



Learn-AT

Learning ~ Fellowship

Learn-AT Curriculum and Pedagogy Framework

2019/20

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

reading, writing, maths

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

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

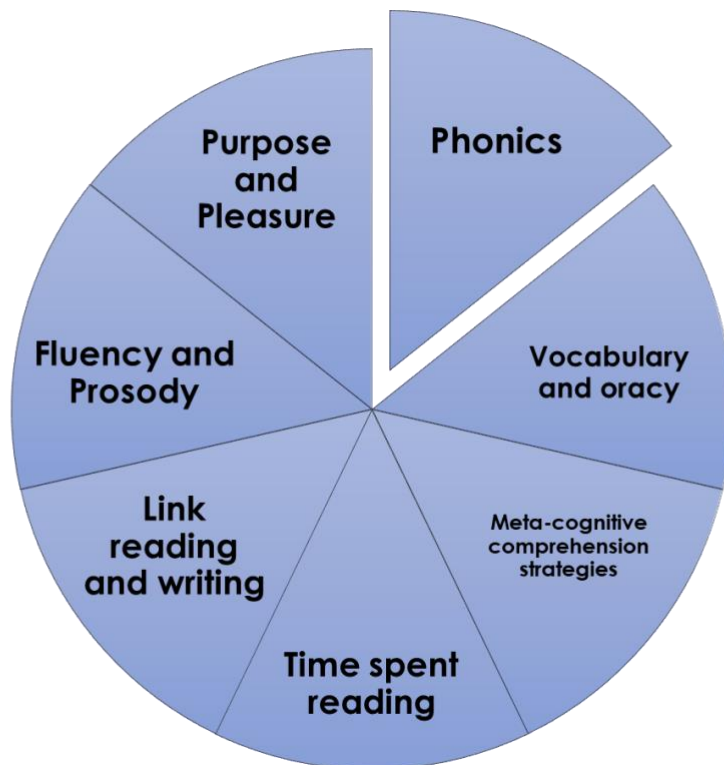
The infographic features several images: a bowl of minestrone soup, a lasagne, a portrait of Mick Waters, and book covers for 'The Izzie Time Traveller: Rome & Romans' and 'The Boy in the Striped Pyjamas'. On the right, there are large black outlines of a spoon, a fork, and a knife.

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

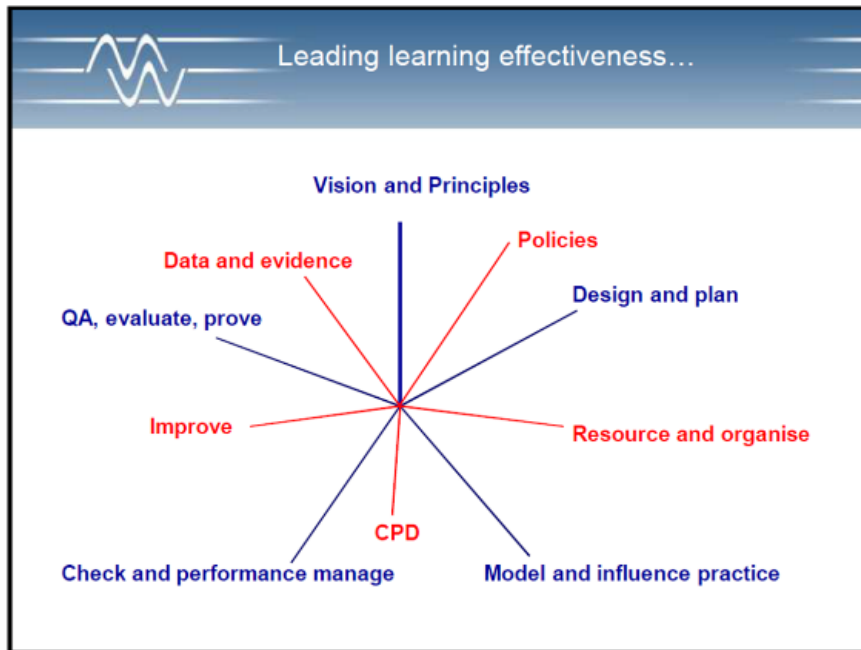
(<https://researchrichpedagogies.org/research/theme/reading-for-pleasure-pedagogy>).

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:

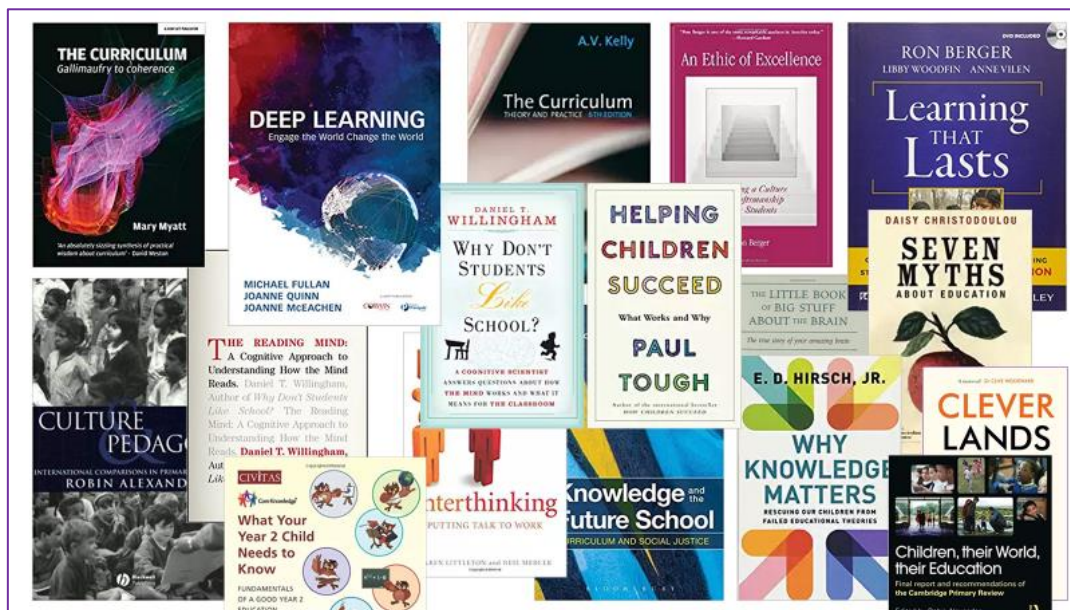
Professor Michael Young; Andreas Schleicher; Daisy Christodoulou; E. D Hirsch; Dylan Wiliam; Michael Fullan and Joanne Quinn; Ron Berger; Professor Robin Alexander; Daniel Willingham; Kirschner, Sweller and Clark; Sfard; Didau and Rose; Curran and Gilbert; Lucy Crehan; Mary Myatt

