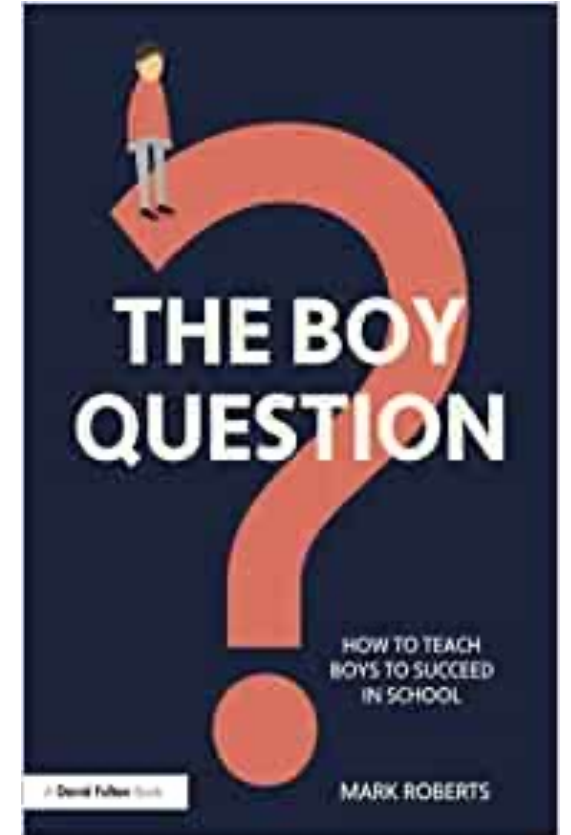
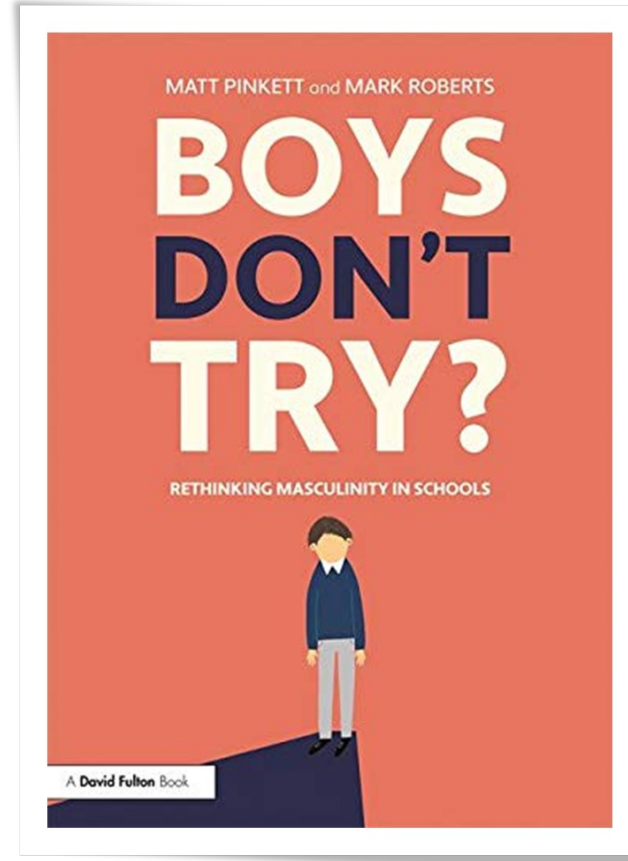
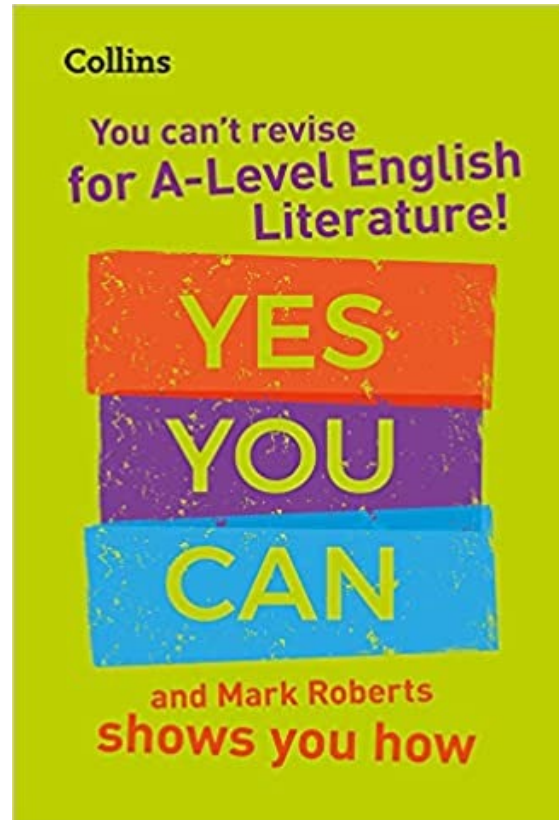
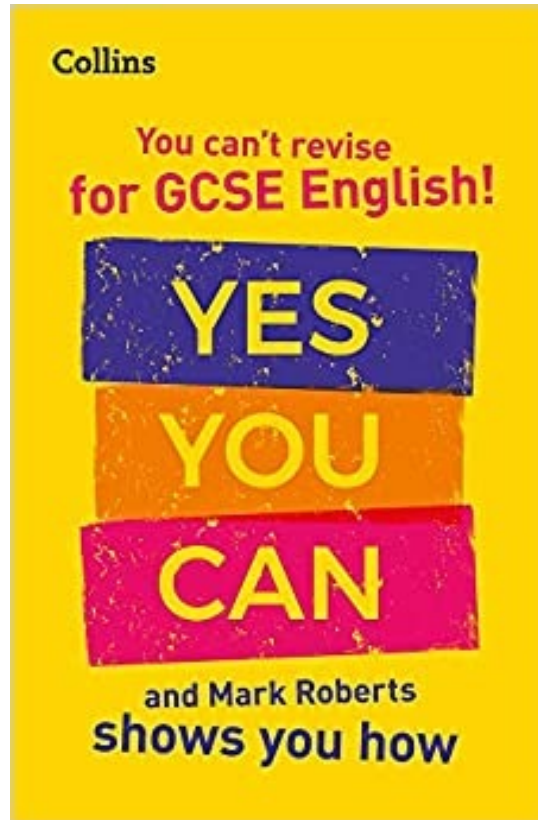


