# Cognitive load theory and Rosenshine's principles of direct instruction

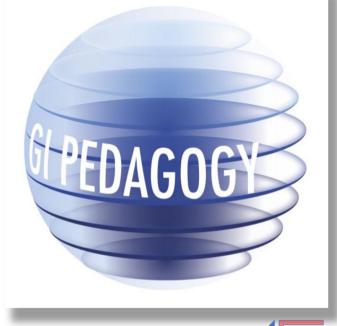
#### 1.1 Intro

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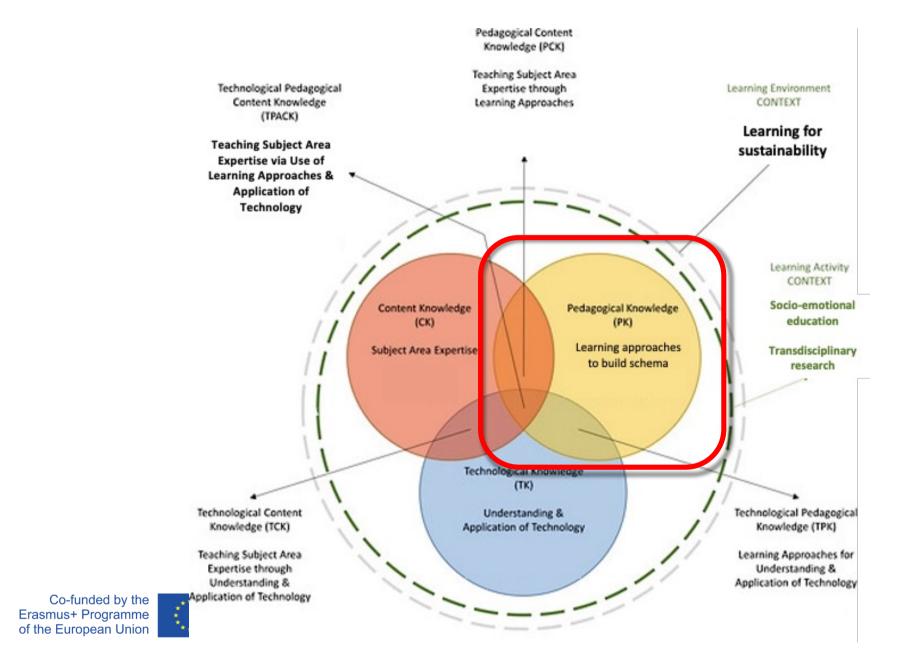














### Joining the dots – what's the story of schema? Building schema starts young...





Me a year old. My mam said I was obsessed with taking pictures with my pretend camera.. I think this was a real camera case. Isn't it funny that I was taking pictures in my head before I could even walk.

EDAGOG'

2:12 PM · Dec 28, 2020 · Twitter for Android

https://twitter.com/sonyaphotoart/status/1343560480086962178



### Joining the dots – what's the story of schema? Building schema continues...





**Ewan Birney** @ewanbirney · Jan 3 Replying to @ewanbirney

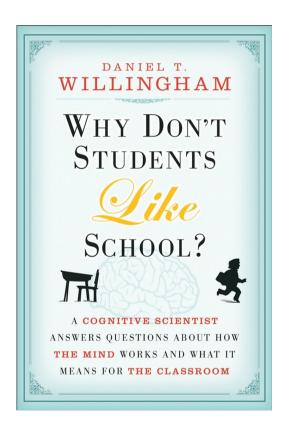
In my head, on top of this solid ground of observations is a theory/model of how it all fits together - a sort of **intellectual super-structure**. This super-structure is personal to each scientist (though often the core bits agree).

Let's call this superstructure
"understanding" and from it scientists predict
useful experiments or observations to do next on the "marshy edge" of the solid ground science is not a random walk in
experiments or observations, rather it has a
structure.



#### Joining the dots – what's the story of schema? Cognitive Load Theory





## 'memory is the residue of thought'

What will improve a student's memory? Daniel Willingham



