

postnote

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TEACHING CHILDREN TO READ

Reading is the gateway to learning; without it, children cannot access a broad and balanced curriculum. Dyslexic difficulties are associated with negative educational, employment and economic outcomes, making reading-related issues relevant to various policy domains. This POSTnote explains the reading process and the underlying basis of specific reading difficulties. It also summarises different methods of reading instruction, and examines their use in the context of current and possible future policy directions.

Reading Development and Difficulties

The goal of reading is to extract meaning. This is referred to as reading comprehension, and can be viewed as the product of two necessary components (see Box 1):

- decoding converting printed words to spoken words;
- linguistic comprehension understanding the meaning carried by spoken language.

Deficits in these components are linked to different forms of specific reading difficulty. Government statistics for 2008 showed that 16% of children failed to achieve expected levels of reading by the ages of 7, 13% by age 11 and 31% by age 14. Though the underlying causes of low literacy attainment are many and varied, a number of these children are likely to have specific developmental reading difficulties. These may include (see Box 1):²

- dyslexia affecting an estimated 3-6% of children;
- reading comprehension impairment affecting an estimated 10% of children.

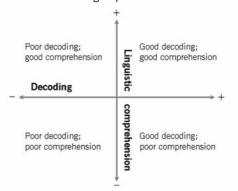
Reading Instruction

There has been a long-standing debate about the best methods for teaching children to read. Central to this has been the importance of phonics, a strategy that teaches children to link sounds with letters and to use these correspondences to decode words. In particular, focus has been on how much emphasis should be placed on phonics, and on how explicitly it should be taught.

Box 1. The Simple View of Reading^{2,3,4}

The figure below depicts reading comprehension as the product of two necessary components: decoding and linguistic comprehension. Although decoding and reading comprehension are related, they are founded on different oral language skills (in addition to other cognitive skills).⁵ Decoding is dependent upon speech-sound information (phonology), particularly appreciating that a spoken word is made up of individual sounds (phonemes). Once a word has been decoded, comprehension depends upon broader language skills such as vocabulary, grammar and making inferences. Variations in decoding and linguistic comprehension result in different reading profiles (see figure), which relate to different reading difficulties:

- Children with dyslexia have primary difficulties in decoding, typically because of weaknesses in phonology. Children whose reading profiles fall into either the upper or lower left quadrants (poor decoding coupled with either good or poor comprehension) are likely to be experiencing dyslexic difficulties.
- Children with reading comprehension impairment can decode print, but have comprehension difficulties that are often related to weaknesses in vocabulary, grammar, and making inferences. Their reading profile falls into the lower right quadrant.



Source: *Identifying and Teaching Young Children with Dyslexia and Literacy Difficulties*, Department for Children, Schools and Families, 2009.

Box 2. Key Elements of Reading Instruction⁶

The following are key elements of balanced reading instruction (listed purely in alphabetic order):

- Comprehension understanding the meaning of words and sentences, integrating this meaning across texts, and making inferences beyond the printed words.
- **Fluency** reading accurately and with sufficient speed.
- Phonics linking sounds with letters and using these correspondences to read words. Teaching phonics takes account of the fact that there is not always a one-to-one correspondence between letters and sounds: ship has 4 letters, but only 3 sounds (sh-i-p).
- Phonological awareness awareness and manipulation of the sound structure of speech. This has different levels: syllables (foot-ball), onset-rime (f-oot-b-all), phonemes (f-oo-t-b-a-ll).
- Spelling and writing mapping sounds to print, moving from individual letters, to groups of letters (such as oa and sh), to word patterns (such as -eed), to words, to sentences. This supports phonic knowledge for reading.
- Vocabulary knowing the meanings of words.

While the relative importance of each of these elements may change over the course of reading development, an overriding consideration is to nurture an enjoyment and appreciation of reading throughout the learning process.

In recent years, the centrality of phonics in early reading has been acknowledged. However, other key elements are considered important for balanced reading instruction (Box 2). These different elements may need to be emphasised at different points during reading development. For example, a good foundation in spoken language (including phonological awareness and vocabulary, see Box 2) helps subsequent training in phonics, which in turn can be applied to reading and writing. Once reading becomes fluent, this frees up capacity for comprehension, which will be supported by knowing the meaning of an increasingly large number of words (vocabulary development).

Policies on Teaching Reading

In recent years, the focus of reading policy has been on instruction in primary schools. However, the impacts of literacy difficulties also cut across wider policy domains, such as employment and economics (Box 3).

Recent Policy

The National Literacy Strategy (NLS, now part of the National Primary Strategy) was introduced in 1998 and recommended that schools deliver a structured teaching programme of literacy through a daily literacy hour.