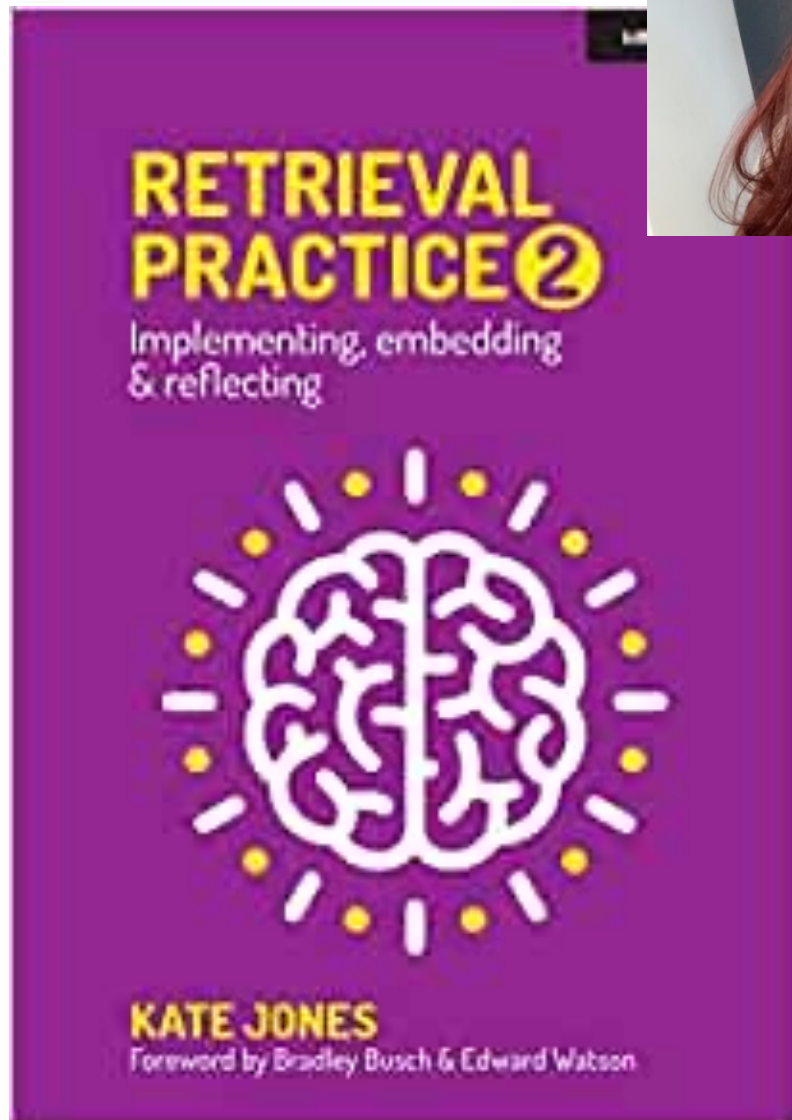
The Journey to 'Evidence-Informed'

Encouraging a focus on evidence-informed
approaches to learning and teaching

James A. Maxwell

research  **ED**





set of exams, due to the disruption of the coronavirus pandemic. I am hopeful however that this structured and focused approach to retrieval practice, carefully tuned to the needs of history, will have a significant impact on the outcomes of our students.

Thank you to Hugh for sharing his experiences and insight. You can follow Hugh on Twitter @HughJRichards and learn more about Huntington Research School @HuntResearchSch.



James Maxwell is Headteacher at Carrickfergus Grammar School in Northern Ireland and is also the author of *Making Every MFL lesson count: Six Principles to Support Modern Foreign Language Teaching*. I have had the privilege to work with James and his enthusiastic team of teachers. As a headteacher, naturally James has oversight of teaching, learning, curriculum and professional development at his school. He shares the approach he has taken in terms of whole-school leadership with retrieval practice.



Whole-school leadership and retrieval practice

James Maxwell

Increasingly, direction in my school has been shaped by educational research. That journey started when we read Daniel Willingham's seminal book *Why Don't Students Like School?* It was a game-changer which led us onto other great educational literature such as Daisy Christodoulou's *Making Good Progress? The Future of Assessment for Learning* and Peps McCrea's *Memorable Teaching*. A staff training day in 2019 focused on some of this literature and the decision was taken to embed the following three maxims as the crux of our learning and teaching principles in our new School Development Plan:

- Subject-specific knowledge must precede domain-specific skill;
- Memory is the residue of thought; and
- Assessment is the bridge between learning and teaching.

THE SCHOOLS OF THE FIRST TERM OF THE COGNITIVE SCIENCE NETWORK

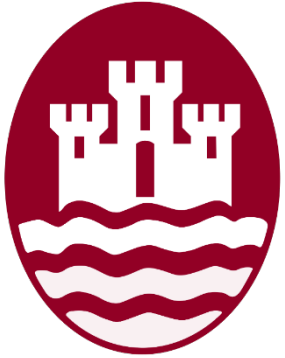
Carrickfergus Grammar

North Cestrian School

St James Primary

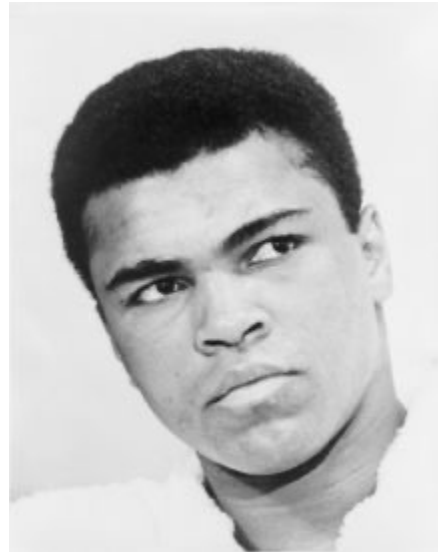
Stock High School





- WHAT is evidence-informed practice?
 - From classroom practice to whole-school implementation
- WHY evidence-informed practice?
- HOW do we implement evidence-informed practice?
 - A framework for implementation
 - The Marginal Gains
 - A Case Study

“The man who views the world at **50** the same as he did at 20 has wasted 30 years of his life.”



Making every
MFL
lesson count



*Six principles to support
great foreign language teaching*

James A. Maxwell

Edited by Shaun Allison and Andy Tharby

WHAT MAKES GREAT TEACHING?



30 OCTOBER 2014



SCHOOLS, TEACHING AND TUITION



ROBERT COE, CESARE ALOISI, STEVE HIGGINS, LEE ELLIOT MAJOR

DOWNLOAD REPORT



What makes great teaching?

Review of the underpinning research

Robert Coe, Cesare Aloisi, Steve Higgins and Lee Elliot Major
October 2014

1. (Pedagogical) content knowledge (Strong evidence of impact on student outcomes)

The most effective teachers have deep knowledge of the subjects they teach, and when teachers' knowledge falls below a certain level it is a significant impediment to students' learning. As well as a strong understanding of the material being taught, teachers must also understand the ways students think about the content, be able to evaluate the thinking behind students' own methods, and identify students' common misconceptions.

2. Quality of instruction (Strong evidence of impact on student outcomes)

Includes elements such as effective questioning and use of assessment by teachers. Specific practices, like reviewing previous learning, providing model responses for students, giving adequate time for practice to embed skills securely

and progressively introducing new learning (scaffolding) are also elements of high quality instruction.

3. Classroom climate (Moderate evidence of impact on student outcomes)

Covers quality of interactions between teachers and students, and teacher expectations: the need to create a classroom that is constantly demanding more, but still recognising students' self-worth. It also involves attributing student success to effort rather than ability and valuing resilience to failure (grit).

4. Classroom management (Moderate evidence of impact on student outcomes)

A teacher's abilities to make efficient use of lesson time, to coordinate classroom resources and space, and to manage students' behaviour with clear rules that are consistently enforced, are all relevant to maximising the learning that can take place. These environmental factors are necessary for good learning rather than its direct components.

5. Teacher beliefs (Some evidence of impact on student outcomes)

Why teachers adopt particular practices, the purposes they aim to achieve, their theories about what learning is and how it happens and their conceptual models of the nature and role of teaching in the learning process all seem to be important.

6. Professional behaviours (Some evidence of impact on student outcomes)

Behaviours exhibited by teachers such as reflecting on and developing professional practice, participation in professional development, supporting colleagues, and liaising and communicating with parents.