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	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	Core knowledge and understanding e.g. excellent general, subject, social and cultural knowledge,	Skills and competences Essential skills: literacy, numeracy, ICT, personal, social, emotional, learning and thinking skills, physical, moral, spiritual The six cs: see below	Attitudes, attributes and dispositions 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	Domain Knowledge Cultural Subject knowledge (Curriculum) General	Vocabulary Tier 1 Tier 2 Tier 3 <i>for reading and listening comprehension, written communication and oracy</i>	Reading • Volume • Criticality • Comprehension • Curriculum content – fiction and non-fiction Reading is an essential skill that also supports the acquisition of vocabulary and knowledge	Domain specific skills e.g. Music, Computing, Design PE and Sport etc	Fluency in basic skills Maths: number - facts/operations Cursive handwriting, phonics for spelling, grammar, technical accuracy Decoding for reading – PHONICS Social skills			
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	Equity <ul style="list-style-type: none"> Equity and equality of opportunity, entitlement and experience Consistently high expectations, quality and standards for all Learn-AT pupils A mastery curriculum Excellence in SEND provision 	Evidence <p>Research-informed pedagogies:</p> <ul style="list-style-type: none"> Formative assessment strategies embedded in teaching and learning Use of evidence from cognitive science research – e.g. importance of metacognition and self-regulation Balance of direct instruction and inquiry Strong self-evaluation 	Engagement <ul style="list-style-type: none"> Authentic purposes and contexts for learning – Berger 2006 Emphasis on first-hand experience Purposeful, structured play in the early years; drama, strong emphasis on outdoor learning, sport and the Arts. Pupil agency, autonomy and choice Cross-curricular connections
--	---	---	---

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					

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 ~~Se~~Harborough/~~Blaby~~/Narborough Reading Curriculum Rope

The many strands that are woven together to create engaged learners with deeper conceptual understanding

Curriculum:

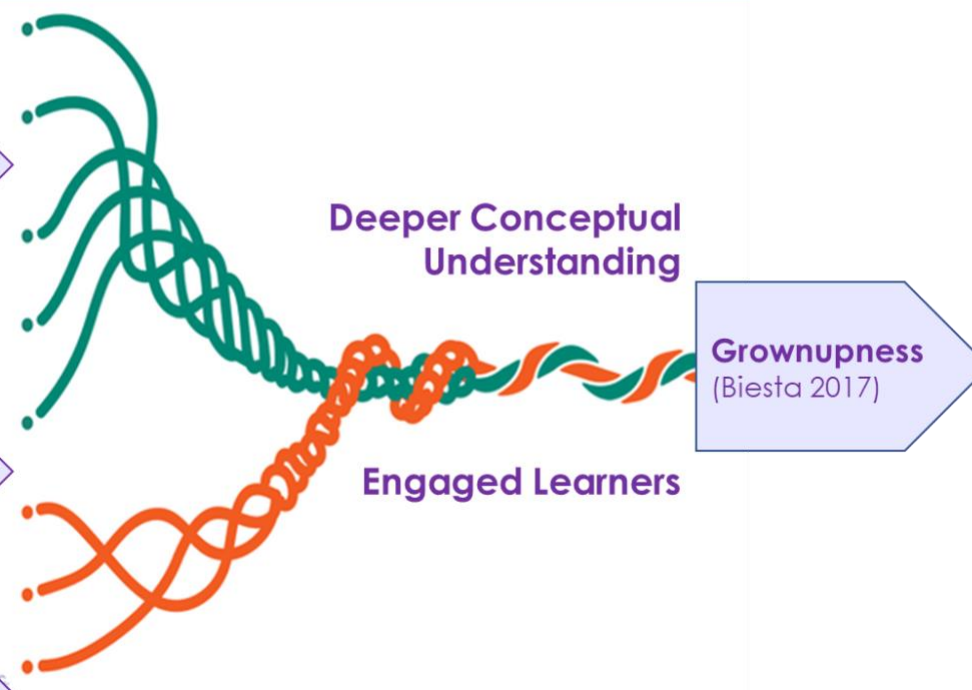
- **Domain specific**, substantive, disciplinary and procedural knowledge (skills) – planned sequentially in precise detail;
- Cultural knowledge
- **Threshold concepts**
- The **Big Ideas** of subject disciplines
- **Vocabulary**
- **Coherent links** and connections made within, between and across domains and subjects
- **Reading, Writing, Maths**

Pedagogy

- **Authentic purposes**, contexts, audiences
- **Cognitive science** – retrieval practice, spaced learning, interleaving, dual coding
- **Pedagogical context knowledge**
- **Oracy** embedded/dialogic teaching
- Planned, contextualised opportunities for the **Six Cs**.
- **Unconditional Positive Regard**

Assessment

- **Curriculum as the progression model**
- Responsive teaching, **formative assessment**
- **Diagnostic, summative assessment**