The NLS approach for teaching early reading encouraged children to use a number of strategies on encountering an unfamiliar word. These included phonics, recognising the shape of the word, and inferring its meaning from contextual or grammatical information. No one cue was emphasised over another, and while the teaching of phonics was a requirement between ages 5 to 7, the way in which it was taught remained open to choice. The then House of Commons Education and Skills Committee in 2005⁷ called for a review of the NLS. It felt that the number of children failing to reach age-expected levels of reading was unacceptably high, and that the

Box 3. Economic Consequences of Dyslexia⁸

Low literacy skills due to dyslexic difficulties impose a substantial cost on individuals and the economy at large. People with such difficulties have been compared with those without on a number of outcomes, using longitudinal survey data.

- Education people with dyslexic difficulties are much more likely to underachieve at GCSE level, and to leave education at 16 years old. For instance, taking into account various factors (including ability measures at age 10-11), the probability of achieving 5 or more GCSEs at A* to C level is lowered by 3.3–12.3% for such people.
- Employment people with dyslexic difficulties are significantly less likely to be in employment in adulthood. Having dyslexic difficulties is related to a reduction in earnings of 12.8–14.5% (once controlling for measured ability at age 10-11). This amounts to approximately £3,151 a year, cumulating to £80,977 over an individual's employment lifetime.

recommended methods for teaching reading might not reflect progress in research on the effectiveness of phonics instruction. In light of this report, the then Department for Education and Skills commissioned the Independent Review of the Teaching of Early Reading.⁹

Current Recommendations

In 2006, the Independent Review of the Teaching of Early Reading made a range of recommendations, which included support for children with literacy difficulties, teacher training, and leadership and management within schools. However, the most detailed recommendations, which have been reiterated in two subsequent reviews, 4,10 concerned best practice in the teaching of early reading and phonics for all children. These were intended to ensure that UK policy reflected recent research evidence regarding best practice in teaching decoding skills. 11,12 The recommendations included that:

- High quality systematic phonics should be taught as the main approach in learning to read (decoding) and spell (encoding). For most children, phonic work should start by the age of 5, and should include:
 - teaching letter-sound correspondences in a clearly defined, incremental sequence;
 - applying these correspondences throughout a written word to derive its constituent sounds (c-a-t, sh-i-p, etc.), then blending these together to produce the spoken word;
 - applying this process in reverse to move from a spoken to a written word for spelling.
- Phonic work should occur within a broad and rich language curriculum that takes account of developing the four inter-dependent strands of language: speaking, listening, reading and writing.

Implementation of Policy The Teaching of Early Reading

The National Curriculum was amended to make the teaching of systematic phonics in early reading highly advised from September 2007. The Communication, Language and Literacy Development programme was established to support implementation. Through this, every local authority now has funding for an early literacy

consultant, whose main aim is to improve the teaching of phonics within the literacy curriculum in primary schools.

In addition to in-service training for qualified teachers, all teachers must undergo initial teacher training (ITT) and meet qualified teacher status standards to enter the profession. Providers of ITT were required to restructure courses following the Independent Review's recommendations. An Ofsted inspection in 2008¹³ judged that ITT providers had responded well. For instance, relevant aspects of courses had been updated, and trainees were generally deemed to be well-equipped to teach early reading. Indeed, newly qualified teachers are increasingly confident in the standard of training they received for teaching reading.¹⁴ However, good teaching practice was not universal and Ofsted made recommendations for strengthening training provision to improve the teaching of early reading. For example, it advised that all trainee teachers should observe good teaching and assessment of reading and phonics, and have their practice in these areas assessed. The Leading Literacy Schools programme was set up in 2008 to address these needs.

Teaching Reading Comprehension

The detailed recommendations for how to teach phonics are currently being implemented. However, the Independent Review recognised that phonics alone is not sufficient if children are to become skilled readers who read for comprehension, recommending that phonics work should occur within a broad and rich language curriculum. While detailed guidance on what this might entail was outside the remit of the Independent Review, the Department for Children, Schools and Families (DCSF) has produced guidelines 15 on teaching reading comprehension. These are based on US research (see Box 4), 11 which suggests that students should understand how to use a range of comprehension strategies, depending on the nature of the text and the purpose for which it is being read. The teaching of reading comprehension can therefore be incorporated into lessons across a wide variety of subjects.

Many academics and educators see a need for the comprehension aspect of reading to be given a higher priority in education policy and in teaching practice. Some suggest that better resources to help to teach reading comprehension are required, and that these should include both text-based strategies and wider oral language skills such as vocabulary and listening comprehension. A report in 2009¹⁶ recognised the importance of young children's oral language development. The DCSF is rolling out the "Every Child a Talker" programme to all local authorities to improve early language development by training those who work with young children, and by supporting parents.

