplary teaching and effective and timely intervention there is strong evidence that Australian students are able to improve their reading to diminish the profoundly negative effects of poor reading ability.

Reference List
Texas Education Agency (2000 Rev) Beginning Reading Instruction: Components and Features of a Research-Based Reading Program. Washington, ERIC Clearinghouse.

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