



# Twilight: Principles of Curriculum Design

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Education  
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Empowering educators with evidence

# Session Overview

- **What is ‘the curriculum’?**
- **What values and principles might we consider when planning the curriculum in our subject?**
- **What kind of evidence can we use to support curriculum planning?**
- **Which models support practical planning?**



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# Questions on Curriculum

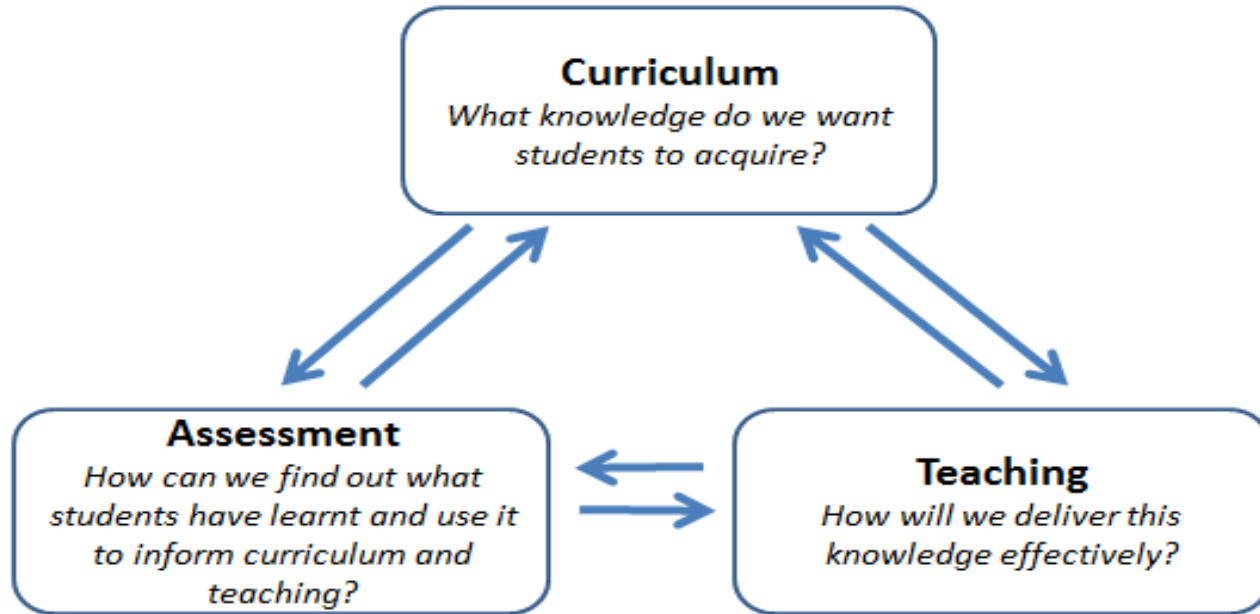
- What does curriculum mean to you?
- Why is it so deserving of our attention?
- What are the challenges with curriculum development that you are grappling with?



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# Curriculum, Teaching and Assessment



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# Curriculum Entitlement

*“Evie arrives at secondary school with the label ‘less able’. She has fallen behind during her primary years in the basics – reading, writing and arithmetic. She is a hard-working, conscientious child from an underprivileged background. She receives little support from home. On arrival at secondary school, Evie takes a number of baseline tests and before long finds herself in the bottom set for many subjects. In unstreamed subjects, teachers differentiate by giving her easier work to complete than her peers. Teachers rarely expect more than this from Evie – after all, somebody has to be the weakest in the group. It is no wonder then that Evie herself has little expectation that she can become an academic achiever. After five years of secondary school, Evie enters the real world. She has failed her GCSEs.”*

