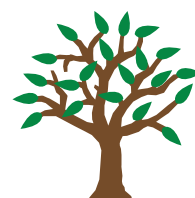


# CURRICULUM EXPLAINED

Learning Academies Trust

Salisbury Road  
Primary School

November 2021



**LEARNING**  
ACADEMIES TRUST

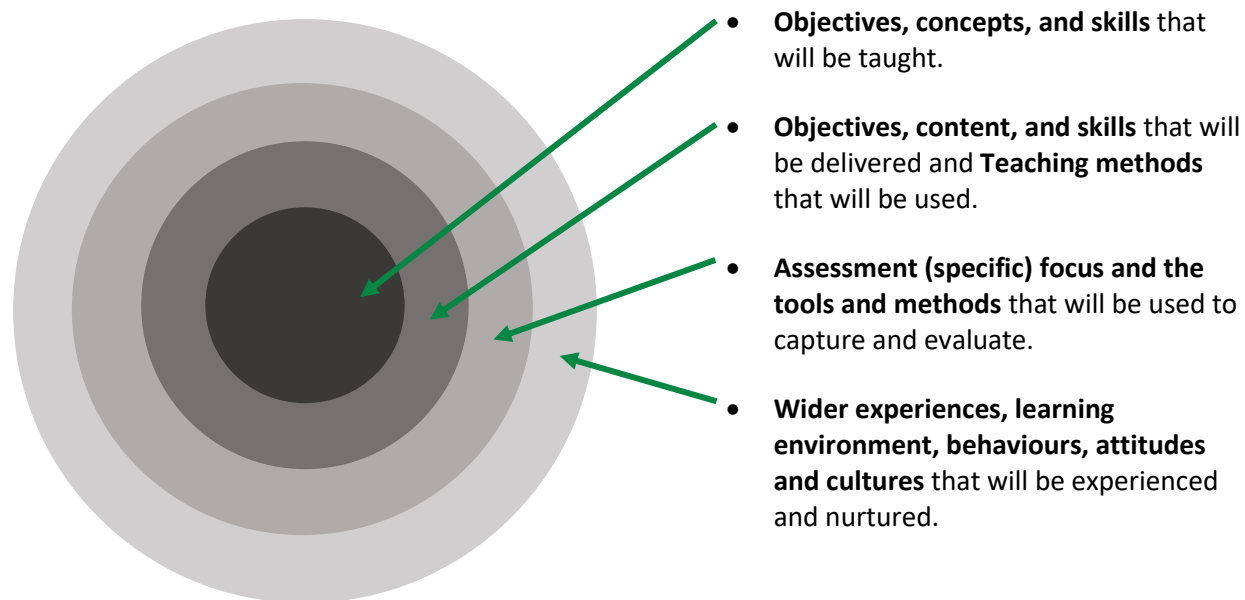
## LAT CURRICULUM EXPLAINED: RATIONALE

### Curriculum Definition

LAT's Curriculum can be broken down into four distinct, but interconnect parts:

1. Intended Curriculum: the required knowledge, skills and understanding that might be written down in the specification for a unit of study.
2. Enacted Curriculum: the curriculum that the pupils actually experience as delivered by their Teachers, each Teacher applying their own filter, adding or subtracting content, developing a unique combination of tasks and resources.
3. Assessed Curriculum: the knowledge, skills and understanding that students encounter in their assessment – normally a subset of a much wider curriculum.
4. Learned Curriculum: the knowledge, skills and understanding that students are left with at a later time.

This definition can also be represented in a visual way that maps LAT's vision to achieve a broad Curriculum for all its pupils, parents and staff. The image below details how Teachers plan by first identifying the key objectives, concepts, skills, knowledge and vocabulary that will be taught. Teachers then move into a progressive process of designing and sourcing the relevant and most effective Teaching resources, models and images. Next Teachers identify how best to capture assessment on pupil outcomes and then finally highlight further behaviours and experiences that the wider curriculum is intended to bring.



