



Teaching & Learning Newsletter

AUTUMN 1 2021

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Welcome to the first WeST Teaching & Learning (T&L) newsletter of the 2021 – 22 academic year, as last year these will be arriving in your inbox every half term. With an aim to collate and share research informed educational thinking around pedagogy and curriculum that supports the strategic priorities of WeST.

We hope that the content will support and inform your classroom practice and ongoing professional development discussions to ensure that we are creating the most effective and impactful learning environments for our pupils – rooted in evidence.

Can I draw your attention to the following page which as in the summer term, shares the **WeST Principles of Curriculum Delivery**, with key documents linked and information about the supporting training in the form of voluntary bitesize remote sessions. Delivered over MS Teams, these sessions will be 45 minutes, are voluntary and open to all. ****Please note: the dates of these session have changed and will now all be delivered on a Tuesday, thank you for updating your diaries.***

The first session is coming up on Tuesday 28 September, 16.00 – 16.45, MS Teams - [What is learning & how do we catalyse it?](#)

Below are the dates and themes for your diary, we hope to see you there. You do not have to pre-register, simply click on the session title to join the meeting. Your T&L leads and headteachers will receive the link a week prior to each session as a reminder.

As ever, I hope it's a useful read.

Ruth

Ruth Woodhouse

Director of Training & Learning

RWoodhouse@westst.org.uk

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WeST Principles of Curriculum Delivery

Rationale:

The WeST Principles of Curriculum Delivery are a curated body of knowledge, rooted in evidence, experience and current educational thinking that succinctly communicates what great teaching and learning looks like at WeST. A practical framework – not a checklist that guides support staff, teachers, and leaders through our agreed expectations of quality teaching and learning.

Our commitment is that these principles will be a golden thread, running through our collaborative school improvement work and will be a returning reference point for quality assurance and professional development at all levels.

You will find both a short guide and an A3 one pager linked below.

[The WeST Principles of Curriculum Delivery – a guide](#)

[The WeST Principles of Curriculum Delivery – A3 One pager](#)

To support the effective embedding and implementation of these principles you are invited to attend remote sessions, an introductory session on how we learn followed by a session for each principle; that expands on what, why and how it can be enacted in the classroom.

WeST voluntary bitesize training, remote via MS Teams, 16.00 – 16.45.

These sessions will be 45 minutes, are voluntary and open to all. Below are the dates and themes for your diary, we hope to see you there. You do not have to pre-register, simply click **on the session title to join the meeting**. Your T&L leads and headteachers will receive the link a week prior each session as a reminder.

Tuesday 28 September, 16.00 - [What is learning & how do we catalyse it?](#)

Tuesday 30 November, 16.00 - [High academic expectations and scholarly environments](#)

Tuesday 18 January, 16.00 - [Memorable learning](#)

Tuesday 08 March, 16.00 - [Quality teacher instruction](#)

Tuesday 17 May, 16.00 - [Guided \(deliberate\) Practice](#)

Tuesday 28 June, 16.00 - [Independent Practice & Feedback](#)

WeST Training: Principles of Curriculum Delivery

– 6 voluntary, bitesize remote sessions

Session Overviews:

1. **Tuesday 28th September, 16.00 - What is learning & how do we catalyse it?**
 - Our beliefs & an introduction to WeST Principles of Curriculum Delivery
 - What is teacher expertise & how do we develop it?
 - Expertise as mental models, actions and impact
 - What is learning and how does it happen?
 - Willingham's Simple Model of Memory
 - Ebbinghaus's Forgetting Curve
 - An introduction to cognitive load theory and why it matters

2. **Tuesday 30th November, 16.00 - High academic expectations and scholarly environments**
 - Do expectations affect pupil outcomes? – YES, so how do we raise them?
 - Principles of classroom culture
 - Systems & routines
 - High Behavioural expectations
 - Building relationships & trust
 - Building academic rigour that engages students in learning
 - Set and stress
 - No Opt Out & stretch it
 - Pitch it up

3. **Tuesday 18th January, 16.00 – Memorable learning**
 - Why memory?
 - Memory architecture: Working Memory (WM) and Long-Term Memory (LTM)
 - Effective strategies for memorable learning: retrieval, spaced practice, interleaving, elaboration and the testing effect

