Cognitive load theory and Rosenshine's principles of direct instruction

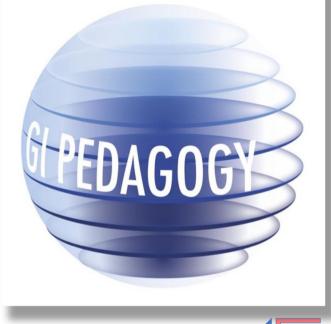
1.2 What is Cognitive Load Theory?

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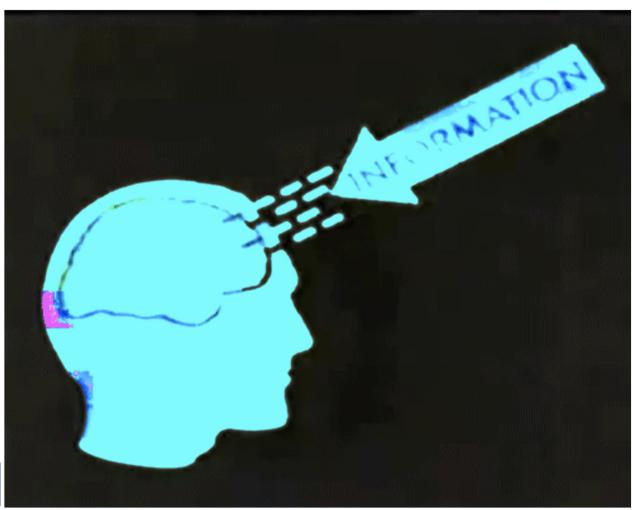








Cognitive Load Theory: What is it NOT?





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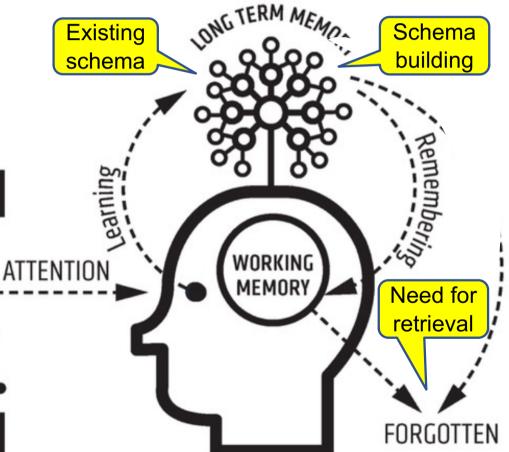


Cognitive Load Theory: What is it?

ENVIRONMENT

Cognitive Load Theory (CLT) targets improvements in long-term memory in order to 'free up' working memory

Developed in the 1980s by John Sweller, an Australian Educational Psychologist





Cognitive Load Theory. What is it?

1. WORKING MEMORY

Information is processed in the working memory, where we hold small amounts of new information for a very short time. The average person can only hold on to around seven chunks of new information in their working memory at a time, and can only work on about four chunks at a time.





"Mr. Osborne, may I be excused? My brain is full."

OPTIMISING LOAD

Information stored in longterm memory can reduce the load on working memory. This is because there are no limits to working memory when dealing with familiar information.

2. LEARNING

Learning happens when we successfully transfer new information from our working memory into our long-term memory.

OVERLOAD

Learning can be slowed down or even stopped if our working memory is overloaded, such as when we have to process too much new information at once.

3. LONG-TERM MEMORY

Information is organised and stored in our long-term memory in 'schemas'. A schema can be very simple with only a couple of pieces of information, or very complex with an enormous amount of information.

'Extraneous load'



Source: <u>Cognitive load theory in</u> <u>practice:</u> Examples for the classroom