Metacognition & Reading : focusing on 'learning from complex texts'

What was the last thing you read?

What was the last thing you read? A novel, a newspaper, a magazine, a shop window sign? If you considered the mental processes involved you would notice that thousands of thoughts were being processed in nanoseconds. You would realise that you read with reference to your sphere of 'world knowledge and experiences'. This helps you to interpret what you read and act on it.

If you were reading a complex text about complex ideas, or an unfamiliar type of text, you might find yourself having to work a little harder to understand it. Perhaps you would read it more than once. Perhaps you would slow your rate of reading or read more deliberately. You might experience false starts, realise you don't fully understand and back track several words or sentences. You might glance back at the heading or fast forward to the last paragraph to help resolve your confusion. You would interpret points by using not only the text but your existing knowledge and understanding. You might stumble over unfamiliar words and find yourself using clues in the text and the context to clarify meaning. You might have found yourself having an internal conversation with the author or yourself, silently agreeing or disagreeing with what you are reading.

"As experienced readers read they begin to generate a mental representation, or gist, of the text, which serves as an evolving framework for understanding subsequent parts of the text. As they read further, they test this evolving meaning and monitor their understanding, paying attention to inconsistencies that arise. If they notice that they are losing the meaning as they read, they draw on a variety of strategies to re-adjust their understandings. They come to texts with purpose that guide their reading, taking a stance toward the text and responding to the ideas that take shape in the conversation between the text and self." Reading for understanding, Schoenback, Greenleaf and Murphy 2012.

Some pupils will be very conscious of how they read and the strategies they employ, whilst others will not and may, in addition, have a limited understanding of how good readers engage with texts.

type of text

- Purpose of reading and selection of appropriate texts.
- Awareness of structure, format, key features of text type.
- Consideration for author, date, reliability and validity.
- Using all the text features to aid understanding, such as illustrations, tables, graphs, headings and subheadings, text in bold and italics.

ways to interact

- Drawing a picture
- Revision cards
- Mind maps
- Thinking maps
- Discuss
- Summarising
- Developing own questions
- Highlighting / underline / circle
- Annotate in margins
- Create a grid
- Write a report
- Answer questions

text skills

- Summarising skills
- Note taking
- Selecting relevant parts of text / bullet points
- Skimming and scanning
- Using graphic organisers and thinking maps
- Paraphrasing

How are you developing these skills and raising pupil awareness of reading strategies?

deficit knowledge

- Self-assessing understanding
- Questioning
- Seeking help
- Working with others
- Use of multiple sources
- Debugging strategies
- Maintaining focus

Vocabulary

- Subject specific terminology
- Academic language
- World knowledge and understanding
- Word walls, vocabulary maps, dictionary skills, thesaurus use, etc.

reading skills

- Previewing the text
- Hypothesising and predicting
- Self-questioning
- Making links and connections
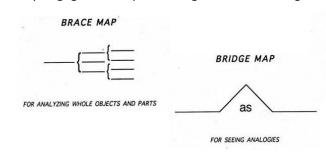- Considering all the evidence
- Pause and think

Cognition – intellectual functioning of the human mind characterised by remembering, comprehending, focusing, processing information, making decisions etc. Metacognition generally refers to the knowledge and awareness of this cognition. We want to increase pupil's awareness and understanding of the thinking that takes place as they read. We want them to have flexibility, adjusting their processing behaviours, such as reading rate, to effectively and efficiently meet the demands imposed by the purpose of reading and the characteristics of the text. Metacognition starts with the reader consciously intending on controlling the act of reading. They have an awareness of metacognition and strategies that good readers engage in.

Often the metacognitive process starts with the reader clarifying the purpose of reading in their mind – that is, understanding the explicit and implicit task demands and establishing the goal. They use this to select strategies to help them understand the text and achieve the goal. They consider the purpose and goal against an awareness of their own cognitive processes and identify any challenges that may be ahead. For example, they recognise they may need to slow down when reading a challenging science article. They understand the different types of demands that are imposed on them by different reading goals and different types of reading materials. The reader strategically plans the regulation and monitoring of the reading act.

Whilst reading, they identify the important aspects of a message. They focus attention on the major content rather than trivia. They monitor ongoing activities to determine whether comprehension is occurring. They use a range of reading strategies, for example : re-reading, skimming, scanning, paraphrasing, identifying patterns in text, sequencing events, looking for relationships, and reading ahead for clarification, making, confirming or disapproving predictions, formulating and answering questions, and employing sensory imagery. They engage in self-questioning to determine if goals are being achieved and they take corrective action when failures in comprehension are detected.
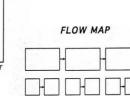
Teachers should explicitly teach ways of recording pupil's understanding of the text, such as mind maps and the eight thinking maps developed by Dr. David Hyerle. They should consider teaching thinking tools such as Plus/Minus/Interesting and DeBono's six thinking hats to help pupils dig into the text. Teachers may also find tools such as 'accountable talk' and 'prove it' useful in helping to push their thinking to new heights.

BRACE MAP — FOR ANALYZING WHOLE OBJECTS AND PARTS

BRIDGE MAP — as — FOR SEEING ANALOGIES

BUBBLE MAP — FOR DESCRIBING USING ADJECTIVES

DOUBLE BUBBLE MAP — FOR COMPARING AND CONTRASTING

CIRCLE MAP — FOR DEFINING IN CONTEXT

FLOW MAP — FOR SEQUENCING AND ORDERING

MULTI-FLOW MAP — FOR CAUSES AND EFFECTS

TREE MAP — FOR CLASSIFYING AND GROUPING