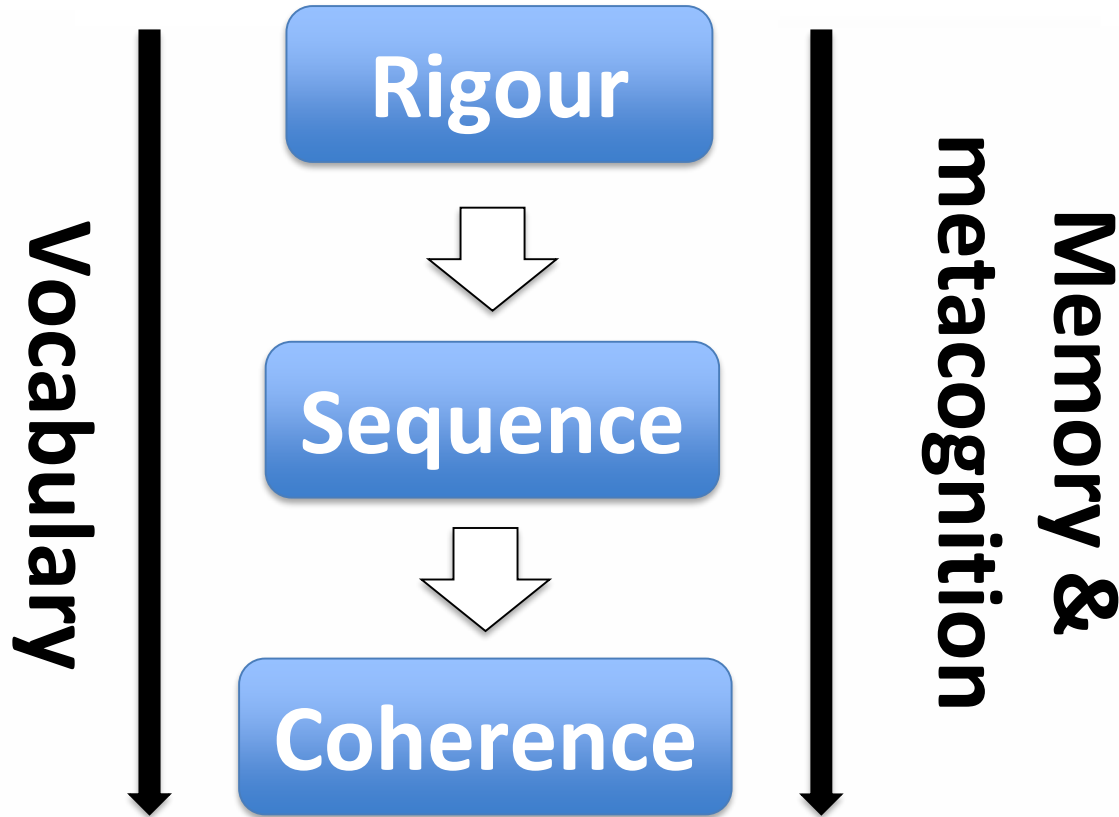
Making every lesson count – Allison & Tharby



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# A Model for Curriculum Planning



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# A simple approach to curriculum planning

*“Why this?  
Why then?”*



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# An evidence informed curriculum should...

- Support retrieval practice.
- Support spaced practice.
- Make explicit what knowledge should be learnt – including the key concepts.
- Be sequenced and coherent.
- Support explicit vocabulary instruction.
- Make time for disciplinary metacognitive development.

