Ambition Institute

EARLY CAREER TEACHERS

SCIENCE OF LEARNING AND PLANNING HABITS

Launch Conference | Participant Workbook

KEEP GETTING BETTER

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Science of learning and habits of planning

Welcome to the Early Career Teachers Training Programme Launch Conference workbook. This workbook will accompany the facilitated session and help you build on your learning from the orientation which you should have completed online via Steplab.

Session aims

To revisit:

> Key information about the Early Career Teachers Programme

> How the Early Career Teachers programme will support you to develop your expertise

> Key principles from the science of learning

To understand:

> The implications of the science of learning on our role as teachers and learners on this programme

> Key habits of planning

Today's session

Section 1: Programme Overview

Section 2: The power of effective teaching

Section 3: The science of learning

Section 4: Habits of planning

Section 5: Experiencing a clinic

Section 6: Reflection

Appendix: Additional exemplification for Habit 1

Bibliography

Programme overview

Terminology

- **Pupils**
- **Mentor**
- **ECF** = Early career framework
- **ECT** = Early career teacher
- **ECT Programme**= Early career teachers Programme
- **Orientation** is the online introduction (via Steplab) to Ambition's early career programme.
- **Induction** refers to your (two-year) entitlement to training as a new teacher.

Retrieval: Early career framework

1. The early career framework is:

    A. A curriculum of learning to develop early career teacher's expertise.

    B. A second assessment framework from which to evaluate early career teachers.

    C. A suggested set of content which early career teachers may find helpful for their context.

Notes:

Key ideas

- Teachers are the foundation of the education system – there are no great schools without great teachers.
- Teachers deserve high quality support throughout their careers, particularly in those first years of teaching when the learning curve is steepest.
- This two-year induction is the bridge between initial teacher training and a career in teaching.

Your entitlements

- Attend high quality professional development, conferences and clinics.
- A dedicated mentor to support your practice and guide you through the programme.
- A continued additional 10% timetable reduction for first year of induction and a newly funded 5% off-timetable in second year, providing you protected time for your professional development.

Retrieval: Early career teachers programme

1. The early career teachers programme is designed to:

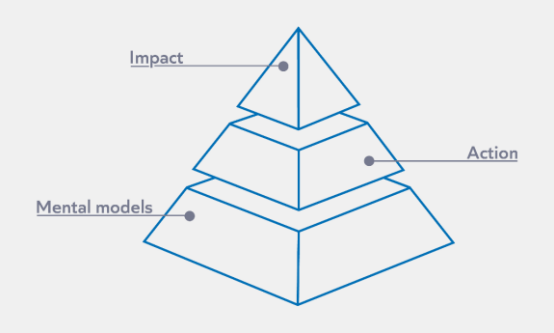
    A. Support the professional development of early career teachers and assess the quality of newly qualified teachers across the country.

    B. Support early career teachers to develop expertise in key areas of teaching and learning through engaging with a curriculum of learning which is based on the early career framework.

    C. Develop early career teachers' ability to develop expertise in all aspects of their role as teachers.

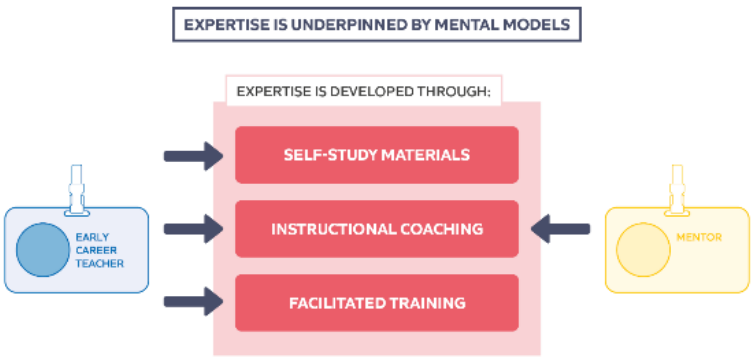
Notes:

Ambition's approach to developing teacher expertise



Notes:

How is teacher expertise developed on the programme?



Initial teacher training framework		Early Career Framework	
Learn that teachers have the ability to affect and improve the wellbeing, motivation and behaviour of their pupils.	**Learn how to** Communicate a belief in the academic potential of all pupils, by: > Receiving clear, consistent and effective mentoring in how to set tasks that stretch pupils, but which are achievable, within a challenging curriculum.	**Learn that** teachers have the ability to affect and improve the wellbeing, motivation and behaviour of their pupils.	**Learn how to** Communicate a belief in the academic potential of all pupils, by: > Using intentional and consistent language that promotes challenge and aspiration. > Setting tasks that stretch pupils, but which are achievable, within a challenging curriculum. > Creating a positive environment where making mistakes and learning from them and the need for effort and perseverance are part of the daily routine. > Seeking opportunities to engage parents and carers in the education of their children (e.g. proactively highlighting successes).

