



# Learn-AT

Learning ~ Fellowship

## **Learn-AT Curriculum and Pedagogy Framework 2021/22**

## Introduction

The Learn-AT Curriculum Framework is a work in progress. The Trust convened a working group (the Curriculum and Pedagogy Group - CPG) to investigate primary curriculum design during 2017/18. This document represents the CPG's work since then and outlines the Learn-AT vision for a research -informed, coherent curriculum founded on shared values and principles. Our intention is to provide clear guidance for Learn-AT schools which will ensure equity and excellence. The framework provides a common curriculum design template from which schools can plan coherent sequences of learning to meet the needs of their pupils, secure deep learning and introduce them to knowledge beyond their experience. This collaborative project is now in its third year. During Phase One (2017/18), CPG engaged with a wide range of curriculum research literature, considered vision and principles and set the curriculum approach within a pedagogical context. Phase Two in 2018/19, saw CPG members and Learn-AT subject leaders working together to develop curriculum maps for each subject within eight primary curriculum domains (Alexander 2009). Phase Three, this year, involves curriculum leaders in schools, working together, sharing subject specialist and curriculum design expertise, to develop precise, detailed and coherent programmes of study for each curriculum subject. This year, too, CPG has shifted its focus from KS1 and KS2, to consider the principles of curriculum design in EYFS.

## Curriculum and Cutlery

We began the project with a strong conviction that we wanted to develop a curriculum for our pupils which was rich, rounded and rigorous – like a rich minestrone soup, full of food for the intellect and food for the soul. Reading, writing and maths as the essential 'cutlery' needed by pupils to access the curriculum completed the metaphor. As the work of CPG has progressed, the soup has transformed from unstructured pottage into a dish that more resembles a lasagne – more carefully planned, with a coherent structure, layers and carefully-planned cross curricular links, vertical – through subject and years, horizontal between subjects within years and diagonal, between subjects in one year and different subjects in another.

# Deeper learning for children: curriculum and cutlery


Rich, rounded, rigorous, planned curriculum - RRR

Reading is curriculum and cutlery

The curriculum is all the stuff you learn in school...'  
(Mick Waters)

reading, writing, maths

Reading  
facts/knowledge/vocabulary  
~Thinking, critical readers...  
empathy/criticality/citizenship

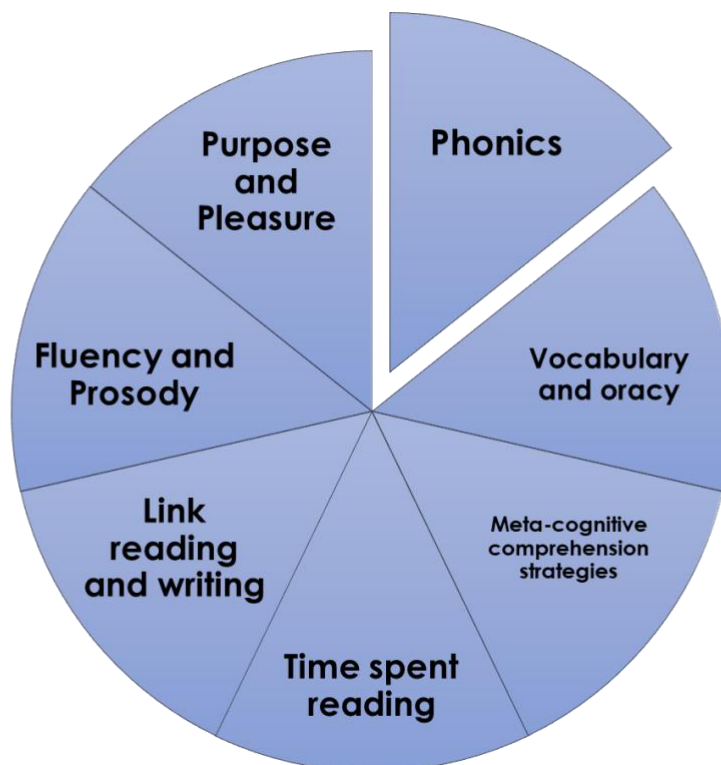


## The Fundamental Importance of Reading

Reading is fundamentally important. **Reading is both curriculum and cutlery.** We expect all leaders and teachers to implement a research-informed approach to the teaching of reading. All schools implement a programme of systematic synthetic phonics, with fidelity, to teach early reading. Reading for pleasure pedagogies are employed to promote a school-wide reading culture and a love of reading for all pupils

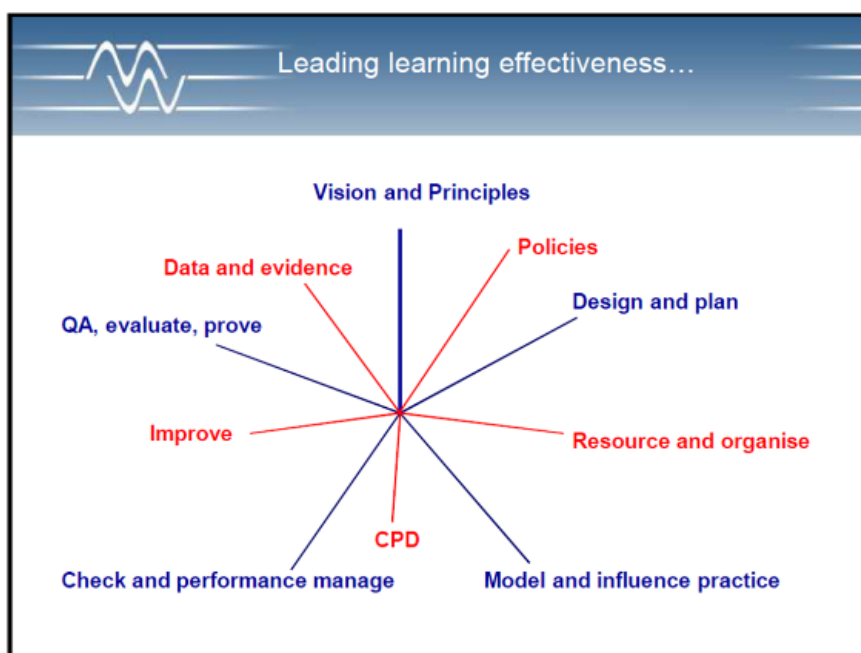
(<https://researchrichpedagogies.org/research/theme/reading-for-pleasure-pedagogy>).

This diagram summarises the key elements of the reading curriculum in Learn-AT schools:



## The Process of Curriculum Design

Three members of CPG participated in Whole Education's Leading and Managing Curriculum Change project. This provided support and facilitation for the group's curriculum design work. At the beginning of the project, Mick Waters provided an organisational structure for the curriculum design process as follows:



We developed a shared vision and agreed underpinning principles. This document represents the policy so far. The project has been implemented in four phases:

- 2017/18 - Phase 1: Research and reading, leading to the development of an overarching framework of curriculum design and pedagogical principles
- 2018/19 - Phase 2: Develop framework principles for each curriculum subject
- 2019/20 – Phase 3: work collaboratively with curriculum and subject leads across the trust to agree precise, detailed and coherent programmes of study, and sequences of learning for each subject contextualised to each school's context. This is our curriculum **intent**. Review the Learn-AT Assessment Framework to secure high-quality assessment in all subjects and to ensure effective evaluation of the **impact** of our curriculum **implementation**.
- 2020 onwards – Phase 4: Develop high quality, subject-specific professional learning and development for teachers

We are working to achieve the effective implementation of a research-informed, rich, rounded, rigorous and *coherent* curriculum, developed through professional collaboration and which achieves our mission and aims for the benefit of all Learn-AT pupils.

## Curriculum Literature

Members of CPG have read and discussed a wide range of curriculum and pedagogy-related literature, including the following authors:

### Academics, policy-makers, writers and researchers:

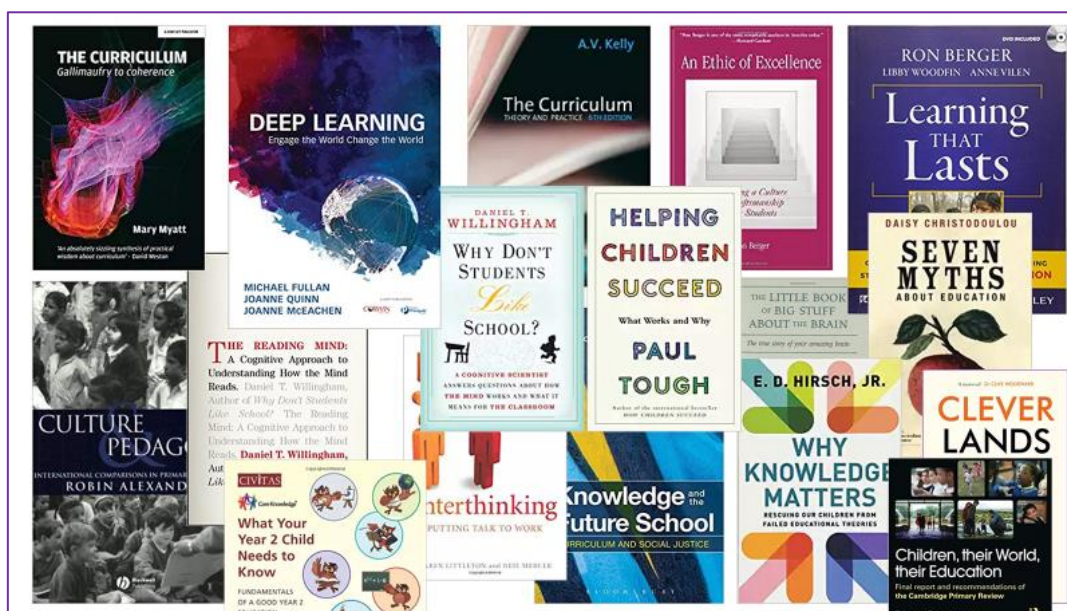
Professor Michael Young; Andreas Schleicher; Daisy Christodoulou; E. D Hirsch; Dylan Wiliam; Michael Fullan and Joanne Quinn; Ron Berger; Professor Robin Alexander; Daniel Willingham; Kirschner, Sweller and Clark; Sfard; Didau and Rose; Curran and Gilbert; Lucy Crehan; Mary Myatt

### Bloggers:

Christine Counsell; Clare Sealy; Jon Brunskill; Daniel Willingham; Doug Lemov; Rob Carpenter; Mary Myatt

In addition to taking part in the Whole Education LMCC project, we have visited and trawled the websites of schools both praised by Ofsted and recommended by Whole Education for their curricula. We have made use of the resources provided by the Core Knowledge Foundation and the Cambridge Primary Curriculum Review.

### A Selection of CPG Curriculum Reading



This Big Picture of the Learn-AT Curriculum is a key outcome of our learning and discussions:



Learn-AT Curriculum – Big Picture			
What are we trying to achieve?			
Mission	Every child flourishes and enjoys learning with access to a rich, rounded, rigorous and coherent curriculum		
Aims	Excellence	Equity	Wellbeing
	Successful, engaged learners who enjoy learning and who are knowledgeable and skilled, make progress and achieve	Confident, articulate individuals, who can lead safe, healthy and fulfilling lives	Responsible citizens who can make a positive contribution to society
Core trust values	Learning and fellowship		
Intrinsic values	Christian values, British values and all those essential values common to good, kind and tolerant people of all faiths and no faith		
RRR: a rich, rounded and rigorous curriculum	<u>Core knowledge and understanding</u> e.g. excellent general, subject, social and cultural knowledge	<u>Skills and competences</u> Essential skills: literacy, numeracy, ICT, personal, social, emotional, learning and thinking skills, physical, moral, spiritual The six cs: see below	<u>Attitudes, attributes and dispositions</u> e.g. determined, adaptable, confident, risk-taking, enterprising, self-regulating, emotionally resilient, spiritually aware, tolerant, kind

What does the curriculum contain?								
Mastery of Core Skills and Domain Knowledge	<u>Domain Knowledge</u>		<u>Vocabulary</u>		<u>Reading</u>		<u>Domain specific skills</u>	
	Cultural		Tier 1		• Volume		e.g. Music,	
	Subject knowledge (Curriculum)		Tier 2		• Criticality		Computing,	
	General		Tier 3		• Comprehension		Design	
			<i>for reading and listening comprehension, written communication and oracy</i>		• Curriculum content – fiction and non-fiction		PE and Sport etc	
					Reading is an essential skill that also supports the acquisition of vocabulary and knowledge			
Domains of Learning EYFS/KS1/KS2	Faith and Belief	Mathematics	Science and Technology	Citizenship and Ethics	Place and Time	Arts and Creativity	Language, Oracy and Literacy	Physical and Emotional Health
Deeper Learning - core competencies	Critical thinking and problem-solving	Communication	Creativity and imagination	Character Education	Citizenship	Collaboration		
Foundational and universal competency	Oracy							
Bottom line	Unconditional positive regard and well-being							

How do we organise learning?								
The curriculum as the entire planned learning experience, underpinned by the schools core values and mission								
Components	Environment	Events	Extended hours	Learning outside the classroom	Lessons	Locations	Routines	Ethos

How is the curriculum delivered?			
Pedagogical approaches to teaching and learning	<u>Equity</u>		<u>Evidence</u>
	<ul style="list-style-type: none"> <li>Equity and equality of opportunity, entitlement and experience</li> <li>Consistently high expectations, quality and standards for all Learn-AT pupils</li> <li>A mastery curriculum</li> <li>Excellence in SEND provision</li> </ul>		Research-informed pedagogies: <ul style="list-style-type: none"> <li>Formative assessment strategies embedded in teaching and learning</li> <li>Use of evidence from cognitive science research – e.g. importance of metacognition and self-regulation</li> <li>Balance of direct instruction and inquiry</li> <li>Strong self-evaluation</li> </ul>
	<u>Engagement</u>		
	<ul style="list-style-type: none"> <li>Authentic purposes and contexts for learning – Berger 2006</li> <li>Emphasis on first-hand experience</li> <li>Purposeful, structured play in the early years; drama, strong emphasis on outdoor learning, sport and the Arts.</li> <li>Pupil agency, autonomy and choice</li> <li>Cross-curricular connections</li> </ul>		

