Teaching & Learning Newsletter

················

Welcome to the SPRING 1 edition of the WeST Teaching & Learning (T&L) newsletter, a termly curation of some educational thinking, reading and evidence to support quality teaching and learning in the classroom and the effective enactment of the WeST principles of curriculum delivery. You will also find some subject specific shares from the WeST SI team.

As always, the first page reminds you of 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.

Next session: Tuesday 18 January, 16.00 – 16.45, MS Teams.

The third session in the series will focus on Memorable Learning. We will discuss why memory is so important to learning and why it plays a pivotal role in curriculum design and delivery, so that our students know more and know how to do more. We will look at the architecture of memory: Working Memory (WM) and Long-Term Memory (LTM) and then share effective strategies for memorable learning in our classrooms.

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, please do copy, and paste the below meeting link into your calendars and share with colleagues. Your T&L leads and headteachers will receive the link a week prior to each session as a reminder.

WEST Bitesize CPD. Session 3: Memorable Learning, Tuesday 18 January, 16.00

Click here to join the meeting

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

Ruth

Ruth Woodhouse
Exec. Director of Training & Learning
RWoodhouse@westst.org.uk

··

Stronger together…every child in a great school

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.

<div style="background-color:#3a5a40; color:white; text-align:center;">

The WeST Principles of Curriculum Delivery – a guide

The WeST Principles of Curriculum Delivery – A3 One pager

</div>

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

Find archived sessions here: [Previous sessions](#)

Session Overviews:

1. **Tuesday 28th September, 16.00 - <u>What is learning & how do we catalyse it?</u>**
   - 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 - <u>High academic expectations and scholarly environments</u>**
   - Do expectations affect pupil outcomes? – YES, so how do we raise them?
   - Principles of classroom culture
   - Building academic rigour that engages students in learning

3. **Tuesday 18th January, 16.00 – <u>Memorable learning</u>**
   - 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 – <u>Quality teacher instruction</u>**
   - Why is instruction so important to learning?
   - Rosenshine's Principles of Instruction
   - 'I do' and Explicit & Direct Instruction

5. **Tuesday 17th May, 16.00 - <u>Guided (deliberate) Practice</u>**
   - 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
     -

6. **Tuesday 28th June, 16.00 - <u>Independent Practice & Feedback</u>**
   - 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

***

Memory is the residue of thought, so what are your pupils thinking about.

Ahead of the next WeST Bitesize CPD I've been refreshing and re reading some of the educational thinking and research which shaped the WeST principles of curriculum delivery and why memory plays such a pivotal part in learning.

Retrieval Activity:
1. Label the below illustration of Willingham's simple model of memory
2. Talk through the process of learning – describe what's happening in this model
3. Define learning in one sentence.

WILLINGHAM SIMPLE MODEL OF MEMORY
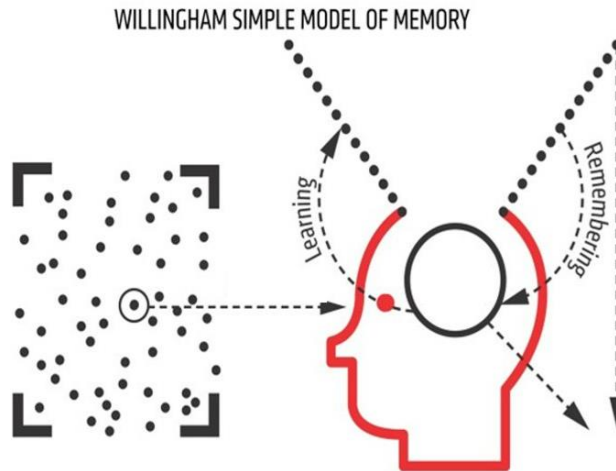
Reflecting on the role of the working and long-term memory in the process of learning is one the most important things we can do, whether planning individual lessons, activities or developing our subject's curriculum plans. Knowing what our pupils can remember is a way, we can assure ourselves that learning is happening, and our curriculum plans and classroom enactment is effective.