4. **Tuesday 08th March, 16.00 – Quality teacher instruction**
 - Why is instruction so important to learning?
 - Rosenshine's Principles of Instruction
 - 'I do' and Explicit & Direct Instruction

5. **Tuesday 17th May, 16.00 - Guided (deliberate) Practice**
 - Why practice is the way to make progress
 - What is good deliberate & guided practice
 - Modelling, Questioning, Scaffolding and monitoring student thinking
 - I do, we do, you do - the gradual release of responsibility
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6. **Tuesday 28th June, 16.00 - Independent Practice & Feedback**
 - Why is independent practice important and what counts?
 - Overlearning & fluency
 - How to do it well in the classroom
 - What the research says about feedback to improve pupil learning (EEF Principles)
 - Effective feedback in the classroom: task, subject, self-regulation strategies

The single most important thing for teachers to know

Back in 2017 Dylan William tweeted that he'd "come to the conclusion, Sweller's Cognitive Load Theory is the single most important thing for teachers to know." You can find the original paper published in 1988 [here](#) but I will also endeavor to summarise, signpost you to some great input and share some practical implementation tips for the classroom.

Tom Sherrington suggests that if "teachers are going to improve their practice, then it's essential for the ideas they are basing their thinking around to be formulated on a sound model...[teachers] are more likely to implement them well if they can formulate a mental model of learning that underpins the practice." I agree, and it's why I believe every teacher needs to understand the science of learning and be familiar with the learning model that has emerged from contemporary cognitive science.

Reflect: What is the role of the working and long-term memory in the process of learning?

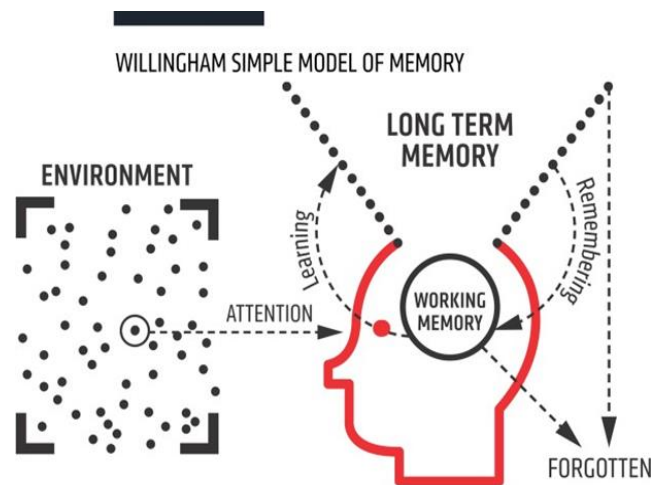
A great place to start or brush up on the cognitive essentials of how we learn are here:

[The Science of Learning | Deans for Impact](#)

Prefer to watch: <https://youtu.be/noTvKPxlHbE>

[1. The working and long-term memory – Teach First \(education.gov.uk\)](#)

[Simplifying Cognitive Load Theory – A Chemical Orthodoxy \(wordpress.com\)](#)



So why is this so important?

Learning involves a lasting change in pupils' capabilities or understanding. If you want your pupils to learn and retain new information, you need to avoid overloading the working memory, giving the knowledge a chance of becoming stored in the long-term memory.

What? Cognitive Load Theory (CLT) is Sweller's theory of attention as it relates to education; the main principle is that we can only process a limited amount of information at one time, so we must avoid overloading attention with unnecessary or extraneous material. The amount of information requiring our or our student's attention is known as "cognitive load" and overabundance of it is known as "cognitive overload" (Sweller & Chandler, 1994)

Intrinsic cognitive load is the load associated with the core learning taking place; what we want pupil's WM to be occupied with

Extraneous or Extrinsic Load comes from the manner and structure of instruction, the effect of task design, the environment and draw's pupil's WM resources away from the core information to be learned.

Why? In a nutshell, if pupils (this is at any age or stage) can only process a limited amount of information at any one time, it is very important teachers are not overloading their attention. Which has implications for how we plan lessons, design presentations, write textbooks and give instructions.

