



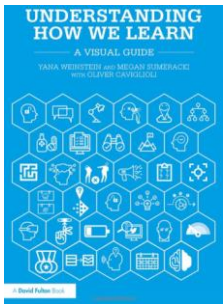
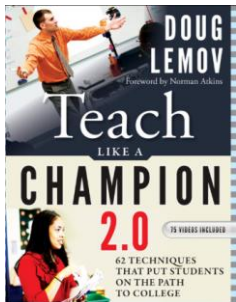

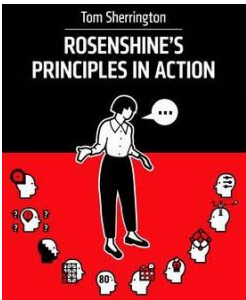
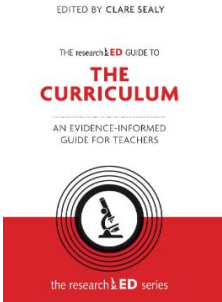
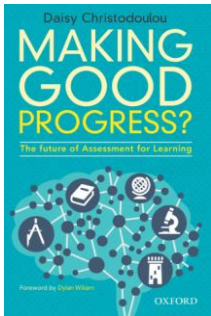
Milldown CE Academy

Inspire – Believe - Achieve

Teaching and Learning Policy

This policy is to ensure that teaching and learning is the best it can be, so that all our individual children can live out our school motto of, *'Inspire, Believe. Achieve.'* and achieve beyond expectations. The aim is for learning to be acquired into the long-term memory and for children to be able to make links within subjects and across subjects. Assessment – both formative and summative – goes hand-in-hand with teaching and learning and will be referenced in brief in this policy. For more in-depth detail, please see the 'Assessment Policy'.

Our policy and practice is underpinned and guided by educational research. The following sources of information are a selection that have guided the development of this policy and the practice within school:

<p>Understanding How We Learn: Weinstein, Sumeracki, Caviglioli</p> 	<p>Teach Like a Champion: Doug Lemov</p> 	<p>Education Endowment Trust</p> 
<p>Rosenshine's Principles in Action: Tom Sherrington</p> 	<p>The Curriculum: Clare Sealy</p> 	<p>Making Good Progress: Daisy Christodolou</p> 

At Milldown, we have a commitment to:

- Progression - we are responsible for providing guidance, support and expertise necessary for the best learning to take place;
- Ambition – all staff are ambitious as to what can be achieved by all our children; every child has the right to access the very best learning that we can offer;
- Equality of opportunity for all our families and staff members – everyone should be treated with dignity and fairness;
- Accountability to ourselves and to each other.
- High expectations:
 - Teaching staff are expected to be knowledgeable and to deliver effective learning sequences that meet children's various needs, building on children's prior knowledge and understanding;
 - The learning environment must first and foremost support learning;
 - All staff are role models for children in terms of their expectations and behavior.