How well are we doing?								
Securing effective learning and teaching so that learners understand quality and how to improve								
Evaluating Impact	Looks at the whole child, e.g. progress in knowledge, understanding and skills, attitudes, attributes and dispositions.	Uses assessment information intelligently to identify trends and clear goals for improvement	Uses critical friends to offer insights and challenges.	Uses a wide range of measures – qualitative and quantitative	Creates a continuous improvement cycle	Uses a variety of techniques to collect and analyse information	Employs principled, effective formative and summative assessment	Involves the whole school community: learners, parents, teachers, employers and governors.
to secure								
Accountability measures	High standards of achievement – attainment and progress.	Good behaviour and attendance		Civic participation		Healthy lifestyles		Sustained involvement in education
and								
Aims	Successful, engaged learners who are knowledgeable, skilled, enjoy learning, make progress and achieve			Confident, articulate individuals who can lead safe, healthy and fulfilling lives			Responsible citizens who make a positive contribution to society	
Learn-AT Early Years Curriculum – Big Picture								

What are we trying to achieve?			
Mission	Every child flourishes and enjoys learning with access to a rich, rounded, rigorous and coherent curriculum		
Aims	Excellence	Equity	Wellbeing
	Successful, engaged learners who enjoy learning and who are knowledgeable and skilled, make progress and achieve	Confident, articulate individuals, who can lead safe, healthy and fulfilling lives	Responsible citizens who can make a positive contribution to society
Core trust values	Learning and fellowship		
Intrinsic values	Christian values, British values and all those essential values common to good, kind and tolerant people of all faiths and no faith		
RRR: a rich, rounded and rigorous curriculum	<u>Core knowledge and understanding</u> e.g. excellent general, subject, social and cultural knowledge,	<u>Skills and competences</u> Essential skills: literacy, numeracy, ICT, personal, social, emotional, learning and thinking skills, physical, moral, spiritual The six cs: see below	<u>Attitudes, attributes and dispositions</u> e.g. determined, adaptable, confident, risk-taking, enterprising, self-regulating, emotionally resilient, spiritually aware, tolerant, kind

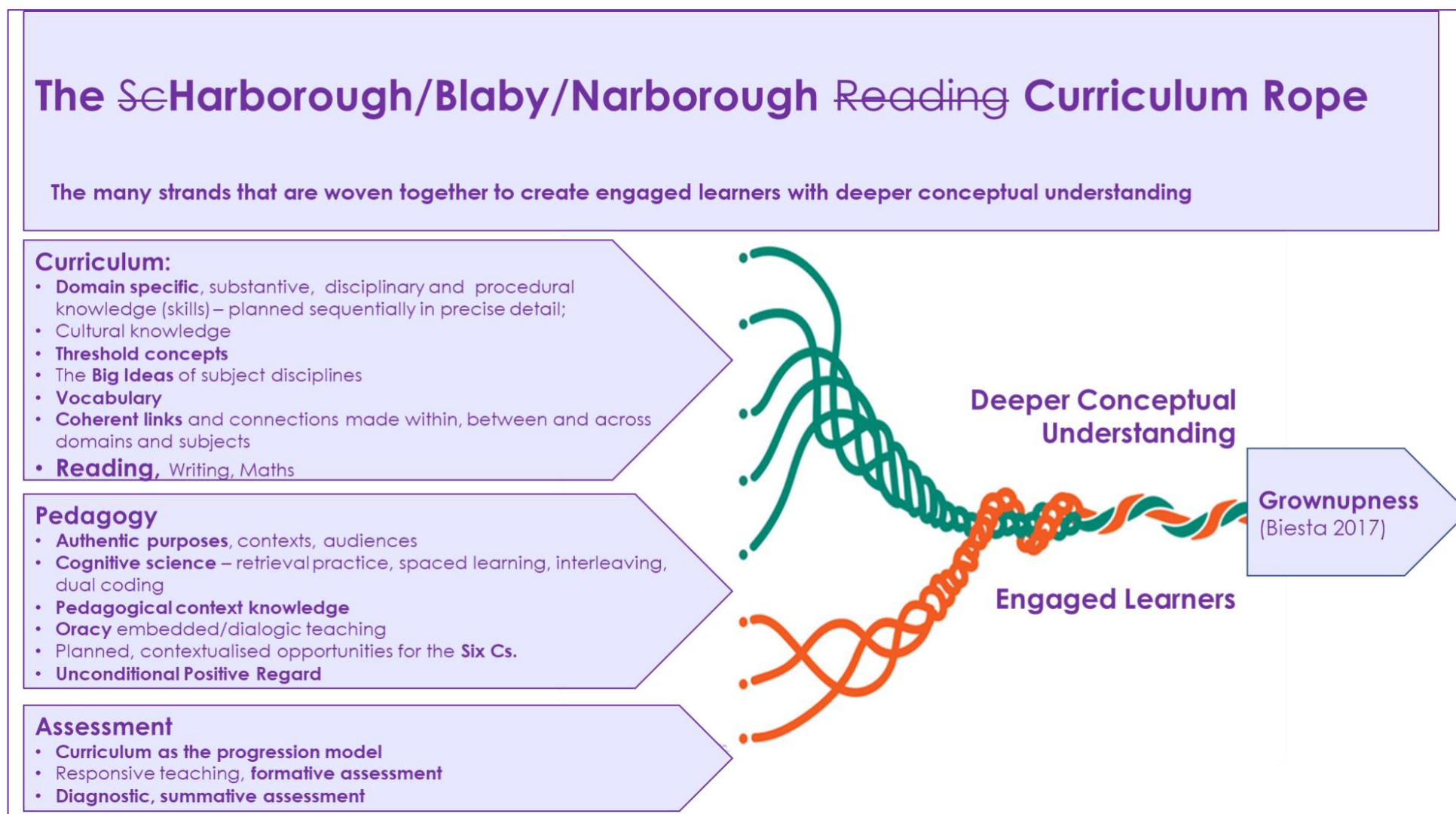
What does the curriculum contain?										
Prime Areas of Learning	Communication and Language			Physical Development			Personal, Social and Emotional Development			
	Listening, attention & understanding		Speaking	Gross Motor		Fine Motor		Self-regulation	Managing Self	Building Relationships
Specific Areas of Learning	Literacy			Maths		Understanding of the World			Expressive Arts and Design	
	Comprehension	Word reading (Phonics)	Writing	Number	Numerical Patterns	Past & Present	People Culture Communities	Natural World	Creating with materials	Being imaginative & expressive
Deeper Learning - core competencies	Critical thinking and problem-solving		Communication	Creativity and imagination		Character Education		Citizenship		Collaboration
Foundational and universal competency	Oracy									
Bottom line	Unconditional positive regard and well-being									

How do we organise learning?	
The curriculum as the entire planned learning experience, underpinned by the schools core values and mission	
Balance between adult-led and child-initiated learning	<p>Learning is planned through a series of themes to facilitate discrete, direct teaching of vocabulary, knowledge &amp; skills</p>

How is the curriculum delivered?			
Pedagogy	<u>Equity</u> <ul style="list-style-type: none"> <li>Equity and equality of opportunity, entitlement and experience</li> <li>Consistently high expectations, quality and standards for all Learn-AT pupils</li> <li>A mastery curriculum</li> <li>Excellence in SEND provision</li> </ul>	<u>Evidence</u> <p>Research-informed pedagogies:</p> <ul style="list-style-type: none"> <li>Characteristics of effective early learning</li> <li>Formative assessment strategies embedded in teaching and learning</li> <li>Use of evidence from cognitive science research – e.g. importance of metacognition, vocabulary &amp; knowledge</li> <li>Direct instruction and inquiry</li> <li>Strong self-evaluation</li> </ul>	<u>Engagement</u> <ul style="list-style-type: none"> <li>Authentic purposes and contexts for learning</li> <li>Emphasis on first-hand experience</li> <li>Purposeful, structured play, drama, strong emphasis on outdoor learning</li> <li>Pupil agency, autonomy and choice</li> <li>Cross-curricular connections</li> <li>Enabling environments</li> </ul>

How well are we doing?								
Securing effective learning and teaching so that learners understand quality and how to improve								
Evaluating Impact	Looks at the whole child, e.g. progress in knowledge, understanding and skills, attitudes, attributes and dispositions.	Uses assessment information intelligently to identify trends and clear goals for improvement	Uses critical friends to offer insights and challenges.	Uses a wide range of measures – qualitative and quantitative	Creates a continuous improvement cycle	Uses a variety of techniques to collect and analyse information	Employs principled, effective formative and summative assessment	Involves the whole school community: learners, parents, teachers, employers and governors.
to secure								
Accountability measures	Early Learning Goals (Early Years Foundation Stage Profile)							
and								
Aims	Successful, engaged learners who are knowledgeable, skilled, enjoy learning, make progress and achieve			Confident, articulate individuals who can lead safe, healthy and fulfilling lives		Responsible citizens who make a positive contribution to society		

This slide illustrates the complex strands which weave together to create a rich, rigorous and coherent curriculum that prepares children for grown-up-ness (Biesta 2017):





## The Mission

*Every child flourishes with access to a rich, rounded, rigorous and well-planned curriculum.*

## Aims

### Equity ~ Excellence ~ Wellbeing

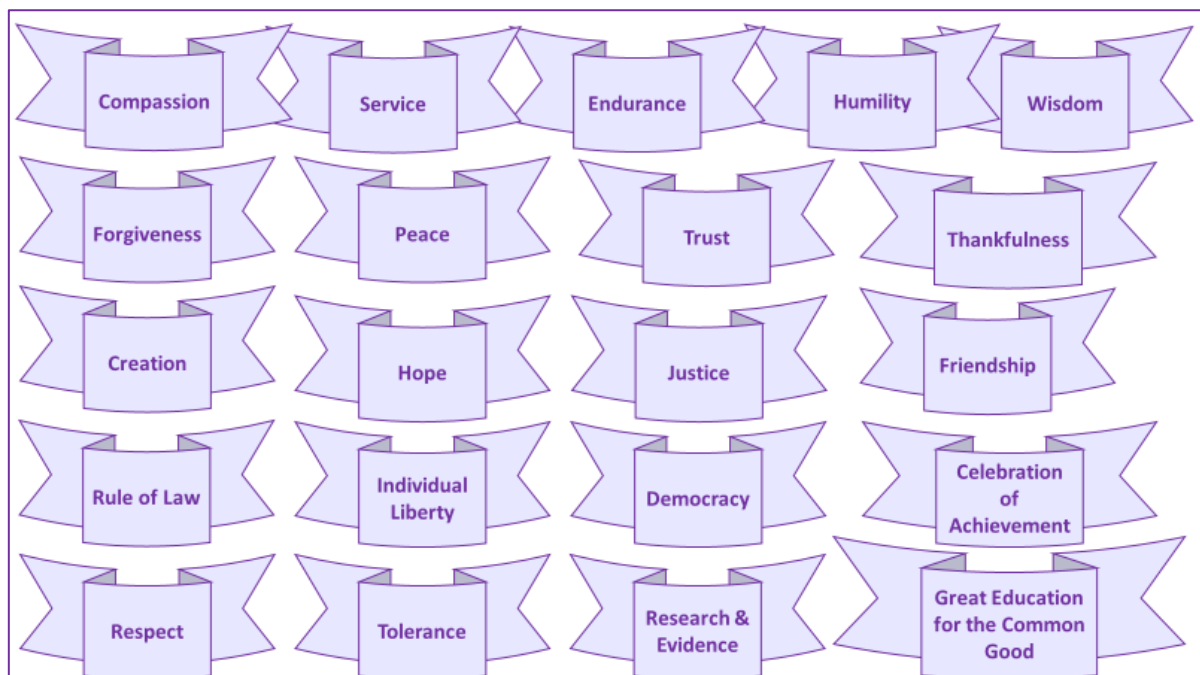
- Successful, engaged learners who are knowledgeable, skilled, enjoy learning, make progress and achieve
- Confident, articulate individuals who can lead safe, healthy and fulfilling lives
- Responsible citizens who make a positive contribution to society

## Under-pinned by values

The Learn-AT core purpose of *Learning* and core value of *Fellowship*

and

values taken from Christian, Humanist and British cultural traditions:



## Curriculum and Pedagogy

*Learn what and learn how'*

*Learning is a change in  
long-term memory*

Kirschner, Sweller & Clark,  
2006

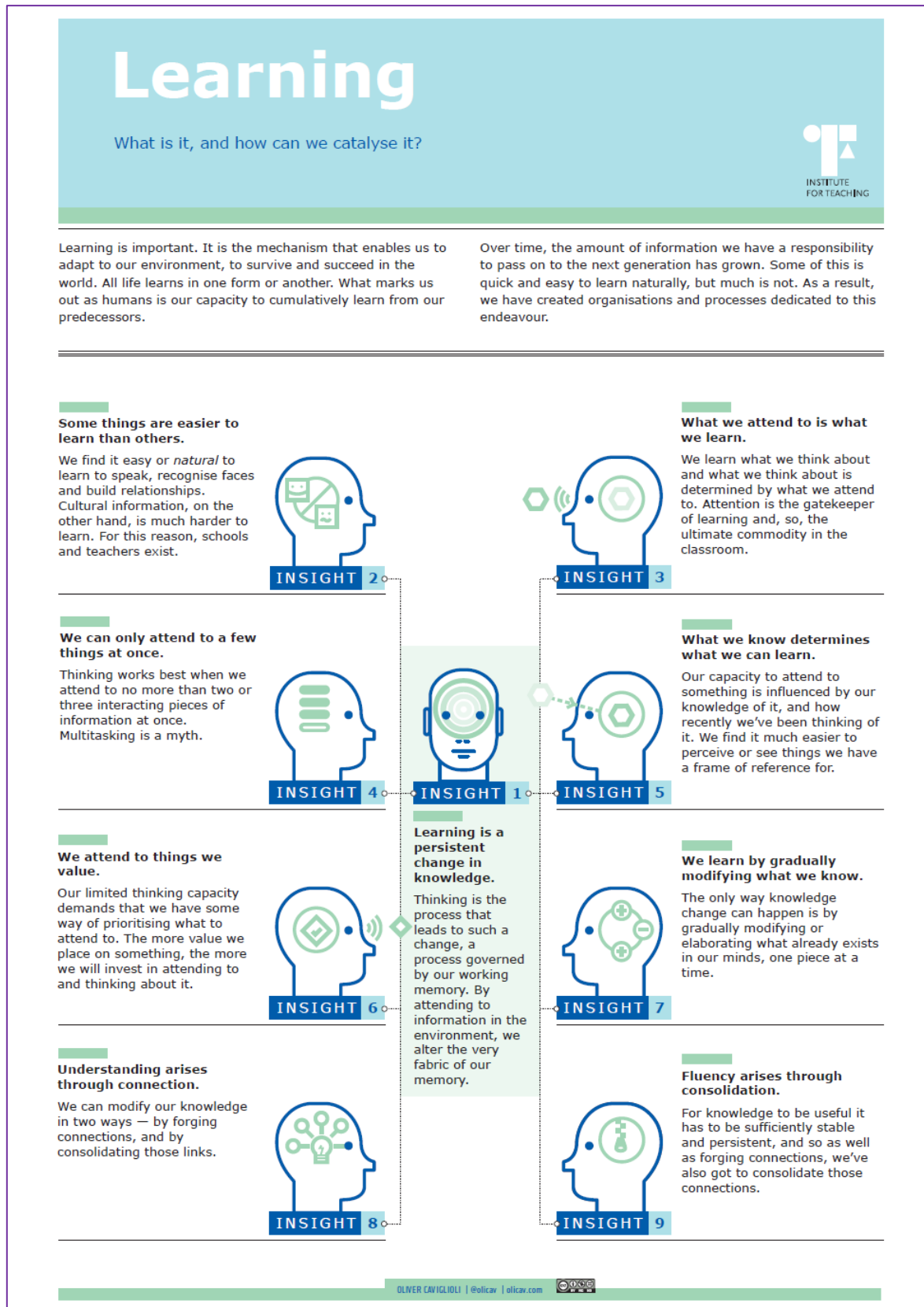
*Memory is the residue of  
thought*

Willingham, 2009

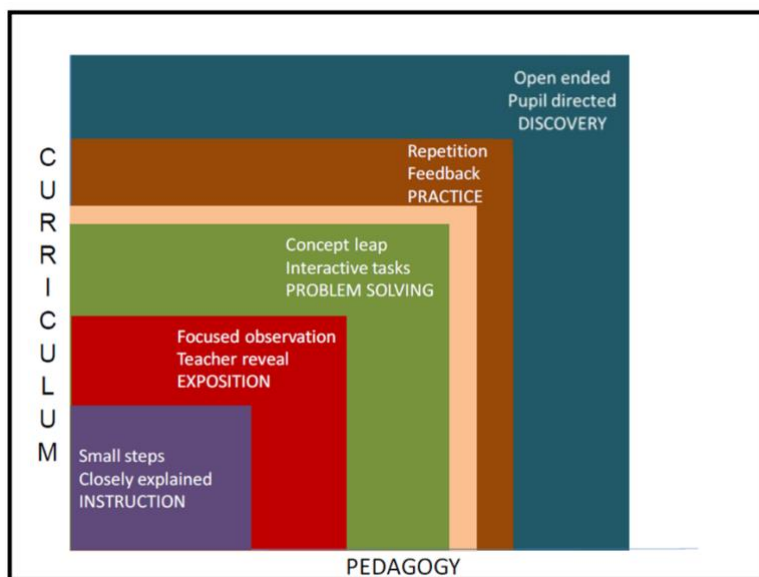


During our deliberations, we have found it impossible to divorce consideration of curriculum from discussion of pedagogy. Dylan Wiliam says that curriculum at the achieved level *is* pedagogy (2016). They are intrinsically linked. Learning can be defined as a change in the long-term memory and memory as the residue of thought (Sweller et al, 2006; Willingham, 2009). This means that we must design a curriculum that provides pupils with comprehensive and foundational knowledge but ensure that it is taught in such a way that secures that knowledge in long-term memory. In this way it can be used to support the development of skills, built on and applied later. To do that we need to make sure pupils think deeply about their learning. Superficial curriculum 'delivery' is not enough. Our pupils deserve deep learning.

This poster summarises and synthesises some recent research relating to the nature of learning (McRea, Caviglioli 2018):

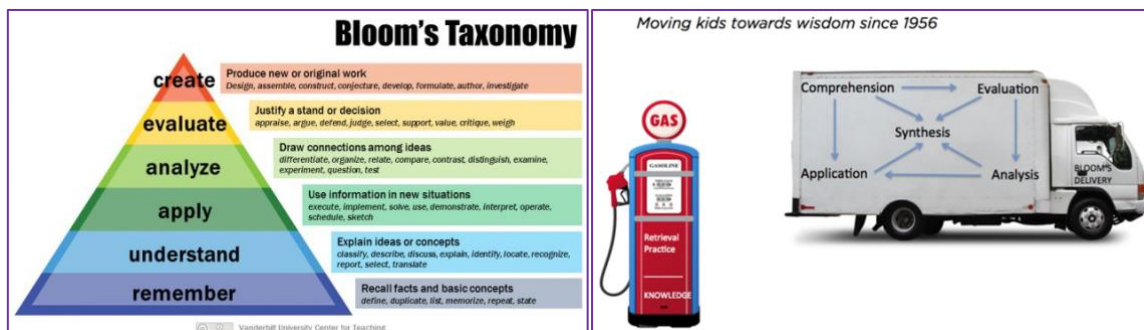


Mick Waters uses this diagram to illustrate the ways in which teachers can use pedagogy to teach the curriculum:



He suggests that the pedagogical cycle involves explicit teaching of an element of knowledge, or a key concept, and develops conceptual understanding and/or deep learning through a process of explicit instruction, exposition, problem-solving, deliberate practice and inquiry.

Doug Lemov (2016) explains that Bloom's Taxonomy is often misinterpreted – that Bloom placed knowledge and remembering facts at the base of his pyramid to indicate its essential place as the foundation required for the other elements to be possible. He suggests that Bloom's Taxonomy can be re-imagined as a vehicle for facilitating deeper learning:



The Learn-AT curriculum emphasises the essential place of knowledge in learning and its important role in supporting the development of domain-specific skills, competencies and non-cognitive capacities such as attitudes, attributes and dispositions. The curriculum therefore has three key and interwoven strands:

- Core knowledge and understanding
- Skills and competencies
- Attitudes, attributes and dispositions

We consider core knowledge to include:

- Disciplinary and substantive knowledge in subject domains

- Declarative and Procedural knowledge
- Social, moral and cultural knowledge
- Broad vocabulary to support rich understanding and cognitive schema
- Big ideas that shape the world
- Key concepts

(see Appendix 8: Knowledge Glossary)

Core skills and competencies include:

- Skills such as literacy, numeracy, digital, personal, social, emotional, learning and thinking skills, meta-cognition, physical, moral, spiritual...
- The Six C's – competencies for deeper learning:
  1. Critical thinking and problem solving
  2. Communication
  3. Creativity and imagination
  4. Character Education
  5. Citizenship
  6. Collaboration

We value highly the development of non-cognitive capacities such as:

- Determination
- Adaptability
- Flexibility
- Confidence
- Risk-taking
- Enterprise
- Self-regulation
- Emotional resilience
- Spiritual awareness
- Tolerance
- Kindness
- Curiosity

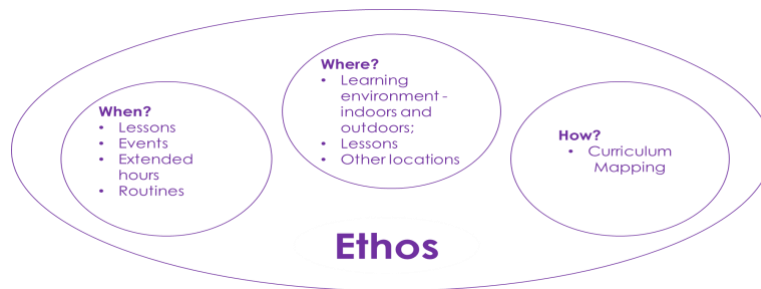
We believe these are most effectively developed within the context of a rich, rounded and rigorous, coherent curriculum, rather than taught discretely or in isolation (Tough, 2016).

## Organisation of Learning

Mick Waters defines the curriculum as 'all the stuff you learn in school'. Organising something so all-encompassing is complex and involves many inter-relationships.

This diagram acknowledges the influence of school culture and ethos on all aspects of school life and illustrates the ways in which the primary curriculum is organised:





## Equity

We are committed to equity and equality of opportunity, entitlement and experience for all pupils, regardless of their social or cultural background, race, ethnicity, religion, gender or ability. In the context of curriculum and pedagogy this means:

- We have consistently high expectations and set high standards for all pupils. All pupils will experience challenge, regardless of their ability or prior attainment.
- We are committed to a 'Mastery' approach to curriculum and pedagogy. This means we do not discriminate on grounds of prior attainment or ability. We intervene to provide additional support or teaching and learning time so that every child can achieve and make good progress. We teach key concepts to mastery and provide opportunities for learners to achieve deeper understanding. By integrating the 6C's and Bloom's Taxonomy (re-interpreted with knowledge as the foundation; see Appendix 6), teachers support children of all abilities to secure and consolidate their foundational knowledge and deepen their learning.
- We are committed to excellence in provision for pupils with SEND. We expect them to make good progress from their starting points. We provide a high-quality curriculum that meets their specific learning needs and promotes their well-being.

## Evidence

The Learn-AT curriculum is research evidence-informed. Its emphasis on knowledge derives from research in cognitive science. In addition, we are committed to implementing research-informed pedagogies such as:

- Formative assessment strategies embedded in teaching and learning
- Development of metacognition and self-regulation
- Balance of direct and guided instruction and inquiry learning – recognising that inquiry-learning requires secure domain knowledge
- Use of assessment and evidence to evaluate impact of teaching on learning.

## Engagement

Because we want pupils to remember what we teach, we want them to think about their learning. Thinking requires authentic engagement. We use a range of strategies to promote deeper learning and engagement:

- Integration of the 6Cs in all aspects of the curriculum (Fullan, Quinn 2018)
- Authentic purposes and contexts for learning (Berger 2006)
- Emphasis on first-hand experience and curricular enrichment following foundational knowledge development

- Purposeful, structured play in the early years; drama, strong emphasis on outdoor learning (e.g. Forest School), PE, sport and the Arts.
- Pupil agency, autonomy, choice and voice
- Strong, coherent cross-curricular connections

### Faculties, Domains and Subjects

The Cambridge Primary Curriculum Review (Alexander, 2009) organises subjects into eight domains of learning:

1. Language, Oracy and Literacy
2. Mathematics
3. Science and Technology
4. Place and Time
5. Arts and Creativity
6. Physical and emotional health
7. Faith and Belief
8. Citizenship and Ethics

For organisational purposes we have organised those domains into four faculties:

Faculty	Domain	Subject
STEM	Mathematics	Mathematics
		Science
	Science and Technology	Design
		Computing
Arts	Language, Oracy and Literacy	English
		Languages
	Arts and Creativity	Art
		Music
Wellbeing	Citizenship and Ethics	Drama
		PSHE/SRE
	Physical and Emotional Health	Philosophy
		PE
Humanities	Place and Time	Sport/Outdoor Education/Forest School
		Geography
	Faith and Belief	History
		RE
		Philosophy

In the same way that we want our pupils to learn and to remember what they are taught, we want them to develop automaticity and fluency in core skills. Research evidence suggests strongly that fluency in skills such as phonics for reading and writing, cursive handwriting, automatic recall of basic number facts, spellings and technical aspects of writing such as punctuation reduces the cognitive load and frees up cognitive space for further learning. Fluent writing can be a useful tool for thinking across the curriculum. Fluent reading combined with a broad vocabulary supports understanding across all domains. Reading and writing are the cutlery pupils need to access the curriculum throughout their education. Our aim is for all pupils to master these skills and the foundational knowledge they need to build age-appropriate expertise in each domain of learning.

This diagram illustrates the Mastery Learning Cycle for mathematics:



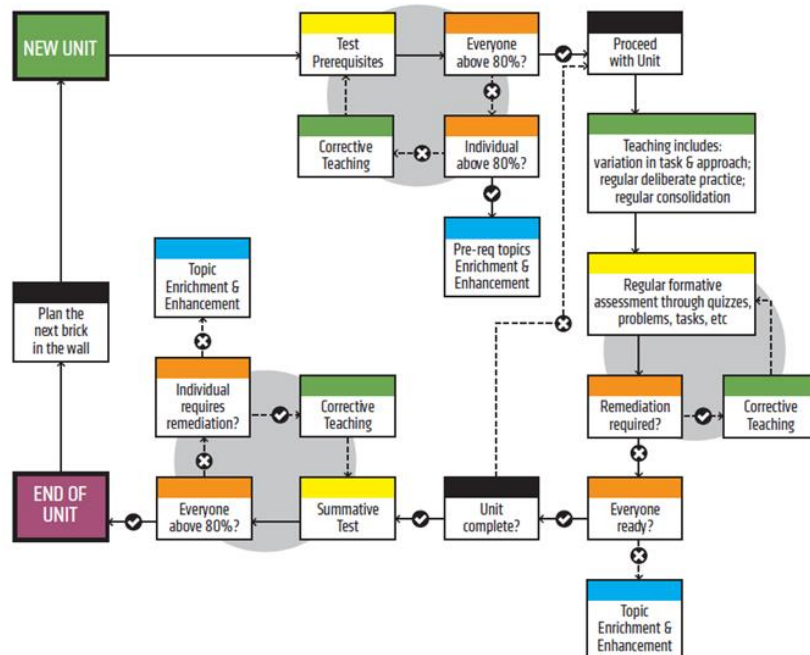
# MASTERY LEARNING CYCLE

OLIVIA VISUALS  
OLIVER CAVALLI  
@olivia | oliviacav.com

Mark McCourt

@EmathsUK

<https://emaths.co.uk>



## KEY

Assessing	Teaching	Decision	Non-compulsory content	Process
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### New unit

The planning, design and sequencing of units is important to ensure that, as the journey through mathematics progresses, new concepts and learning is being built on top of appropriate foundations.

### Test prerequisites

Test design is critical here. Often, tests used in mathematics education reveal little about whether a child has actually grasped a concept or not — rather, tests tend to reveal whether a child can repeat something they have been shown. Performance is not a good proxy for learning!