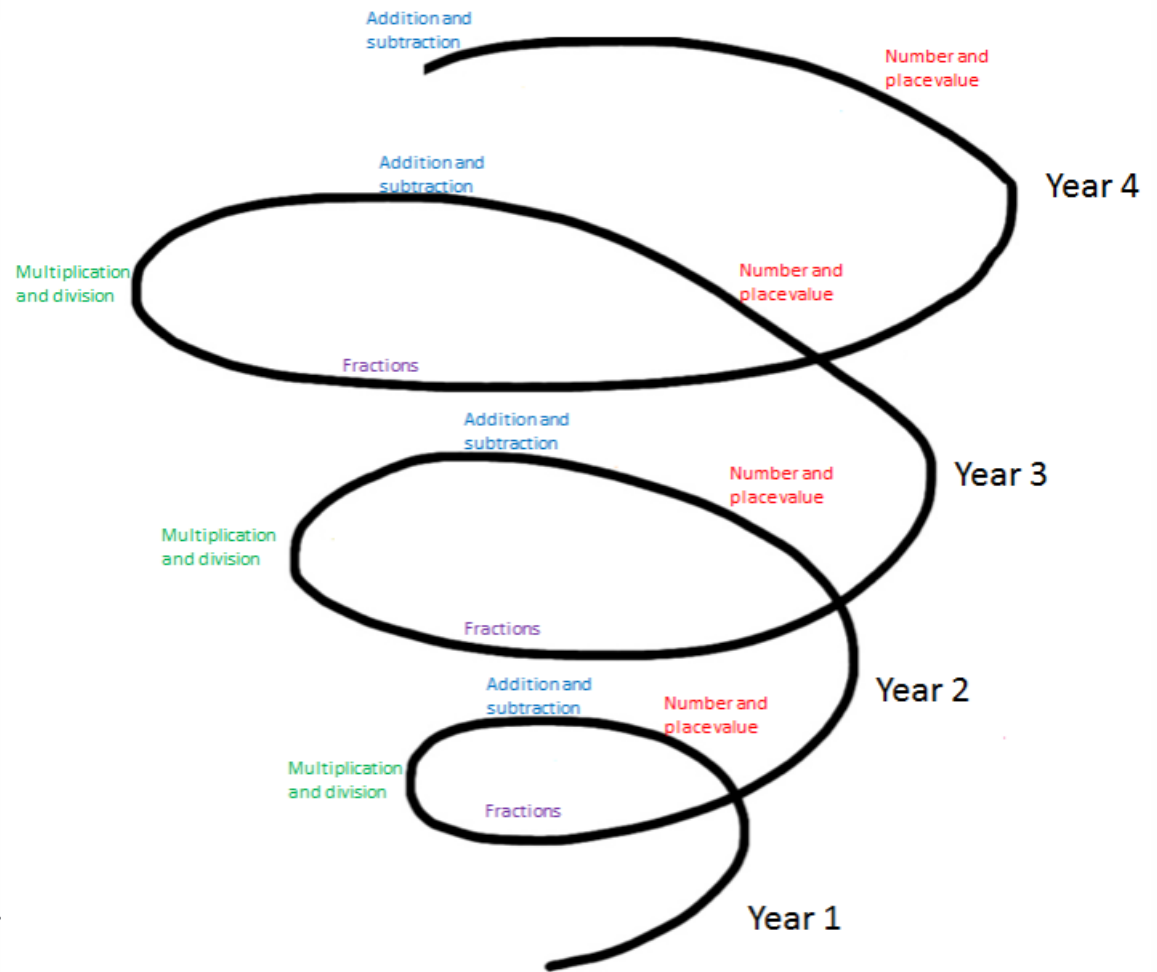


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# Curriculum models

## 1. The spiral



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# Curriculum models

## 2. *Mastery (slower pace/higher success rate)*

### Mastery learning

Moderate impact for very low cost, based on moderate evidence.



+5

Mastery learning breaks subject matter and learning content into units with clearly specified objectives which are pursued until they are achieved. Learners work through each block of content in a series of sequential steps.