Mastery pedagogy

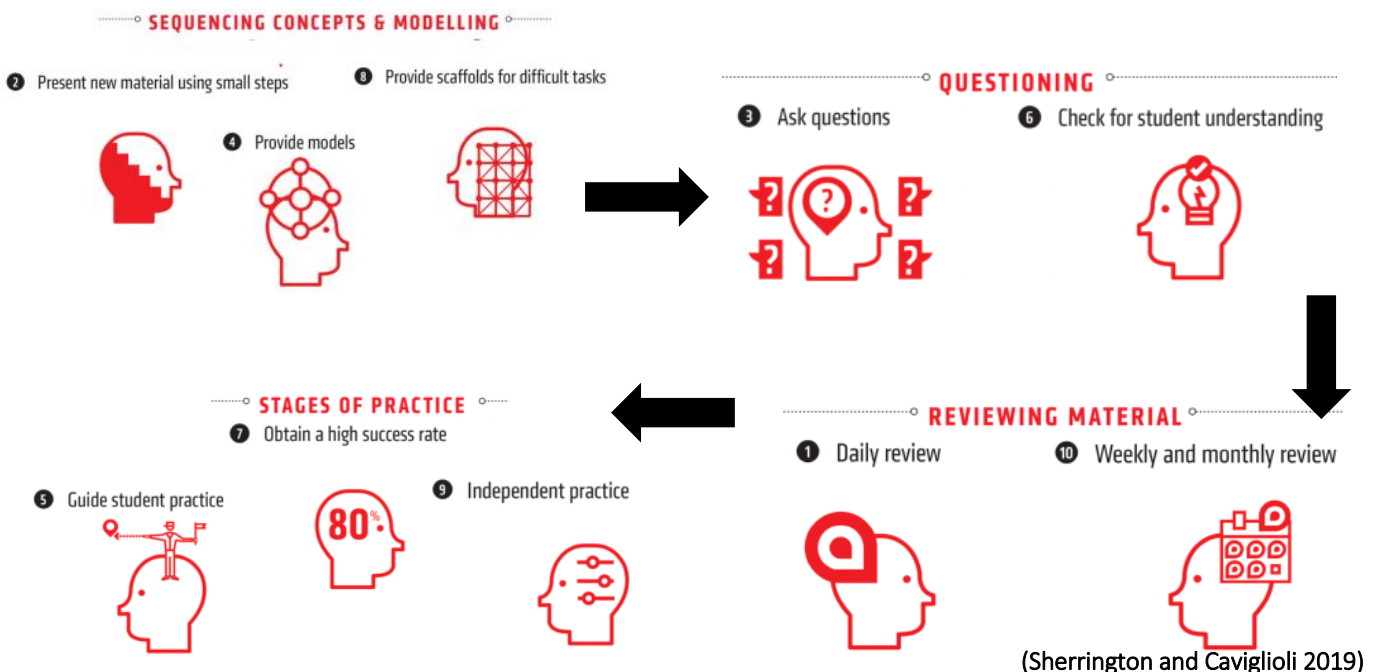
Mastery pedagogy works on the principle that all learners will meet expectations. It works on the premise that great teaching, based on excellent modelling, formative assessment and particularly great questioning, is crucial. Precise assessment and teaching that closes any gaps, along with reconsidering fixed notions of “ability,” are all part of mastery pedagogy. All children should be enabled to achieve a deep learning of key ideas and constructs and should have opportunities for even deeper learning. Metacognition and self-regulation will be modelled and taught through all learning opportunities, so that children internalise these learning structures for themselves. Mastery learning is *deep* learning that sticks and can be recalled over time. In order to meet the National Curriculum objectives securely children need to have mastered them. An outline of our approach to teaching and lesson design are summarised in appendix 1.

In demonstrating mastery learning, learners may show:

independence in using a concept, skill or knowledge; fluency in the application of a concept, skill or knowledge; ability to apply learning across subject boundaries; consistency in application over a period of time; ability to apply without reminders or pre-teaching; ability to explain connections with other learning; evidence of applying their learning and an ability to teach to another.

Subject Specific Teaching Approaches

All lessons normally begin with retrieval practice (quizzing of prior learning based on a ‘last term, last month, last week, last lesson’ approach). Rosenshine’s Principles of Instruction underpins our approach to teaching and learning. See below.



Where appropriate, lessons are designed and taught around a lesson question (e.g. How do writers clarify meaning? How do mathematicians subtract from multiples of 1000? Why and how are the Battle of Ypres, and ‘The Race to the Sea’ linked?). This focuses the lesson on the purpose of the learning and how it can be linked to other areas of learning. For example, rather than working from a ‘learning objective’ of ‘Use commas for lists,’ children will explore a lesson question such as ‘How do writers stop the reader getting confused?’. This approach means that the lesson is focused on answering the question and there is purpose assigned to the use of commas. In this example, children will also understand that writers add clarity to their writing in other ways too, not just through commas.