### Everyone above 80%?

It is tempting to move on without this benchmark being reached. After all, teachers have internal and external pressures on them, which encourage behaviours of moving through content quickly. A fear can exist that content will not be covered. However, although early units will typically take 40% more teaching time, this time is recouped later in the course, when pupils will be able to travel more quickly through units because the prerequisites are truly secure. The threshold of 80% is only as useful as the design of the questions / tasks / problems. Designed badly, 80% (or any other mark) can be utterly meaningless.

### Corrective Teaching

This 'corrective teaching' must be distinct from prior attempts to teach the concept, which the individual failed to grasp. A different approach is deployed at each cycle.

### Teaching includes...

There are aspects of school level mathematics that pupils must acquire fluency in if they are to be able to access the rest of the subject and move to greater expertise in more demanding situations. The fundamental, non-negotiables are:  
1. Numerosity. 2. Place value. 3. Base 10 system.  
4. Arithmetic. 5. Proportional reasoning

### Regular formative assessment...

It is the design of these tasks, questions, problems, quizzes that is key to success. Formative assessment design is intellectually demanding and complex. Matching the concepts with intelligent assessment questions is high priority. These questions must reveal whether or not an individual has grasped the concept.

### Topic Enrichment and Enhancement

Pupils should be given real opportunities to be intellectually challenged. They should be able to celebrate their own depth of knowledge and success, by grappling with significantly complex problems. This must include opportunities to conjecture, generalise and reason.

### Summative Test

A successful pass in the summative test should be equally rewarded and celebrated, regardless of when the pupil passes. A good analogy here is a driving test. A driver is not considered less of a driver because they passed on their third test rather than their first.

### Plan the next brick in the wall

Like a jenga puzzle, new mathematical learning rests on earlier mathematics. The 'bricks' must be carefully planned - a pathway that makes sense and builds the wall appropriately - if the course (rather than just a unit) is to be successful.

In addition to these core skills, teachers integrate the teaching of domain and subject specific skills such as:

- Music
- Computing
- Design
- PE/sport
- Map reading (Geography)
- Interpreting evidence from primary sources (History)
- Understanding the principles of fair testing (Science and Technology)
- and many more...

## Vocabulary and Oracy

Vocabulary and oracy development have an essential role to play in addressing disadvantage. For all pupils, regardless of background, a broad vocabulary is essential to support comprehension of spoken language and complex texts (Willingham, 2017; Hirsch, 2016; Beck, McKeown, 2013; Quigley, 2018). We develop Tier 1, Tier 2, and Tier 3 vocabulary through explicit teaching, for example through Word Study, linked to the teaching of spelling, by explicit teaching of subject specific specialist vocabulary in context, by championing high-quality dialogue with all pupils, and by promoting a **high volume of independent reading** (Allington 2016). We want all children to read independently and at length every day, in school. This is particularly important for children from disadvantaged backgrounds who may not have the opportunity to do this at home.

Reading is an essential skill that unlocks doors to learning, builds vocabulary, domain, social and cultural knowledge and empathy; reading is key to social mobility. Research suggests that these aspects of a reading curriculum are significant:

- systematic synthetic phonics to support early decoding fluency
- Volume of reading
- Oral language and vocabulary
- Criticality
- The development of metacognitive comprehension strategies
- Links to wider curriculum content – fiction and non-fiction
- Strong links to the teaching of writing

## Oracy

If reading is key, oracy is central. Without fluency in spoken language and the ability to understand fluent spoken language, children will struggle to achieve in school and in life.



The Learn-AT curriculum puts a strong emphasis on the integration of opportunities to develop oracy skills across all domains of learning.

## The Six C's



Often described as 21<sup>st</sup> Century skills, at Learn-AT we don't think the 6 C's are any more pertinent to the 21<sup>st</sup> century than all the others. We think these skills are universal and essential for human innovation and creativity. However, we think they should be developed in domain contexts, integrated across the curriculum and build on foundational knowledge, as tools for developing profound engagement and deeper learning.

'Deep learning is valuable learning that sticks...is good for all, but it is especially powerful for those most alienated from the traditional schooling system' (Fullan et al, 2018, p.xvii)

'The crucial discriminator of deep learning is the depth of acquisition of the new competencies'

'The movement toward increasingly complex acquisition of the 6 Cs must be the anchor that drives the learning design and what makes the learning deep.' (Fullan et al, 2018, p69)

## **The Six Cs are:**

### **Character**

- Learning to learn
- Grit, tenacity, perseverance and resilience
- Self-regulation, responsibility and integrity

### **Citizenship**

- Thinking like a global citizen
- Considering global issues based on deep understanding of diverse values and worldviews
- Genuine interest and ability to solve ambiguous and complex real-world problems that impact human and environmental sustainability
- Compassion, empathy and concern for others

### **Collaboration**

- Working interdependently and synergistically in teams
- Interpersonal and team-related skills
- Social, emotional and intercultural skills
- Managing team dynamics and challenges
- Learning from and contributing to the learning of others

### **Communication**

- Communicating effectively with a variety of styles, modes and tools including digital
- Communication designed for different audiences
- Reflection on and use of the process of learning to improve communication

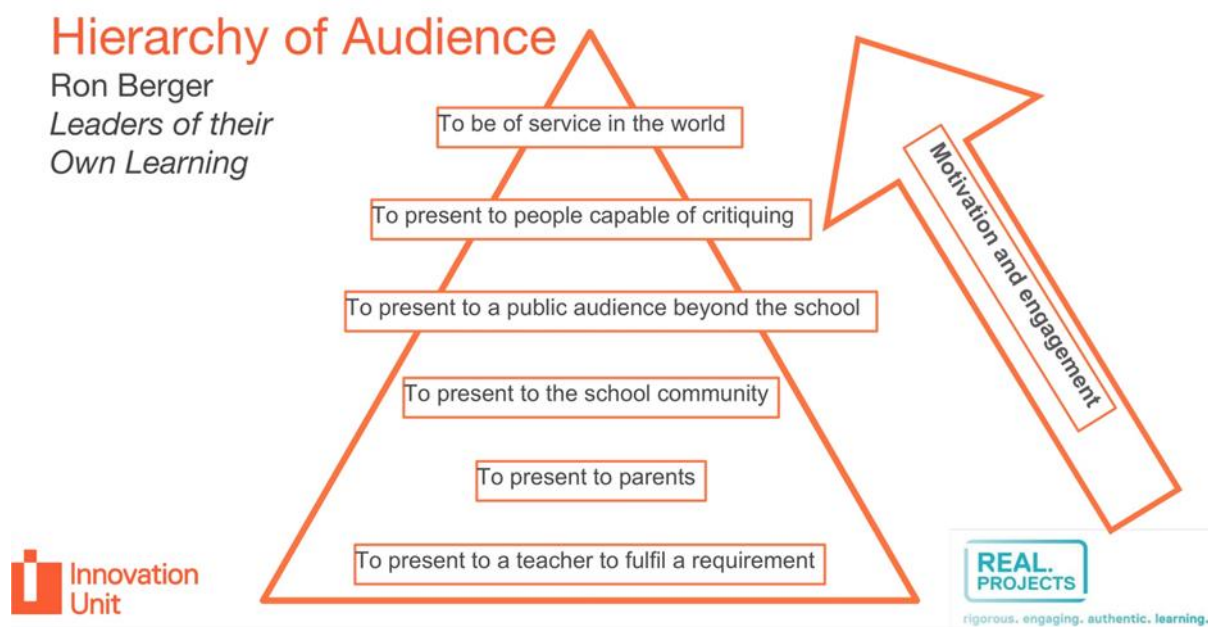
### **Creativity**

- Having an entrepreneurial eye for economic and social opportunities
- Asking the right inquiry questions
- Considering and pursuing novel ideas and solutions
- Leadership to turn ideas into action

### **Critical Thinking**

- Evaluating information and arguments
- Making connections and identifying patterns
- Problem solving
- Constructing meaningful knowledge
- Experimenting, reflecting and acting on ideas in the real world

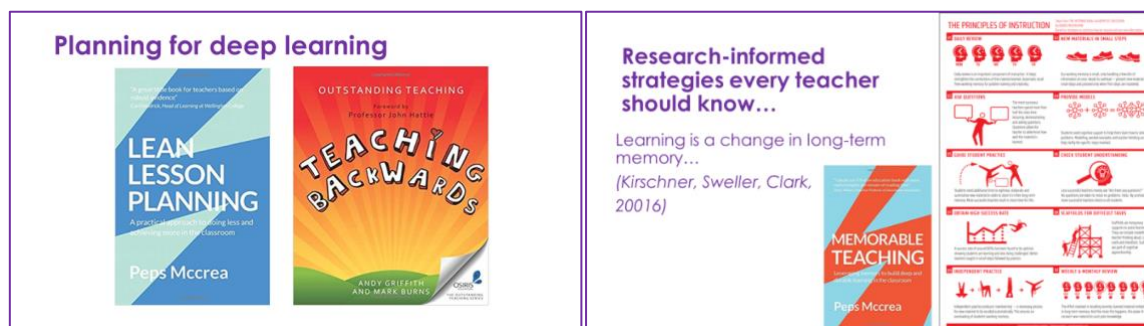
Ron Berger (2014) talks about deeper instruction and advocates the use of the 'hierarchy of audience' to provide authentic contexts for pupil engagement and deeper learning:



Mantle of the Expert (Heathcote, 1995; Taylor, 2016) and other drama techniques and strategies can also help teachers to provide engaging and authentic contexts for pupil learning.

## Planning for Deep Learning

Teachers plan coherent sequences of lessons which lead to tangible outcomes over extended periods of time. Outcomes can be extended pieces of writing, including essays based on curricular topics in history and geography for example, extended pieces of narrative, expository or discursive writing in English, or presentations, speeches etc. Journaling is used in mathematics to support the development of reasoning, problem-solving and deep learning. Useful guidance on effective planning can be found here:



This poster summarises Barak Rosenshine's Principles of Instruction:

# THE PRINCIPLES OF INSTRUCTION

Taken from THE INTERNATIONAL ACADEMY OF EDUCATION

By BARAK ROSENSHINE

Based on strategies to optimise how we acquire and use new information

## 01 DAILY REVIEW



Daily review is an important component of instruction. It helps strengthen the connections of the material learned. Automatic recall frees working memory for problem solving and creativity.

## 02 NEW MATERIALS IN SMALL STEPS



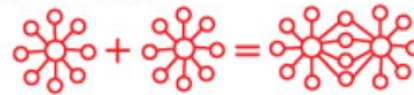
Our working memory is small, only handling a few bits of information at once. Avoid its overload — present new material in small steps and proceed only when first steps are mastered.

## 03 ASK QUESTIONS



The most successful teachers spend more than half the class time lecturing, demonstrating and asking questions. Questions allow the teacher to determine how well the material is learned.

## 04 PROVIDE MODELS



Students need cognitive support to help them learn how to solve problems. Modelling, worked examples and teacher thinking out loud help clarify the specific steps involved.

## 05 GUIDE STUDENT PRACTICE



Students need additional time to rephrase, elaborate and summarise new material in order to store it in their long-term memory. More successful teachers built in more time for this.

## 06 CHECK STUDENT UNDERSTANDING



Less successful teachers merely ask "Are there any questions?" No questions are taken to mean no problems. False. By contrast, more successful teachers check on all students.

## 07 OBTAIN HIGH SUCCESS RATE



A success rate of around 80% has been found to be optimal, showing students are learning and also being challenged. Better teachers taught in small steps followed by practice.

## 08 SCAFFOLDS FOR DIFFICULT TASKS



Scaffolds are temporary supports to assist learning. They can include modelling, teacher thinking aloud, cue cards and checklists. Scaffolds are part of cognitive apprenticeship.

## 09 INDEPENDENT PRACTICE



Independent practice produces 'overlearning' — a necessary process for new material to be recalled automatically. This ensures no overloading of students' working memory.

## 10 WEEKLY & MONTHLY REVIEW



The effort involved in recalling recently-learned material embeds it in long-term memory. And the more this happens, the easier it is to connect new material to such prior knowledge.

