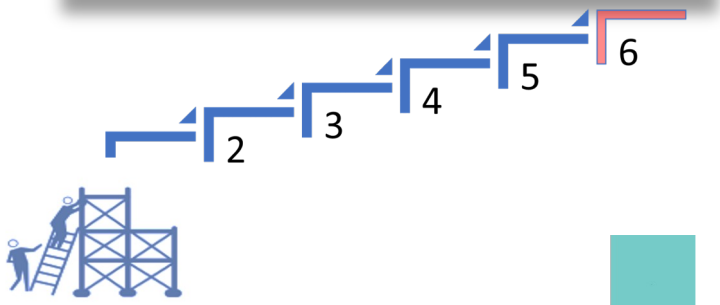
Cognitive load theory and Rosenshine's principles of direct instruction

1.4 What are the drivers?

Brendan Conway
St Mary's University, Twickenham, United Kingdom

Luc Zwartjes
Geography Department Ghent University, Belgium



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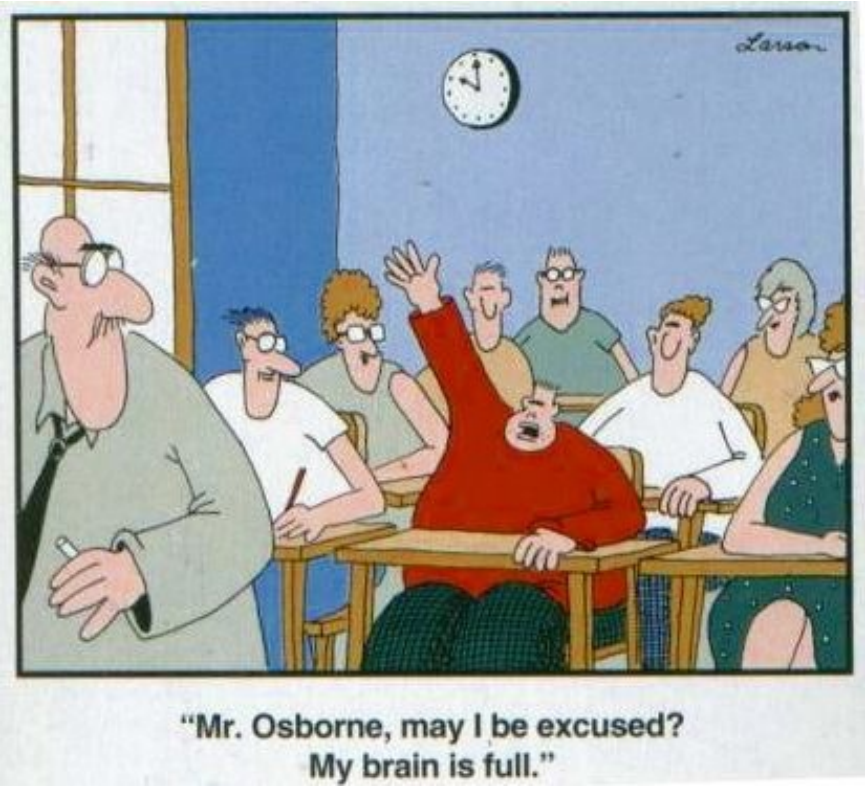
Schema and Cognitive Load Theory: What are the drivers?



- Evidence-led approaches e.g. Hattie's effects; Rob Coe
- National performance in OECD PISA tests 2000-2018.
- Need to boost 'cultural literacy' (ED Hirsch et al).
- Emphasis on 'powerful disciplinary knowledge' PDK (Michael Young).
- Loss of modularity at GCSE and A Level > much stronger focus on long-term memory.
- Reaction to poorly-evidenced '3-part lesson' and proliferation of educational 'fads' and 'myths'.
- Retreat from prescription > pedagogical vacuum (2010-2014).
- Transition toward evidence-led pedagogy (2015-onwards)

