



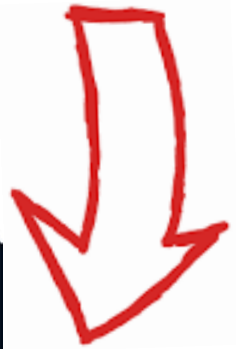
Reading in Computer Science

Disciplinary literacy is defined as the confluence of content knowledge, experiences, and skills merged with the ability to read, write, listen, speak, think critically and perform in a way that is meaningful within the context of a given field.



READING CODE

Reading code is different than any other text you will read. It is packed with highly complex vocabulary terms, jargon and acronyms which need to be learned and understood before they can be read. Reading code is a key feature in Computer Science. When reading code, ask: Does the code run? Does the code run correctly? Does the code run as expected on all possible test cases? How will specific changes affect the outcome of the code?



Distinctive Features

- Computer science texts, articles, research papers and codes are typically concept and idea dense
- Words, codes and symbols all have a specific meaning which isn't always clear (often reads like a different language)
- Acronyms are often used
- Every word and symbol matters

Demands and Strategies

- Intensive, slow reading and rereading to analyse details
- Use a flowchart to visualise the direction the code is going and predict possible outcomes.
- Get more than just the 'gist'; read carefully and closely.
- Identify all parts of code / text and their meaning
- Create a working dictionary of topic-specific terminology and acronyms with their definitions
- Pay attention to detail and think sequentially
- Apply previously learned concepts and processes



- Research papers
- Code
- Computing books
- Text books
- Articles
- News articles
- Instructions
- Video tutorials



CLOSE READING



QUESTIONING



MAKING CONNECTIONS



VISUALISING



PREDICTING



INDEPENDENT READING



STAYING CURRENT

Wider reading around computer science can enable students to gain a wider and deeper knowledge of the subject. New languages, protocols, and innovations are happening every day. Being a computer scientist means staying current.

- Use reading as a way to make connections and understand real world issues.
- Summarise and synthesise ideas.
- Read nonfiction critically. Pay attention to the source and reliability.