Optimizing multiple-choice tests as tools for learning

Jeri L. Little • Elizabeth Ligon Bjork

© Psychonomic Society, Inc. 2014

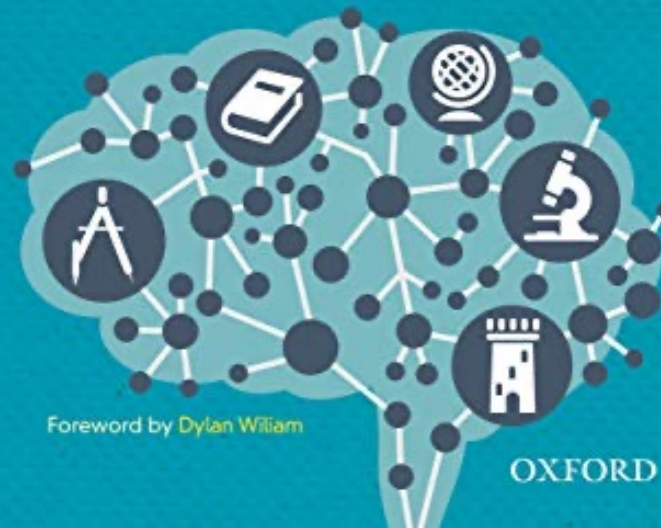
Abstract Answering multiple-choice questions with competitive alternatives can enhance performance on a later test, not only on questions about the information previously tested but

beneficial retrieval processes for both tested and related information, and the results have implications for the effective use of multiple-choice tests as tools for learning.

Daisy Christodoulou

MAKING GOOD PROGRESS?

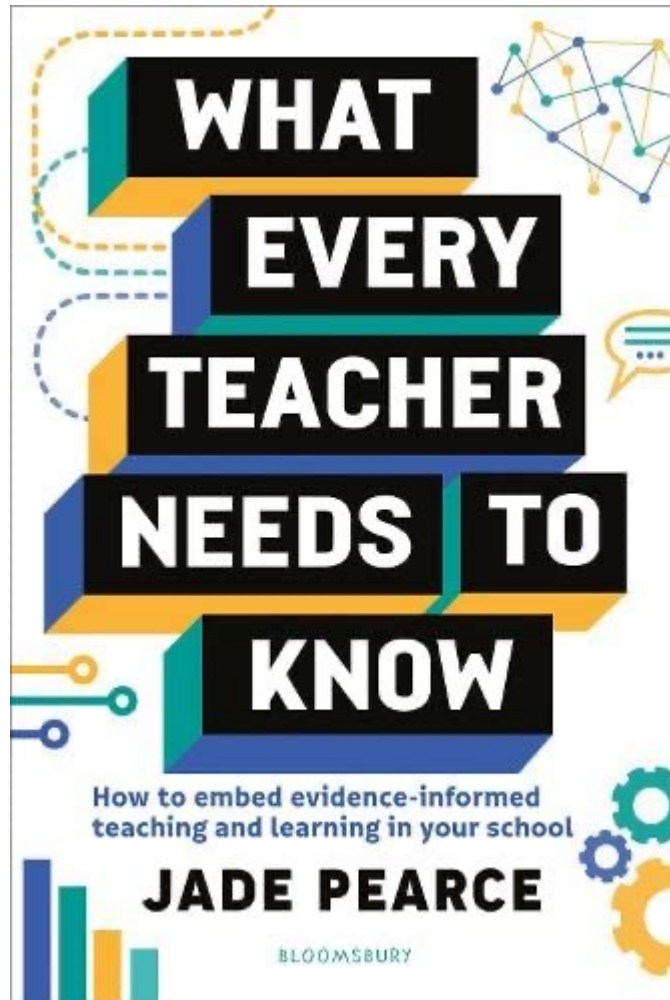
The future of Assessment for Learning



Foreword by Dylan William

OXFORD

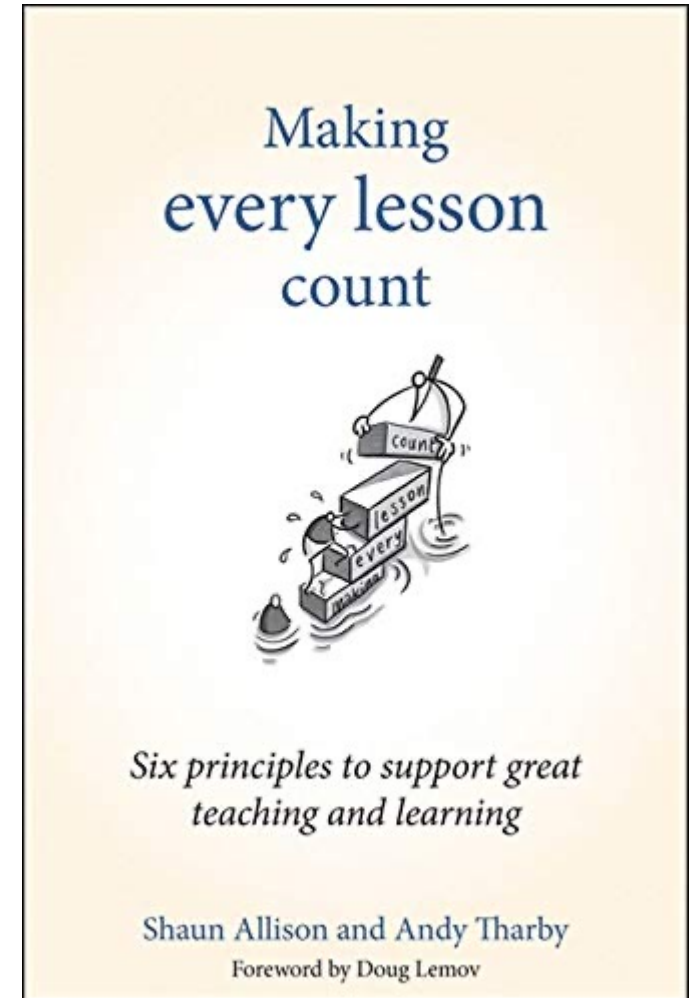
WHAT IS EVIDENCE-INFORMED TEACHING?



Evidence-informed teaching combines evidence from research with teachers' experience and professional judgement, and also takes account of the context of the school or class. It acknowledges that whilst research evidence can identify those practices that are most likely to be effective, this must be combined with teachers' judgement and experience of what works best, and must also be modified to suit different schools and classes – what works for a certain group of pupils, a certain school or in a certain subject may not be effective elsewhere.

WHY EVIDENCE-INFORMED TEACHING?

- Helps to identify 'nuggets' which have optimal impact
- Debunks learning myths
- Can help to reduce workload



Present information to learners in their preferred learning style

A belief in the importance of learning styles seems persistent, despite the prominence of critiques of this kind of advice. A recent survey found that over 90% of teachers in several countries (including the UK) agreed with the claim that “Individuals learn better when they receive information in their preferred learning style (for example, visual, auditory or kinaesthetic)” (Howard-Jones, 2014). A number of writers have tried to account for its enduring popularity (see, for example, a clear and accessible debunking of the value of learning styles by Riener and Willingham, 2010), but the psychological evidence is clear that there are no benefits for learning from trying to present information to learners in their preferred learning style (Pashler et al, 2008; Geake, 2008; Riener and Willingham, 2010; Howard-Jones, 2014).