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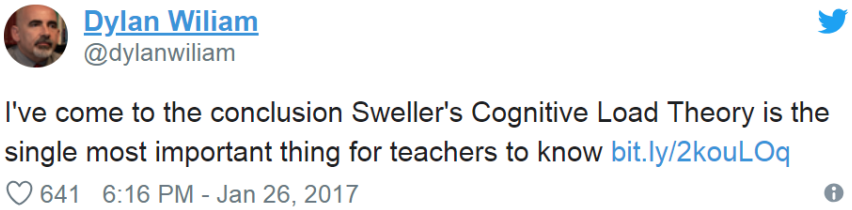
Schema and Cognitive Load Theory: Who says?

‘Cognitive Load Theory is the single most important thing for teachers to know.’

Dylan Wiliam



‘one of the best supported theoretical frameworks in education’.

Daniel Muijs (Dean of the Faculty of Education and Society at Academica University of Applied Sciences in Amsterdam, Netherlands)

‘Our **memories get stronger once retrieved**, if we have had time to forget them’

Memory not memories – Teaching for long-term learning by Clare Sealy

‘interrupting forgetting’

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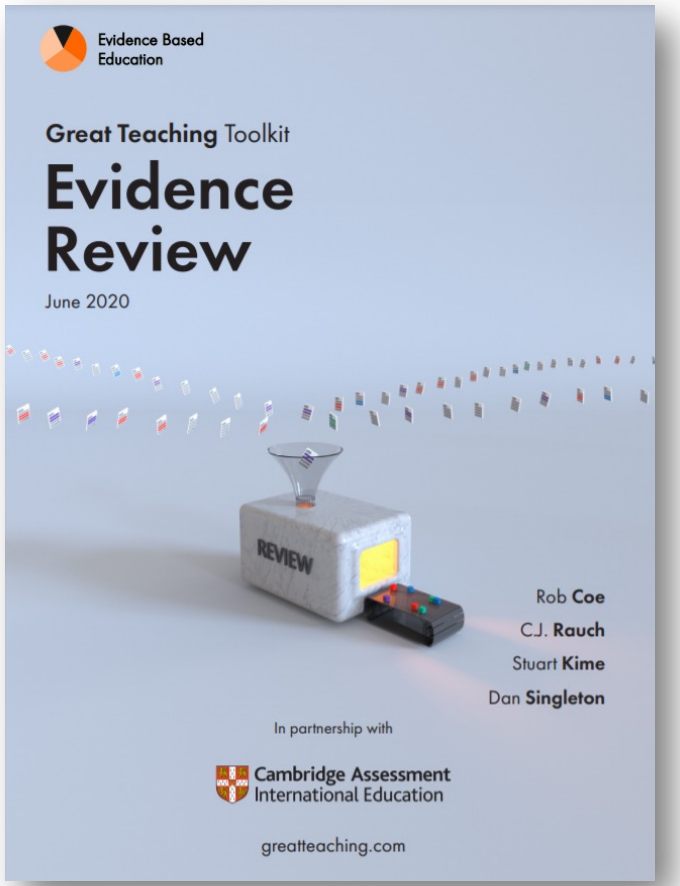
Schema and Cognitive Load Theory: Who says (who said)?



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Great Teaching Toolkit

Led by Professor Rob Coe, published 17 June 2020 Cambridge International; Evidence Based Education.

***Embedding**, getting the learning to stick…*

*memory is not just a storage facility for facts that could just as easily be looked up: the **schemas** that we use to organise knowledge in memory are the very things we use to think with and to connect new learning to (Sweller, 1994)…*

*Knowledge or **schemas** that are required for future learning must be secure and readily retrievable.*

***Forgetting is normal** but can be slowed or prevented by periodic revisiting and review.*

Full report:

Great teaching toolkit: Evidence review

Building schema:

Great teaching toolkit: Evidence review – 4: Activating hard thinking