#### LAT's Curriculum is influenced by:

Cognitive and Neuro science  
Journal Based research and disciplined inquiry  
Local, national, and global audits of need  
National Curriculum guidance  
Context and values of individual LAT Schools  
Aspiration to develop Teacher expertise  
Cross industry influence

#### Intended outcome of LAT's Curriculum:

Meet the diverse and bespoke needs of each community, whilst securing pupil outcomes  
Create and test Scientific informed research and innovation  
Transmit the values of each School beyond its immediate Community  
Facilitate effective and pedagogy  
Develop talents and interests of Community members

*Diagram adapted and inspired by, Concentric Ring of Conceptualization of "Curriculum", Dr. Shao-Wen Su, Journal of Language Teaching and Research, Vol 3 No 1, pp. 153-158, January 2012. The various Concepts of Curriculum and the Factors Involved in Curricula-making.*

## PHILOSOPHICAL APPROACH EXPLAINED

The Learning Academies Trust curriculum plan is built on a robust and considered philosophy related specifically to influences such as: cognitive science, neuro science, national academic standards and community needs. It is built on best practice identified from educational research and applied to the context of the schools. LAT members believe that the **learned curriculum** is the curriculum that actually counts for pupils as they strive to build informed links between theories, proven study, facts from history and their own ideas.

LAT members believe that disadvantaged students often need to rely much more on the diet of deliberate learning that they receive from being in school. **A good curriculum empowers children with the knowledge they are entitled to and is primarily based initially on the National Curriculum.** Phrases such as, 'If children don't remember what we have taught them, then even the richest curriculum is pointless' seem ever more relevant as educators strive to assess their pupil's depth of understanding. Key reference points for this belief stem from experts such as: '**Memory is the residue of thought.**' Professor Dan Willingham (Psychologist and author); '**Learning is a change in long term memory.**' '**If nothing has seen changes in long term memory, then nothing has been learned.**' Professor Paul Kirschner (Educational Psychologist & Author), '**You can always Google it!**' is the most dangerous myth in education today. Dylan Wiliam (Educationalist) and '**Learning is defined as an alteration in long term memory.**' Sweller, Ayres & Kalyuga (2011). Other key references are of interest when measuring the purpose, worth and effectiveness of LAT's Curriculum, most notably, **Martin Robinson's, Trivium**, where he debates the need for pupils to be taught that the arts of knowing, questioning and communicating unlock the Curriculum's true potential. Ofsted have also influenced Curriculum design by offering a structure for staff to frame their thinking. The **collective parts of Curriculum thinking can be organised as three interlinked and key elements 1) Intent 2) Implementation 3) Impact.**

LAT's curriculum offers pupils a core set of objectives and goals that all are entitled to receive access to. Staff continuously design and refine their approaches to measuring the impact of this curriculum deliberately focusing on how each of the LAT schools **personalise and contextualise** learning experiences. Staff work in teams to meticulously **select** what is taught, **organise** this in a progressive and deliberately challenging order and then **integrate** and apply within their own schools. Pupils and their families benefit from having peers from across the LAT's influence to link with and collectively learn with/from. Staff work in cross-school disciplinary teams to design schemes of teaching, learning and assessment, that are **deliberately progressive and challenging** in nature. Staff benefit from having colleagues as experts to **quality assure and review** stages of planning. They **organise themselves into dynamic subject-based hubs all of which focus in on creating excellence within schools.** Subject Hubs **challenge and support each other's professional development aiming at all times to network their thoughts and professional relationships beyond those found within the LAT itself.**

Curriculum design is **grounded by key subject drivers.** History and Geography act as fundamental **perspective drivers** that add **empathy and perspective** to learning. They act as a directional **compass** to centre and **root learning, whilst prompting the direction of pupil's further thoughts and ideas.** Studying key concepts about the past (History), '**Then and Now**' and linking to other places (Geography), '**Here and There**' enables pupils to **create their own opinions** (based on factual knowledge and/or accounts evidenced from key sources of credible information) of how these concepts might develop in the future. Relating learning back to a pupil's own version of the **here and now**, creating curiosity, expects pupils to both study and **think deeply** about how these interrelate with each other and become relevant to a pupil's everyday life.

Pupils continuously look not only to remember facts, but to apply knowledge beyond discrete subject areas to create a rounded and broad knowledge base and extended schema of understanding. Staff continuously review how to implement a curriculum that enables pupils to study less content, but in more depth than ever before.