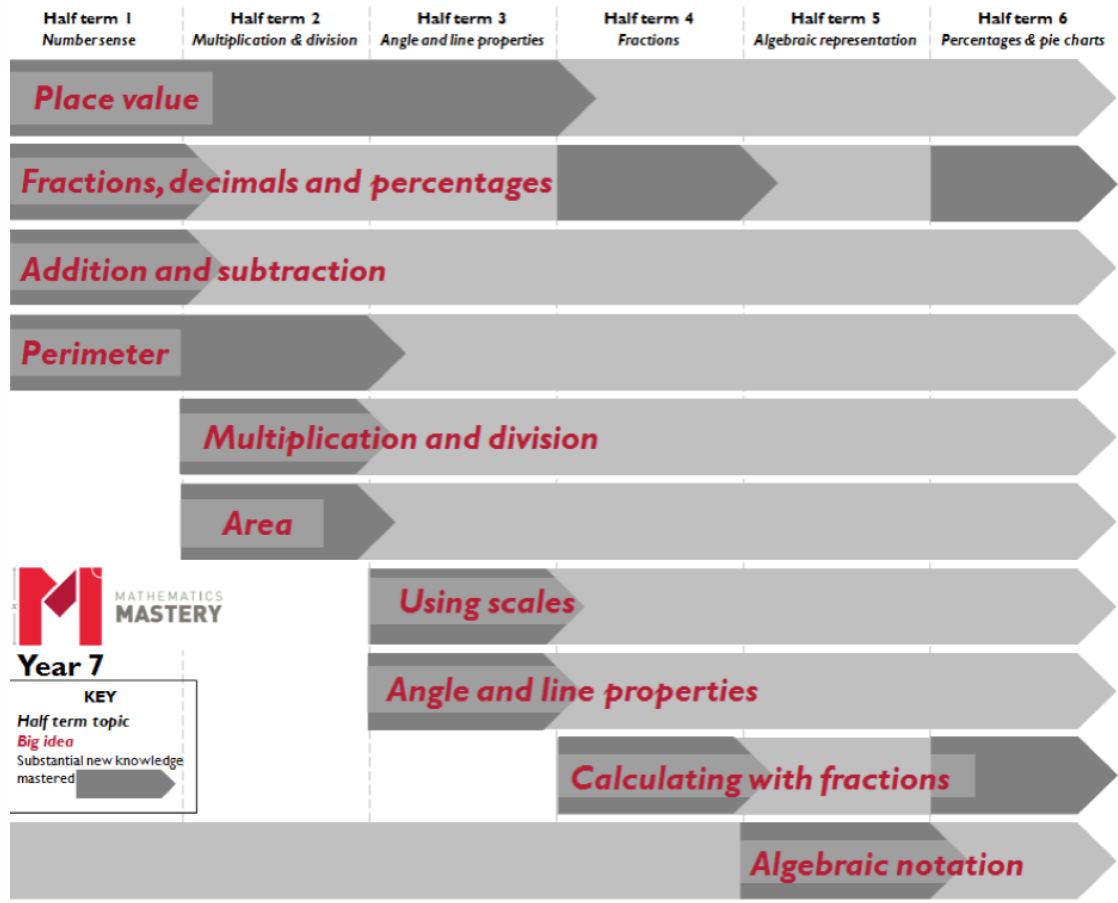
Students must demonstrate a high level of success on tests, typically at about the 80% level, before progressing to new content. Mastery learning can be contrasted with other approaches which require pupils to move through the curriculum at a pre-determined pace. Teachers seek to avoid unnecessary repetition by regularly assessing knowledge and skills. Those who do not reach the required level are provided with additional tuition, peer support, small group discussions, or homework so that they can reach the expected level.

EEF Toolkit



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Year 7

**KEY**

Half term topic

Big idea

Substantial new knowledge mastered



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# Curriculum models

## 3. 'Memory platforms'



Dedicate a portion of each lesson for going back and revising/practising previously-covered material.



# Curriculum models

## 4. Cumulative testing

Term 1 (test content taught in autumn)  
+  
Term 2 (test content taught in autumn +  
spring)  
+  
Term 3 (test content taught in autumn +  
spring + summer)  
=  
Improved memory retention



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# Curriculum models

## 5. Lagged homework

Half-term week	Homework coverage
Autumn 1	Autumn 1
Autumn 2	Autumn 2
Autumn 3	Autumn 1 and 2
Autumn 4	Autumn 2 and 3
Autumn 5	Autumn 3 and 4
Autumn 6	Autumn 4 and 5



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# The curriculum is never finished ...



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# Setting out your objectives

## Objectives

The curriculum should be challenging in its depth and breadth so that:

- All students acquire **transformational knowledge** that takes them beyond their experience.
- All students are encouraged to **appreciate the value** of each subject.
- All students are **well-prepared for terminal exams** at the end of five years of study.
- All students build their **academic background knowledge** and cultural capital by acquiring tier two and tier three vocabulary.
- At KS3, all students **acquire and retain the foundational knowledge required for GCSE** at the very least.



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# Setting out your underlying principles

## Underlying Principles

- The curriculum must **provide a map that directs what knowledge should be taught and when it should be taught**. However, this should also allow some **flexibility** for teachers to respond to the differing needs of their classes.
- The curriculum must be taught in a **coherent and step-by-step sequence** that allows for the **incremental development of** knowledge within each subject.
- When possible, each new unit of learning should **build upon** the previous unit.
- **Broad and deep factual knowledge is** usually the prerequisite for skills such as critical thinking, creative thinking, evaluation and analysis.
- Learning and performance should not be confused. Curriculum design should support real learning which requires **durable changes to long-term memory**.
- New **tier two and tier three vocabulary** should be incorporated into curriculum planning.



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# Reflective Questions

- What is the purpose of your curriculum?
- Can you articulate the ‘why this? Why now?’ of your curriculum?
- What do you do to make the curriculum coherent?
- How effectively is the curriculum sequenced through the years (and what is this sequencing based on)?
- Do you ensure that all students, especially those from disadvantaged backgrounds, have full access to the curriculum?



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