Programme principles

Revisit the programme principles and consider the following:

1. How do the programme principles might support you to manage your workload and develop expertise?
2. How can the programme principles support you to engage regularly with professional development?

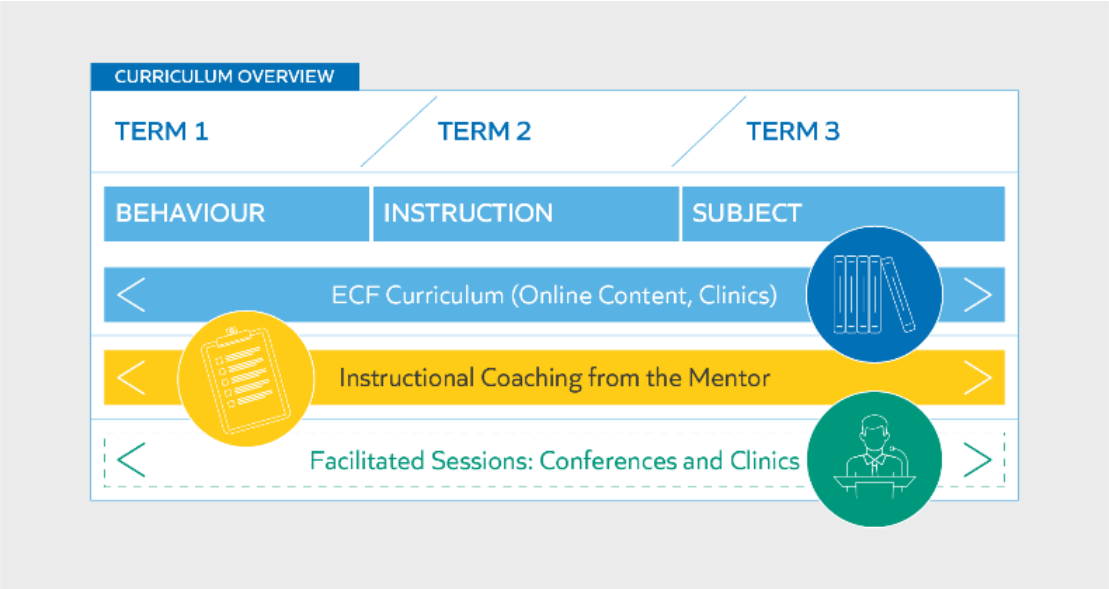
- **Key learning broken down into small, manageable chunks** – in Year 1 of the programme, each week, you will work on a bite-sized aspect of your teaching (known as a step) with your mentor. An example would be looking at a specific strategy to help you to ask effective questions to your pupils.
- **Clear modelling of effective practice** – during your instructional coaching session, your mentor will model what the bite size aspect (step) looks like before you practise applying the step yourself. You will also see lots of different models of the strategies and approaches being taught within clinics and conferences.
- **Multiple opportunities to return to key learning** – the aim of this programme is for you to develop mastery of key teaching practices and, to do that, it is important to revisit and build on key learning. You will have the opportunity to revisit and deepen understanding of key learning through the self-study you carry out, as well as the clinics and conference. For example, in your ITT year, you may have learnt about the importance of giving clear instructions and you will revisit this content when looking at self-study modules on routines. You will then return to these ideas when thinking about how to break down content when modelling content to your pupils.
- **Practice and feedback** -within the instructional coaching session, you will deliberately practise and receive formative feedback on a bite sized aspect of your teaching so that you have an opportunity to practise the step before deploying it “live” in your classroom.
- **Contextualised-** through the models your mentor shows you, they will help you to see how the learning in your self-study modules translate into practice.
- **Familiar routines**-each week, you will engage in weekly self-study and the weekly (fortnightly in year 2) instructional coaching, to help both you and your mentor get into the routine of engaging in your professional development on the programme.