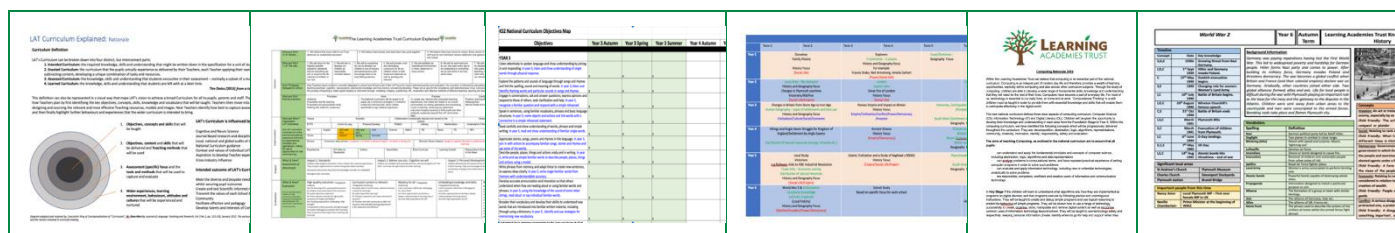
A **culture of continuous improvement**, that remains invitational at all times, is a by-product of this cultural exchange of ideas and research. **Workload is reduced** by sharing resources and expertise across all LAT Schools, whilst at the same time linking staff to develop rigorous and cross LAT assessment judgments. There is a **continuity in LAT's curriculum design** offering pupils and their families an **entitlement for all** model of delivery.

The LAT's, **'Believe we can...Together we will'**, ethos empowers staff to create the finest curriculum experiences that aim to create learning that is, memorable, relevant, authentic in purpose and embedded in knowledge, skills and concepts. Research and inquiry informed practice sit at the heart of staff professional development. This sense of professional curiosity and exploration, drives a process that is committed to continuous reflection and refinement of practice. Philosophies linked to LAT curriculum design are therefore, in their very make up and nature, continuously evolving.

'Believe you can... Together we will.'


## ORGANISATION: INTENT - 12 STEP PLANNING SEQUENCE EXPLAINED

Staff continuously review how to implement a Curriculum that enables pupils to study less content, but in more depth than ever before. Staff have divided the planning sequence up into carefully crafted bite sized stages of development. The continuum below depicts this process enabling users to locate their thinking against pre-agreed actions.



1	2	3	4	5	6
LAT Informed	LAT Informed	LAT Informed	LAT Informed	LAT Informed	LAT Informed
Long Term Planning	Long Term Planning	Long Term Planning	Long Term Planning	Long Term Planning	Long Term Planning
What? Why?	What? When?	What? When?	What? When?	What? When?	What? Who?
LAT Rationale, definition, influences and principles articulated	LAT Curriculum organisation 1 page overview	How often? Objective Concepts Vocabulary progressively mapped across all year groups	Subject specific overviews Years 1 – 6 as matrix. Highlighted links between subjects	Subject specific rationales and narrative overtime	Subject specific Knowledge Organisers detailing the minimum but essential knowledge to be taught and assessed
				School Informed	
				What? When? Why? Contextualised at school level	

Planning steps continued...

	<p>Assessment Rationale</p>	<p>Short Term Planning Templates</p>	<p>Teaching, Learning and Assessment guidance and resources</p>	<p>Pedagogy Guidance and Design linked to research</p>	<p>Subject Knowledge Audit linked to CPD Map</p>
---	-----------------------------	--------------------------------------	---	--	--

<p><b>7</b></p> <p>LAT Informed</p> <p>Medium Term Planning</p> <p>What? Why? LAT Rationale, definition, influences and principles articulated</p>	<p><b>8</b></p> <p>LAT Informed</p> <p>Medium Term Planning</p> <p>What? When? How often? Objective Concepts Vocabulary progressively mapped across all year groups</p>	<p><b>9</b></p> <p>School Informed</p> <p>Short Term Planning</p> <p>What? When? LAT Curriculum organisation 1 page overview</p>	<p><b>10</b></p> <p>School/PTSA Informed</p> <p>What? When? Subject specific overviews Years 1 – 6 as matrix. Highlighted links between subjects</p>	<p><b>11</b></p> <p>School/PTSA Informed</p> <p>What? When? Why? Subject specific rationales and narrative overtime</p>	<p><b>12</b></p> <p>School/PTSA Informed</p> <p>What? Who? Subject specific Knowledge Organisers detailing the minimum but essential knowledge to be taught and assessed</p>
--	---	--	--	---	--