The Mission

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

Aims

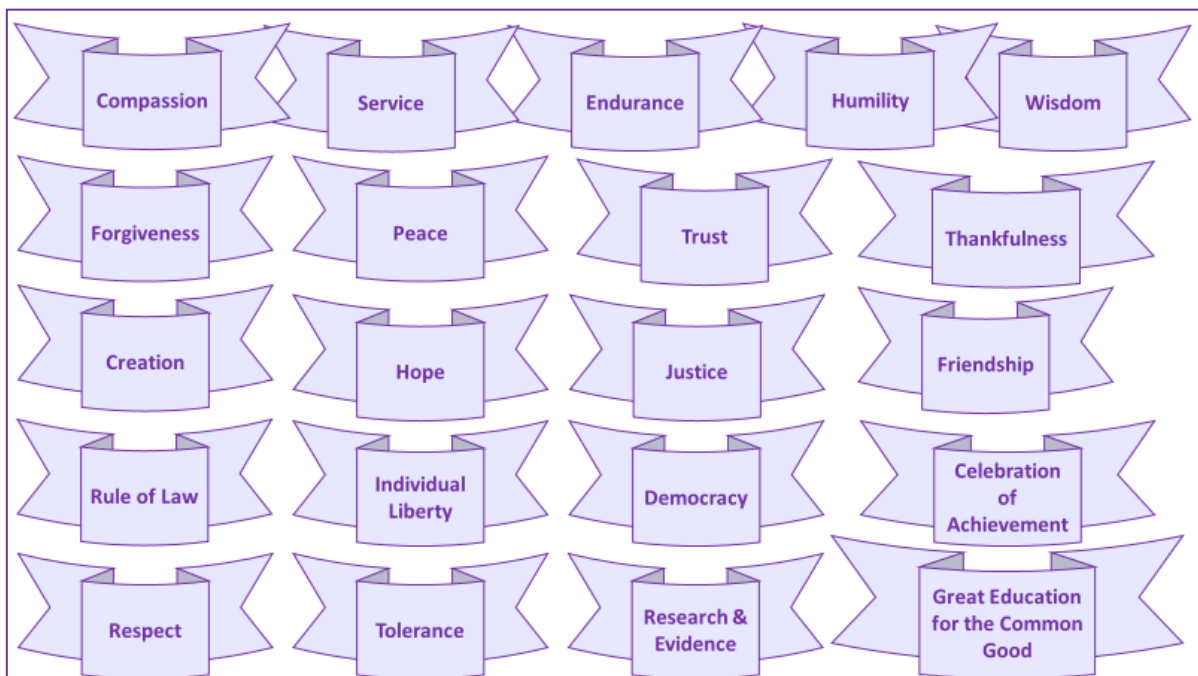
- Successful, engaged learners who are knowledgeable, skilled, enjoy learning, make progress and achieve
- Confident, articulate individuals who can lead safe, healthy and fulfilling lives
- Responsible citizens who make a positive contribution to society

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 William 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):

Learning

What is it, and how can we catalyse it?



Learning is important. It is the mechanism that enables us to adapt to our environment, to survive and succeed in the world. All life learns in one form or another. What marks us out as humans is our capacity to cumulatively learn from our predecessors.

Over time, the amount of information we have a responsibility to pass on to the next generation has grown. Some of this is quick and easy to learn naturally, but much is not. As a result, we have created organisations and processes dedicated to this endeavour.

Some things are easier to learn than others.

We find it easy or *natural* to learn to speak, recognise faces and build relationships. Cultural information, on the other hand, is much harder to learn. For this reason, schools and teachers exist.



INSIGHT 2

What we attend to is what we learn.

We learn what we think about and what we think about is determined by what we attend to. Attention is the gatekeeper of learning and, so, the ultimate commodity in the classroom.



INSIGHT 3

We can only attend to a few things at once.

Thinking works best when we attend to no more than two or three interacting pieces of information at once. Multitasking is a myth.



INSIGHT 4

What we know determines what we can learn.

Our capacity to attend to something is influenced by our knowledge of it, and how recently we've been thinking of it. We find it much easier to perceive or see things we have a frame of reference for.



INSIGHT 5

Learning is a persistent change in knowledge.

Thinking is the process that leads to such a change, a process governed by our working memory. By attending to information in the environment, we alter the very fabric of our memory.

We attend to things we value.

Our limited thinking capacity demands that we have some way of prioritising what to attend to. The more value we place on something, the more we will invest in attending to and thinking about it.



INSIGHT 6

We learn by gradually modifying what we know.

The only way knowledge change can happen is by gradually modifying or elaborating what already exists in our minds, one piece at a time.



INSIGHT 7

Understanding arises through connection.

We can modify our knowledge in two ways — by forging connections, and by consolidating those links.



INSIGHT 8

Fluency arises through consolidation.

For knowledge to be useful it has to be sufficiently stable and persistent, and so as well as forging connections, we've also got to consolidate those connections.

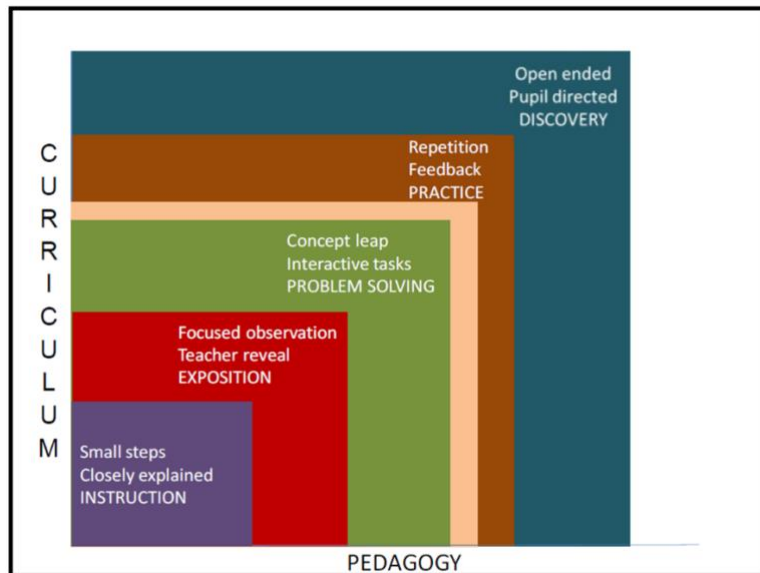


INSIGHT 9

OLIVER CAVIGLIOLI | @olicav | olicav.com

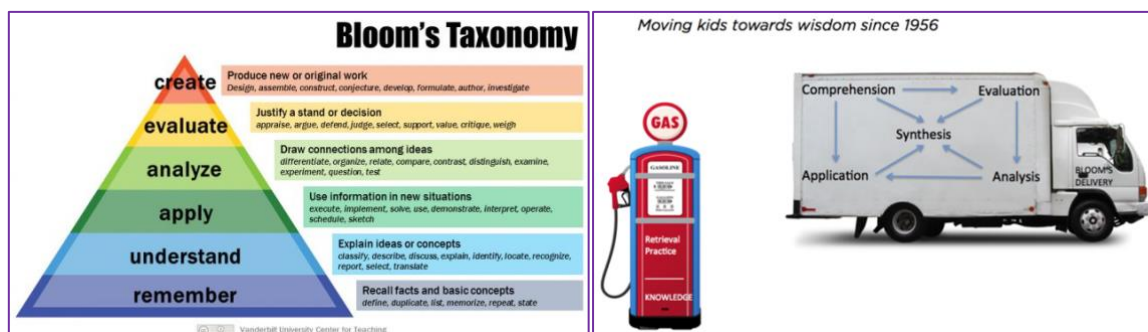


Mick Waters uses this diagram to illustrate the ways in which teachers can use pedagogy to teach the curriculum:



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:

- Excellent general, domain and subject knowledge
- Social, moral and cultural knowledge
- Broad vocabulary to support rich understanding and cognitive schema
- Big ideas that shape the world

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:

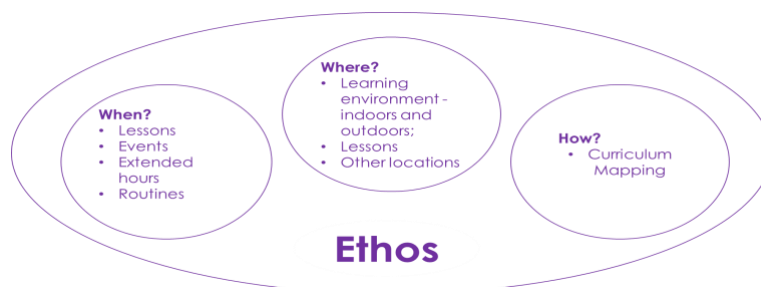
- Determination
- Adaptability
- Flexibility
- Confidence
- Risk-taking
- Enterprise
- Self-regulation
- Emotional resilience
- Spiritual awareness
- Tolerance
- Kindness
- Curiosity

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

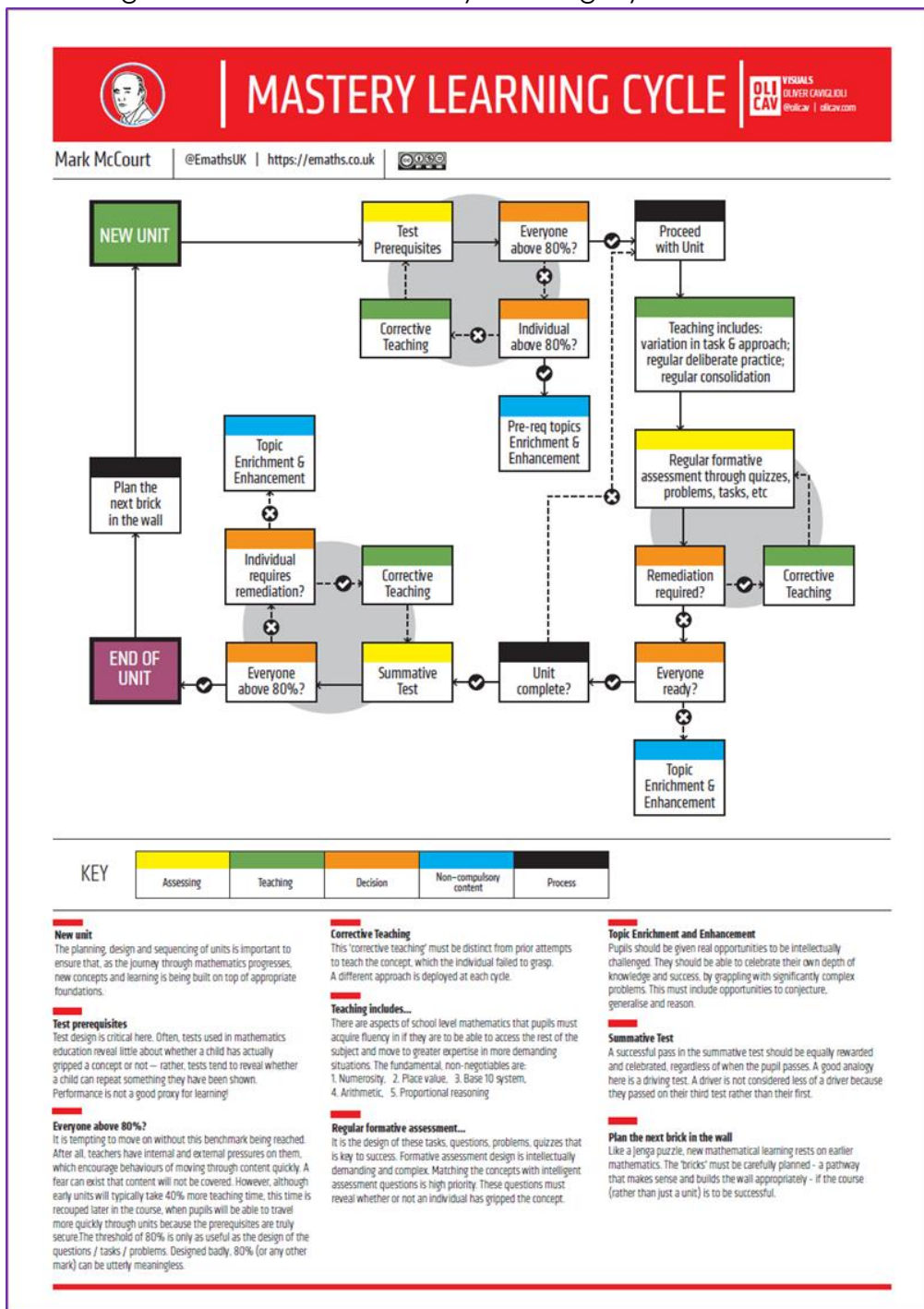
For organisational purposes we have organised those domains into four faculties:

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	PSHE/SRE
		Philosophy
	Physical and Emotional Health	PE
		Sport/Outdoor Education/Forest School
Humanities	Place and Time	Geography
		History
	Faith and Belief	RE
		Philosophy

A mastery approach to learning

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:



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 21st Century skills, at Learn-AT we don't think the 6 C's are any more pertinent to the 21st 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

