

What did your pupils remember? In the end, that's all that matters.

<https://thetraditionalteacher.wordpress.com/2017/07/07/liberated-by-cognitive-science/>

BEGINNING READING INSTRUCTION: BRI The Cognitive Science

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1 THE POWER OF STORIES



↳ *The human brain seems to be set up specially for the retention of stories. They sink in and they stay in the mind more easily than anything else... Things that create an emotional reaction will be better remembered.*

DANIEL WILLINGHAM
WHY DON'T STUDENTS LIKE SCHOOL?

BRI instruction takes place within 78 decodable animal tales. Each Alphabetic Code correspondence is introduced carefully, with extensive practice.

2 COGNITIVE LOAD THEORY



↳ *With too great a cognitive load children lose track of what they're doing, make mistakes, they get lost, give up. Even if they hang on long enough to solve the problem, they don't have enough mental capacity left over to reflect on what they've done.*

ANNIE PAUL MURPHY
MINDSHIFT

Early BRI books are created from just three words and five sounds and gradually build up to avoid memory overload.

3 OVERLEARNING: PRACTISING BEYOND THE POINT OF CONFIDENCE



↳ *Research shows that we routinely overestimate how much we will remember and underestimate how much we will forget. To encourage automaticity – effortless recall or performance – students should overlearn by practising beyond the point of confidence.*

ANDY THARBY
<https://durrington.researchschool.org.uk/2018/02/26/15-myths-about-memory-and-learning/>

BRI stories offer extensive practice in foundational skills. Each new correspondence is introduced five times initially, and repeated frequently in different contexts.

4 INTERLEAVING



↳ *The mixing of items, skills, or concepts during practice, over the longer term, seems to help us to not only see the distinctions between them but also to achieve a clearer grasp of each one individually.*

BENEDICT CAREY
HOW WE LEARN

BRI's mixing of related but distinct characteristics (e.g. see, me, sees) alerts children to the complexity of the Alphabetic Code.

5 FLEXIBLE KNOWLEDGE



↳ *[Flexible knowledge] is of course a desirable goal, but it is not an easily achieved one. When encountering new material, the human mind appears to be biased towards learning the surface features of problems, not toward grasping the deep structure that is necessary to achieve flexible knowledge.*

DANIEL WILLINGHAM
<https://www.aft.org/periodical/american-educator/winter->

BRI scrupulously introduces a tiny selection of Advanced Alphabetic Code correspondences, encouraging both flexibility and early knowledge of the deeper structure of the Code.

6 MEMORY OVERLOAD



↳ *Find the core of your message: keep it simple.*

ROBBIE RUSSELL
<https://howthenshouldweteach.wordpress.com/2018/03/08/6-features-of-excellent-explanations/>

Brevity, simplicity, and consistency are the cornerstones of BRI instruction for both teachers and pupils.

7 RETRIEVAL: TESTING FROM MEMORY



↳ *Nothing cements long-term learning as powerfully as retrieval practice.*

JENNIFER GONZALEZ
<https://www.cultofpedagogy.com/retrieval-practice/>

Retrieving a specific memory given partial cues or hints improves future retrieval.

ROBERT BJORK
<http://gocognitive.net/interviews/future-learning>

BRI's Spelling Books – introduced after the storybooks – underpin retrieval practice.