# INTENT: LAT CURRICULUM EXPLAINED - 1 PAGE OVERVIEW

Intention	What and Why? 3 LAT Beliefs...	1. We believe that every child in our Trust deserves an outstanding education			2. We believe that schools work best when they work together			3. We believe that every school is unique. Every school in the Learning Academies Trust will have its own individual mission statement and agreed set of individual school aims and values						
	What and Why? 7 LAT We wills...	1. We will strive for the highest possible academic standards and do everything we can to improve the life chances of children in our care		2. We will aim to develop our children as responsible rounded citizens	3. We will do everything we can to develop our children's love of enquiry and perseverance and encourage them to be truly lifelong learners		4. We will provide a rich and stimulating curriculum for all our children which is both broad and balanced as well as exciting and relevant		5. We will establish an inspirational environment in every classroom in every school		6. We will all work hard and try our very best every day to be outstanding in everything we do and strive to be truly world class		7. We will not let social disadvantage be an obstacle to success. We know that with great leadership, inspirational teaching, caring pastoral support and hard work, every child in every one of our schools can succeed	
	How? Pedagogy: Currently delegated to individual schools	How teachers teach content is currently delegated to school level & forms part of the LAT focus for inquiry informed practice and evaluation. Our provision is informed by educational research into effective teaching practices, cognition, neuroscience, learning & knowledge and how memory via learning develops. These act as glue for the consistency and distinctiveness of our curriculum. Purpose of learning and the process of teaching is made explicit leading to outcomes through: modelling, imaging, questioning, AfL, moderation and effective methods of effective teaching, learning and assessment.												
	What and Why? Planned intentions	Principles: Authentic Purposeful real-life learning Purposeful and personalised study Sharing with authentic audiences			Aims: The National Curriculum will be taught to all pupils (as a minimum) arranged in a coherent evidenced informed plan which relates specifically to age related progression.			Purpose: To create real, relevant and purposeful learning experiences, that meets the needs of our school communities, by raising aspirations and developing a love of learning, achieving key attainment outcomes bringing meaning to both pupils and their authentic audiences beyond the LAT and school itself.			Conditions for learning: Positive Learning Behaviour, Self Esteem and Metacognition Mental Health and Wellbeing			
Implementation	What and When? Organisation LAT Centralised	Empathy			Values			Collaboration (contextually relevant and owned by the school)			Oracy			
	Our LAT curriculum comprises an entire planned educational experience informed by organisational principles and approaches, making full use of opportunities for real world learning.	EYFS	Comm & Lang		Physical Develop	PSED		Literacy		Mathematics	Understand of World		Expressive A&D	
		NC	English	Art and Design	Geog	Hlstory	Science	Maths	RE	Music	PE	MFL	PSHE	Computing
		Experiences	Ed Visits inc Residential		Visitors		Assemblies		Extra-Curricular		Learning Outside		Responding to Events in the News	Charity Focus
Impact	What & How? Assessment of Attainment	Impact 1: Standards Children make progress and attain in line or better than national expectations. They are given opportunities to achieve the greater depth standard. Assessment documents show that the knowledge and skills are embedded throughout the curriculum.				Impact 2: Believe you can...Together we will Children are confident and successful learners, demonstrating the LAT 'We Wills', and make the right choices for their learning				Impact 3: Personal Development Children demonstrate the essence of the LAT 'We Wills' throughout all aspects of their learning. They are encouraged to develop self-belief in their abilities and develop strategies that enable them to achieve regardless of their starting points.				
Evaluation	What & How? Evaluation  Our LAT curriculum has an ambition for high achievement of all pupils irrespective of background and starting point. The achievement is represented in three key areas.	High quality outcomes: Triangulated evidence Has the learning led to a purposeful outcome? Do children have ownership of the outcomes? Do pupils experience expertise? Are there relevant contexts for high quality outcomes for English and Maths? Are Teaching expectations challenging / high enough? Is assessment criteria accurate and high enough? Are pupils challenged to evaluate their learning? Does assessment help shape future teaching and learning?			Curriculum content is relevant: Triangulated monitoring Are pupils able to connect local, national and local contexts for learning? Do pupils enjoy their learning? Do Teachers respond to and shape educational research? Do Teachers link with community to offer rich resources and extended learning experiences? Is AfL responsive and effective?			Mastery for all: Triangulated monitoring Is the curriculum sufficiently challenging for every child? Are there opportunities to develop a deeper understanding of learning values? Are their high expectations for all?			Embedding knowledge and skills: Triangulated monitoring Is the curriculum sufficiently challenging for every child? Are there opportunities to develop a deeper understanding of learning values? Are their high expectations for all?			Being part of the LAT learning family: Triangulated monitoring Do pupils input into a collaborative learning process across schools/community? Do pupils share their learning with authentic audiences? Is collaboration embedded across schools? Are pupils able to relate both their own and the LAT values and experiences to British Values