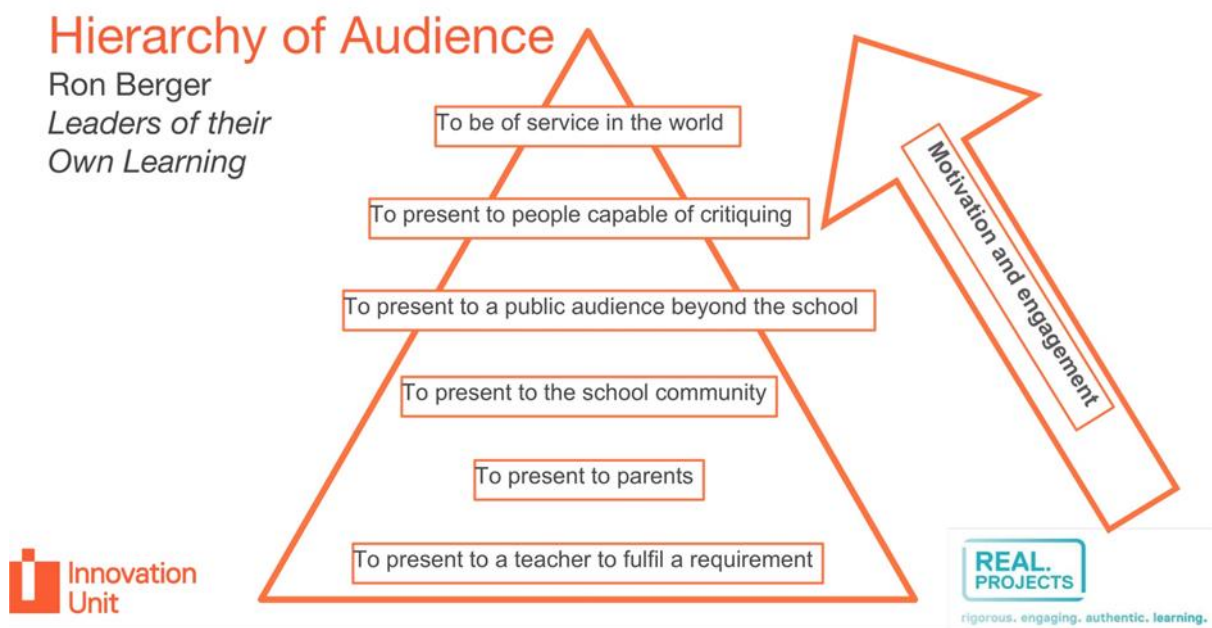
Creativity

- 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

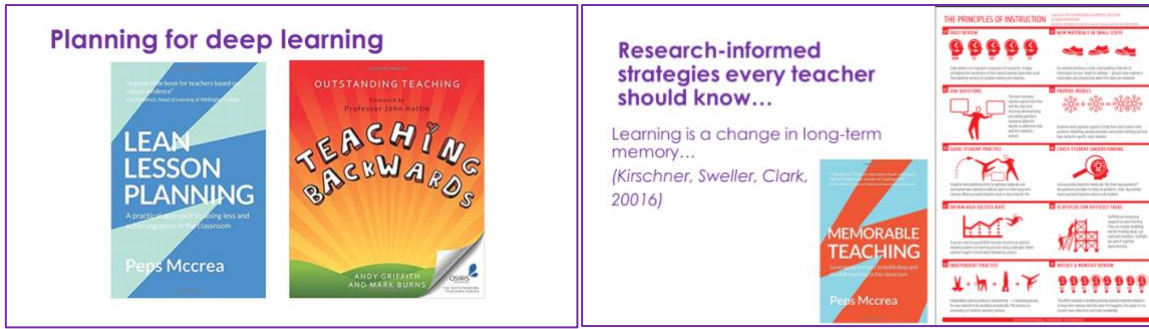
Ron Berger (2014) talks about deeper instruction and advocates the use of the 'hierarchy of audience' to provide authentic contexts for pupil engagement and deeper learning:



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



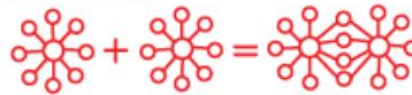
Our working memory is small, only handling a few bits of information at once. Avoid its overload – present new material in small steps and proceed only when first steps are mastered.

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 | teachingtwos.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.

Phase Two of this curriculum design work involved agreeing frameworks for each subject. 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 vocabulary essential to coherent curriculum intent for each subject.

Framework documents and associated curriculum resources and guidance are stored in the Learn-AT Curriculum Framework Team on Microsoft Teams. 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"> • Events • Development and movements • Individuals or groups • Discoveries and historical sites 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						

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	Six Cs: Provide opportunities for pupils to collaborate, think critically and solve problems, develop creativity, communicate, develop their understanding of citizenship, build character.	<ul style="list-style-type: none"> • Extinction • Ancestry • Empire • Independence • Settlement • Invasion • Rebellion • Revolution • Protest • Tyranny • Democracy • Evidence • Source • Monarchy • Republic • Freedom • Slavery
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	Procedural knowledge and domain specific skills: <ul style="list-style-type: none"> • Use words and phrases about the past • Share basic opinions about the past • Put events into chronological order • List differences between their lives and the lives; of people in the past • Use sources to answer simple questions about the past. • Share basic opinions about the past 	
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		

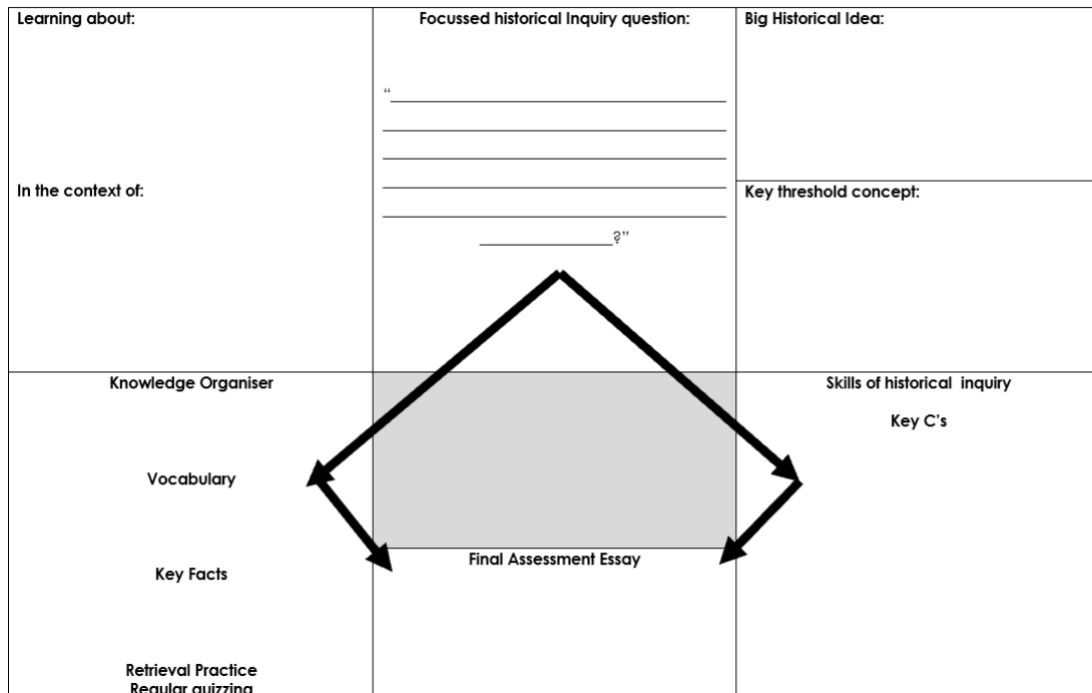
Historical Big Ideas and Threshold Concepts