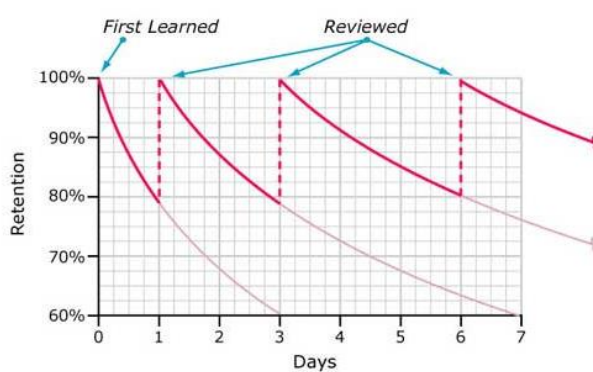
- **English** – whole class reading and Talk 4 Writing are the main pedagogical approaches we use but there will be times when one-to-one or small group guided reading is needed. Phonics and spelling is taught using Sounds~Write.
- **Maths** – the ‘Maths No Problem!’ pedagogical approach is used where lessons have the following structure: Retrieval Practice, Exploration, Reflecting on and Structuring of ideas, Guided Practice, Independent Practice. Resources such as the ‘National Centre for Excellence in teaching of Mathematics (NCETM)’ and ‘White Rose Maths hub’ also supplement our teaching.
- **Foundation subjects** – where appropriate, subjects are blocked. This means, for example, that several lessons will take place across the week(s) rather than there being one lesson a week across a whole half-term. This allows learning to be explicitly linked more easily, for children to build on prior learning more readily and to leave more time afterwards for retrieval practice to ensure learning is secured in the long term memory.

Research Driven

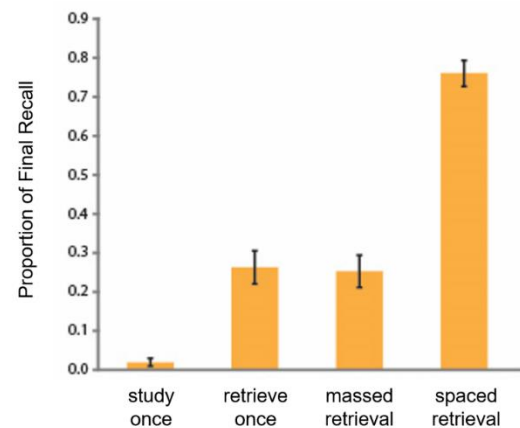
The following summarises the theory behind our approach to teaching and learning, lesson and curriculum design and assessment:

- **Retrieval Practice.** Learning must be spaced and revisited over time to ensure it is not forgotten but is acquired in the long-term memory. This is demonstrated in the graph below (left) known as the 'Ebbinghaus Forgetting Curve'.
- **Spaced Learning.** The most effective way to revisit learnt content to make sure that is learnt is through retrieval practice (e.g. quizzes). This was shown in a study by Karpicke & Bauernschmidt (2011) where the participants that had spaced quizzes remembered more than anyone else. See below, right.

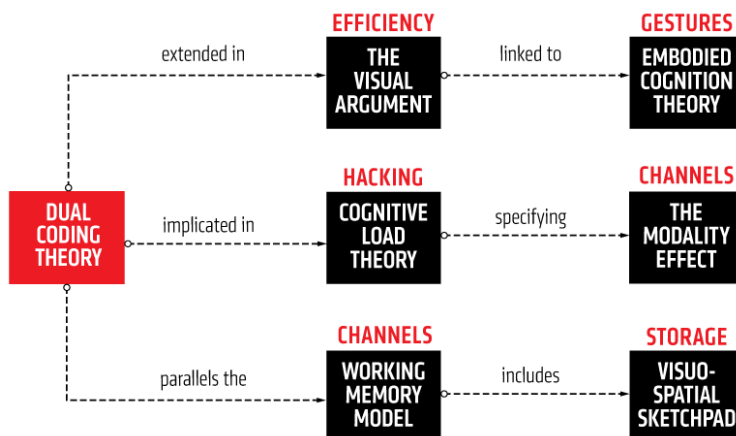
Typical Forgetting Curve for Newly Learned Information