For curriculum organisation, please see the Whole-School Matrix (separate document) which details all of our subjects and units.

Staff tune into these focus areas and understand that over time, they will **build sophisticated banks of refined resources**. The intention is to **reduce staff workload, cover less content, but in more depth**, whilst giving **confidence** to all that these resources are continually **refined and evaluated for effectiveness**.

**Teams working together**, with a **common focus, articulating what works, why and how** is a crucial benefit and outcome of LAT's Curriculum organisation. A **true celebration** of learning is also made possible through **cross School subject links**. Staff, pupils and their families not only **know what is being taught across all LAT Schools, but also when it is taught**. They are therefore, able to seamlessly **link with each other sharing and comparing examples of learning related to the exact same subject matter**.

This method of curriculum organisation enables LAT School members to become a **unique community of networked learners**.

Creating an authentic sense of **cross School collective responsibility** is deliberate, but a secondary outcome of LAT's curriculum organisation, is that of cross-school **excitement and interest**. Understanding how **one pupil's learning is part of a wider connection with other LAT learners** brings a sense of **connectivity and belonging**. Each LAT School is **encouraged** and has **freedom to add further worth** to the curriculum model, by delivering schemes that provide **contextually relevant meaning and structure**. Schools create their **personalised** subject areas and guiding schemes of work, for example, those related to **bespoke values, behaviours and mission statements**. This enables each LAT School to **root themselves in their communities**. Remaining **real, authentic and relevant to the communities that they serve**, becomes is key for all LAT Schools.



Notes of reference to inform LAT rationale and practice

## Curriculum and Cognitive Science

Referenced: <https://rosalindwalker.wordpress.com/2019/08/06/curriculum-and-cognitive-science/>

What do we mean by curriculum? And why is curriculum so important? How should curriculum planning and execution be informed by cognitive science? These are, in my opinion, questions of the utmost importance.

### What do we mean by curriculum?

Curriculum is the substance of what is taught. It is the things we want students to learn while they are with us, and it is structured over time, since learning happens in time. We will return to this later.

### Why is curriculum so important?

In recent times, it was widely believed in teaching that knowledge was a low-level thing and that it wasn't really worth learning knowledge because we should be doing high-level stuff like analysing, synthesising and evaluating instead. We now know that to be false. [Research has shown conclusively that skills like evaluating are domain specific. Knowledge is what we think with](#), and [we can only be curious about things we already know something about](#).

We now know from cognitive science that [the mind can be conceived of as comprising two "parts"](#): the working memory and the long-term memory. Working memory is what we think with, and space there is very limited: it can hold only around five items at a time. If you try to hold more, something will drop out.

The long-term memory is where the things we have learned are stored. When we encounter a problem like a puzzle or an essay question, we can bring information up into our working memory from our long-term memory. The exciting thing here is that there are no known limits to space in the long-term memory. It's not like a jar that can get full up. In fact, the more you know, the easier it is to learn new things. And the more you have stored, linked and automatised in your long-term memory, the more space you can free up in your working memory for dealing with challenging material.