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.

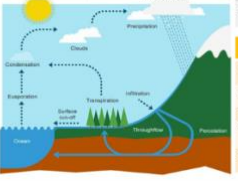
Disciplinary Knowledge		Six Cs, procedural knowledge and domain specific skills	Key Themes
Know about...	In the context of:	Know how to:	Develop understanding over time of key themes and ideas such as:
Pre-Roman Britain <ul style="list-style-type: none"> Changes in modern Britain from the Stone Age to the Iron Age 	<ul style="list-style-type: none"> late Neolithic hunter-gatherers and early farmers, for example, Skara Brae Bronze Age religion, technology and travel, for example, Stonehenge Iron Age hill forts: tribal kingdoms, farming, art and culture 	<p>Six Cs: Provide opportunities for pupils to collaborate, think critically and solve problems, develop creativity, communicate, develop their understanding of citizenship, build character.</p> <p>Procedural knowledge and domain specific skills:</p> <p>Quality of written communication:</p> <ul style="list-style-type: none"> Structure essays and enquiries with mostly relevant information Use dates and terminology <p>Interpretations</p> <ul style="list-style-type: none"> Identify different interpretations of events in the past Identify how different periods in history have changed or stayed the same over different periods <p>Historical judgements</p> <ul style="list-style-type: none"> Give a judgement to an enquiry or issue in history State criteria for making these judgements <p>Use of sources</p> <ul style="list-style-type: none"> Select mostly relevant sources to use in their work or argument State facts that can be learnt from a source about an event or period in history 	<ul style="list-style-type: none"> Extinction Ancestry Empire Independence Settlement Invasion Rebellion Revolution Protest Tyranny Democracy Evidence Source Monarchy Republic Freedom Slavery
Roman Britain <ul style="list-style-type: none"> the Roman empire and its impact on Britain 	<ul style="list-style-type: none"> Julius Caesar's attempted invasion in 55-54 BC the Roman Empire by AD 42 and the power of its army successful invasion by Claudius and conquest, including Hadrian's Wall British resistance, for example, Boudica "Romanisation" of Britain: sites such as Caerwent and the impact of technology, culture and beliefs, including early Christianity 		
Anglo-Saxons and Scots <ul style="list-style-type: none"> Britain's settlement by Anglo-Saxons and Scots 	<ul style="list-style-type: none"> Roman withdrawal from Britain in c. AD 410 and the fall of the western Roman Empire Scots invasions from Ireland to north Britain (now Scotland) Anglo-Saxon invasions, settlements and kingdoms: place names and village life Anglo-Saxon art and culture Christian conversion – Canterbury, Iona and Lindisfarne 		
Anglo-Saxons and Vikings <ul style="list-style-type: none"> the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor: 	<ul style="list-style-type: none"> Viking raids and invasion resistance by Alfred the Great and Athelstan, first king of England further Viking invasions and Danegeld Anglo-Saxon laws and justice Edward the Confessor and his death in 1066 		
Local History <ul style="list-style-type: none"> an aspect of local history 	<ul style="list-style-type: none"> an in-depth study linked to one of the British areas of study listed above a study over time tracing how several aspects of national history are reflected in the locality (this can go beyond 1066) a study of an aspect of history or a site dating from a period beyond 1066 that is significant in the locality 		
Extended Chronological Study <ul style="list-style-type: none"> an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066 	<ul style="list-style-type: none"> the changing power of monarchs using case studies such as John, Anne and Victoria changes in an aspect of social history, such as crime and punishment from the Anglo-Saxons to the present or leisure and entertainment in the 20th Century the legacy of Greek or Roman culture (art, architecture or literature) on later periods in British history, including the present day a significant turning point in British history, for example, the first railways or the Battle of Britain 		
Ancient Civilisation <ul style="list-style-type: none"> the achievements of the earliest civilisations – an overview of where and when the first civilisations appeared and a depth study of one 	<ul style="list-style-type: none"> Ancient Sumer; The Indus Valley; Ancient Egypt; or The Shang Dynasty of Ancient China 		
Ancient Greece <ul style="list-style-type: none"> Greek life and achievements and their influence on the western world 	<ul style="list-style-type: none"> Greek Myths Gods and Goddesses Democracy 		
Non-European Study <ul style="list-style-type: none"> a non-European society that provides contrasts with British history 	<ul style="list-style-type: none"> Early Islamic civilisation, including a study of Baghdad c. AD 900; Mayan civilisation c. AD 900; or Benin (West Africa) c. AD 900-1300 		

History Unit Planning Framework



Knowledge Organisers

During Phase Three, teachers and curriculum leaders to develop an archive of Knowledge Organisers to support planning for mastery and assessment of key knowledge for foundation subject topics. Here are some examples of Knowledge Organisers:

Why People Settle Near Rivers	Longest Rivers in the World	Vocabulary	Timeline	Important Gods	Notable Pharaohs																								
<ol style="list-style-type: none"> Rivers provide a source of fresh, clean water for lots of people to drink. There are likely to be animals near rivers, making hunting easier. The land will be fertile and can be used for farming. People can travel quickly and easily along rivers on boats. Rivers form a natural barrier against invaders. People can fish in rivers, providing a good food source. 	<ol style="list-style-type: none"> Amazon River 6,992 km Peru, Brazil, Colombia Nile 6,853 km Egypt, Sudan Yangtze (Chang Jiang) 6,300 km China Mississippi/Missouri 5,970 km USA Yenisei/Angara 5,540 km Russia Yellow River 5,464 km China Congo River 4,700 km Democratic Republic of Congo, Congo, Angola Lena River 4,472 km Russia Mekong 4,350 km Vietnam, Cambodia, Laos, China, Thailand, Myanmar Niger River 4,180 km Nigeria, Niger, Mali, Guinea, Benin 	<ol style="list-style-type: none"> current The flow of the river. erosion The act of slowly wearing something away. tributary A stream or river that flows into a larger river. meander A bend in a river. confluence The point where two rivers or streams meet. mouth The end of a river, where it meets & flows into the sea. dam A barrier built to hold back or divert a river. Estuary An area near the coast where a river and the sea mix and drain the land. drainage basin The area of land that is drained by a river. watershed High ground which forms the boundary of a river basin. 	<ol style="list-style-type: none"> c. 7,000 BCE Hunters and fishermen settle on the banks of the Nile. c. 3300 BCE First evidence of hieroglyphics being used. c. 3100 BCE Upper and lower Egypt unified by Narmer. c. 2555 BCE Great Pyramids at Giza are built. c. 2520 BCE The Great Sphinx is built. c. 1,600 BCE Pharaohs are buried in tombs in the 'Valley of the Kings'. 1332 BCE Tutankhamun, aged nine, becomes Pharaoh. 332 BCE Alexander the Great conquers Egypt. 30 BCE Cleopatra, the last pharaoh of Egypt, kills herself. 1922 CE Howard Carter discovers Tutankhamun's mummified body. 	<ol style="list-style-type: none"> Amun The "Hidden One". King of Gods. Ra God of the Sun (later combined with Amun to become Amun-Ra) Mut The Mother Goddess Isis Goddess of Health, Marriage and Wisdom. Married to Osiris. Horus God of the Sky and protector of the Pharaoh. Son of Isis & Osiris. Seth God of Chaos (evil, storms and war). Brother and mortal enemy of Horus. Anubis The Divine Embalmer. Son of Horus. Looks like a wolf. 	<table border="1"> <thead> <tr> <th>Name</th> <th>Reign</th> <th>Famous for:</th> </tr> </thead> <tbody> <tr> <td>1 Narmer</td> <td>c. 3,100</td> <td>Joined upper and lower Egypt, first pharaoh of unified Egypt. Commissioned the Great Pyramid at Giza.</td> </tr> <tr> <td>2 Khufu</td> <td>2589-25 66 BCE</td> <td></td> </tr> <tr> <td>3 Thutmose III</td> <td>1481-14 25 BCE</td> <td>Ruled with step-mother Hatshepsut. Warrior Pharaoh. Considered military genius, winning many battles. Also known as 'Ozymandias' or 'King of Kings', "Greatest" Pharaoh.</td> </tr> <tr> <td>4 Ramses II</td> <td>1303-12 13 BCE</td> <td>Also known as 'Ozymandias' or 'King of Kings', "Greatest" Pharaoh.</td> </tr> <tr> <td>5 Akhenaton (Amenhotep IV)</td> <td>c. 1353-13 34</td> <td>Tried to make Egyptians worship just one God.</td> </tr> <tr> <td>6 Tutankhamun</td> <td>1341-13 23 BCE</td> <td>Youngest ever Pharaoh. Restored old religious belief system.</td> </tr> <tr> <td>7 Cleopatra (VII)</td> <td>51-30 BCE</td> <td>Last Pharaoh of Egypt. Had a romance with Roman leader Mark Antony. Killed herself with an asp (snake).</td> </tr> </tbody> </table>	Name	Reign	Famous for:	1 Narmer	c. 3,100	Joined upper and lower Egypt, first pharaoh of unified Egypt. Commissioned the Great Pyramid at Giza.	2 Khufu	2589-25 66 BCE		3 Thutmose III	1481-14 25 BCE	Ruled with step-mother Hatshepsut. Warrior Pharaoh. Considered military genius, winning many battles. Also known as 'Ozymandias' or 'King of Kings', "Greatest" Pharaoh.	4 Ramses II	1303-12 13 BCE	Also known as 'Ozymandias' or 'King of Kings', "Greatest" Pharaoh.	5 Akhenaton (Amenhotep IV)	c. 1353-13 34	Tried to make Egyptians worship just one God.	6 Tutankhamun	1341-13 23 BCE	Youngest ever Pharaoh. Restored old religious belief system.	7 Cleopatra (VII)	51-30 BCE	Last Pharaoh of Egypt. Had a romance with Roman leader Mark Antony. Killed herself with an asp (snake).
Name	Reign	Famous for:																											
1 Narmer	c. 3,100	Joined upper and lower Egypt, first pharaoh of unified Egypt. Commissioned the Great Pyramid at Giza.																											
2 Khufu	2589-25 66 BCE																												
3 Thutmose III	1481-14 25 BCE	Ruled with step-mother Hatshepsut. Warrior Pharaoh. Considered military genius, winning many battles. Also known as 'Ozymandias' or 'King of Kings', "Greatest" Pharaoh.																											
4 Ramses II	1303-12 13 BCE	Also known as 'Ozymandias' or 'King of Kings', "Greatest" Pharaoh.																											
5 Akhenaton (Amenhotep IV)	c. 1353-13 34	Tried to make Egyptians worship just one God.																											
6 Tutankhamun	1341-13 23 BCE	Youngest ever Pharaoh. Restored old religious belief system.																											
7 Cleopatra (VII)	51-30 BCE	Last Pharaoh of Egypt. Had a romance with Roman leader Mark Antony. Killed herself with an asp (snake).																											
<h3>Hydrological Cycle</h3> <ol style="list-style-type: none"> Evaporation: The sun turns water from the ocean into vapour which moves into the atmosphere. Condensation: As the vapour cools in the air, it turns back into water and forms clouds. Precipitation: The condensed water vapour then falls back to earth as rain. Transpiration: Water vapour also enters the atmosphere from plants. This is called transpiration. Runoff: As the rain reaches the earth, it moves over the earth downhill because of gravity. This is called runoff. It keeps flowing until it reaches the sea. Infiltration: Some of the water does not runoff, but instead soaks deep into the soil, becoming groundwater. 	<h3>UK's Major Rivers</h3> <ol style="list-style-type: none"> River Severn 354 km Wales/England River Thames 346 km England River Trent 297 km England River Great Ouse 230 km England River Uye 215 km Wales/England 	<h3>Egyptian Inventions</h3> <ol style="list-style-type: none"> Written Language Hieroglyphics used symbols to represent for sounds. Papyrus Sheets An early kind of paper. The Plow A heavy metal blade, pulled by an ox to make ditches in the ground for farming. Mummification Taking out organs from a dead body so it doesn't rot away. Surgical Instruments The Egyptians used scalpels, stitches and other instruments. The Calendar The Egyptians created a calendar with 12 months of 30 days. 																											

