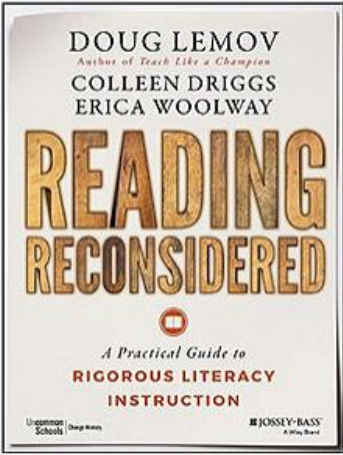


Our SHINE Curriculum - why we do it...

	<p>Knowledge Development (p.50). What happens in our brains when we read does not make much of a distinction between reading about an experience and encountering it in real life - the same neurological regions are stimulated.</p> <p>“One of the strongest drivers of reading ability is prior knowledge.” And one of the ways that pupils gain knowledge is by reading deeply and widely. There needs to be a coherent, sequential, knowledge-rich curriculum delivered every year from EYFS upwards.</p> <p>When texts are closely paired it maximises synergy - e.g., reading a novel set in WW2, then reading some NNNF about the conditions that soldiers lived in. In this example, children would be more attentive to both the emotions of the soldiers (as they understand more about what they are going through) and the factual information (as they care about the soldier characters in the novel). Pupils connect the dots. The absorption rate goes up. By embedding such NNNF texts regularly in the scheme of teaching a novel we are showing the children that a book does not live in isolation, and we are also modelling, and building a habit of, intellectual curiosity.</p>
	<p>Curriculum Coherence: A system is regarded as coherent when the national curriculum content, textbooks, teaching content, pedagogy, assessment and drivers and incentives all are aligned and reinforce one another. Teacher Subject knowledge must be a school priority - directed time must be created for this.</p> <p><i>‘Schools share powerful knowledge on behalf of society so we teach them what they need to know to make sense of and to improve the world. They need that knowledge in order to interpret and improve the world. It enables them to grow into useful citizens. It enables them to grow into citizens who understand one another. It’s fair and just that all children should have access to this kind of learning, and this of knowledge.’</i></p> <p>Planning a curriculum which draws the threads between the overarching ideas and the detail is the key to unlocking the present distance between what is taught and how well it is remembered. (Cognitive load theory and long term memory)</p> <p>‘Planning... the most powerful is when teachers work together to develop plans, develop common understandings of what is worth teaching, collaborate on understanding their beliefs of challenge and progress, and work together to evaluate the impact of their planning on student outcomes.’ <i>Hattie p.40</i></p> <p>Beautiful work: Have fewer things of higher quality - Austin’s butterfly... It is the appropriate use of pace which allows us to help our pupils to go deeper and learn better.</p>
	<p>Give Your Reading Curriculum a Backbone</p> <p>... make use of this wider curriculum learning, read texts that share and build upon the content being taught. Make your reading spine symbiotic with your wider curriculum.</p> <p>...Choose books that go beyond children’s experience, that are rich in knowledge and teach them something about the world. Choose books that dovetail with your wider curriculum. Choose books that have cultural capital, those books that are part of our cultural furniture, those books that educated members of our society tend to know and allude to. Choose books that will stretch and challenge, with unfamiliar vocabulary and elaborate sentence patterns.</p>
<p><u>The 3D curriculum that promotes remembering</u></p>  <p>Clare Sealy: ResearchEd</p>	<p>A good curriculum empowers children with the knowledge they are entitled to: knowledge that will nourish both them and the society of which they are members.</p> <p>The very bones of our curriculum across the years and across subjects will need to link up in a highly, well thought out way, so that knowledge taught in one subject is explicitly reinforced and revisited in a not only in other subjects, but in subsequent years. In this way, key concepts and vocabulary are reinforced because new words and concepts are encountered repeatedly in meaningful contexts. I am calling this way of building a curriculum a 3D curriculum</p> <p>Vertical Links - high yield key concepts revisited again and again.</p>



Horizontal Links - between subjects in a year
 Diagonal Links - links that join concepts across both year groups and across subjects.
 Each time a concept is encountered within a different context, not only is the concept more likely to be remembered, the understanding of that concept becomes more nuanced.
 Importance of Tier 2 and Tier 3 vocabulary.