"Learning, in turn is defined as a change in long-term memory, if nothing has been changed in long term memory – nothing has been learned."

Kirschner, Sweller and Clark. 2012 *Why Minimal Guidance During Instruction Does Not Work: An Analysis of the Failure of Constructivist, Discovery, Problem-Based, Experiential, and Inquiry-Based Teaching* Educational Psychologist, 42(2) 75-86

Working Memory – is the site of awareness and thinking. Working memory is where information that is being actively processed is held, but its capacity is limited and can be overloaded.

Long-term Memory – is where factual and procedural knowledge is stored. Long-term memory can be considered as a store of knowledge that changes as pupils learn by integrating new ideas with existing knowledge.

The aim of learning is to generate a persistent change in knowledge (Kirschner et al., 2006). Thinking is the process that leads to such a change, a process governed by our working memory.

Read more here: IFT Report: Learning, What is it, and how might we catalyse it? Peps Mccrea

Listen to Deans of Impact, Executive Director Benjamin Riley explain what we know about how pupils learn best.
https://youtu.be/noTvKPxlHbE

If that's how learning works, how can we teach in way that makes learning stick for all pupils.

We need to be planning and teaching in a way that overcomes the barriers of our working memory and harnesses its strengths, here are some ideas for effective instruction for memory.

Prior Knowledge

To begin with, we can support working memory by drawing on prior knowledge; drawing on information in our long-term memory, like knowledge of words or of number, frees up capacity in our working memory. This is one of the reasons why it's useful to get pupils to commit some foundational knowledge to their long-term memory first.

Exposition (or introduction of new content)

Introduce in small amounts, always checking for understanding before moving on. Plan to deliver instruction in manageable chunks and do not overwhelm the WM with too much unnecessary information. Repeatedly and explicitly focus the pupil's attention on the key knowledge they need to think hard about.

Remove distractions

This can commonly be the words we use and the way we deliver our instruction, reflect on how you are communicating and focusing all pupils on the key information, consider your use of visuals. Do they focus or distract all pupils? Is there unnecessary noise, stimulation, complex activity instructions which will consume the pupils WM?

Plenty of Practice

Practice is an effective way of pupils thinking hard and transferring knowledge from the limited WM to the long-term memory for storing and further deepening. Practice will help pupils commit new content to the LTM. Monitor and check for understanding here is crucial as pupils must be practicing the correct thing. Do not move on or fade the support until you have assured yourself all pupils are successful. Using the I do, We do, You do model is an effective way of managing and removing support in practice.

Retrieval

Retrieval is not just revisiting or being re-exposed to, we must plan to provide purposeful opportunities for pupils to think hard and draw down knowledge from their LTM. An effective way to do this is to question, verbal, written, low stakes quizzing or extended questions. The more frequently we are required to retrieve information, the more robust and secure our mental models of that knowledge become.

See these techniques in practice here: https://youtu.be/gfnFc_4mXn4

Reflect: As a department or with a colleague look at your curriculum and your lesson planning with the Making it Stick principles in mind. Discuss, how you are ensuring and assuring that all pupils are remembering what you need them to remember.

Intended	High-level aims, objectives of what you expect pupils to learn.	Have you focused student's attention on this? Do all students know it, can they say it? Do they know the steps in the process to get there? How did you show them the steps? Can you pre-empt and share the misconceptions?
Implemented	Resources/tasks that will be used to achieve learning aim	What will they be thinking about? How will they get to practice? How will you check for understanding? When and how will they retrieve it? What prior knowledge/vocab do they need to be successful? How will you scaffold and fade support? (I do, We do, You do)
Enacted	How content is taught and learnt in the classroom	Low stakes quizzes Practice questions, turn and talk (can they say before it, before they write it?) Questioning: cold call, show call, stretch it, partner talk Elaboration, interleaving content and spacing practice

Recommendations from our Director of Education, Richard Light:

