# **How Experts Read**

(from This is Disciplinary Literacy: Reading, Writing, Thinking, and Doing...Content Area by Content Area by ReLeah Lent)

### When scientists read, they--

- Assume an objective stance.
- Search for answers to relevant questions.
- Sift through and evaluate quality and quantity of evidence.
- Look for data-based outcomes.
- Determine validity of source.
- Decipher vocabulary necessary for conceptual understanding.
- Question reasoning and conclusions.
- Pay attention to detail and numbers.
- Collaborate with colleagues when faced with complex ideas.
- Chart, illustrate, and graph data and conclusions.
- Consider alternatives to what has been presented.
- Ask "Why?" more than "What?"
- Understand that theories are subject to change and seek out more current findings.

## When mathematicians read, they--

- Use the information they are reading as pieces of a puzzle.
- Make meaning out of mathematical symbols and abstract ideas
- Act as investigators looking for patterns and relationships.
- Seek to understand what the problem is asking them to do rather than reading only for information.
- Ask questions as they read.
- Make notes of misconceptions or confusion.
- Read for accuracy and clear mathematical reasoning.
- Scrutinize ways that math is reported in the media or in real world applications.
- Apply previously learned mathematical concepts.
- Look for what is missing.
- Think about how vocabulary may be used differently in math contexts.

### When historians or social scientists read, they--

- Compare and contrast events, accounts, documents, and visuals such as infographs or photographs.
- Interpret primary and secondary sources with an eye toward bias.
- Create narratives from existing information.
- Use knowledge of the present to make sense of the past and vice versa.
- Situate new understandings within background knowledge.
- Think sequentially to piece together timelines.
- Make inferences and determine what is important from what is merely interesting.
- Untangle threads of fact from often conflicting accounts and perspectives.
- Determine meanings of words within context.

### When readers of fiction and nonfiction approach text, they--

- Look for ways that characters, setting, and conflicts may influence the meaning of the text.
- Understand the use and effect of figurative language.
- Find underling messages that evolve as a theme.
- Read skeptically, discerning unreliable narrators or characters.
- Recognize devices authors use to enhance their writing, such as flashback, hyperbole, or analogy.
- Read nonfiction critically, looking for bias or fallacies in reasoning.
- Summarize and synthesize ideas in nonfiction and events in fiction.
- Use reading as a way to make connections or understand real-world issues.
- Understand how voice works to influence meaning.
- Use text structure as a tool for comprehension.
- Pay attention to new vocabulary or how the writer has used words in new ways.
- Engage in a mental dialogue with the author.