What is reading comprehension, why is it so hard to develop, and what do teachers need to know about it?

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Abstract

The English National Strategies team¹ is currently working with the Post-Rose Independent Advisory Group (of which CH is a member) to produce a DVD containing guidance on reading and reading development that will both challenge experienced teachers and guide those working in early years settings who have had little or no formal training in literacy. The section on reading comprehension is likely to emphasise that the goal of decoding should be to find meaning; that reading helps children develop not just decoding ability, but an awareness of self, and of self in relation to others; that reading comprehension is an active, not a passive process, one that involves a triangular relationship between reader, author and text; that reading comprehension does not develop spontaneously, but should be supported by the development of strategic comprehension abilities.

¹ http://www.standards.dfes.gov.uk/primary/

Definitions

Perfetti, Van Dyke and Hart (2001):
… the study of reading is, in part, the study of language processes, including comprehension. What distinguishes reading most clearly from spoken language processes is the conversion process, or decoding. Beyond decoding, reading shares some linguistic and general cognitive processes with spoken language in the processes of comprehension.

The Simple View of Reading (Gough, Hoover & Peterson, 1996)

\[ R = D \times C \]

Oxford English Dictionary:
The action of comprehending; the action or fact of comprehending with the mind; understanding. The ability to understand a passage of text and answer questions on it, as at school or psychological exercise

The International Reading Association’s Dictionary of Reading definition of reading comprehension cites two sources:
Comprehension involves the recovery and interpretation of the abstract deep structural relations underlying sentences (Bransford and Johnson)
Comprehension is a process of integrating new sentences with antecedent information in extrasentential structures (P. Thorndyke)

Kintsch
Comprehension is a constraint reduction process, in which memories, knowledge, beliefs, body states and goals combine with perceptual processes in a discourse context to form idea units that are parsed and associated with elements in the reader’s LTM to form an initially unstable network. This bottom-up process becomes stabilized as it takes account of local and memory-based data and selectively activates elements that fit together, and deactivates elements that do not. A context-insensitive construction process is followed by a constraint-reduction or integration process that gradually yields order out of initial chaos. (paraphrase of Kintsch, 1998, p. 4-5)

Propositional models of text, just as propositional models of knowledge, have been useful- but break down in experimental conditions as we start to approximate to real-life contexts such as reading a novel.

Schema theory approaches (Anderson, Spiro, and Montague, 1984 ) also work as useful metaphors, but need to be understood as much more fluid in real-world comprehension contexts (such as a primary school child reading an information book in an unfamiliar domain).
Attractive though both these theories are, they fail to represent the messy, provisional and initially chaotic cognitive structures that teachers encounter in children’s reading and comprehension. Semantic vector models that begin with unstable representations of text and knowledge built using weak production rules have much to commend them in these contexts.

*Asking questions as a method of assessment of knowledge is fraught with problems..... Educationally, the problem is that asking questions is artificial and sometimes yields invalid results. It is an unnatural act when a teacher asks a student for something the teacher knows better than the student. (Kintsch, 2002,p. 296).*

**Why is it so difficult to teach/improve reading comprehension?**

Improving reading comprehension is difficult because it involves building vocabulary (which is not a matter of rote learning, but rather extending and reorganising a reader’s whole array of semantic, conceptual and world knowledge networks), improving working memory capacity, and extending the number and availability of retrieval structures, as well as encouraging the reader to put all these to good use.

**Fundamental principles underpinning reading development:**

- Decoding and comprehension are two key components of reading, but this does not mean that they should be taught separately; the goal of decoding should be to find meaning, and learners need a sense of the rewards that meaning can bring.
  

- Reading helps children develop not just decoding ability, but an awareness of self, and of self in relation to others.
  

- Reading comprehension is an active, not a passive process: it involves a triangular relationship between reader, author and text, rather than a linear transmission of meaning from author to reader.
  

- Reading comprehension does not necessarily develop spontaneously: for most readers, it’s helpful to see thoughtful and critical reading modeled by teachers and peers.
  

- Critical literacy is as important as literacy, and if anything, this is even more important when children encounter texts on the Internet.
  

- Engagement is fundamental to developing reading comprehension, and engagement depends upon four things: a coherent curriculum, high motivation, sufficient instruction about strategic reading, and sufficient choice in all areas of reading.
  
Aspects of reading comprehension that teachers need to know about are as follows:

- **The Matthew Effect**: children who choose to read become exponentially better at reading and comprehending than those who do not.


- **When motivation is high**, children will tackle (and understand) much more difficult texts than those they usually read.


- **Reading while listening helps most learners to comprehend**, and is likely to also increase fluency.


- **Weaker readers are generally the poorest at monitoring their own comprehension**—so they need support in this.


- **Text structures**, particularly those in information book and text books, are manifold, complex, and generally unsignalled.


- **Children’s reading in school is often in short bursts**, and is even avoided by some teachers; readers need to encounter sustained contact with texts if they are to become fluent, and they need support in maintaining engagement.


- **When the texts encountered in school are difficult**, children need bridging tasks to assist them in gaining meaning; DARTs activities can be very helpful here.


- **Children who are taught to develop tactics and strategies for tackling and understanding texts learn more and remember more than those who are not**; such readers acquire effective self-regulation strategies.


National Reading Panel (2000a) *Teaching Children to Read: an Evidence-Based Assessment Of The Scientific Research Literature On Reading And Its Implications For Reading Instruction*. Washington CD: National Institute of Child Health and Human Development. NIH Pub No. 00-4769.


**Definitions of comprehension- References:**