Memory, not memories - teaching for long term learning



Clare Sealy: ResearchEd



Episodic memory is so tied up with context it is no good for remembering things once that context is no longer present. Luckily our brains also have semantic memory. Semantic memories have been liberated from the emotional and spatial/temporal context in which they were first acquired. And once a concept has been stored in the semantic memory, then it is more flexible and transferable between different contexts.

Cognitive overload occurs when we overwhelm the limited working memory with too much new information at once. Since most of us can only handle about 4 new items of information at once. If we want successful learners, instead of over focusing on the quality of teaching, we need to pay attention to the quality of what gets taught. Is it suitably knowledge-rich?

The retrieval effect' - should become the bedrock of our teaching for long term learning. It is not an assessment tool, it is a learning tool... Its prime purpose is to make memories stronger. Some children will fail in their attempt at retrieval. That's fine. Once they've struggled, then you reteach.

Having retrieval tasks at the start of lessons, be they 'do now' tasks, entry tickets, start of lesson plenaries or any other retrieval tasks are more likely to strengthen the learning from the previous lesson than an end of lesson retrieval task. What is more, to make memories really strong, come back to them at gradually increasing intervals. This is known as 'spaced learning.'

Beyond Knowledge Organisers: building the best curriculum in the world.



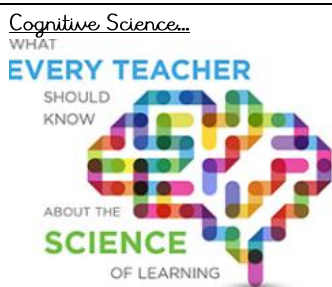
Jon Brunskill

ResearchEd

We need to go beyond knowledge organisers. Sure we need teachers, pupils and parents to be really clear on the core, necessary facts that represent a well developed schema of a topic. But we need to make sure that the explanations of - and connections between - those facts in lessons makes the knowledge memorable, flexible and transferable.

The more you know, the more easily you learn.

The idea of 'democracy', for example, is best explicitly revisited in multiple units, year after year. So too with 'civilisation', 'parliament', 'republic' and 'revolution' and dozens of others. A really well sequenced curriculum that gives children plenty of concrete examples of these concepts requires specificity and higher-level oversight.



1. Knowledge frees up your brain's capacity for thinking
 Cognitive sciences have found that our brains work at different speeds, depending on whether we have learned something already, or whether we are relying on 'working memory'. Working memory is new information you can keep in your head and is very limited (holding between three and seven pieces of new information). That is why learning your times tables by heart is useful. Completing more complex calculations is made more simple if knowledge of tables is already 'locked in'.

2. We learn new things by connecting them to old things
 The way in which the brain stores new information, and makes inferences and discoveries, is by connecting to existing stored knowledge (schema). You cannot have skills without knowledge, because you cannot evaluate something you do not know anything about. You also cannot come up with new ideas without jumping off existing ones.

'Fast read, back-to-back' Reading project at the University of Sussex
 Dr Julia Sutherland, Principal Investigator

...the more children read, especially 'back-to-back' reading of whole books, the more they improve not only their vocabulary and reading skills, but their cognitive abilities, supporting their learning across the curriculum.

The idea of 'back to back' reading comes from new University of Sussex research in which teachers asked 365 Year 8 students (predominantly reluctant readers or those who find reading a challenge) to read two, challenging novels, back-to-back in just one term. Young readers made a phenomenal 16 months' progress on average in their reading comprehension level, with students overall gaining an average of 8.5 months (measured by standardised pre and post-comprehension tests).



- > EEF Preparing for Literacy (EYFS) (2018)
- > EEF Improving Literacy in KS1 (2016)
- > EEF Improving Literacy in KS2 (2017)
- > EEF Metacognition and Self-Regulation Guidance Report (2018)
- > EEF Improving Behaviour in Schools (2019)