Ensure learners are always active, rather than listening passively, if you want them to remember

This claim is commonly presented in the form of a ‘learning pyramid’ which shows precise percentages of material that will be retained when different levels of activity are employed. These percentages have no empirical basis and are pure fiction. Memory is the residue of thought (Willingham, 2008), so if you want students to remember something you have to get them to think about it. This might be achieved by being ‘active’ or ‘passive’.

COGNITIVE SCIENCE APPROACHES IN THE CLASSROOM: A REVIEW OF THE EVIDENCE





CPD @ Carrickfergus Grammar

Professional Development Portal For CGS Staff

[Home](#)
[A Visit to the Michaela School, Wembley](#)
[Retrieval Practice](#)

Categories

- Ability (1)
- Behaviour (7)
- Cognitive Load (2)
- David Didau (1)
- English (1)
- Expectation (8)
- Explicit Instruction (1)
- Geography (1)
- History (1)
- Homework (2)
- John Sweller (1)
- Knowledge (4)
- Learning (1)
- Learning and Teaching (11)
- Memory (14)
- MFL (1)

Attainment over Ability

Posted on [January 26, 2021](#)

[Attainment over Ability](#)

Posted in [Ability](#) | [Leave a reply](#)

The Hidden Lives of Remote Learners

Posted on [January 26, 2021](#)

<https://researchschool.org.uk/norwich/news/the-hidden-lives-of-remote->

CGS Posts

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Blogroll

- [Filling the Pail – Greg Ashtr](#)
- [The Learning Rainforest – Tom Sherrington](#)
- [The Learning Scientists](#)
- [The Learning Spy – David Didau](#)

- Michaela (4)
- Pedagogy (1)
- Performance (3)
- Quizlet (1)
- Remote Learning (1)
- Retrieval Practice (10)
- Rosenshine (1)
- Self-Quizzing (5)
- SEN (2)
- Spacing (1)
- Tom Sherrington (2)
- Uncategorized (1)

Tag Cloud

Behaviour Cognitive

Load Didau English

Expectation Explicit

Instruction Geography History

Homework John Sweller

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Effect **Memory** MFL

Michaela Pedagogy

Performance Quizlet

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learners

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10 Teaching Techniques to Practise – Deliberately

Posted on [February 17, 2020](#)

[10 Teaching Techniques to Practise – deliberately](#)

Posted in [Learning and Teaching](#), [Tom Sherrington](#) | Tagged [Learning and Teaching](#), [Tom Sherrington](#) | [Leave a reply](#)

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Low Stakes Quizzing and Retrieval

Posted on [January 16, 2020](#)

[Low Stakes Quizzing and Retrieval](#)

Posted in [Memory](#), [Performance](#), [Retrieval Practice](#), [Self-Quizzing](#) | Tagged [Memory](#), [Performance](#), [Retrieval Practice](#), [Self-Quizzing](#) | [Leave a reply](#)

