



Teachers understand...	So that all pupils ...	Underpinning research and recommended reads
Principle 1. High academic expectations and scholarly environments Links to Teachers' Standards: 1, 7, 8, 4 Links to ECF: Standard 1/7		
a) How to orient pupil's attention (set and stress), selecting what to focus on for further thinking. Manage desirables and minimise distractions, b) Routines minimise wasted learning time and are an opportunity to embed high expectations you can see. c) Expectations can affect pupil outcomes; setting learning goals that challenge and stretch pupils is essential. d) How and why to consistently teach, model and practice high standards of reading, oracy and vocabulary.	a) Know what is important and what to specifically attend to, as Working Memory is limited. b) Feel safe and know that every minute of every lesson counts. Pupils know and can show how to get it right and can learn free from distractions. c) Know teachers believe they can achieve, experience success, and know thinking hard, making mistakes, and learning from them is part of their daily routine. d) Can effectively and confidently talk and listen, be able to discuss their learning and engage successfully with all materials and texts to develop their thinking and knowledge.	Early Career Framework Teachers' Standards: Overview Teach Like a Champion 2.0, Doug Lemov Get Better Faster, Paul Bambrick-Santoyo High Expectations, ECF, Teach First Holding High Expectations and Maintaining Engagement Improving Behaviour in Schools, six recommendations for improving behaviour in schools, EEF https://educationendowmentfoundation.org.uk/tools/guidance-reports/improving-behaviour-in-schools/ Can teachers increase students' self-control? Daniel Willingham https://www.aft.org/sites/default/files/periodicals/Willingham_3.pdf Re-establishing Teaching Routines, Tom Sherrington https://teacherhead.com/2020/05/29/re-establishing-teaching-routines/ Coe, R., Aloisi, C., Higgins, S., & Major, L. E. (2014) What makes great teaching. Review of the underpinning research. Durham University: UK. Available at What-Makes-Great-Teaching-REPORT.pdf (suttontrust.com) https://oracycambridge.org/oracy-learning-skills-rationale/ (From Fear is the Mind Killer)
Principle 2. Memorable learning Links to Teachers' standards: 1, 2, 3, 5, 6 Links to ECF: Standard 2/5		
a) How learning happens, modelling the most effective strategies: retrieval, interleaving, elaboration, and spaced practice b) Frequent low stakes testing strengthens the memory trace for use in new and transferable situations c) Working memory is limited, daily, weekly and monthly recall re-activates prior knowledge and supports development of fluency, whilst reducing cognitive load d) How to simplify complex information, keep essential information together and remove unnecessary information	a) Understand how learning happens and how best to remember key concepts and develop fluency and can practice these strategies independently as well as in the classroom b) Can practice and show what they know and can remember, can experience success and be able to evaluate how their learning is progressing. c) Get to think hard, strengthening their schema so that they can remember more and recall and apply knowledge more easily, without feeling overwhelmed d) Can successfully engage with new material and manage the intrinsic load	Why Don't Students like school? Daniel T Willingham Memorable Teaching, Peps Mccrea Sweller's Cognitive Load Theory in Action, Oliver Lovell Learning, What is it, and how might we catalyse it? Peps McCrea Learning: What is it, and how might we catalyse it? Ambition Institute The Science of Learning, Deans for Impact The Science of Learning Deans for Impact The Learning Scientists, Six strategies https://www.learningscientists.org/downloadable-materials What improves a student's memory? https://www.aft.org/sites/default/files/periodicals/willingham_0.pdf MARGE, Arthur Shimamura https://shimamurafiles.wordpress.com/2018/09/marge_shimamura.pdf Testing (Quizzing) Boosts Classroom Learning https://www.gwern.net/docs/spacedrepetition/2021-yang.pdf
Principle 3. Quality teacher instruction Links to Teachers' Standards: 2, 3, 4, 5, 6 Links to ECF: Standard 3/4/5		
a) Modelling and narrating the thought process is a central feature of giving good explanations and develops pupil's capacity for metacognition and self-regulation. b) Sequenced small steps help to deal with working memory limitations by thinking out loud and planning for practice after each step c) Discovery learning is not effective when the content is new, explicit instruction supports the learning of new concepts (I do, we do, you do) d) Questioning is at the heart of great instructional teaching and should be a frequent, highly interactive, dynamic, and responsive process.	