Future Ed 2023

15.15 – 15.45

Keynote 4 including 10 mins of Q&A

"Delivering Early Careers Framework"

Speakers:

Peter Mather, Head of Training and Development, Greenford High School

Jeremy Dudman Jones, Assistant Headteacher, Greenford High School

Cara Carey, Development Lead, Teach First Programme Support

What is the Early Career Framework?

- A two-year statutory induction programme for ECTs, Early Career Teachers, following QTS recognised training (e.g. PGCE, PGDE, Teach First Year 1).

- Replaced the one-year NQT (Newly Qualified Teacher) induction from September 2021.

Department for Education

The early career framework (ECF) sets out what early career teachers are entitled to learn about and learn how to do when they start their careers. It underpins a new entitlement for 2 years of professional development designed to help early career teachers develop their practice, knowledge and working habits.

The 2-year induction programme

Teachers starting induction on or after 1 September 2021 are known as 'early career teachers' (ECTs).

ECTs now serve an extended induction over 2 school years. During their induction period, they are entitled to:

- a 2-year training programme based on the early career framework
- support from a dedicated mentor
- time off timetable for induction activities, including training and mentor sessions
- regular progress reviews and 2 formal assessments against the teachers' standards

The end of an ECT's induction period is still marked by a decision as to whether the teacher's performance meets the teachers' standards.

Long-term partner
for those facing the

toughest

challenges

How Pupils Learn (Standard 2 – Promote good progress)

Learn that…	Learn how to…
1. Learning involves a lasting change in pupils' capabilities or understanding. 2. Prior knowledge plays an important role in how pupils learn; committing some key facts to their long-term memory is likely to help pupils learn more complex ideas. 3. An important factor in learning is memory, which can be thought of as comprising two elements: working memory and long-term memory. 4. Working memory is where information that is being actively processed is held, but its capacity is limited and can be overloaded. 5. Long-term memory can be considered as a store of knowledge that changes as pupils learn by integrating new ideas with existing knowledge. 6. Where prior knowledge is weak, pupils are more likely to develop misconceptions, particularly if new ideas are introduced too quickly.	**Avoid overloading working memory, by:** • *Taking into account pupils' prior knowledge when planning how much new information to introduce.* • *Breaking complex material into smaller steps (e.g. using partially completed examples to focus pupils on the specific steps).* • *Reducing distractions that take attention away from what is being taught (e.g. keeping the complexity of a task to a minimum, so that attention is focused on the content).* **Build on pupils' prior knowledge, by:** • *Identifying possible misconceptions and planning how to prevent these forming.* • *Linking what pupils already know to what is being taught (e.g. explaining how new content builds on what is already known).* • *Sequencing lessons so that pupils secure foundational knowledge before encountering more complex content.* • *Encouraging pupils to share emerging understanding and points of confusion so that misconceptions can be addressed.* **Increase likelihood of material being retained, by:** • *Balancing exposition, repetition, practice and retrieval of critical knowledge and skills.*

How Pupils Learn (Standard 2 – Promote good progress)

[Further reading recommendations are indicated with an asterisk.]

Adesope, O. O., Trevisan, D. A., & Sundararajan, N. (2017) Rethinking the Use of Tests: A Meta-Analysis of Practice Testing. *Review of Educational Research, 87*(3), 659–701. https://doi.org/10.3102/0034654316689306.

Agarwal, P. K., Finley, J. R., Rose, N. S., & Roediger, H. L. (2017) Benefits from retrieval practice are greater for students with lower working memory capacity. *Memory, 25*(6), 764–771. https://doi.org/10.1080/09658211.2016.1220579.

Allen, B. and Sims, S. (2018) The Teacher Gap. Abingdon: Routledge.

Baddeley, A. (2003) Working memory: looking back and looking forward. *Nature reviews neuroscience, 4*(10), 829-839.

Black, P., & Wiliam, D. (2009) Developing the theory of formative assessment. Educational Assessment, Evaluation and Accountability, 21(1), pp.5-31.

Chi, M. T. (2009) Three types of conceptual change: Belief revision, mental model transformation, and categorical shift. In *International handbook of research on conceptual change* (pp. 89-110). Routledge.

Clark, R., Nguyen, F. & Sweller, J. (2006) *Efficiency in Learning: Evidence-Based Guidelines to Manage Cognitive Load.* John Wiley & Sons.

Cowan, N. (2008) What are the differences between long-term, short-term, and working memory? *Progress in brain research, 169*, 323-338.

*Deans for Impact (2015) The Science of Learning [Online] Accessible from: https://deansforimpact.org/resources/the-science-of-learning/. [retrieved 10 October 2018].