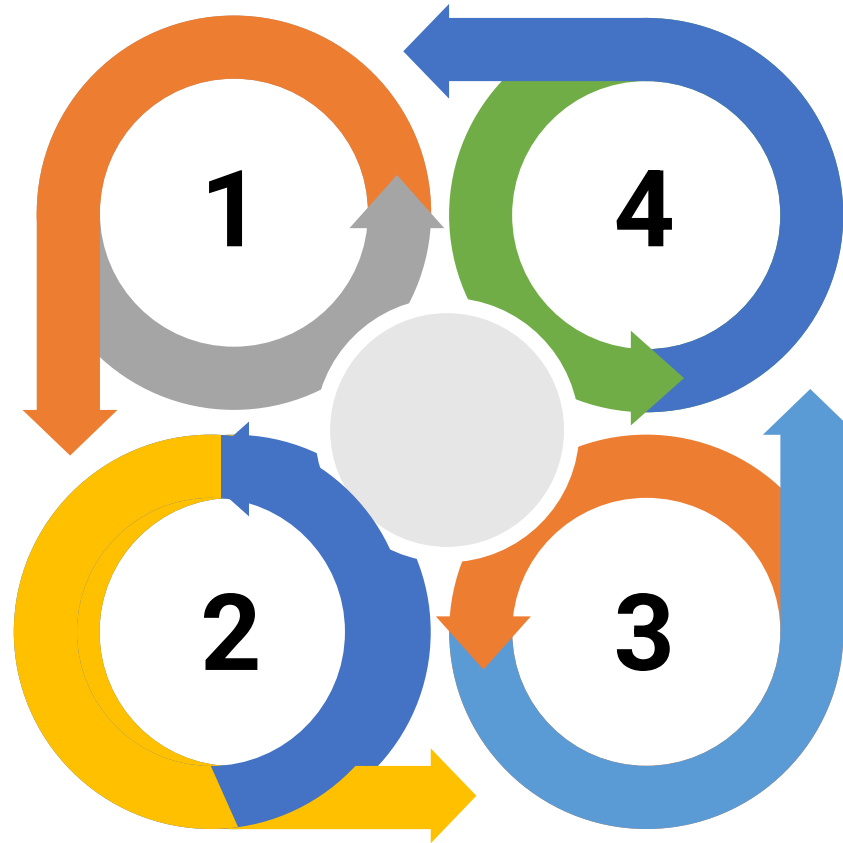
Edit

How to develop Evidence-Informed Practice

How to develop Evidence-Informed Practice

**Choose the Focus
– Narrow and
Specific**

**Emphasise and
Encourage the
Research**

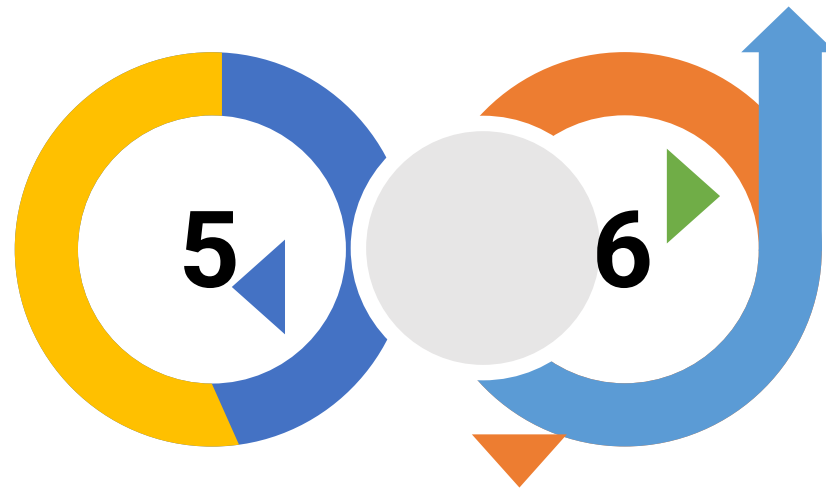


**Allow time
for Trial
and Error**

**Employ the
Experts**

How to develop Evidence-Informed Practice

**Refresh the
Research**

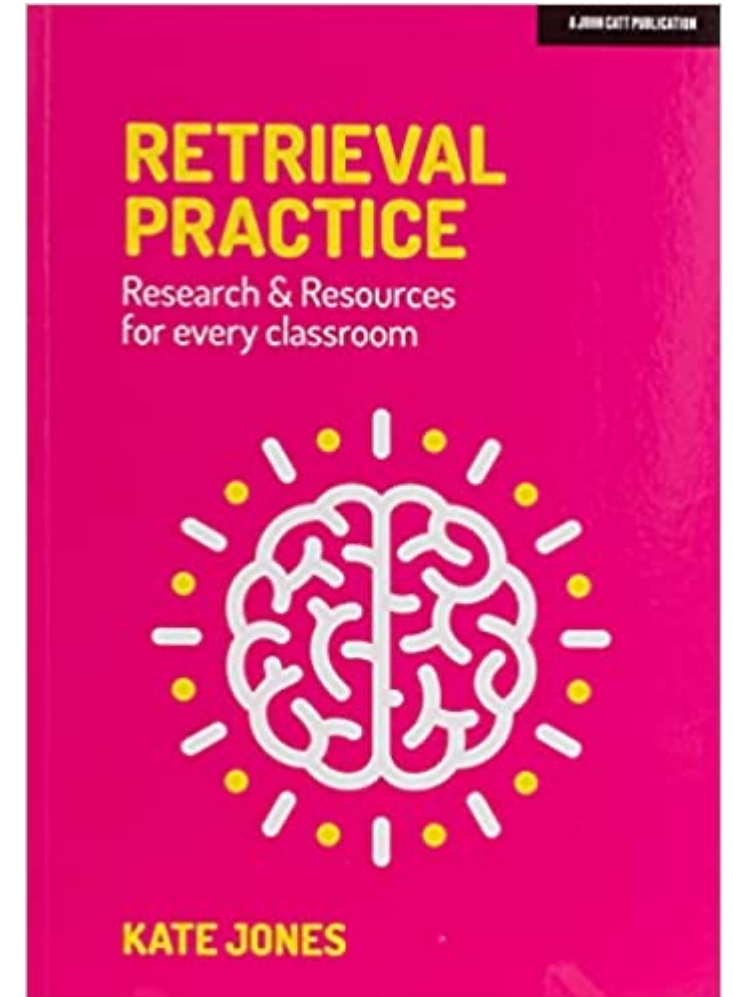


**Review and
Re-employ**

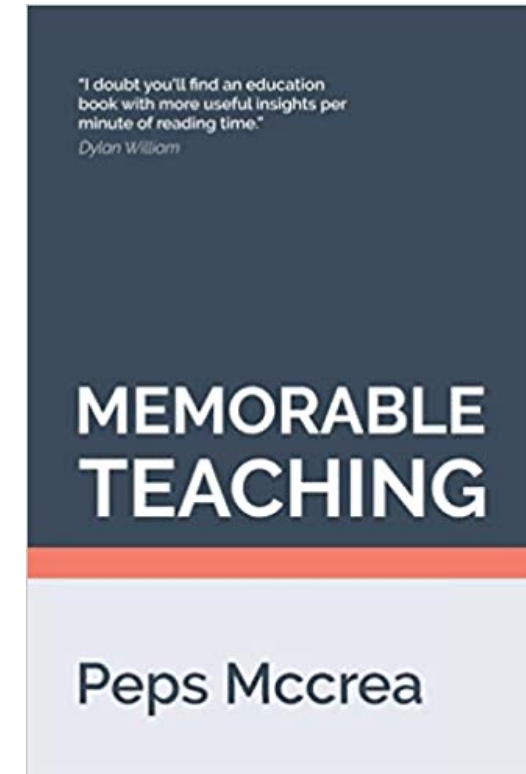
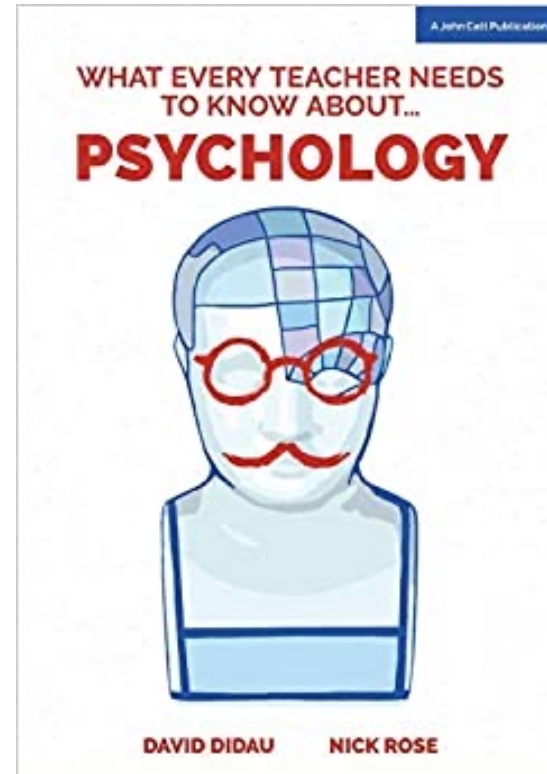
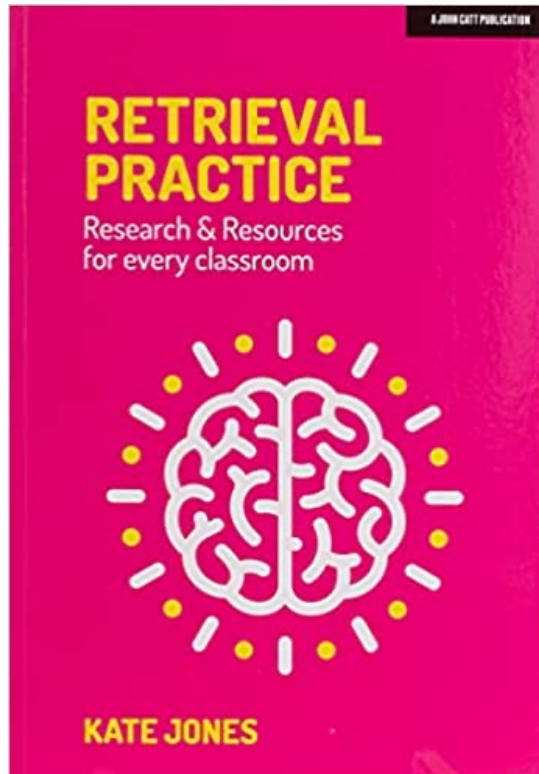
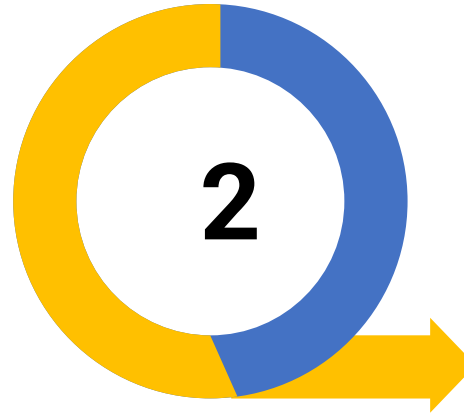
Choose the Focus – Narrow and Specific