1. Tom Sherrington has been drafting up some planning tools and guidance documents that align with the implementation principles Ruth Woodhouse has been working on with schools. They draw on the Rosenshine principles initially and may prove a useful resource for those wishing to embed the key principles of curriculum implementation.
   The @teacherhead planning tool. Draft | teacherhead

2. Tom also posted a revisit blog to Dylan Wiliam's five formative assessment strategies which again, align with the planning tools and curriculum implementation approaches above. For our February Primary inset session, we will be focusing on assessment, so I thought this timely and helpful.
   Revisiting Dylan Wiliam's Five Brilliant Formative Assessment Strategies. | teacherhead

3. Ruth Ashbee published an excellent blog on School Discourse and the teaching profession. She talks about Fields of practice and how leadership teams can enhance features of the profession. Expertise and specialisms are promoted strongly. An interesting think piece, as you'd expect from Ashbee.
   Shake Up School Thinking: Professionalisation and the Schools Discourse (ruth-ashbee.com)

4. David Didau published his latest blog on The Shape of Assessment. He promotes some strong arguments for a mastery style approach to assessment and what steps might be needed to move towards such an approach.
   The shape of assessment – David Didau (learningspy.co.uk)

Further reading:

Peps Mccrea (2018) Memorable Teaching: leveraging memory to build deep and durable learning in the classroom Memorable Teaching: Leveraging memory to build deep and durable learning in the classroom: 2 (High Impact Teaching) : Mccrea, Peps: Amazon.co.uk: Books

Pashler, H., Bain, P. M., Bottge, B. A., Graesser, A., Koedinger, K., McDaniel, M., & Metcalfe, J. (2007). Organizing Instruction and Study to Improve Student Learning. US Department of Education. bit.ly/ecf-pas

Blog: Principles of memory – Evidence for Educators (wordpress.com)

Understanding Misconceptions: Teaching and Learning in Middle School Physical Science, By Philip M. Sadler and Gerhard Sonnert, American Educator, Vol. 40, No. 1, Spring 2016, AFT https://files.eric.ed.gov/fulltext/EJ1094278.pdf

Want all of Daniel Willingham's articles in one place? Here you go: Articles - Daniel Willingham--Science & Education

(PDF) Think and pair before share: Effects of collaboration on students' in-class participation (researchgate.net)

Willingham DT (2009), 'Why don't students like school? Because the mind is not designed for thinking', American Educator, Spring issue, pages 4 to 13

Peps Mccrea on Twitter: "How does classroom success influence motivation for learning, and what can we do about it?

Chetty, R., Friedman, J. N., & Rockoff, J. E. (2014). Measuring the Impacts of Teachers II: Teacher Value-Added and Student Outcomes in Adulthood. American Economic Review, 104(9), 2633–2679. bit.ly/ecf-che

Coe, R., Aloisi, C., Higgins, S., & Major, L. E. (2014). What makes great teaching. Review of the underpinning research. Durham University: UK. bit.ly/ecf-coe

Education Endowment Foundation (2017). Metacognition and Self-regulated learning: Guidance Report. bit.ly/ecf-eef

Rosenshine, B. (2012). Principles of Instruction: Research-Based Strategies That All Teachers Should Know. American Educator, 36(1), 12–20. bit.ly/ecf-ros

----

Shares from our Lead Practitioners and Executive Directors

WeST Geography

GeogPod (The Geographical Association's Podcast) is currently featuring episodes on curriculum thinking from a range of people within the geography community, as well as some topical issues including climate change, to promote further discussion in the classroom. **Listen here**: GeogPod - The GA's Podcast (geography.org.uk)

The exam boards are running a series of free professional development sessions to support teachers with marking and moderating mocks, as well as preparing students for external exams. Most allow one registration per school so you will need to arrange to view these together as a department.