So, curriculum is absolutely critical. The substance of what we plan for our children to learn will form the resources they have to draw upon when approaching problems. Knowledge in students' long-term memory will be their toolbox when reading texts, writing essays, wrestling with problems, and thinking in general. Curriculum stocks the toolbox.

If we want students to get cleverer, to be better able to analyse, evaluate, and synthesise, to be effective critical thinkers and problem solvers, there are no short cuts. We must teach them lots of knowledge and help them to remember it.

This knowledge forms our curriculum. When we build a curriculum, we have to make choices: choices about what to include, how we exemplify and illustrate, how we practise, and in what order everything comes. These decisions are not trivial. In planning curriculum, we are planning to build the knowledge that our students will use in order to think – potentially for the rest of their lives.

### How should curriculum be informed by cognitive science?

To plan our curriculum, we must begin at the end. We must ask: What is it that we want our students to leave us with, that they did not have when they arrived?

What we want students to gain from their time with us is rich, powerful and well-organised knowledge that they can use to think with and to understand the world and themselves. Cognitive science gives us the model of knowledge as a schema: a web of interconnected pieces of knowledge. When students join us, they have a limited schema in our subject: few pieces of knowledge, few connections, and possibly misconceptions:

We want them to leave us with a dense, well-linked and well-organised schema – in other words, we want them to have learnt lots of high-quality knowledge in the subject.

As experts in our subject, we have a good schema in our heads for our subject.\* However, brains being what they are, we can't just take a copy of our schema and insert it into the brains of our students. Schemas aren't copied: they are built.

Building happens over time. Time and content are the two critical characteristics of curriculum.

When we make houses, we don't see a house, copy it, and paste it onto the ground. We look carefully at the parts of the house and their materials, we look at how they will all fit together in the end, the roles of the walls, struts and beams, and we plan out a sequence of building so that we can build the house over time. We want it to be beautiful, long-lasting, and for each subsequent piece to be supported by what has already been built. We must do the same with curriculum. The schema is like a house and we must plan how we build it.

In cognitive science, building a schema is known as [encoding](#). Effective curriculum planning and implementation are informed by cognitive science so that encoding can be successful.

In planning curriculum, we must consider first the content itself, or rather the content headlines. This will be a mixture of [substantive and disciplinary](#) knowledge: the claims or pieces produced by the discipline, and the rules and procedures for working within the subject. These are the main features of the house: the walls, roof, doors and windows. In science, there are fewer decisions to be made regarding content headlines, and this is for several reasons: it is a "vertical" subject with relatively well-agreed necessary prior knowledge for further study; and the



National Curriculum and specifications in the UK are pretty good, with a good level of ambition and preparation for further study, and few glaring omissions; they are quite detailed. We might decide to add in additional content, perhaps because it supports other knowledge and makes it more meaningful and memorable. We might show our students the formula for resistors in parallel, for example, because it is much more satisfying and less frustrating for them than just being told "the total resistance will be less – never mind how much less!"

Were we not furnished with a reasonably well-designed National Curriculum/specification, we would have to ask ourselves, what is the knowledge with the highest leverage? What knowledge brings the most understanding? What knowledge opens up the world the most? What will allow students to succeed at A-level if they pursue it? What will enrich their lives even if they choose other A-levels? And indeed, we can surmise that these are the questions that were asked when this National Curriculum was created, since it is largely good.

In other subjects and other contexts, there are many more decisions to be made around content. In more "horizontal" subjects like history and literature, there is no obvious and finite set of foundations – you have to leave out some things, in fact you have to leave out most! The political and ethical implications here are significant but not insurmountable, as Christine Counsell shows [here](#).

These decisions about the headlines of what to include in curriculum are critical because of cognitive architecture. If we want students to have a powerful schema, it must contain the components that apply in the largest numbers of contexts, that best illustrate the important concepts, and that give explanation to the most and most significant phenomena. You can't think about something you know nothing about.

It is important to say here that these main features, these headlines, are not equal to the curriculum, just as the main features of the house are not equal to the house itself. They are key but they are not the totality. So even if your exam specification is perfect, it does not equal the curriculum.