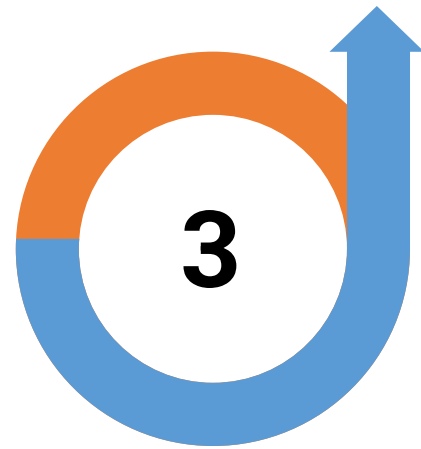


1. Build the rationale
2. Dip toe in water with research
3. Depict the 'other side'



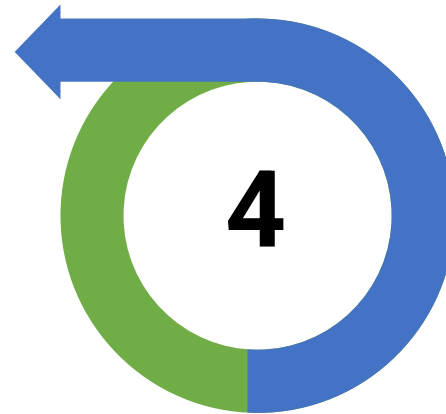
**Emphasise and
Encourage the
Research**





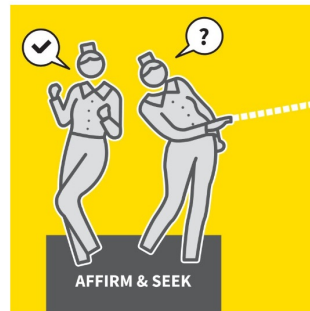
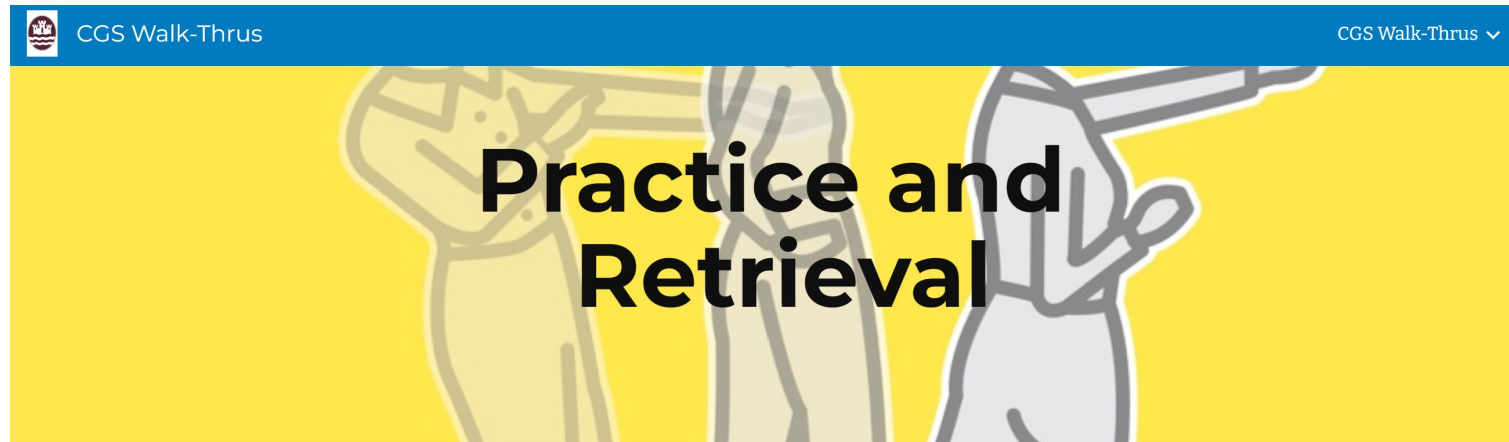
**Employ the
Experts**