However, a knowledge organiser does not a curriculum make. It is essential that Knowledge Organisers are developed in a context of a coherent and carefully planned sequence of learning and implemented within a context of effective and research-informed pedagogy.

Monitoring and Evaluation

Strategies for evaluation of the quality of education and the impact of the curriculum:

- Look at the whole child, e.g. progress in knowledge, understanding and skills, attitudes, attributes and dispositions.
- Use assessment information intelligently to identify trends and clear goals for improvement
- Use critical friends to offer insights and challenges
- Use a wide range of measures – qualitative and quantitative
- Create a continuous improvement cycle (see Learn-AT School Improvement Framework)
- Use a variety of techniques to collect and analyse information
- Employ principled, effective formative and summative assessment (see Learn-AT Assessment Framework)
- Involve the whole school community: learners, parents, teachers, employers and governors.

Accountability measures relate to:

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

Appendix 2: Curriculum Overview 1






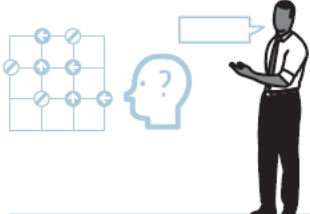

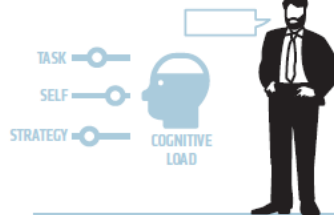

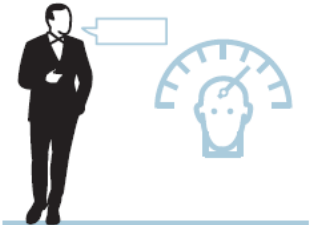
Faculty	Domain	Subject	Cycle 1*	Cycle 2	Cycle 3	Cycle 4			
Arts	Language, Oracy and Literacy	English	Entertain Inform Persuade Discuss	Inform Persuade Discuss Entertain	Persuade Discuss Entertain Inform	Discuss Entertain Inform Persuade			
			Integrated grammar and word study/spelling – planned for progression						
			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						
	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

Self-regulated learning consists of COGNITION 	Self-regulated learning consists of METACOGNITION 	Self-regulated learning consists of MOTIVATION 
<p>1 Develop knowledge and skills</p>  <p>Teachers need to gain a shared understanding of how their pupils develop metacognitive knowledge (knowledge of the task, strategies & themselves as a learner). Then can then support pupils to plan, monitor and evaluate their learning (their metacognitive regulation).</p>	<p style="text-align: center;">RECOMMENDATIONS 7</p> <p style="text-align: center;">METACOGNITION & SELF-REGULATION GUIDANCE FOR TEACHERS</p>  <p style="text-align: center;">A personal summary of the Education Endowment Foundation's 2018 Guidance Report on Metacognition and Self-Regulated Learning. Get the report at www.educationendowmentfoundation.org.uk</p>	<p>2 Teach metacognition</p>  <p>The teaching of metacognitive skills is most effective within subject content. While it involves explicit strategy instruction and modelling, it also includes questioning to activate prior knowledge, and ensures memorisation, practice, and reflection.</p>
<p>3 Model your thinking</p>  <p>Teachers need to move beyond their unconscious competence and make explicit their implicit and natural expertise. With the aim of future independent learning clearly in mind, there will need to be a gradual reduction of this scaffolding.</p>		<p>4 Challenge self-regulation</p>  <p>Only when students are challenged will they develop their self-regulation. But the optimum level of challenge is difficult to gauge. Cognitive load theory helps teachers consider the pressures placed on students' working memory.</p>
<p>5 Promote metacognitive talk</p>  <p>Talking helps students learn to reason, discuss, argue and explain their thinking. The teacher's role is crucial in posing ever-challenging questions, insisting on close listening and, in effect, designing better conversations for learning.</p>		<p>6 Teach organisation and management</p>  <p>The bedrock of independent learning is the ability to manage and organise one's learning. Teachers will want to provide feedback that supports this, as well as setting up guided practice in which prompts and scaffolding are gradually withdrawn.</p>

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 https://www.data.org.uk/resource-shop/projects-on-a-page-full-pack-of-21-planners/
		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	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 (PrimaryTimery Guidance)
		History	Learn-AT Framework/detailed, coherent schemes of work (PrimaryTimery guidance)
	Faith and Belief	RE	Leicestershire Agreed Syllabus + Understanding Christianity

Agreed by Learn-AT Curriculum and Pedagogy Group, Faculty and Subject Leaders during 2018/19

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 5: Learn-AT Curriculum Framework Summary

Faculty	Domain	Subject	Curriculum/Scheme of Work
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	[ABRSM Music Curriculum 2019]: 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 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

This framework was 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 Green	Deputy Headteacher	Church Langton CE Primary School
Hayley Brown	Deputy Headteacher	Little Bowden Primary School

Next Steps

Curriculum Design Phase 2: 2018/19

- Frameworks for each subject
- Long term Curriculum Subject/Topic/Unit Maps for each year group for each school

Curriculum Design Phase 3: 2019/20

- Coherent and detailed sequences of learning (learning road maps) for each subject, for each year group.
- Knowledge organisers
- Review assessment framework
- Review, evaluation and revision

Curriculum Design Phase 4: 2020/21

- Develop high-quality subject-specific CPD for teachers
- Review, evaluation and revision

Last review: November 2019