The links below take you to the booking pages for these sessions.

https://www.aqa.org.uk/professional-development/search?f.Subjects%7CD=Geography

https://qualifications.pearson.com/en/support/training-from-pearson-uk.html?stp1=28&stp1Name=A%20Level&stp2=223&stp2Name=Geography

Nicola Dowling
Exec. Director Geography
NDowling@westst.org.uk

WeST Science

Blog: Dr Niki Kaiser's blog discussing the use of diagnostic assessment within a coherent curriculum to anticipate, diagnose and address misconceptions. It's a short read available here: EEF Blog: Supporting curriculum planning in science | EEF (educationendowmentfoundation.org.uk).

Linked resources are available here: Improving Secondary Science | EEF (educationendowmentfoundation.org.uk).

Simon O'Neil
LP Science
soneill@westst.org.uk

WeST Behaviour & Relationships

The start of the new year provides an ideal opportunity to build supportive relationships with our students, to consider the things that might affect our students and their behaviour, and what we all can do to address them. Certainly, research would suggest that "teachers knowing their students well can have a positive impact on classroom behaviour" (Sammons et al, 2016). For example, while Christmas may have been a joyous time for many, some students may have had a difficult time. If so, they will need support and guidance settling back into the routine of school. Sharing experiences, either positive or negative, can help build their trust in you and their own abilities and innate resilience.

Many of our students will be looking at the uncertainty of our current reality and perceive a range of pressures such as: issues at home; peer relationships and the need to 'fit in' to social groups; the fear of failure and or perceived pressure to 'do well' in exams. These worries can manifest themselves in several ways, from anger and frustration (acting out) to avoidance (acting in) behaviour's which often only reinforce their already low self-esteem, which in turn could lead to more serious mental conditions.

The (EEF, 2019:9) points out "being aware of events before their effect becomes extreme, there is more of a chance of mitigating any negative change." In other words, to help students shift their mindset from a fixed 'I can't' attitude to a more positive 'I can' growth mindset through protective factors, such as: providing a sense of belonging and value; offering early help; and creating consistency and predictability in the classroom.

In the Improving Behaviour in Schools Guidance Report (Education Endowment Foundation, 2019) there are six key recommendations. This month I would like to draw your attention to Recommendation One –

KNOW AND UNDERSTAND YOUR PUPILS AND THEIR INFLUENCES
· Pupil behaviour has multiple influences and are often seen as maladaptive way to communicate unmet needs, some of which teachers can manage directly.
· Understanding a pupil's context will inform effective responses to misbehaviour
· Every pupil should have a supportive relationship with a member of school staff

A good way to build relationships with students is the **Establish- Maintain- Restore (EMR)** method mentioned below. Consider how you will find the time this term to intentionally focus on students you believe are the most difficult to connect with or are hard to reach and maybe in need of a consistent, positive relationship.

Building positive relationships using the EMR method

ESTABLISH	MAINTAIN	RESTORE (R3)
Intentional practices to cultivate positive relationships	Proactive efforts to prevent diminished quality of relationship	Ensure you RECONNECT / REPAIR /RESTORE As the adults in this situation, we must take responsibility for a negative interaction.
Set aside a window of time to spend with a student to inquire into: General: - be aware of any SEND or social or emotional needs. - Implement any support plans provided Specific - the students' interests/hobbies - ask about significant others – ranging from family and role models to favourite pets and sports teams - Use open-ended questions to allow for self-reflection - offer constructive feedback but only if they agree	Meet and greet CONNECT before redirect: - First attention a positive one - Spot your students behaving well – (5 to 1 recognition of their positive efforts in relation to any negative ones) - Contact parents early– balance positive and the negative by recognising efforts to improve with phone calls / motivational postcards home. - Regular relationship check-ins (updates on the establish phase) - Random special activities (competition engages boys particularly	Seek a restorative conversation with the intention of letting go of the previous incident and to create a 'fresh start'. - Deliver an empathetic statement- this is not agreeing with them but showing you understand how they saw things. - Engage in mutual problem solving - Rebuilding a positive relationship should be the primary intention not simply seeking an apology.

Roger Hutchinson
LP Behaviour
rohutchinson@westst.org.uk

Teaching & Learning Newsletter
Spring 1 2022