**Allow time
for Trial
and Error**





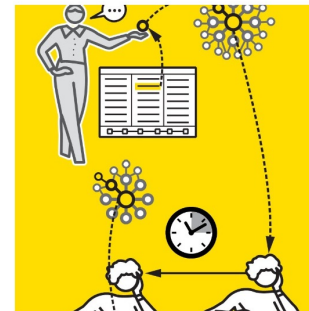
Refresh the Research



Quizzing



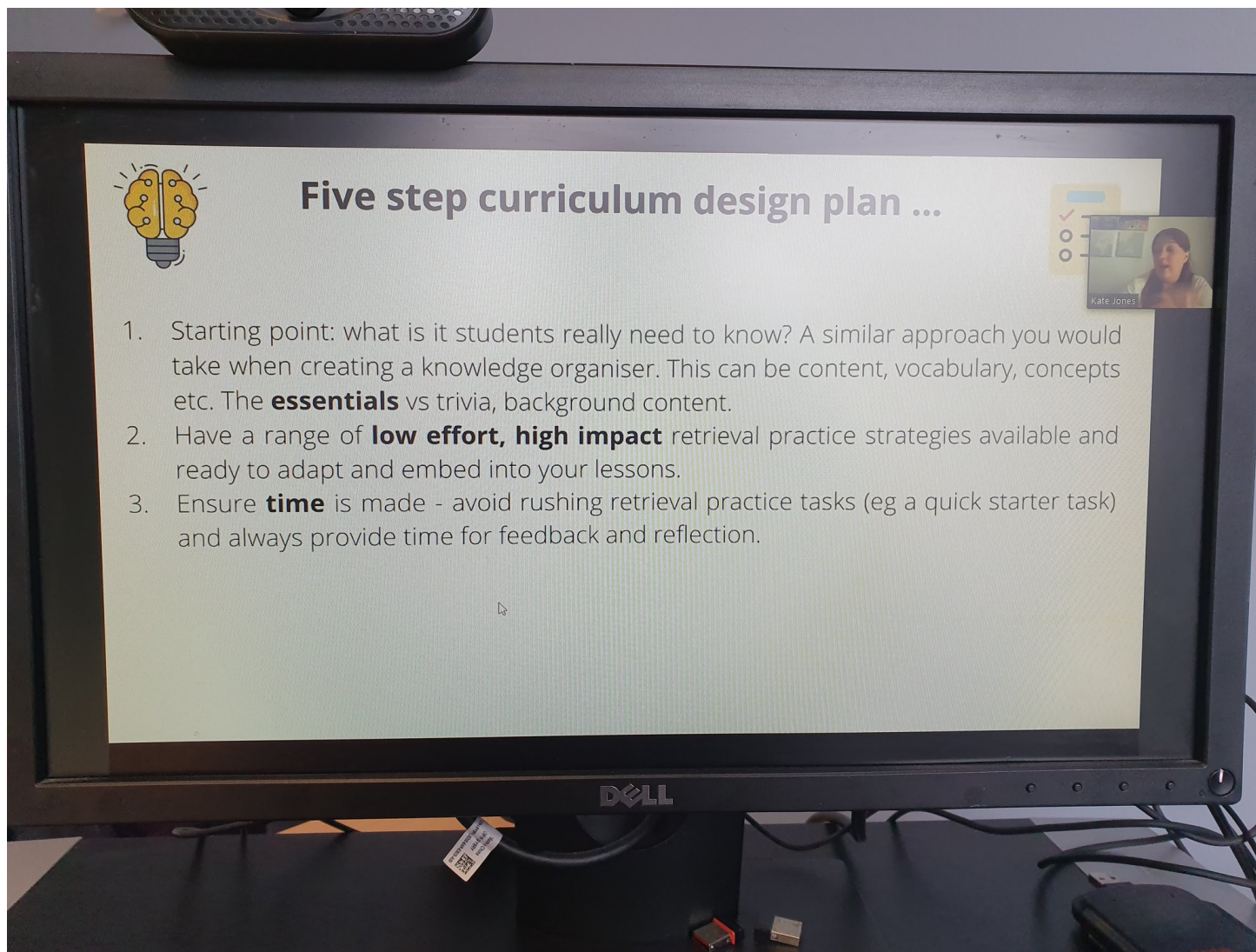
Elaborative Interrogation



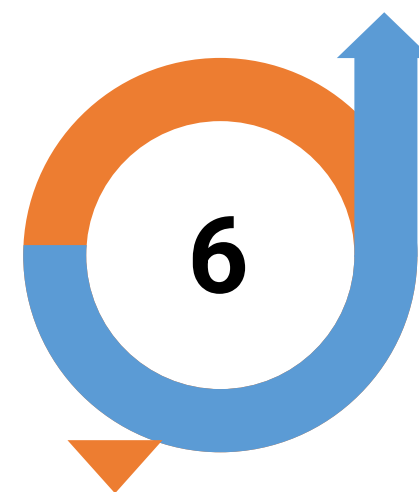
Using a Knowledge Organiser



Rehearsal and Performance

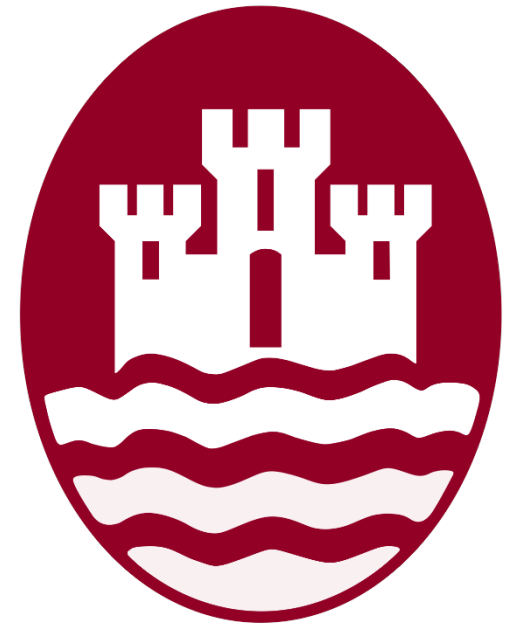


Review and Re-employ



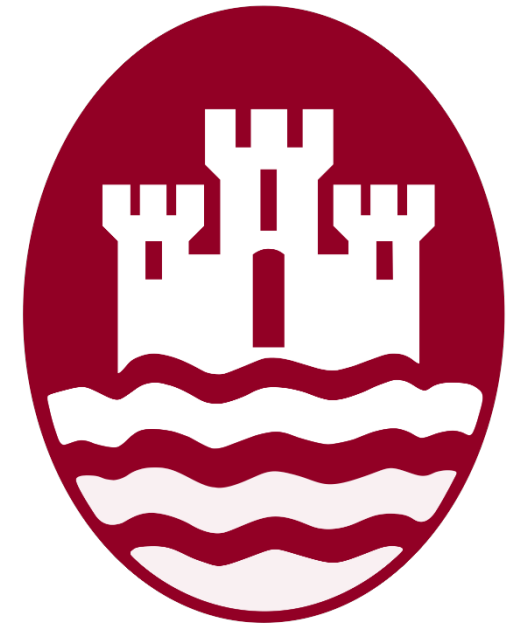
Being research-informed

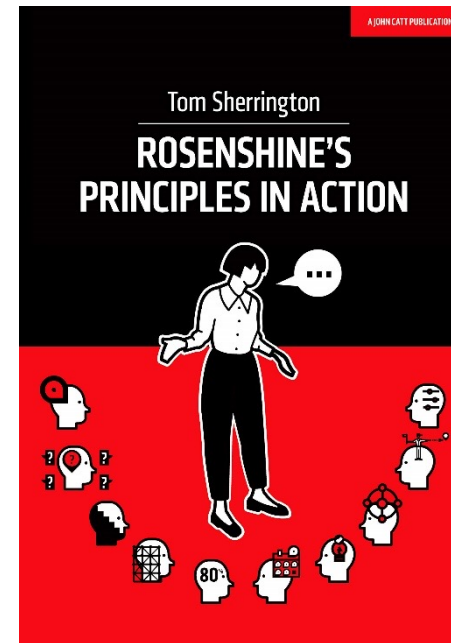
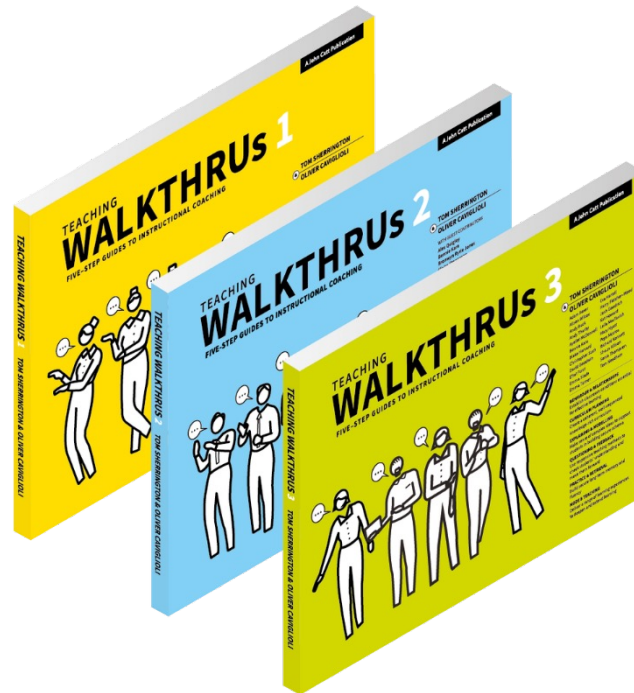
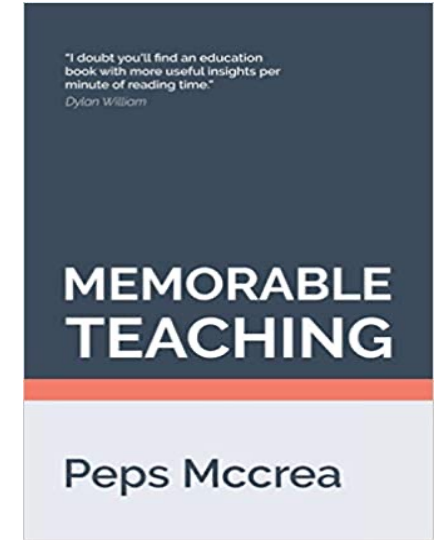
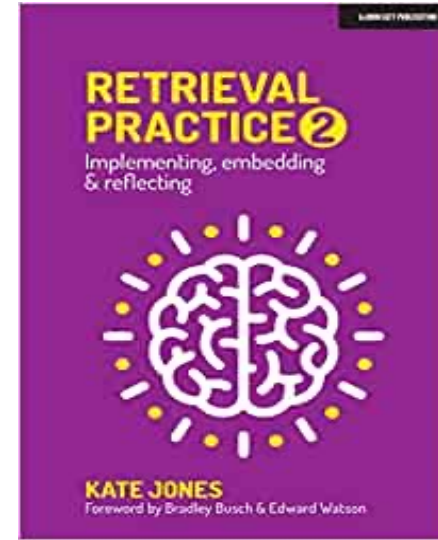
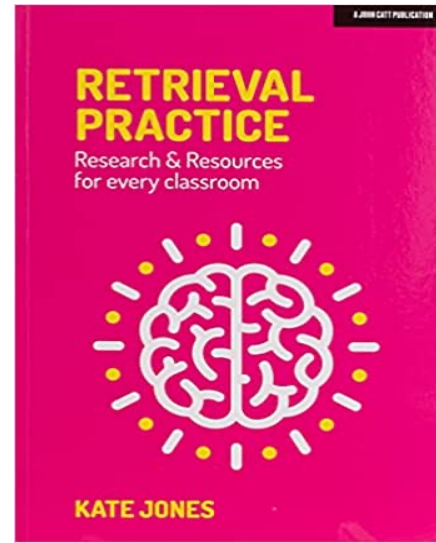
- Helps to build the rationale
- Helps to map the journey and identify what the end outcome will look like
- Buys ownership
- Enhances pedagogical discussion
- Makes teachers feel like professionals!
- Raises standards