Notes:

Programme inputs

Notes:

Programme journey



Behaviour strand: at a glance

1. Fundamentals
2. Routines
3. Instructions
4. Directing attention
5. Low-level disruption
6. Consistency
7. Positive learning environment
8. Structured support of learning
9. Challenge
10. Independent practice
11. Pairs and groups
12. Upholding high expectations

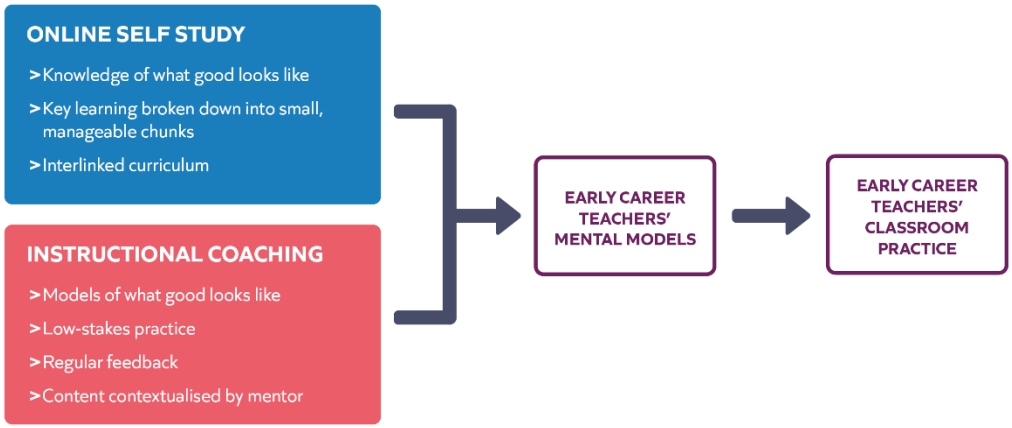
Building in complexity

Retrieval: Early Career Teacher Programme inputs

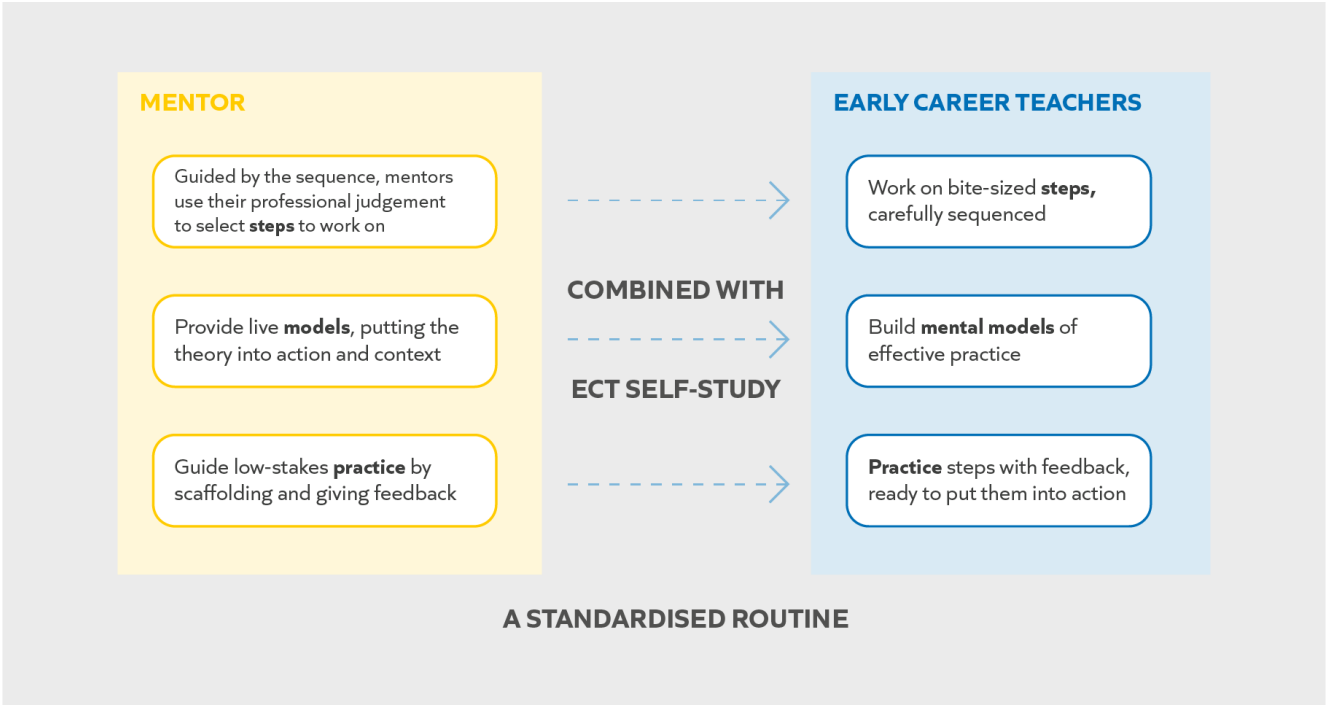
1. Clinics and conferences for ECTs are designed to:
    A. Revisit and build upon content which is also addressed in the weekly study modules.
    B. Cover content which is not as "coachable" as other content (e.g. managing workload and wellbeing).
    C. Cover content which isn't covered in the ECF but which at Ambition Institute we feel is important for ECTs to know**.**