Dunlosky, J., Rawson, K. A., Marsh, E. J., Nathan, M. J., & Willingham, D. T. (2013) Improving students' learning with effective learning techniques: Promising directions from cognitive and educational psychology. *Psychological Science in the Public Interest, Supplement, 14*(1), 4–58. https://doi.org/10.1177/1529100612453266.

*Education Endowment Foundation (2018) Improving Secondary Science Guidance Report. [Online] Accessible from: https://educationendowmentfoundation.org.uk/tools/guidance-reports/ [retrieved 10 October 2018].

Gathercole, S., Lamont, E., & Alloway, T. (2006) Working memory in the classroom. *Working memory and education*, 219-240.

Hattie, J. (2012) Visible Learning for Teachers. Oxford: Routledge.

Kirschner, P., Sweller, J., Kirschner, F. & Zambrano, J. (2018) From cognitive load theory to collaborative cognitive load theory. In International Journal of Computer-Supported Collaborative Learning, 13(2), 213-233.

Pachler, 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.

Pan, S. C., & Rickard, T. C. (2018) Transfer of test-enhanced learning: Meta-analytic review and synthesis. *Psychological Bulletin*, *144*(7), 710–756. https://doi.org/10.1037/bul0000151.

Roediger, H. L., & Butler, A. C. (2011) The critical role of retrieval practice in long-term retention. *Trends in Cognitive Sciences*, *15*(1), 20–27. https://doi.org/10.1016/j.tics.2010.09.003.

*Rosenshine, B. (2012) Principles of Instruction: Research-based strategies that all teachers should know. *American Educator*, 12–20. https://doi.org/10.1111/j.1467-8535.2005.00507.x.

Simonsmeier, B. A., Flaig, M., Deiglmayr, A., Schalk, L., & Well-being, S. (2018) Domain-Specific Prior Knowledge and Learning: A Meta-Analysis Prior Knowledge and Learning. Accessible from: https://www.psycharchives.org/handle/20.500.12034/642

Sweller, J. (2016). Working Memory, Long-term Memory, and Instructional Design. *Journal of Applied Research in Memory and Cognition*, *5*(4), 360–367. http://doi.org/10.1016/j.jarmac.2015.12.002.

Willingham, D. T. (2009) *Why don't students like school?* San Francisco, CA: JosseyBass.

Wittwer, J., & Renkl, A. (2010) How Effective are Instructional Explanations in Example-Based Learning? A Meta-Analytic Review. *Educational Psychology Review*, *22*(4), 393–409. https://doi.org/10.1007/s10648-010-9136-5.

Framework to Curriculum

		Year 1												
		Module 1					Module 2					Module 3		
Statement		S1	S2	S3	S4	S5	S1	S2	S3	S4	S5	S1	S2	S3
1.1	Teachers have the ability to affect and improve the wellbeing, motivation and behaviour of their pupils.		X			X								
1.2	Teachers are key role models, who can influence the attitudes, values and behaviours of their pupils.		X											
1.3	Teacher expectations can affect pupil outcomes; setting goals that challenge and stretch pupils is essential.		X		X									
1.4	Setting clear expectations can help communicate shared values that improve classroom and school culture.		X		X	X								
1.5	A culture of mutual trust and respect supports effective relationships.	X	X	X	X									
1.6	High-quality teaching has a long-term positive effect on pupils' life chances, particularly for children from disadvantaged backgrounds.	X												
1a	1a Using intentional and consistent language that promotes challenge and aspiration.		X			X								
1b	1b Setting tasks that stretch pupils, but which are achievable, within a challenging curriculum.		X			X								
1c	1c Creating a positive environment where making mistakes and learning from them and the need for effort and perseverance are part of the daily routine.		X			X								
1d	1d Seeking opportunities to engage parents and carers in the education of their children (e.g. proactively highlighting successes).	X	X											
1e	1e Creating a culture of respect and trust in the classroom that supports all pupils to succeed (e.g. by modelling the types of courteous behaviour expected of pupils).				X									
1f	1f Teaching and rigorously maintaining clear behavioural expectations (e.g. for contributions, volume level and concentration).			X	X									
1g	1g. Applying rules, sanctions and rewards in line with school policy, escalating behaviour incidents as appropriate.			X										
1h	1h. Acknowledging and praising pupil effort and emphasising progress being made.		X											
2.1	1. Learning involves a lasting change in pupils' capabilities or understanding.						X							
2.2	2. Prior knowledge plays an important role in how pupils learn; committing some key facts to their long-term memory is likely to help pupils learn more complex ideas.						X							
2.3	3. An important factor in learning is memory, which can be thought of as comprising two elements: working memory and long-term memory.						X							
2.4	4. Working memory is where information that is being actively processed is held, but its capacity is limited and can be overloaded.						X							
2.5	5. Long-term memory can be considered as a store of knowledge that changes as pupils learn by integrating new ideas with existing knowledge.						X			X				
2.6	6. Where prior knowledge is weak, pupils are more likely to develop misconceptions, particularly if new ideas are introduced too quickly.									X				
2.7	7. Regular purposeful practice of what has previously been taught can help consolidate material and help pupils remember what they have learned.									X		X		
2.8	8. Requiring pupils to retrieve information from memory, and spacing practice so that pupils revisit ideas after a gap are also likely to strengthen recall.									X		X		
2.9	9. Worked examples that take pupils through each step of a new process are also likely to support pupils to learn.								X					
2a	2a Taking into account pupils' prior knowledge when planning how much new information to introduce much new information to introduce.						X							
2b	2b Breaking complex material into smaller steps (e.g. using partially completed examples to focus pupils on the specific steps).							X						
2c	2c Reducing distractions that take attention away from what is being taught (e.g. keeping the complexity of a task to a minimum, so that attention is focused on the content).						X							
2d	2d Identifying possible misconceptions and planning how to prevent these forming.													
2e	2e Linking what pupils already know to what is being taught (e.g. explaining how new content builds on what is already known).						X							
2f	2f Sequencing lessons so that pupils secure foundational knowledge before encountering more complex content.													
2g	2g Encouraging pupils to share emerging understanding and points of confusion so that misconceptions can be addressed.													