MARGINAL GAINS:

- Research library for staff – keep low stakes
- Online CPD portal for staff – keep low stakes
- Allocate time for research – light-touch and linked to SDP priorities
- Ask the experts – internal and external!
- Invest in staff – books
- Keep the focus specific
- Keep the approach organic
- Keep it low-stakes
- Keep it on the radar





Research/Read/Reflect - Edition 4



M Roberts



To: 3410098 Teaching Staff DL; 3410098 Non-Teaching Staff DL

Tue 20/09/2022 11:04

Research -

Finland is often held up as an educational success story. Yet, as with elsewhere around the world, boys still lag behind girls academically there. In a recent study, Perander et al. (2020), interviewed teachers and found that these teachers adopted stereotypical beliefs about why girls succeed and boys fail:

'Girls' were perceived as diligent and hard-working while boys were perceived as being indifferent towards school and achievements.'

If boys are to flourish academically, teachers will need to ensure that they avoid falling into this line of thinking.

Read -

A highly practical blog that considers how to make best use of a visualiser in the classroom:

<https://simonbaddeley64.wordpress.com/2019/12/13/how-i-use-a-visualiser-in-my-classroom/>

Reflect -

Tom Sherrington and Emma Turner's Mind the Gap podcast has featured Sam Strickland discussing behaviour. If you have some time to fill, it's well worth a listen:

<https://open.spotify.com/episode/4Kwz5MoGaAYf9U3vd4UbTD>

SIGNPOSTS

- Tom Sherrington's Walkthrus series: <https://www.walkthrus.co.uk/>

A PD toolkit for schools and colleges

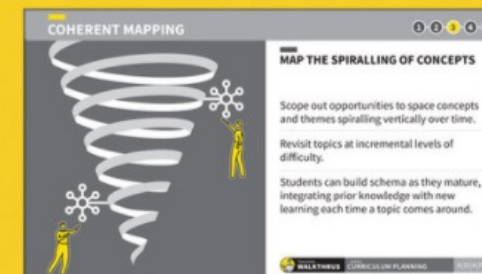
Connected resources for building your professional development programme

LEARN MORE ABOUT THE PD RESOURCE PACK

VIDEOS



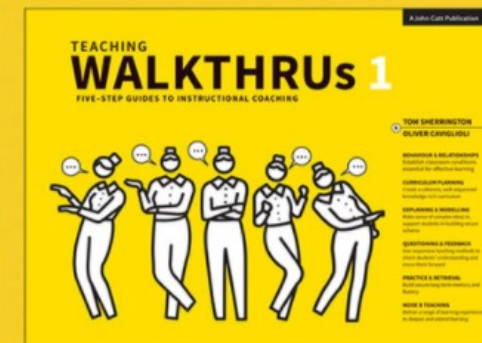
PRESENTATION SLIDES



TRAINER NOTES



BOOK



eBOOK



- Education Endowment Foundation:
<https://educationendowmentfoundation.org.uk/>

The screenshot shows the Education Endowment Foundation website. The header features the logo on the left and a navigation menu with links: 'About us', 'Education evidence' (highlighted with three red dots), 'Guidance for teachers', 'Projects and evaluation', 'Support for schools', and 'News'. Below the header, a breadcrumb trail reads 'Education evidence > Teaching and Learning Toolkit'. To the right of the breadcrumb are social media icons for Facebook, Twitter, Email, and Print. The main content area has a dark red background with a geometric pattern. It features the title 'Teaching and Learning Toolkit' in large white text, followed by the subtitle 'An accessible summary of education evidence'. Below the subtitle are two orange buttons: 'Watch the Toolkit explainer' and 'Read our guide to using the Toolkit'. At the bottom, there are three filter sliders labeled 'Implementation cost', 'Evidence strength', and 'Impact (months)', each with a red bar indicating the current selection.

Education Endowment Foundation

About us ... Education evidence ... Guidance for teachers ... Projects and evaluation ... Support for schools ... News ...

Education evidence > Teaching and Learning Toolkit

Teaching and Learning Toolkit

An accessible summary of education evidence

Watch the Toolkit explainer


Read our guide to using the Toolkit

Implementation cost Evidence strength Impact (months)

- Chartered College of Teaching:
<https://chartered.college/>

Search for...


Phase
Subject
Interest
Reset



RESEARCH DIGESTS

Lessons in nature: What is the impact?


Kuo M, Browning MH and Penner ML (2018) Do lessons in nature boost subsequent classroom...



RESEARCH DIGESTS

Distance learning: How effective is it?


Allen M, Mabry E, Mattrey M, et al. (2004) Evaluating the effectiveness of distance learning:...



RESEARCH DIGESTS

Teachers' engagement with research

Walker M, Nelson J, Bradshaw S et al. (2019) Teachers' engagement with research: What do...

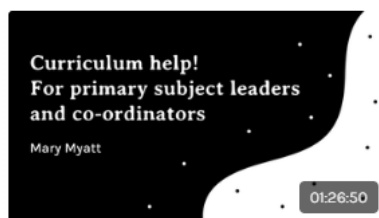


RESEARCH DIGESTS

Do spacing and self-testing predict learning outcomes?

Original research by: Rodriguez F, Kataoka S, Rivas MJ et al. (2018) Do spacing and...

- Mary Myatt's online video portal:
<https://myattandco.com/>



Curriculum help! For primary subject co-ordinators and leaders



Keeping good people - part 1



Curriculum in Wales - live webinar



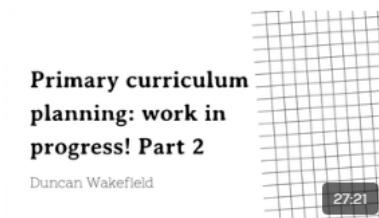
Curriculum impact - live webinar



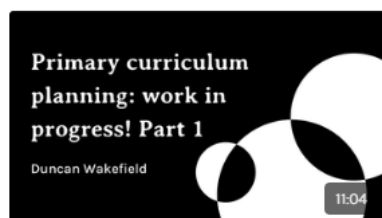
Curriculum implementation - live webinar

Primary

See All



Primary curriculum planning: work in progress! Part 2



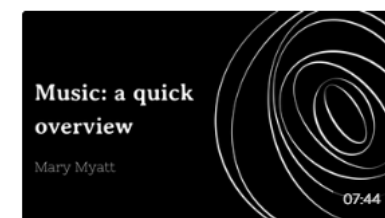
Primary curriculum planning: work in progress! Part 1



Building cultural capital through mini lectures



Religious Education: a quick overview



Music: a quick overview

Secondary

See All



- Teacher Development Trust: <https://tdtrust.org/>



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