Helping Children with Reading Difficulties Decoding Difficulties

Raising the standard of general classroom instruction by implementing the recommendations of the Independent Review ought to reduce the number of struggling

Box 4. Reading Comprehension Strategies

Research suggests that students should be encouraged to use a variety of the following strategies to improve reading comprehension:¹¹

- comprehension monitoring using self-monitoring techniques to assess understanding of text;
- co-operative learning working with peers to support one another's understanding and use of strategies;
- graphic and semantic organisers using diagrams to represent meanings and relationships of ideas in texts;
- story structure focusing in on the plot, characters and events in stories;
- questions posing and answering questions during reading to monitor comprehension of a text and integrate meaning (such as, What does that mean? What is the evidence for that?);
- summarisation identifying and integrating the most important points to create a coherent and succinct summary of a text.

In addition, training in making inferences, learning word meanings and using figurative language may also be useful.

readers. Nonetheless, a minority of children with poor decoding skills (akin to dyslexic difficulties) will require additional reading support.⁴ Typically, this involves small-group or one-to-one sessions for a few hours a week over the course of a few months. For some children, this input may need to be sustained over a longer period. Rigorous evaluations have shown that effective interventions involve work on increasing children's awareness of the individual sounds that make up words (phonemes, Box 2), learning letter-sound correspondences, and applying these skills when reading books.^{17,18} These interventions need to be delivered by trained professionals who understand how to tailor the programme to individual children, who may differ considerably in their strengths and difficulties.

A recent report⁴ recommended that more teachers should be trained as specialists in selecting and delivering reading interventions for children with dyslexia, and that all schools should have access to such expertise. As part of the "Every Child a Reader" initiative, the government has part-funded the "Reading Recovery" intervention. This provides one model of how a specialist literacy teacher can assist young children with reading difficulties, while encouraging school-wide good practice in the teaching of reading. The House of Commons Science and Technology Committee recently announced a call for evidence on literacy interventions for school children with reading difficulties.

Reading Comprehension Difficulties

Reading comprehension is a complex skill. Research in this area has lagged behind research into decoding. As such, there is less evidence on what would constitute effective interventions for children with reading comprehension difficulties. However, recent research suggests that training in text-based strategies (see Box 4 for examples) or in oral language (such as vocabulary, listening comprehension and narrative skills) boosts the comprehension skills of such children. ¹⁹ Children with reading comprehension impairment tend to go unnoticed

in the classroom, ²⁰ suggesting that there is a need to identify them more proactively, and subsequently offer more targeted teaching to address their learning needs.

Support in Secondary Schools

Results from 2008 showed that 13% of children entered secondary school with below age-expected reading skills. ^{1,†} The DCSF has produced additional reading resources that target both decoding and reading comprehension skills. These are typically aimed at children entering secondary school at age 11, but with the reading skills of an average 8-year-old. ²¹

Few secondary school interventions have been evaluated formally¹⁷, which suggests that priority needs to be given to forming evidence-based strategies in this area. In response, the Training and Development Agency for Schools is running a pilot scheme to help secondary school English teachers to be better at understanding and assisting pupils with reading difficulties. If effective, this could be scaled up to a whole-school approach, where literacy is seen as fundamental to the majority of curriculum subjects, not just English.

Professional Development for Teachers

If policy changes are to bring about improvement in children's learning, they must be communicated clearly to educators. Several suggestions on further developments in teacher training have been made by academics and educators, including that:

- primary and secondary teachers alike would benefit from an understanding of the nature of typical reading development, and reading difficulties
- knowledge of evidence-based practice in reading instruction and intervention should relate to decoding skills, reading comprehension and oral language (with the latter as a crucial foundation to reading, but also as an important end in itself)
- sufficient training and support should extend to teaching assistants, who are often tasked with supporting children with reading difficulties.

Overview

- Reading for meaning involves decoding (converting printed words to spoken words) and linguistic comprehension.
- Detailed policy guidelines relating to teaching decoding have been published and implemented. These extend to interventions for improving the reading skills of young children with decoding difficulties.
- Reading comprehension is also important. However, there is less guidance on how it should be taught to all children, or on how to improve the reading skills of children with reading comprehension impairment.
- A significant proportion of pupils in secondary school does not have serviceable reading skills. More research is needed to inform new guidelines on how to meet such learning needs.

[†] The provisional parallel figure for 2009 is 14%.

 Educators (including teaching assistants) would benefit from clear guidance about typical reading development and reading difficulties, and best practice for teaching oral language skills, decoding and reading comprehension.

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