So, we have decided the content headlines of our curriculum. Next, we must think explicitly about the links between these things. In addition to being more detailed, a key difference in the schema of experts compared to novices is

that [an expert's schema is well-organised](#). So I know that electrolysis, batteries, and bonding are all related by their explanation in electron charges, but this is not clear to the novice or student. We need to map out these links in order to inform both our sequencing and our explanations: these will in turn help our students to build their own well-organised schema. When we are planning to build our house, we need to know which parts will be joined, which parts will bear load and which parts will push or pull on other parts. This will help us to plan the order of building, the materials and the techniques.

The builder must carefully map out the sequence of parts to be completed in order for the house to be successfully built. You probably start with foundations, and then walls, then floors and roof, then plastering. If you get this sequence wrong then the house will fall down. It is the same with curriculum. We must take students on a journey where later content makes sense because of earlier content. Where an area is reliant on a [threshold concept](#), we need to have taught and secured that concept first. We are helping students to build a strong and successful schema. You can't build a roof in mid-air.

Now we need to plan out the fullness of the curriculum. How will we explain each concept? What language do we need to define? What diagrams, stories, and examples will be the best choices to help our students to understand and build their schema successfully? What is [the hinterland that feeds the core](#)? The builder plans the details of the materials, tools, and construction. If you want an effective way to guarantee and preserve this careful planning, I have found [booklets](#) to be indispensable.

Because the strength and utility of an expert schema comes in part from the number of links between items, we must plan our curriculum to build as many links as possible. A common misconception around cognitive science and curriculum is that interleaving is a practice of splitting up topics and mixing them up: [this is not what is meant by interleaving and is not an advisable practice!](#)\*\* What we *should* be doing however, is planning in our curriculum detail, where we will make links back to previously studied content, and where we will foreshadow content still to come.

An effective schema is not only strong, it is accessible too. Throughout our curriculum we must schedule spaced retrieval practice in order to build retrieval strength, so that our students can draw upon their learning in the future. Though I would not strictly include retrieval practice as a curricular item, I mention it because a good curriculum without retrieval is a wasted one. It's no good building a beautiful house if you can't get to it because the road is closed.

A well-planned curriculum is beautiful. It is rewarding both to create and to teach, and it should lie at the heart of everything we do. Our subjects deserve to be passed on to all students, and our students deserve to learn this wonderful knowledge. Through curriculum, we build and treasure.

\*Though we probably have some gaps and must be confident about addressing these if we want the best for our students.

\*\* Spaced practice, on the other hand, where the revision of already encoded material is split up and spaced, is an effective method for building retrieval strength.

## Assessment Rationale

The Learning Academies Trust (LAT) has built an assessment framework that informs the schools about the impact of two main aspects of the Teaching and Learning process:

- 1: The depth of a pupil's knowledge, understanding and ability to make links in learning
- 2: The ability for pupils to apply procedural knowledge to skill-based activities

Assessment will be used for the following purposes:

To ensure that pupils are provided with accurate feedback to support their learning and know their next target.

To ensure that teachers are aware of the next steps in learning to support quality first teaching.

To monitor standards, set high expectations and monitor progress over time.

To provide parents with a clear understanding of their child's achievements and progress.

To provide a reflective process which supports pupils to monitor and evaluate their learning

To provide MAT wide comparisons for directors and other stakeholders.

Assessment is taken both formally with snapshot tests using summative assessment tools such as NFER and SATs, but also informally using ongoing dynamic school based formative procedures.

## Influences

To support teachers' ability to make judgements on their pupils depth of understanding, and the effectiveness of their teaching, LAT has been heavily influenced by the work of Martin Robinson and his theory of Trivium. The influence of this theory varies according to the National Curriculum subject being assessed. Using Trivium as a guide, staff work within a framework to formatively assess whether a pupil can:

**Recall knowledge** with confidence about chronology, theory, factual details and linked vocabulary.

**Explore and question** knowledge forming their own rounded opinion, schema and insight, linking theory and opinion to differing contexts.

**Share and communicate** knowledge to others, shaping it into a personalised version, which is relevant to a pupil's own context, (and/or that of others) whilst making authentic links to real life. Making audiences think differently should be a key marker of assessment and an insight into a pupil's depth of clarity, but also their degree of curiosity and interest.