Summarised by Oliver Caviglioli | @olivercaviglioli | teachingnow2s.com

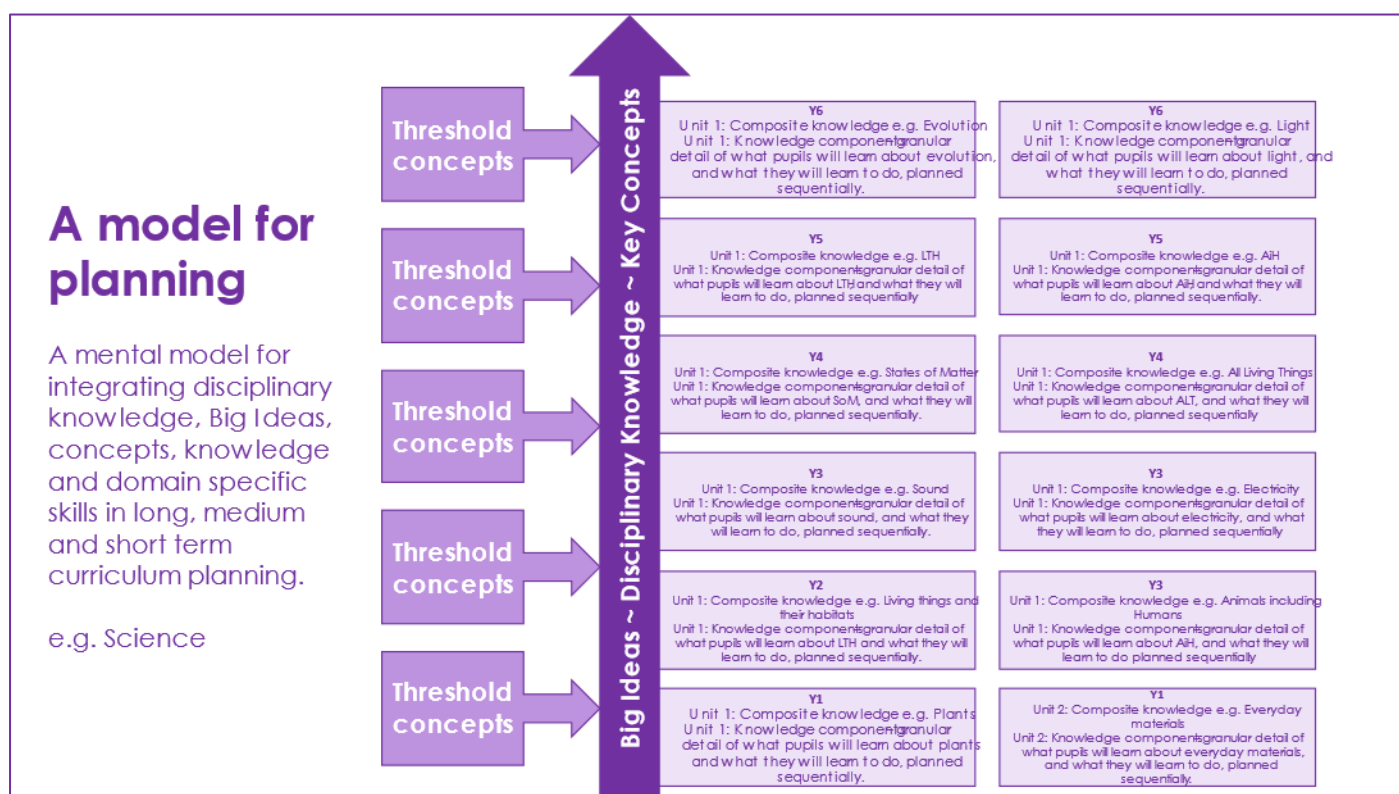
## The Bottom Line – Unconditional Positive Regard

**We treat every pupil, without exception, with unconditional positive regard.**

**Practising unconditional positive regard means accepting and respecting others as they are without judgment or evaluation.**

There are curriculum frameworks for each subject to support an approach to planning which integrates disciplinary knowledge, the big ideas of each subject, progress in conceptual understanding and substantive knowledge (see Appendix 8: Knowledge Glossary). CPG members and Learn-AT Subject Leaders worked together to develop a planning template to support curriculum and subject leaders to design precise, coherent and detailed sequences of learning for each subject during Phase Three. The subject frameworks indicate the big ideas, key concepts and composite knowledge essential to coherent curriculum intent for each subject. Each school develops schemes of work for each subject which outline the detail of the knowledge components for each subject, in each year group. Support for teachers to plan coherent sequences of learning across units of work is provided in Appendix 9.

Framework documents and associated curriculum plans, schemes of work, resources and guidance are stored in the **Learn-AT Curriculum Cupboard** [www.learnatcurriculum.uk](http://www.learnatcurriculum.uk)



Here is an example of the History Curriculum Framework:

Learn-AT History Curriculum Framework		Big Ideas and Concepts of History					
		Over-arching Concept					
		Fundamentally important idea that events happen in order. This can be a challenging concept for young children to grasp. Chronology is important because the exact order in which events occur helps us understand the cause and the effect of those events, and thereby allow us to step back and view the "big picture" of history - how and why events unfold in the way they do, and how they are related.					
		1	2	3	4	5	6
		Continuity and Change	Cause and Effect	Perspectives	Empathetic Understanding	Significance	Contestability
		Historians recognise that over time some things change, and some things stay the same. Examples of continuity and change can be seen across every civilisation and any given period of time. They can be seen in some aspects of everyday life that has continued across centuries or in changes in religious belief that has affected an entire society's culture.	The concept of cause and effect is used by historians to identify the events or developments that have led to particular actions or results. Sometimes the link is clear. Often the link is less obvious or more complicated. Sometimes there are many causes and many effects.	The concept of perspectives is an important part of historical inquiry. A person's perspective is their point of view, the position from which they see and understand events. People will have different perspectives about an event depending on factors such as age, gender, social position, beliefs and values. Historians try to understand the perspectives of people from the past even though they may differ from their own. People from the past will have had different perspective about the same event. Writers and historians also have perspectives that can influence their interpretations of the past.	Empathetic understanding is the ability to understand and appreciate particular events or actions from someone else's point of view. In history, it is about trying to understand the thoughts and feelings of people who lived at different times and in very different cultures. It helps us to understand the impact of past events on individuals or groups and to understand what has motivated them to act in particular ways.	The concept of significance relates to the importance historians assign to aspects of the past, such as: <ul style="list-style-type: none"> <li>Events</li> <li>Development and movements</li> <li>Individuals or groups</li> <li>Discoveries and historical sites</li> </ul> Historians make decisions about what is significant and worth studying. They ask questions about the impact of events, discoveries, movements, individuals and sites on the world, in their own time and later.	The concept of contestability is about interpretations of the past that are the subject of debate among historians. Historians have access to different sources and sometimes study the same sources and reach different conclusions. Often there is no right answer. Technology can help historians reach a more complete understanding of the past.
Key/Threshold Concepts (Service Stations)	Y6						
	Y5						
	Y4						
	Y3						
	Y2						
	Y1						
	EYFS						

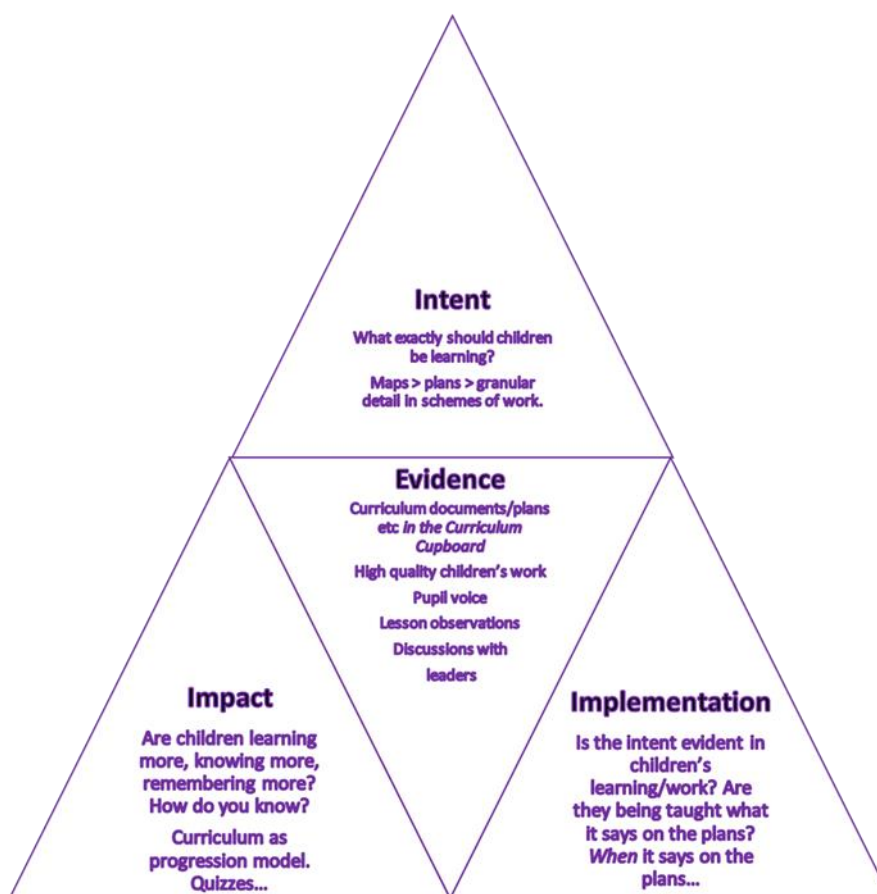
KS1			
Historical Big Ideas and Threshold Concepts			
Curriculum designers take account of big ideas and pertinent threshold concepts to plan a coherent, 'spiral' curriculum for history which secures mastery and progression in conceptual understanding and builds knowledge from 'novice' to 'expert'.			
Teachers take account of big ideas and related threshold concepts in their planning for history lessons to secure mastery of subject knowledge, year on year and over time.			
Disciplinary Knowledge		Six Cs, procedural knowledge and domain specific Skills	Key themes
Know about...	In the context of:	Know how to:	Develop understanding over time of key themes and ideas such as:
Changes within living memory	Internet Technology Food Toys Homes Fashion etc.	<b>Six Cs:</b> Provide opportunities for pupils to collaborate, think critically and solve problems, develop creativity, communicate, develop their understanding of citizenship, build character.  <b>Procedural knowledge and domain specific skills:</b> <ul style="list-style-type: none"> <li>Use words and phrases about the past</li> <li>Share basic opinions about the past</li> <li>Put events into chronological order</li> <li>List differences between their lives and the lives; of people in the past</li> <li>Use sources to answer simple questions about the past.</li> <li>Share basic opinions about the past</li> </ul>	<ul style="list-style-type: none"> <li>Extinction</li> <li>Ancestry</li> <li>Empire</li> <li>Independence</li> <li>Settlement</li> <li>Invasion</li> <li>Rebellion</li> <li>Revolution</li> <li>Protest</li> <li>Tyranny</li> <li>Democracy</li> <li>Evidence</li> <li>Source</li> <li>Monarchy</li> <li>Republic</li> <li>Freedom</li> <li>Slavery</li> </ul>
Significant global and national events beyond living memory	Extinction of the Dinosaurs Fire of London Great Plague Civil War Discovery of America Circumnavigation of the World Victorians – The Education Act Votes for Women WW1 and WW2 Coronation Moon Landing		
Significant people from the past	King John William Caxton Christopher Wren Samuel Pepys Florence Nightingale Mary Seacole Elizabeth Fry Martin Luther King Ghandi Rosa Parks Nelson Mandela Christopher Columbus Queen Victoria Neil Armstrong Tim Berners-Lee		
Significant local events	Civil War Canals Railways Richard III Castles Evacuees Refugees		







Evaluation aims to triangulate evidence for effective curriculum intent (plans and schemes of work), implementation (in teaching and learning) and impact (are children learning and remembering more?)



**Accountability measures relate to:**

- High standards of achievement – attainment and progress – in all curriculum subjects. In Maths and English Learn-AT sets two *universal objectives*:
  - All pupils (except for those with a specific cognitive impairment) regardless of their background, achieve at least the standard expected for their age.
  - All pupils, including those with SEND, make very good progress from their starting points
- Good behaviour and attendance
- Civic participation
- Healthy lifestyles
- Sustained engagement in education