How? The fundamental recommendation of CLT: **In order to increase learning, reduce extraneous load and optimise intrinsic load.** Oliver Lovell succinctly explains, “Our working memory (WM) is the bottleneck of our thinking”

- ★ Rosenshine’s principles of instruction, generative learning* tasks, chunking and automating (routines) – will help to reduce the load of a task and eases the bottleneck of the WM
- ★ Modelling and embedding retrieval activities, spaced practice and interleaving content
- ★ You can only think about something once it is brought to attention in the WM
- ★ Simplify – ask yourself, what can you get rid of and still enable students to think about and remember the learning goal. Less is more.

Reflect: In each of your lessons what knowledge are you making important? and HOW are you guiding students’ attention towards it?

- ★ Instructional efficiency can be improved by removing extraneous load
- ★ Sometimes teachers need to reduce intrinsic load too, by chunking the task into manageable steps
- ★ Pre teaching (vocab/characters/timelines/key events/skills) and then revisiting and practicing over time can optimise intrinsic load

Reflect: Are the important concepts (as well as individual tasks) chunked, sequenced and revisited throughout your curriculum? How does your curriculum plan optimise intrinsic load?

- ★ Eliminate unnecessary information
- ★ Identify when and why you will revisit knowledge
- ★ When information is presented simultaneously in written and spoken form, both are vying for attention = Don’t read from your slides!
- ★ Guided practice and worked examples optimise intrinsic load

Further reading:

Lovell (2020), ‘Sweller’s Cognitive Load Theory In Action’, John Catt Educational Ltd

**Find out more about Generative Learning here:* <https://researchschool.org.uk/stmatthews//what-can-generative-learning-look-like>
<https://teacherhead.com/2020/10/04/teaching-for-understanding-schema-building-and-generative-learning/>

Willingham TD (2009), ‘Why don’t students like school? A cognitive scientist answers questions about how the mind works and what it means for the classroom’, Jossey-Bass

Enser M (2019), ‘Teach like nobody’s watching’, 1st edition, Crown House Publishing

Sherrington T and Caviglioli O (2019), ‘Rosenshine’s principles in action’, John Catt Educational Ltd

Yana Weinstein and Megan Sumeracki’s Understanding How we learn (see in particular Chapter 6 for Attention, Cognitive Load, How to drive attention to learning)

Arthur Simamura’s MARGE: A Whole-Brain Learning Approach ([The Free downloadable book in PDF is here](#))

[How to explain... schema – David Didau \(learningspy.co.uk\)](#)

[A Novice→Expert Model of Learning – David Didau \(learningspy.co.uk\)](#)

Mccrea P (2017), ‘Memorable teaching: Leveraging memory to build deep and durable learning in the classroom’, High Impact Teaching

The Centre for Education, Statistics and Evaluation (2018), ‘[Cognitive load theory in practice](#)’ (viewed on 27 February 2020)



Shares from our team of Lead Practitioners and Executive Directors

WeST History

During the last academic year, myself and curriculum leaders have had many enriching conversations about what makes a strong History curriculum, and it was great to hear the passion for curriculum and lesson design among colleagues in the Trust. One of the key questions that we continue to consider is **how to ensure our schemes of learning are constructed on firm foundations?**

Michael Fordham has carried out an interesting piece of work about what history teachers consider to be the most important substantive concepts that underpin KS2 and KS3, which provides plenty of food for thought as we continue to develop and adapt our curriculums.

Please follow the link here: [Substantive Concepts at KS2 & KS3 – Clio et cetera](#)

Kim Tamlin

LP History

ktamlin@westst.org.uk

WeST MFL

Calling all MFL teachers, please check out these great research summaries produced by Oasis (The Open Accessible Summaries in Language Studies)

<https://oasis-database.org/>

The summaries are of research findings in the field of language teaching and learning. They are generally one page and really accessible to all, so that we can be building our awareness and understanding of key research that is informing curriculum developments and pedagogical thinking in the world of MFL teaching and learning. Enjoy!

Jenni Bindon

LP MFL

jbindon@westst.org.uk