7

Delivery Models

Direct Delivery

Teach First employees deliver content directly to ECTs and Mentors in online seminars.

Indirect delivery

Teach First employees train facilitators in teaching school hubs and academies to deliver the content to all ECTs and Mentors within the hub online or in-person.

Incorporating Neuroscience in Delivery

 - Curriculum and session slides design.

- Delivery of materials

- Applying to practice

- Domain specific

ECF at GHS

- Just completing formal assessments for our ECTs finishing Year 2.

- We started following ECF with TF 3 years ago as offered this early roll-out phase (was a pilot for certain UK regions, expanded due to COVID) for NQTs who completed induction in the 2020 to 2021 academic year.

Why Teach First as our ECF lead provider?

- Long history, a partner school since 2010, mutual respect and support

- Hosting School Centred Learning

- We have successfully trained almost 50 TF, many are still with us in senior positions

- Teach First delivers our NPQs

ECT Induction programme at GHS

- 1 July start – school induction, policies and procedures, getting to know the students, classes and resources ready for September

- ECT and mentors training session to cover expectations

- Educational neuroscience in first half term and revisited in the spring but no explicit links to the ECF - plan to introduce this to mentors as well from September

- Half termly meetings as a cohort during the school year

- Weekly ECT and mentor meetings cover the ECF content, assignments and quizzes; and how this impacts on classroom practice

The ECF

Module	Module title	Terms
	Induction	Autumn 1 (September)
1	How can you create an effective learning environment?	Autumn 1
2	How do pupils learn?	Autumn 2
3	What makes classroom practice effective?	Spring 1
4	How can you use assessment and feedback to greatest effect?	Spring 2
5	How can you support all pupils to succeed?	Summer 1
6	How can you plan a coherent curriculum?	Summer 2

The ECF, one day face to face introduction, online content, one hour per week, 2 on-line seminars per module?
Year 2 building on content from the first year with development cycles that re-visit Year 1 modules.

Module 1 for ECTs: How can you create an effective learning environment?
ECT 2021

Summary

Grades

Objectives

Content

Assignments

Quizzes

Surveys

Course Access

Login History

System Access History

Y2 ECT Development Cycle 1
ECT 2021

Summary

Grades

Objectives

Content

Discussions

Assignments

Quizzes

Checklist

Surveys

Course Access

Login History

System Access History

Week 1: Retrieve

At the very start of the development cycle, you'll need to complete the retrieval quiz and revisit areas of the self-directed study that would benefit your development. The areas that relate most to this development cycle are:

- Module 4 – Session 2: Planning for effective assessment

- Module 4 - Session 3: Monitoring misconceptions

- Module 6 - Session 4: Helping pupils master important concepts, knowledge and skills - part 1

# Learnus at GHS - Jeremy

Training:

- Students

- Staff (whole school)

- Parents

- PGCE (in school and also delivered at UCL IOE)

- A popular part of our in-house NQT Induction programme and now with ECT Induction