## Appendix 1: Principles, Features and Rationale of the Learn-AT Curriculum and Pedagogy Framework

Principle	Feature	Rationale	What does this look like in practice?
<b>Coherent, domain-specific skills development</b>	<ul style="list-style-type: none"> <li>Strong emphasis on oracy, literacy and numeracy development.</li> <li>Securing early, fluent reading and writing is prioritised</li> <li>Subject specific skills taught in context.</li> <li>Six C's integrated in all facets of the curriculum and developed in the context of curriculum domains.</li> <li>Emphasis on development of metacognition and self-regulation and other non-cognitive attributes e.g. resilience in curriculum domain contexts.</li> </ul>	<b>Mind in Society</b> (Vygotsky 1978) <b>Words and Minds</b> (Mercer 2000) <b>Interthinking</b> (Littleton, Mercer 2013) <b>Deep Learning</b> (Fullan, Quinn, McEachen 2018) <b>How to Build a World Class Education System</b> (Schleicher 2018) <b>An Ethic of Excellence</b> (Berger 2003) <b>Learning that Lasts</b> (Berger 2016) <b>Handwriting in Early Childhood</b> (Zaner-Bloser 2017) <b>Handbook of Writing Research</b> (McArthur 2016) <b>Early Literacy Research</b> (Reutzel 2015) <b>Exploring the relationship between letter recognition and handwriting in early literacy development</b> (Reutzel et al 2017) <b>Writing Revolution</b> : a guide to advancing thinking through writing across all subjects and grades (Hochman, Wexler 2017) <b>Early Reading Instruction</b> (McGuinness 2006) <b>The Power of Reading</b> : Insights from the Research (Krashen 2004) <b>What Really Matters When Working with Struggling Readers</b> (Allington, 2013) <b>The Reading Mind</b> (Willingham 2017) <b>Metacognition and Self-Regulation</b> (EEF 2018) <b>Helping Children Succeed: What Works and Why</b> (Tough, 2016) <b>Bloom's Taxonomy Delivery Service</b> (Lemov, 2017) <b>Webb's Depth of Knowledge Continuum</b> (Hess, 2013)	<ul style="list-style-type: none"> <li>Handwriting fluent and automatic, <i>early</i>.</li> <li>English front and centre in curriculum planning.</li> <li>High volume of independent reading and writing every day.</li> <li>Planning and provision for development of Six C's integrated into all curriculum domains.</li> <li>Authentic purposes for learning and authentic audiences for curriculum products.</li> <li>Open-ended questions prompt thinking, conversation, dialogue and extended answers.</li> <li>Challenging work creates productive struggle.</li> <li>Opportunities for reasoning and problem solving are embedded into all subjects, especially mathematics.</li> <li><i>Secure knowledge is the foundation</i> for the development of skills</li> <li>Generic skills are not taught in isolation</li> <li>Grammar is taught in the context of writing for authentic purposes and audiences.</li> </ul>
<b>Curriculum coherence</b>	Teaching is planned over sequences of lessons towards clear overarching learning objectives and outcomes.	<b>Teaching Backwards</b> (Griffiths, 2014) <b>Lean Planning</b> (McRea 2018) <b>Writing Revolution</b> (Hochman, Wexler 2017)	<ul style="list-style-type: none"> <li>Sequences of learning are evident in pupils' work.</li> <li>Coherent, incremental introduction of key concepts, knowledge and skills.</li> <li>Consistent, high expectations in literacy across the curriculum.</li> <li>Coherent links are made between subjects to support deeper learning, for example, foundation subject content in texts and writing topics in English and application of and attention paid to literacy skills in foundation subjects and writing is used as a tool for thinking in maths journaling.</li> </ul>
<b>Knowledge-rich</b>	Knowledge organisers with key facts and vocabulary placed at the heart of curriculum topics.	<b>Cultural Literacy</b> (Hirsch 1984) <b>Why Knowledge Matters</b> (Hirsch 2016) <b>Seven Myths of Education</b> (Christodoulou, 2013) <b>What is a Curriculum and What Can it Do?</b> (Young 2014) <b>On the Powers of Powerful Knowledge</b> (Young, Muller 2013) <b>Knowledge and the Curriculum</b> (Simons, Porter 2015)	
<b>Teaching for Mastery/Mastery Learning</b>	Teachers adopt a mastery approach to teaching and learning in all subjects.	<b>Closing Achievement Gaps</b> : Revisiting Benjamin Bloom's Learning for Mastery (Guskey 2007) <b>Mastery Learning Cycle</b> : Mark McCourt 2018 <b>Learning without Limits</b> (Peacock, 2016) <b>Learning without Labels</b> (Rowland, 2017) <b>Mastering Mathematics</b> (Drury, 2014)	<ul style="list-style-type: none"> <li>Fewer topics are taught but in greater depth</li> <li>Rapid intervention ensures that children who need additional support catch up quickly</li> <li>Effective pre-teaching means all children can access the main lesson.</li> <li>Differentiation by support and intervention to secure understanding and achievement</li> <li>High expectations for all pupils regardless of prior attainment.</li> <li>All pupils without significant SEND are expected to achieve the expected standard or better at the end of each Key Stage.</li> <li>All pupils, including those with SEND, are expected to make good progress from their starting points.</li> <li>No grouping/setting by ability.</li> </ul>
<b>Retrieval practice: regular quizzing and cumulative quizzing</b>	Multiple choice quizzes linked to Knowledge Organisers	<b>Ebbinghaus's</b> Forgetting Curve (1885) <b>Retrieval-Based Learning</b> : the need for guided retrieval in elementary school children (Karpicke et al, 2014) <b>Memorable Teaching</b> (McRea, 2017)	Pupils self-quiz using their Knowledge Organisers <ul style="list-style-type: none"> <li>Lessons often start and end with MCQs</li> <li>Teachers ask a lot of closed questions linked to key facts.</li> </ul>
<b>Research-informed Pedagogies</b>	Classroom practice, CPD and leadership support is guided by evidence from authoritative educational research. Practices such as those outlined in What Makes Great Teaching, (Coe et al, 2014) and Rosenshine's principles of instruction are encouraged.	<b>What Makes Great Teaching</b> (Coe et al 2014) <b>Principles of Instruction</b> (Rosenhine, 2012) <b>Why Minimally Guided Instruction Doesn't Work</b> (Kirschner et al 2016) <b>Educational Effectiveness State of the Art Review</b> (Reynolds et al 2014) <b>The New Art and Science of Teaching</b> (Marzano 2017) <b>Understanding how we learn</b> (Weinstein, Sumeracki 2019) <b>Dual Coding for Teachers</b> (Caviglioli, 2019)	<ul style="list-style-type: none"> <li>Lessons are teacher-led.</li> <li>New information in small chunks.</li> <li>Narrative often used to deliver information as a story.</li> <li>Frequent practice/oral rehearsal of key facts/concepts</li> <li>Models, images and scaffolds used to support learning.</li> <li>Where appropriate, the teacher guides further learning and consolidation in small groups.</li> <li>Inquiry learning builds on explicitly taught and secure foundational knowledge</li> <li>Pupils have regular opportunities for deliberate practice.</li> </ul>
<b>End of Unit Essay</b>	Pupils write an extended essay at the end of each curricular topic.	Opportunity to organise knowledge learned in a sustained report or argument. <b>What Will Improve a Student's Memory?</b> (Willingham, 2008) Essay writing skills development.	<ul style="list-style-type: none"> <li>Y1/2: Restate facts they have learned to inform reader about their topic</li> <li>Y3/4: Organise and group ideas into paragraphs to make a persuasive argument.</li> <li>Y5/6: Write a balanced discursive essay, referencing and assessing for and against each point.</li> </ul>
<b>Responsive teaching</b>	Formative assessment is embedded in all lessons.	<b>Embedded Formative Assessment</b> (Wiliam, 2011) <b>Embedded Formative Assessment: Strategies</b> (Wiliam 20) <b>Making Good Progress</b> (Christodoulou, 2016)	<ul style="list-style-type: none"> <li>Clear learning objectives and success criteria</li> <li>Effective questioning</li> <li>Low stakes assessment strategies</li> <li>High quality verbal feedback supports progress in learning</li> </ul>
<b>Enrichment</b>	Curriculum is enriched through first-hand experiences.	Facilitates application, exploration and deepening of learning <b>Arousal Mediated Memories</b> (LaBar, Phelps 1998) Joy!	Visiting speakers, curriculum events, educational trips and visits are organised to enrich curriculum topics, usually towards the end of a topic so that children's learning experience is enhanced by their increased knowledge, following topic teaching.
<b>Authentic purposes for learning</b>	Teachers integrate authentic purposes for learning to their unit planning.	<b>An Ethic of Excellence</b> (Berger, 2003) <b>Learning that Lasts</b> (Berger, 2016); <b>Leaders of their own Learning</b> (Berger, 2014) <b>Deep Learning</b> (Fullan and Quinn, 2018); <b>Four Purposes for Writing</b> (Tidd, Templar-Wilson, 2016) <b>Mantle of the Expert</b> (Taylor 2017)	<ul style="list-style-type: none"> <li>using Michael Tidd's four main purposes for writing;</li> <li>creating projects with genuine purposes in the local community or beyond;</li> </ul> using drama techniques like Mantle of the Expert to engage and motivate children in authentic learning contexts.



## Appendix 2: Curriculum Overview 1

Faculty	Domain	Subject	Cycle 1*		Cycle 2		Cycle 3		Cycle 4	
Arts	Language, Oracy and Literacy	English	Entertain Inform Persuade Discuss		Inform Persuade Discuss Entertain		Persuade Discuss Entertain Inform		Discuss Entertain Inform Persuade	
			Integrated grammar and word study/spelling – planned for progression							
			Handwriting - explicit, direct teaching and daily practice							
			Core Text 1	Core Text 2	Core Text 3	Core Text 4	Core Text 5	Core Text 6	Core Text 7	Core Text 8
	Arts and Creativity	Drama	Unit 1				Unit 3			
		Art			Unit 1				Unit 2	
		Music	Unit 1				Unit 2			
Humanities	Time and Place	Geography, History	Topic 1 History		Topic 2 Geography		Topic 3 History		Topic 4 Geography	
	Faith and Belief	RE	Unit 1		Unit 2		Unit 3		Unit 4	
STEM	Maths	Maths	Unit 1		Unit 2		Unit 3		Unit 4	
	Science and Technology	Science	Unit 1		Unit 2		Unit 3		Unit 4	
		Design			Unit 1				Unit 2	
		Computing	Unit 1				Unit 2			
Wellbeing	Physical and Emotional Health	PE	Unit 1		Unit 2		Unit 3		Unit 4	
	Citizenship and Ethics	PSHE	Unit 1				Unit 2			
		SRE			Unit 1				Unit 2	



## Appendix 3: Curriculum Overview 2

Faculty	Domain	Subject	Cycle 1*	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6
Arts	Language, Oracy and Literacy	English	Entertain Inform Persuade Discuss	Inform Persuade Discuss Entertain	Persuade Discuss Entertain Inform	Discuss Entertain Inform Persuade	Discuss Entertain Inform Persuade	Discuss Entertain Inform Persuade
			Integrated grammar and word study/spelling – planned for progression					
			Handwriting - explicit, direct teaching and daily practice					
			Core Text 1	Core Text 2	Core Text 3	Core Text 4	Core Text 5	Core Text 6
	Arts and Creativity	Drama	Unit 1		Unit 2		Unit 3	
		Art		Unit 1		Unit 2		Unit 3
		Music	Unit 1		Unit 2		Unit 3	
Humanities	Time and Place	Geography, History	Topic 1 History	Topic 2 Geography	Topic 3 History	Topic 4 Geography	Topic 5 History	Topic 6 Geography
	Faith and Belief	RE	Unit 1		Unit 2		Unit 3	
STEM	Maths	Maths	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
	Science and Technology	Science	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
		Design		Unit 1		Unit 2		Unit 3
		Computing	Unit 1		Unit 2		Unit 3	
Wellbeing	Physical and Emotional Health	PE	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
	Citizenship and Ethics	PSHE	Unit 1		Unit 2		Unit 3	
		SRE		Unit 1		Unit 2		Unit 3

\*These exemplar Curriculum Overviews assume a 36-week planned curriculum, allowing 3 weeks for flexibility to finish off unfinished work, provide for individual curriculum requirements specific to the school (Christmas productions, for example). Thirty-six weeks allows for 4 X 9-week topics, running over half term boundaries, or 6 X 6-week topics – or a combination, according to the school's own planning requirements.

## Appendix 4: Metacognition and Self-Regulation Poster



Oliver Caviglioli | OLICAV.com | @olicav



## Appendix Five: Learn-AT Curriculum Framework - Summary

Faculty	Domain	Subject	Curriculum Programme of Study
STEM	Mathematics	Mathematics	Learn-AT Framework + School's adopted scheme of work (Inspire/Maths No Problem/White Rose etc)
		Science	Learn-AT Framework: detailed, coherent schemes of work (C.Such as a starting point)
	Science and Technology	Design	DT Association Projects on a Page <a href="https://www.data.org.uk/resource-shop/projects-on-a-page-full-pack-of-21-planners/">https://www.data.org.uk/resource-shop/projects-on-a-page-full-pack-of-21-planners/</a>
		Computing	Rising Stars Computing Curriculum
Arts	Language, Oracy and Literacy	English	Learn-AT Framework + detailed planning of fiction and non-fiction texts and genres for each year group
		Languages	Detailed, coherent scheme of work
	Arts and Creativity	Art	Learn-AT Framework : detailed, coherent scheme of work
		Music	DfE Model Music Curriculum Charanga/Music Express/Leicester-Shire Music Hub Scheme of Work
		Drama	Integrated within English and performance opportunities
Wellbeing	Citizenship and Ethics	PSHE/SRE	Cambridge PSHE Scheme of Work
	Physical and Emotional Health	PE	Recognised Curriculum/SoW e.g. Val Sabin/Rising Stars Champions/Youth Sports Trust etc) Comprehensive access to sporting opportunities via LSLSSP/Outdoor Education/Forest School
Humanities	Place and Time	Geography	Learn-AT Framework/detailed, coherent schemes of work
		History	Learn-AT Framework/detailed, coherent schemes of work
	Faith and Belief	RE	Leicestershire Agreed Syllabus + Understanding Christianity

## Appendix Six: Learn-AT Linchpins - core entitlement for all Learn-AT pupils

### Learn-AT Linchpins

**EYFS:** High quality, oracy-rich, rounded and rigorous EYFS Curriculum

**KS1/2:** Learn-AT Curriculum and Pedagogy Framework is established – knowledge-rich, coherent and detailed foundation subject schemes of work are developed throughout 2019/20.

**Assessment Framework** is firmly embedded in all year groups.

## English

- Oracy-rich
- Handwriting is automatic and cursive/joined by Y2
- Comprehensive, research-informed reading curriculum - systematic, embedded:
  - Phonics first and fast; fidelity to the chosen programme
  - Up to an hour of accountable, independent reading for purpose and pleasure, daily, embedded in English AND all subject areas; at just the right level for fluent reading.
  - Early emphasis on fluency (KS1 use phonically decodable books until fluency is achieved)
  - All children read aloud to an adult in school at least 3 times per week; disadvantaged pupils read aloud to an adult daily
  - Reading for pleasure pedagogies
  - Metacognitive comprehension strategies taught in whole class and/or guided reading
  - Systematic vocabulary development, in the context of a rich, rigorous and coherent curriculum
  - Teachers read aloud to pupils at least once a day, class novel and non-fiction, rhymes and poetry
  - Reading is embedded in all subjects
- Writing for four main purposes is taught over well-planned sequences of lessons:
  - All pupils write independently and at length every day – in English and/or across the curriculum
- Grammar, punctuation, spelling and vocabulary
  - Word Study is embedded in classroom practice across Y2 and Key Stage 2
  - Grammar and punctuation are taught systematically *in the context of reading and writing*

## Maths

- School follows a recognised mastery scheme of work with fidelity
- Fluency in number facts/bonds and multiplication/division (tables) is prioritised for all pupils
- Key strategies for differentiation within a mastery approach are embedded:
  - Skilful questioning within lessons to promote conceptual understanding (Drury, 2014, Jones, 2014, Guskey, 2009)
  - Identifying and rapidly acting on misconceptions which arise through same day intervention (Stripp, 2014, Maths Hubs, 2015a) (ARK, 2015).
  - Challenging, through rich and sophisticated problems, those pupils who grasp concepts rapidly, before any acceleration through new content. (NCETM, 2014)
  - Use of concrete, pictorial and abstract representations according to levels of conceptual development (Jones, 2014, Drury, 2014)

*Five Myths of Mastery in Mathematics 2015 National Association of Mathematics Advisors*

**Strong sports and creative arts provision including daily singing (with text)**

# RIPPLE

**Research-informed practice, professional learning and the use of evidence**

## Appendix 7: Learn-AT Curriculum Framework Summary

Faculty	Domain	Subject	Curriculum/Scheme of Work
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STEM	Mathematics	Mathematics	Learn-AT Framework + School's adopted scheme of work (Inspire/Maths No Problem/White Rose etc)
		Science	Learn-AT Framework/detailed, coherent curriculum/aligned schemes of work
	Science and Technology	Design	Learn-AT Framework/detailed, coherent curriculum/aligned schemes of work
		Computing	Rising Stars Computing Curriculum
Arts	Language, Oracy and Literacy	English	Learn-AT Framework
	Arts and Creativity	Art	Learn-AT Framework/detailed/coherent SoW
		Music	DfE Model Music Curriculum Charanga/Music Express/Leicester-Shire Music Hub Scheme of Work
Wellbeing	Citizenship and Ethics	PSHE/SRE	Cambridge PSHE Scheme of Work
	Physical and Emotional Health	PE	Recognised Curriculum/SoW e.g. Val Sabin/Rising Stars Champions/Youth Sports Trust etc) Comprehensive access to sporting opportunities via LSLSP/Outdoor Education/Forest School
Humanities	Place and Time	Geography	Learn-AT Framework/detailed, coherent schemes of work
		History	Learn-AT Framework/detailed, coherent schemes of work
	Faith and Belief	RE	Leicestershire Agreed Syllabus + Understanding Christianity