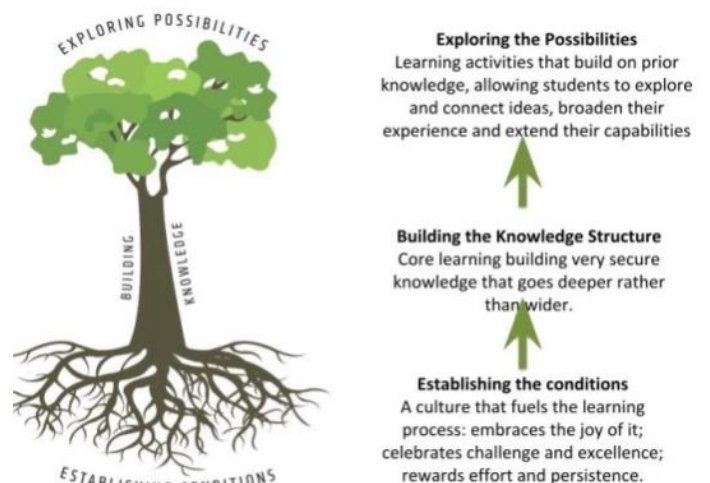
Remembering Starts with Forgetting



- **Dual coding.** Cognitive science has shown that by combining words/knowledge with pictures and then accompanying this with a narrative (such as an oral story), learning and thereby memory can be enhanced and reduce the cognitive load often faced by children when learning (Oliver Caviglioli).



- **Building on Prior Learning.** Curriculum design is crucial in ensuring deep learning. Within subjects, content must be progressive and carefully build on prior learning. Links must also be made across other areas of the curriculum, where appropriate (Clare Sealy). This will help children develop a more secure understanding of key concepts within a subject.
- **Creating the Correct Environment.** Children need to be ready to learn. We aim to achieve this through the approaches outlined in our 'Behaviour Policy'. This sets out the importance of building relationships with children, meeting their emotional needs and creating a culture that embraces learning and challenge (Tom Sherrington, The Learning Rainforest).



How is Teaching and Learning Developed?

- Research underpins our approaches and staff CPD/staff meetings.
- Time given each half-term for staff to undertake professional reading which will often be self-directed.
- Staff are encouraged to keep up-to-date with current educational research through edu-blogs and social media such as Twitter.
- Rather than individual subject leaders, 'Teacher Research Groups' (TRGs) are set up to develop a subject. TRGs will have lead practitioners but will also include teachers new to teaching and in middle leadership positions. They aim not only to develop classroom practice and curriculum, but to also develop leadership skills.
- TRGs collaborate with other staff in school through leading staff meetings, INSET and team-teaching.
- Teaching Assistants also have self-led groups focusing on their impact within the classroom. The focus has been, but is not limited to, metacognition, use of questioning and cognitive load. TAs will also begin to form part of the TRGs.
- Leaders are outward facing: they look to collaborate locally with other schools and draw on expertise but also look further afield to look at excellence in practice.
- Academy review days (AIM days) take place throughout the year
- Headteachers within the academy trust collaborate in working groups to improve chosen areas of teaching and learning.

The Importance of Assessment

Assessment principles

We adhere to the principles of assessment set out by the NAHT, as follows:

- 1) Assessment is at the heart of teaching and learning.
- 2) Assessment is fair.
- 3) Assessment is honest.
- 4) Assessment is ambitious.
- 5) Assessment is consistent.
- 6) Assessment outcomes provide meaningful and understandable information.
- 7) Assessment feedback should inspire greater effort and a belief that, through hard work and practice, more can be achieved.

These principles are set out in full in our 'Assessment Policy'.

References:

Lemov, D., 2020. *Using The Do Now For Retrieval Practice-An Update From Alex Laney - Teach Like A Champion*. [online] Teach Like a Champion. Available at: <<https://teachlikeachampion.com/blog/using-now-retrieval-practice-update-alex-laney/>> [Accessed 6 April 2020].

