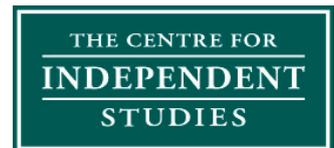




# RESEARCH REPORT SNAPSHOT



## Read About It: Scientific Evidence for Effective Teaching of Reading

Kerry Hempenstall

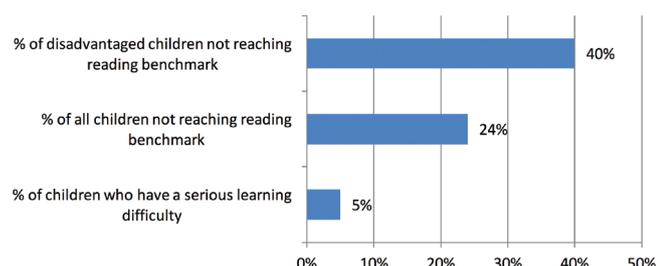
Edited by Jennifer Buckingham

### One million children are at risk of reading failure

One million Australian children are at risk of reading failure, with serious negative consequences for their quality of life and for Australian society. This figure — based on the results of national and international literacy tests — is five times higher than the number of children reading scientists estimate to have serious learning difficulties.

Children from disadvantaged backgrounds are five times more likely to have low literacy at school than their more advantaged peers, perpetuating a cycle of low educational attainment and poverty. One in three disadvantaged children arrives at school with very poor language skills, and the gap between the language-rich and the language-poor grows over time.

**Figure: Proportions of children not reaching reading benchmarks in primary school**



Source: Australian Council for Educational Research (2012); Wheldall (2011)

### The solution is effective, evidence-based instruction

Despite there being various causes of disadvantage, there is only one domain in which an education system can have a significant and sustained impact — by harnessing the power of improved instruction, especially in literacy in the early years of school.

Major reviews of research on reading not only agree on the key components of reading programs but also the most effective way of teaching them.

***“That direct instruction in alphabetic coding facilitates early reading acquisition is one of the most well established conclusions in all of behavioural science.”***

—Stanovich 2000

There are five essential and interdependent components of effective, evidence-based reading instruction — the five ‘keys’ to reading.

### Five keys to reading

- **Phonemic awareness:** Knowledge of, and capacity to manipulate, the smallest distinct sounds (phonemes) in spoken words.
- **Phonics:** Learning and using the relationships between sounds and letter-symbols to sound out (decode) written words.
- **Fluency:** The ability to read accurately, quickly and expressively. Fluent readers are able to focus on reading for meaning.
- **Vocabulary:** The words children need to know in order to comprehend and communicate. Oral vocabulary is the words children recognise or use in listening and speaking. Reading vocabulary is the words children recognise or use in reading and writing.
- **Comprehension:** Extracting and constructing meaning from written text using knowledge of words, concepts, facts, and ideas.

The impact of reducing the number of struggling students through more effective initial class teaching should not be underestimated. School resources and teacher time can be deployed more effectively, learning support can be targeted to children with serious learning problems, and benefits for students extend from improved educational achievement through to a lower likelihood of the mental health and behavioural problems that frequently arise following reading difficulties.

### The research-to-practice gap must be bridged

Progress in knowledge of teaching and reading is dependent on evidence from studies that conform to the rigors of research in other disciplines where the human and economic costs of failure are high.

There is an extensive and rigorous body of evidence about how children learn to read and the most effective ways to teach them. While this research is slowly beginning to be acknowledged in government policy, unfortunately it is not always reflected in teacher education or classroom practice.

This decade could be the beginning of one of the most exciting periods in education history, as the sleeping giant of educational knowledge — ignored for so long — begins to influence education systems around the world. If the evidence on teaching reading is adopted and implemented, there should be no more casualties in the ‘reading wars’.

### Explicit teaching is the most effective method

There is also mounting evidence that explicit or direct instruction is the most effective teaching method, especially for the fundamental code-based components — phonemic awareness and phonics — and especially for children at-risk of reading failure.

In recent years, research has continued to demonstrate that explicit teaching of the five keys to reading benefits all children and can significantly reduce literacy gaps.

***“If this existing gap between research and practice continues to widen...students will perish while educational researchers publish their findings.”***

—Anwaruddin 2015

### Effect sizes from Hattie’s meta-analysis (2009) — Benchmark of 0.4 for ‘real world’ impact

Effective, evidence-based reading instruction	Constructivist/discovery approaches
Phonics 0.6	Whole language 0.06
Vocabulary programs 0.67	Exposure to reading 0.36
Comprehension programs 0.58	Student control over learning 0.04
Mastery learning 0.58	Mentoring 0.15
Worked examples 0.57	Inquiry-based teaching 0.31
Spaced practice 0.71	Problem-based learning 0.15
Feedback 0.73	
Questioning 0.46	
Direct instruction 0.59	

### Author and Editor

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