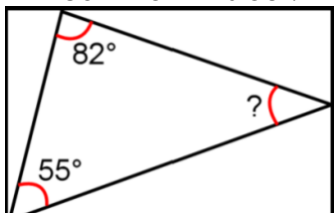
## Appendix 8: Knowledge Glossary

### Knowledge Glossary

#### Epistemology



The philosophical study of the nature, origin, and limits of human knowledge. The term is derived from the Greek epistēmē ("knowledge") and logos ("reason"), and accordingly the field is sometimes referred to as the theory of knowledge, especially with regard to its methods, validity, and scope, and the distinction between justified belief and opinion.				
Knowledge can be				
Disciplinary			Substantive	
<p>Disciplinary knowledge is a curricular term for what pupils learn about how that knowledge was established, its degree of certainty and how it continues to be revised by scholars, artists or professional practice.</p> <p>It is that part of the subject where pupils understand each discipline as a tradition of enquiry with its own distinctive pursuit of truth. For each subject is just that: a product and an account of an ongoing truth quest, whether through empirical testing in science, argumentation in philosophy/history, logic in mathematics or beauty in the arts.</p> <p>It describes that part of the curriculum where pupils learn about the conditions under which valid claims can be made, and associated conventions such as what constitutes evidence or argument in that subject.</p>			<p>Substantive knowledge is the content that teachers teach as established fact – whether common convention, concept or warranted account of reality. You might want pupils to know of crotchets, percentages, the Treaty of Waitangi, Debussy or prokaryotic cells. In calling this 'substantive', we are treating the material presented as givens.</p> <p>'Substantive knowledge is the "stuff" that we know: the facts, concepts &amp; rules that form the building blocks of the various subjects...This "substance" is central to being able to think mathematically, or scientifically, or historically, or to communicate clearly.' Clare Sealy, TES, 11 October 2019</p>	
<p><i>The date of the Treaty of Versailles is a given. Many events before and after the Treaty of Versailles are givens. But attributions of cause, consequence or significance to the Treaty of Versailles are not givens. The humblest of Year 7 history essays is elementary training in argumentation and produces legitimately different conclusions. Moreover, teacher-led, subject-specific research traditions have explored multiple ways of doing this well by blending secure substantive with rich disciplinary knowledge so as to refine pupils' appreciation and practice of historical argument (Foster, 2013).</i></p>				
Knowledge can be				
Declarative to know that			Procedural to know how	
Also known as descriptive, constative, or propositional knowledge				
Concepts	Rules	Facts	Goal directed	Produces actions
<p>In epistemology, descriptive knowledge (also known as propositional knowledge, knowing-that, declarative knowledge, or constative knowledge) is <b>knowledge that can be expressed in a declarative sentence or an indicative proposition</b>. Declarative knowledge includes concepts and rules as well as facts and will allow us 'to recognize things, make judgments, classify things, discriminate differences and identify similarities.' So for example, it is declarative knowledge that lets us recognise a tree as a tree, judge that it is a mighty fine tree, or an old tree, classify it as a Horse Chestnut, discriminate how it is</p>			<p>Procedural knowledge is knowledge that produces action, that enables us to do stuff. It is goal directed. Procedural knowledge enables us to do things. Most obviously, it involves motor behaviour; learning to play the guitar or catch a ball are both forms of procedural knowledge.</p>	

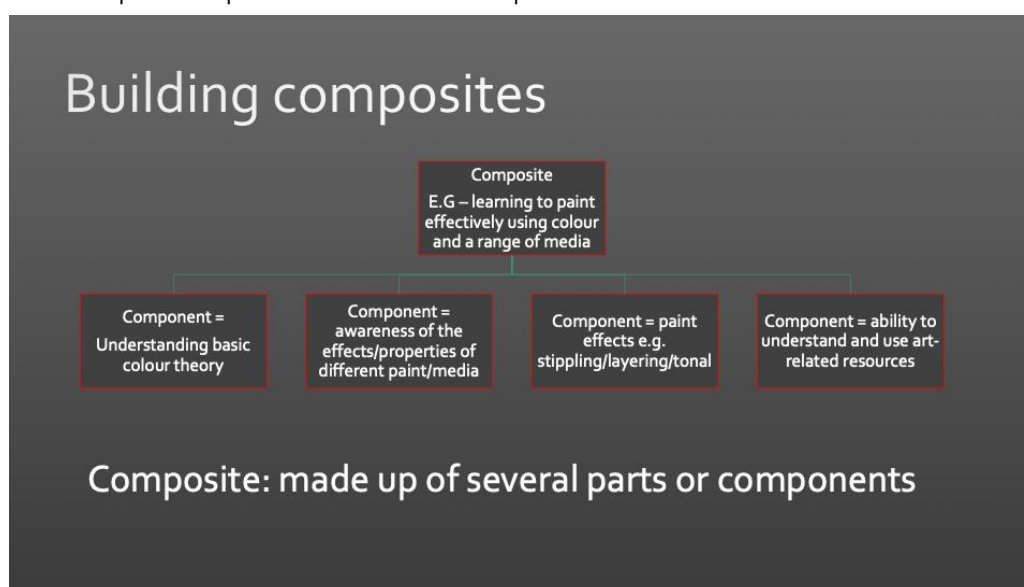
different from a Sweet Chestnut and identify how both are similar, being examples of deciduous trees. (Sealy 2018)	
I know that the internal angles of a triangle add up to 180°.  I can recognise a triangle	I can work this out: 

### Composite knowledge and components.

The national curriculum outlines top-level outcomes. These are often multi-faceted summaries that encompass a range of knowledge and skills. These could be described as being 'composites', and each composite is made up of its constituent parts, the 'components'.

While the national curriculum outlines the composite outcomes, it does not detail the components that pupils need to know in order to achieve these and it does not specify the sequence in which they should be taught.

Inspectors will probe deep dive subjects to find out what the intended 'composite' outcomes are and the component parts the curriculum specifies.



#### Questions to consider:

- Are you clear on the intended 'composite' outcomes at particular stages? (Curriculum maps and overviews)
- Are the right components in place?
- Are they taught in the right order?

(ASCL 2019)

### Conditional knowledge

Conditional knowledge: 'to know when and which one' is knowledge about when to use a procedure, skill, or strategy and when not to use it; why a procedure works and under what conditions; and why one procedure is better than another (a form of metacognitive knowledge).

### Powerful Knowledge (Michael Young)

Powerful knowledge is the knowledge that comes from specialist communities and centuries of learning, and it does change, but more slowly than people believe. It is context-independent. It can lift children and young people out of their lived experience. It is the job of a teacher to engage with the prior experience of the pupils and give them access to powerful knowledge. Knowledge is powerful 'if it predicts, if it explains, if it enables you to envisage alternatives'. **Michael Young**

Building on this, Young provides three distinctions or criteria for 'powerful knowledge':

**1. It is distinct from the common sense knowledge we acquire through everyday life.**

We will grasp knowledge about where we live and other aspects of life through our daily experience. This is important, but it is limited to the context in which we live. Schools should seek to surpass this, giving us knowledge that we wouldn't otherwise have access to.

**2. It is systematic**

The concepts of powerful knowledge are 'systematically related to each other' in groups that we call subjects or disciplines' (p. 75). Powerful knowledge therefore allows us to generalise and think beyond particular contexts.

**3. It is specialised**

Powerful knowledge has been developed 'by clearly distinguishable groups, usually occupations, with a clearly defined focus or field of enquiry' (p. 75). These groups include a range of experts, from scientists and mathematicians, to novelists and musicians.

### Key Concepts

A concept is a mental representation of a class of things. Concepts are a way of grouping or categorising things to make sense of a complex and diverse world.

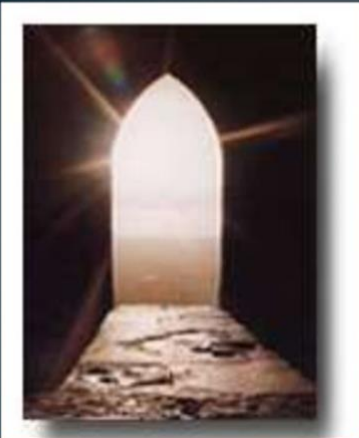
Find out more here:

<https://cambridge-community.org.uk/professional-development/gswkey/index.html>

### Threshold Concepts

Research in education recognizes that each discipline has threshold concepts that are "akin to a portal, opening up a new and previously inaccessible way of thinking about something" (Meyer and Land 2003). By actively teaching threshold concepts and purposefully integrating threshold concepts into curriculum design, we can improve student learning in our courses (Fouberg 2019). Threshold concepts are transformative, probably irreversible, integrative, bounded, and troublesome. They are transformative because they change perspective; irreversible because once 'seen' they cannot be 'unseen'; integrative because they help bring clarity to other concepts; bounded because they differentiate ways of seeing; and troublesome because truly understanding the concept requires intellectual struggle or tenacity. Eric H. Fouberg

### Threshold Concepts (Meyer & Land)



<http://www.ee.ucl.ac.uk/~mflanaga/thresholds.html>

- "A threshold concept can be considered as akin to a portal, opening up a new and previously inaccessible way of thinking about something. It represents a transformed way of understanding, or interpreting, or viewing something without which the student cannot progress." (Meyer and Land, 2005)

### Big Ideas

A big idea provides a "conceptual lens" for prioritizing content.

A Big Idea refers to core concepts, principles, theories, and processes that should serve as the focal point of curricula, instruction, and assessment. Big Ideas reflect expert understanding and anchor the discourse, inquiries, discoveries, and arguments in a field of study. They provide a basis for setting curriculum priorities to focus on the most meaningful content.

Big Ideas function as the “conceptual Velcro for a topic of study. They connect discrete knowledge and skills to a larger intellectual frame and provide a bridge for linking specific facts and skills. A focus on these larger ideas helps students to see the purpose and relevance of content.

Discrete facts do not transfer. Big Ideas are powerful because they embody transferable ideas, applicable to other topics, inquiries, contexts, issues and problems. Because we can never cover all the knowledge on a given topic, a focus on the Big Ideas helps to manage information overload. Big Ideas provide the *conceptual thought lines* that anchor a coherent curriculum.

A Big Idea is inherently abstract. Its meaning is not always obvious to students, and simply covering it will not ensure student understanding. “Coverage” is unlikely to cause genuine insight; understanding must be earned. Thus, the idea must be uncovered – its meaning discovered, constructed or inferred by the learners, with the aid of the teacher and well-designed learning experiences. (McTighe & Wiggins, 2004, p. 69)

### Cultural Capital or Cultural Literacy

“As part of making the judgement about the quality of education, inspectors will consider the extent to which schools are equipping pupils with the knowledge and cultural capital they need to succeed in life. Our understanding of ‘knowledge and cultural capital’ is derived from the following wording in the national curriculum: ‘It is the essential knowledge that pupils need to be educated citizens, introducing them to the best that has been thought and said and helping to engender an appreciation of human creativity and achievement.’” (Ofsted).

A grasp of the background knowledge that writers and speakers assume their audience already has.

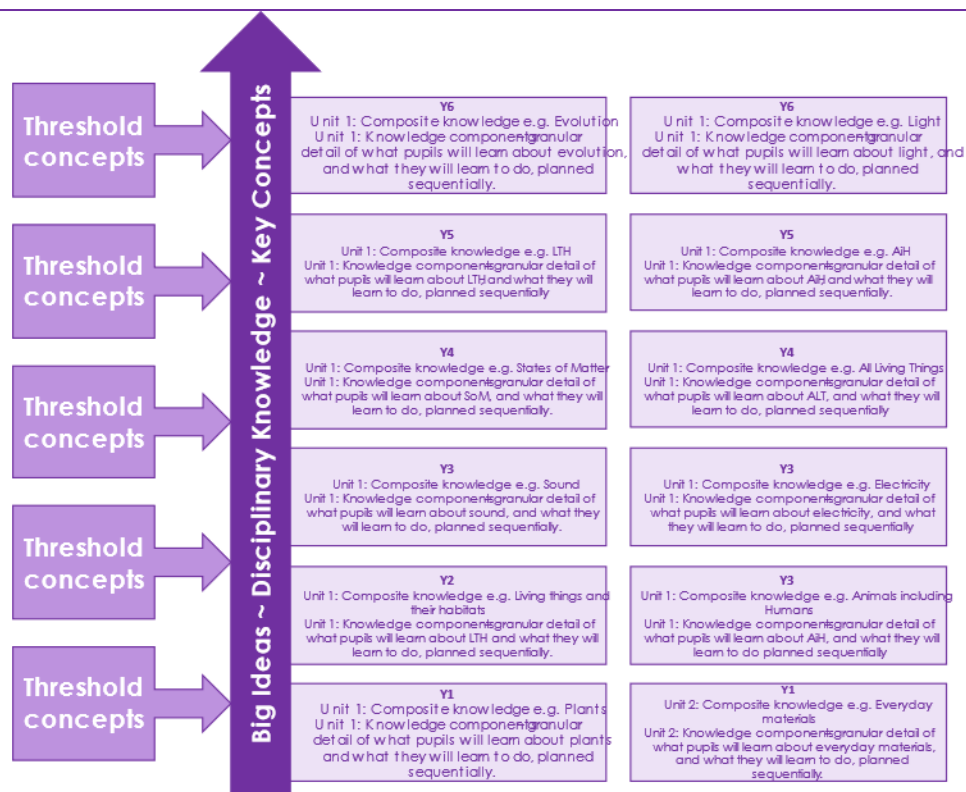
Term	Definition	AKA
Subject specific content knowledge and conceptual understanding	The stuff you want students to know, understand and do in your subject if you have successfully taught them a rich, challenging curriculum. This “stuff” is central to being able to think mathematically, or scientifically, or historically, or to communicate clearly.	Substantive knowledge Declarative knowledge
The subject specific pursuit of truth	A curricular concept for what pupils learn about how that knowledge was established, its degree of certainty & how it continues to be revised by scholars, artists or professional practice. It is that part of the subject where pupils understand each discipline as a tradition of enquiry with its own distinctive pursuit of truth.	Disciplinary knowledge
Subject specific skills/strategies	The skills/strategies specific to your subject which can either help students develop subject knowledge or apply subject knowledge to solve problems.	Procedural
Knowledge of Metacognitive strategies	‘to know when and which one’ is knowledge about when to use a procedure, skill, or strategy and when not to use it; why a procedure works and under what conditions; and why one procedure is better than another.	Conditional knowledge
Core and hinterland knowledge	The core knowledge you want pupils to remember is supported by an equally important hinterland, the little examples, the stories, the illustrations, the richness, the dwelling on this but not that, and the times when you as a teacher go off-piste with your passion.	N/A
Key concept	An important concept which allows students to understand what comes next in a subject.	Threshold concept