Karpicke, J. and Bauernschmidt, A., 2020. *Spaced Retrieval: Absolute Spacing Enhances Learning Regardless Of Relative Spacing*. [online] Semantic Scholar. Available at: <<https://www.semanticscholar.org/paper/Spaced-retrieval%3A-absolute-spacing-enhances-of-Karpicke-Bauernschmidt/23c01da059b9eb8be667930bdddcd2033e719e31>> [Accessed 6 April 2020].

FutureLearn. 2020. *An Introduction To Dual Coding Theory*. [online] Available at: <<https://www.futurelearn.com/courses/technology-teaching-learning/0/steps/53322>> [Accessed 6 April 2020].




Sealy, C., 2020. *The 3D Curriculum That Promotes Remembering*. [online] primarytimerydotcom. Available at: <<https://primarytimery.com/2017/10/28/the-3d-curriculum-that-promotes-remembering/>> [Accessed 6 April 2020].

Sherrington, Tom, and Oliver Caviglioli. *The Learning Rainforest Great Teaching in Real Classrooms*. Johan Catt Educational Ltd, 2017.















Sherrington, T. and Caviglioli, O., n.d. *Rosenshine's Principles In Action*. John Catt.



Our drivers focus our pedagogy and curriculum – they shape and scaffold our practice and curriculum design

Critical Thinking 	Communication 	Challenge 
<ul style="list-style-type: none"> Thinking hard Applying learning Reviewing own & other's learning Challenging questioning and work Small-step lesson design and scaffolds allow all to think deeply at some point in the learning Understand what I have been successful with, what I need to improve and how to go about it 	<ul style="list-style-type: none"> Understanding and using a wide-ranging vocabulary Speaking like an expert Public speaking Presenting Partner talk and support Peer feedback 	<ul style="list-style-type: none"> Challenging other's ideas and viewpoints Group projects Applying prior learning to solve real-life problems Challenging prejudice and injustice Pushing out of our comfort zone Making a positive difference to our world Perseverance

Our Lesson Design: We structure learning to build independence over time. Get it right for the lowest 20% to ensure success for all and live out our vision of 'Inspire-Believe-Achieve.'

  	 		  	  	 	
Fluency/ Retrieval of prior knowledge & vocabulary (think 'priming' and 'spacing')	Key Concept(s) – identify & link. Key vocabulary – explain & model (Frayer model)	Learning question & essential knowledge to be learnt – where does it fit with the bigger picture?	Anchor task – activity to expose concept, pull out knowledge and misconceptions	I do – We do Explicit explaining & modelling and narrating the metacognitive process – plan, monitor, evaluate. Back & forth opportunity for guided practice (example here)	You do - Independent practice Application of strategy / learning. Ensure the 'task' is purposeful & embedding/ applying learning	Evaluation of learning. What do I know? Have I answered the lesson question? How do I know? If I was stuck/found something difficult, what helped? Could this help me next time?
Elicitation task (this will need to be done prior to the unit beginning to ensure adaptations to planning and/or pre-teaching and/or filling of gaps can be planned in. Ensure this task is purposeful and allows you to ascertain the children's prior knowledge (see the medium term plan for required prior knowledge). What it's not – it's not asking the children to write everything they know about [topic]. This is unlikely to draw out the specific prior knowledge.						
L1						

Planning: <ul style="list-style-type: none"> What resources do I need to ? Have I done this before and was it successful? What have I learned from the examples we looked at earlier? Where do I start and what strategy / approach will I use? What scaffold do I need e.g. Do I need a line guide to keep my features in proportion? 	Monitoring: <ul style="list-style-type: none"> Am I doing well? Do I need any different techniques to improve? How am I doing against the learning intention e.g. are all of my facial features in proportion? Am I finding this challenging? Is there anything I need to stop and change to improve? 	Evaluation: <ul style="list-style-type: none"> How did I do? Did my guide strategy work? Was it the right approach to choose? How would I do a better next time? Are there other perspectives, strategies or techniques I would like to try?
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