External Training

- Conferences

- School visits

- Primary, Secondary, Post-16 and universities

Learnus ™

Attention, Active engagement, Error Feedback and Consolidation

4 LESSONS IN LEARNING
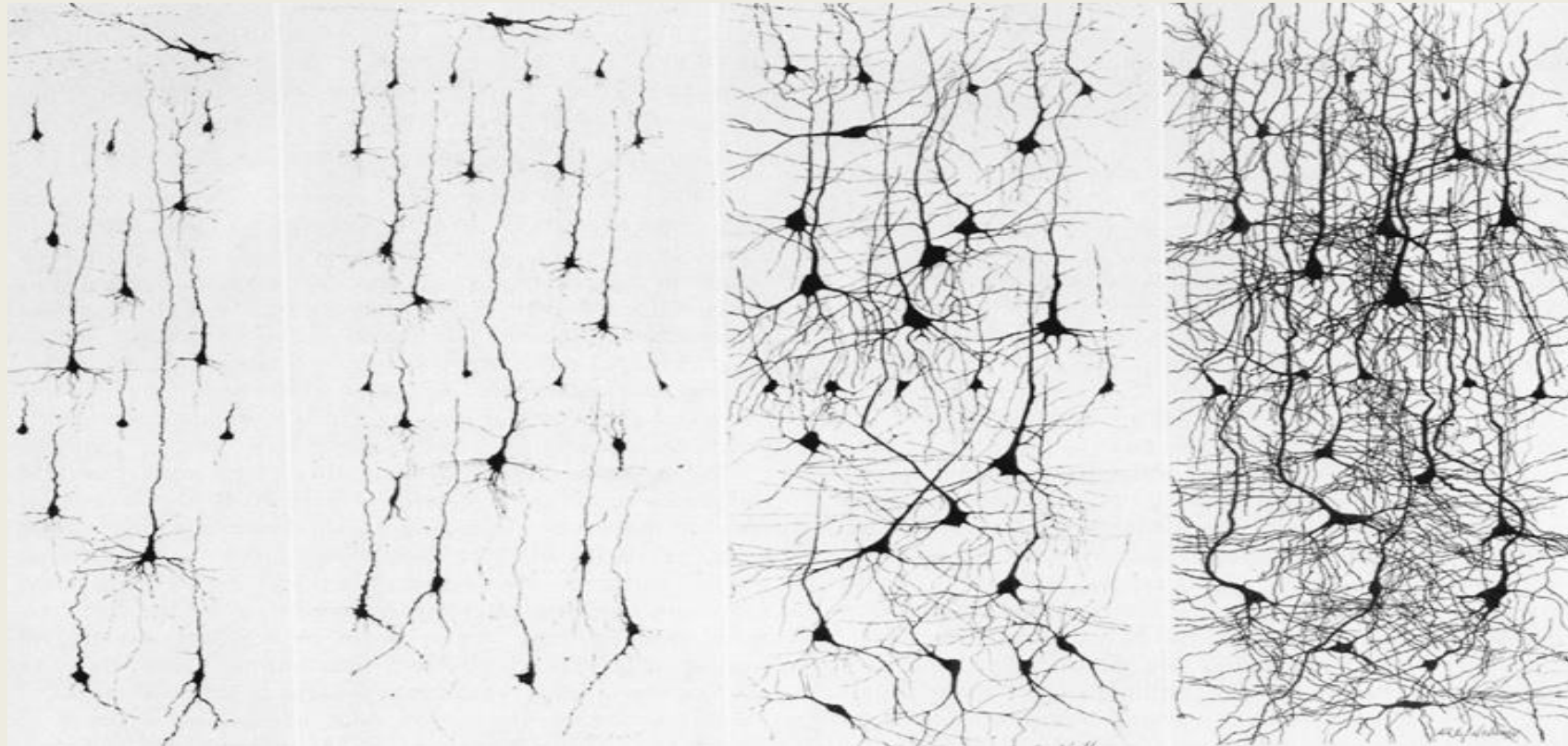
Learnus

Good teaching requires permanent attention to student's attention

Good teaching requires paying attention to the limits of attention

It takes 15 to 20 years for Executive control (concentration to fully mature)

Learnus ™

Should we know a little more about what is under the bonnet

STUFF ABOUT THE TEENAGE BRAIN

© Roman Originals

THE 3 LEGS OF THE STOOL FOR SCHOOL

1.Brain Maturation,
Synaptic pruning and Plasticity
2.Circadian Rhythms
3.Neurotransmitters and rewards

Learnus ™

2 Thinking systems by Daniel Kahneman

The halo effect

Innate causality

Cognitive load

Priming and anchoring

Confirmation bias

Loss aversion

Regression to the mean