John Tomsett 2021

## A model for planning

A mental model for integrating disciplinary knowledge, Big Ideas, concepts, knowledge and domain specific skills in long, medium and short term curriculum planning.

e.g. Science

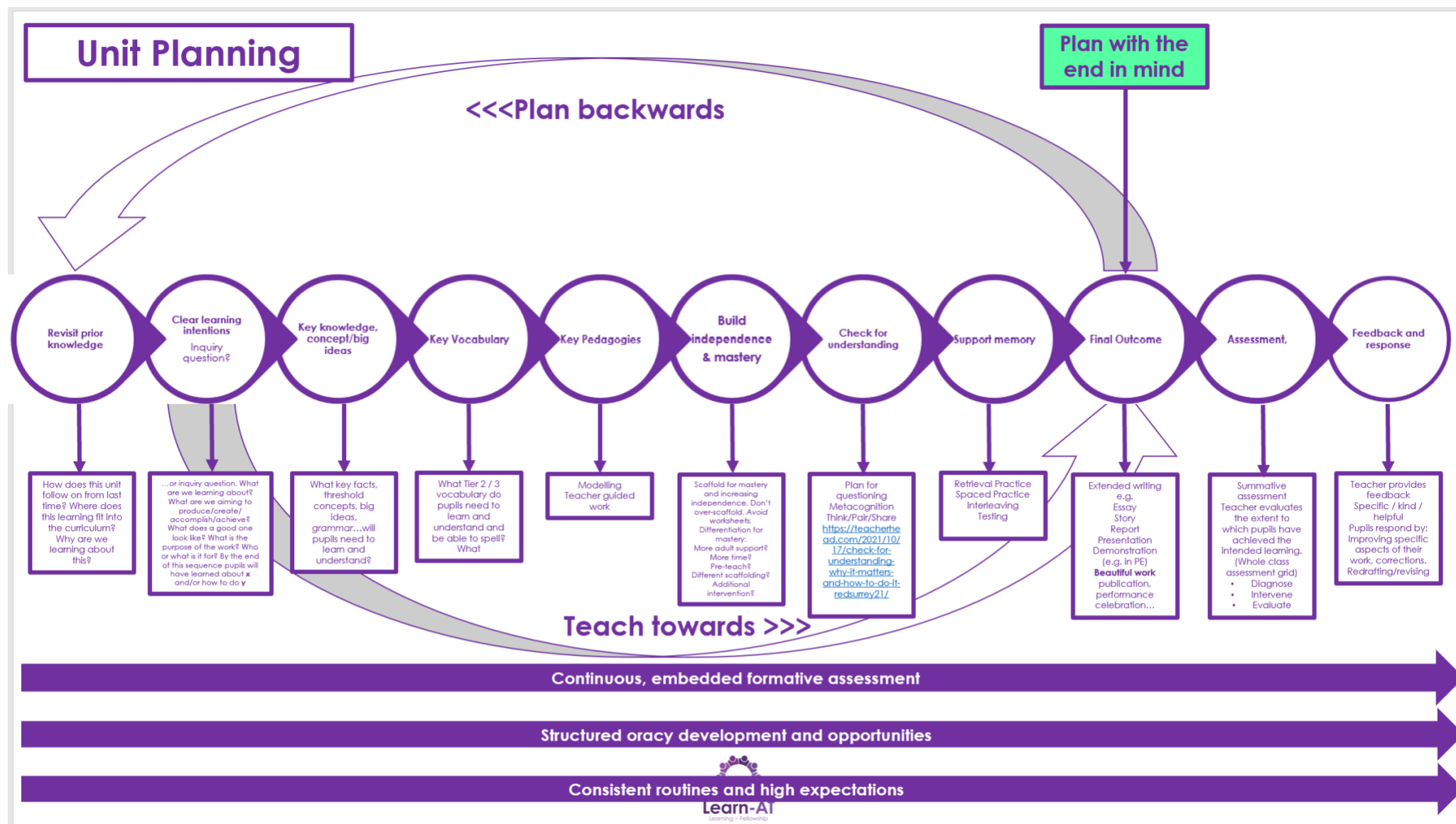


Adapted from:

- Christine Counsell: <https://impact.chartered.college/article/taking-curriculum-seriously/>
- Michael Young: <https://impact.chartered.college/article/a-knowledge-led-curriculum-pitfalls-possibilities/>
- Clare Sealy: <https://primarytimery.com/>
- Josh Vallance: <https://mrvallanceteach.wordpress.com/about/>
- ASCL: [https://www.ascl.org.uk/ASCL/media/ASCL/Help%20and%20advice/Inspection/Guidance-Paper\\_Education-Inspection-Framework-2019-Inspecting-the-Quality-of-Education.pdf](https://www.ascl.org.uk/ASCL/media/ASCL/Help%20and%20advice/Inspection/Guidance-Paper_Education-Inspection-Framework-2019-Inspecting-the-Quality-of-Education.pdf)
- John Tomsett: <https://www.johntomsett.com/2021/04/09/this-much-i-know-about-defining-the-terms-used-to-discuss-the-school-curriculum/>
- Cambridge Education: <https://cambridge-community.org.uk/professional-development/gswkey/index.html>
- Ofsted: <https://www.gov.uk/government/collections/curriculum-research-reviews>



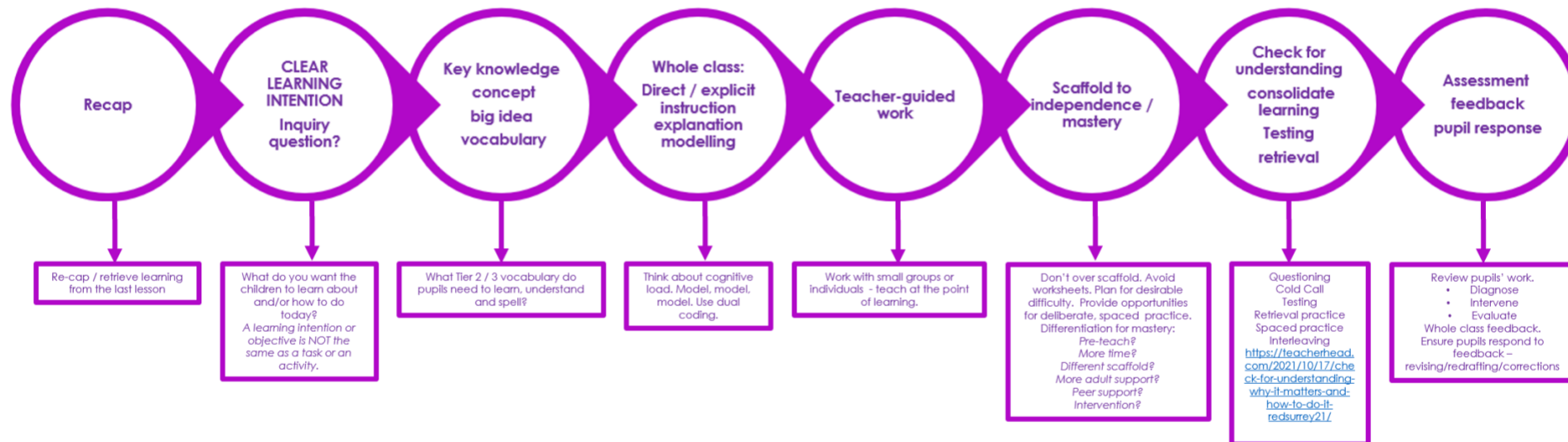
## Appendix 9: Planning Sequences of Learning in Units of Work



# Lesson planning

The starting point for planning is always what you want pupils to *learn about* and/or *how to do*. **NOT** the activity you want them to be busy with.

Revisit > Review > Teach > Practice > Apply



Continuous, embedded formative assessment

Structured oracy development and opportunities

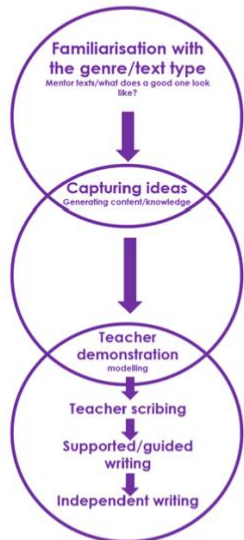
Consistent routines and high expectations



# A Writing Curriculum

*A tool for thinking and communication, writing for pleasure, purpose and progress, in English and across the curriculum, fiction, non-fiction, creative writing, prose and poetry...*

## The Teaching Sequence for Writing



Metacognition and Self-Regulation

### Shared Writing

(mini-lessons / teacher modelling / explicit link to reading / mentor texts)

### Guided Writing

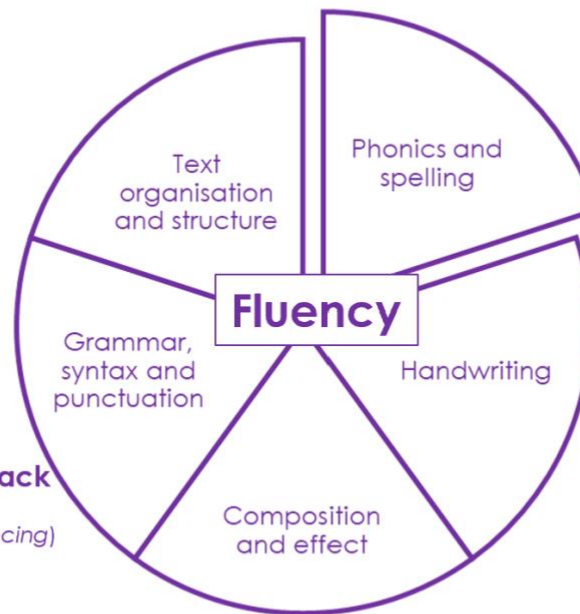
(group, explicit teaching at the point of writing)

### Independent Writing

(daily)

### Assessment and Feedback

Specific / helpful / kind  
(whole class and 1-1 conferencing)



Purpose and Audience

Form and Style

## The Writing Process



Oracy, Vocabulary and Talk  
**A Community of Writers**



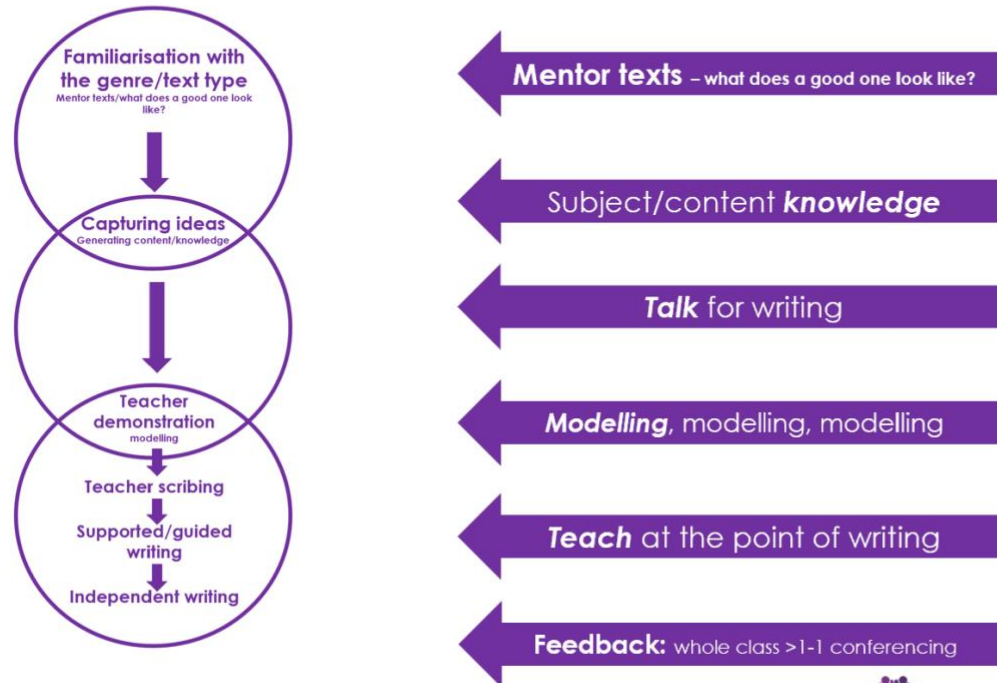
Technical skills

Authorship

# Writing Sequences

*in any subject, and from individual sentences to extended pieces completed over a series of lessons*

## Teaching Sequence for Writing



adapted from Raising Boys' Achievements in Writing (2004 p7), [UKLA](#) & Primary National Strategy



## The Writing Process



**This framework was first developed by the Learn-AT Curriculum and Pedagogy Group 2017/18:**

CPG Member	Role	School
Dave Turner (Chair)	Head of School	Ridgeway Primary Academy
Stef Edwards	CEO	Learn-AT
Claire Rodi	Assistant Head	Market Harborough CE Academy
Emma Tayler	Headteacher	
Tasmin Williams	Curriculum Leader	Meadowdale Primary School
Christina Addison	EYFS Leader	Ridgeway Primary Academy
Matt Hough	Assistant Headteacher	Meadowdale Primary School
Alison Vickers	Deputy Headteacher	Husbands Bosworth CE Primary School
Sarah Walker	Learn-AT Lead Practitioner for English and Y1 Teacher	Great Bowden Academy
Heather White	Executive Headteacher	Lubenham and St Andrews
Ruth Burton	Head of School	St Andrew's CE Primary School
Rachel O'Hara	EYFS Leader	Blaby Stokes CE Primary School
Angela Dewes	Executive Headteacher	Great Bowden and Ridgeway
Sue Foster	Head of School	Lubenham All Saints Primary School
Jenny Edwards	Deputy Headteacher	Church Langton CE Primary School
Hayley Brown	Deputy Headteacher	Little Bowden Primary School

**Last review: November 2021**