a) Have a strong basis from which to learn and can organise information into secure, well-structured schema and have a clear pathway to success. b) Form a clear schema, locating an area of learning in relation to others, whilst not overloading the working memory and experiencing marginal gains and boosting confidence c) Experience front loaded instruction, practice that facilitates overlearning and a gradual release of support which develops fluency and independence d) Can evidence and explain what they have learned and remembered, provide feedback, ask questions, and rehearse and practice communicating their understanding – improving long term retention.	Rosenshine's Principles in Action, Tom Sherrington Explicit & Direct Instruction, The research ED guide, An evidence-informed guide for teachers Teaching Walkthrus, Tom Sherrington & Oliver Caviglioli The Science of Learning, Deans for Impact https://deansforimpact.org/wp-content/uploads/2016/12/The_Science_of_Learning.pdf Principles of instruction, Barak Rosenshine https://www.aft.org/sites/default/files/periodicals/Rosenshine.pdf Rosenshine's Masterclass, Tom Sherrington's - https://teacherhead.com/2020/03/16/rosenshine-masterclass-captured-free-cpd/ Why Minimal Guidance During Instruction Does Not Work... Kirschner, Sweller, Clark Why Minimal Guidance During Instruction Does Not Work: An Analysis of the Failure of Constructivist, (tandfonline.com)
Principle 4. Guided practice Links to Teachers' Standards: 2, 4, 3, 5 Links to ECF: Standard 3/4		
a) Questioning should identify pupil misconceptions and connect learning b) Scaffolding is designed to move students towards independence and is needed for challenging tasks. Support is then faded at the right time c) How to continually monitor and support student thinking during practice d) How to plan for high quality talk (dialogic teaching), modelling the use of subject specific vocabulary and using high quality, challenging reading texts	a) Can self-evaluate and practice correctly, strengthening their retrieval so that future learning can be hooked onto existing schema and deepened further b) Can engage with challenging tasks, meet high expectations and experience success c) Feel supported and do not waste time struggling, their misconceptions and haps in understanding are identified quickly and addressed to enable them to continue to make progress d) Engage with high quality reading material, are heard, have their opinions valued and can practice communicating their understanding using subject specific vocabulary confidently and correctly.	Rosenshine's Principles in Action, Tom Sherrington Alexander, R (2020) A Dialogic Teaching Companion Gaunt, A. and Stott, A. (2019) Transform Teaching and Learning Through Talk: The Oracy Imperative Guided Practice, ECF, Teach First Guided practice self-study Practice with Purpose, Deans For Impact https://deansforimpact.org/resources/practice-with-purpose/ Memories are made of this, Dylan Wiliam- https://www.tes.com/news/school-news/breaking-views/memories-are-made Desirable Difficulties, Blake Harvard https://theeffortfuleducator.com/2020/07/23/desirable-difficulties-presentation/ What is Expert Teaching, Peps McCrea What is expert teaching? Ambition Institute Questioning – Top 10 Strategies by Alex Quigley Questioning – Top Ten Strategies (theconfidentteacher.com) Questioning, ECF, Teach First 5. Questioning – Teach First (education.gov.uk)
Principle 5. Independent practice and feedback that progresses learning Links to Teachers' Standards: 4, 1, 2, 5 Links to ECF: Standard 5/6		
a) That Independent practice should include the same material as guided practice and needs to be continuously monitored to check all students are being successful b) Independent practice doesn't have to be only a solo activity, it can involve collaborative learning activities with peers and a provided framework c) Feedback should be integrated into lessons and take place while learning is in progress and pupils are given opportunity to respond d) Feedback is precise, and explicitly describes how to improve and make progress	a) Feel confident when working independently and have had extensive opportunity to practice, develop fluency and secure knowledge required in their memory to build on further, transfer and apply to new situations b) Have the opportunity to explain material to someone else and/or receive feedback or further instruction from a peer c) Receive frequent and valuable feedback, so that they can explain/demonstrate where they are and where they need to get to and how they can get there d) Understand where and why they made mistakes and how to correct and improve their learning	Making Good Progress? Daisy Christodoulou What is assessment for learning? Dylan Wiliam https://www.academia.edu/19409243/What_is_assessment_for_learning EEF Guidance Report and Evidence Summary: Metacognition and Self-Regulation - resources here Feedback, Evidence Summary, EEF Feedback Toolkit Strand Education Endowment Foundation EEF Independent Practice, ECF, Teach First Independent practice self-study The Four Pillars of Assessment, Evidence Based Education A resource guide EEF (2016) A marked improvement? A review of the evidence on written marking. https://educationendowmentfoundation.org.uk/public/files/Publications/EEF_Marking_Review_April_2016.pdf