Notes:

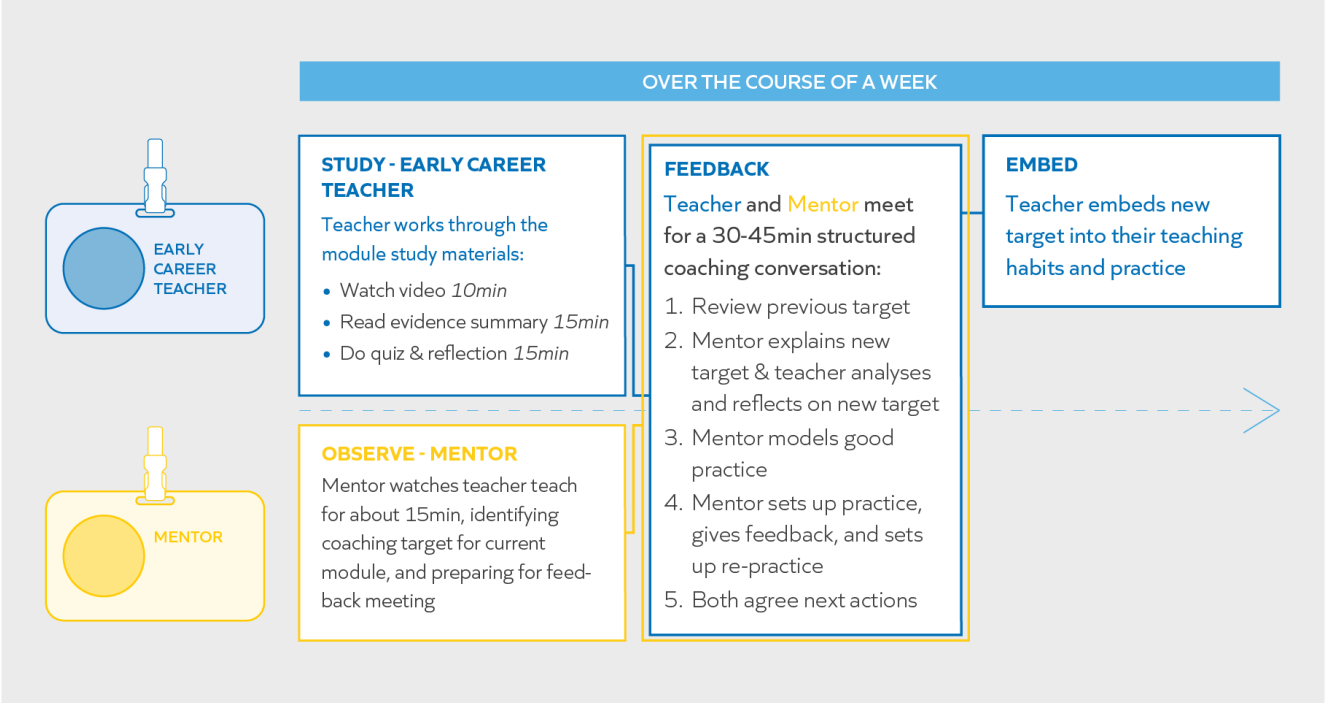
Self-study and coaching



Instructional coaching: Key features



A typical week



Clinics and conferences

> Supports and builds on understanding of key curriculum content

> Addresses certain key ideas which you may not be coached on (e.g. pupil wellbeing)

> Provides opportunity to network with peers

Suggested training sequence

Year	Half-term 1	Half-term 2	Half-term 3	Half-term 4	Half-term 5	Half-term 6
Y1	Conference 1		Conference 2			
		Clinic 1		Clinic 2		Clinic 3
Y2	Conference 3					
		Clinic 4	Clinic 5		Clinic 6	

Where can I find out more?

Steplab→ Library→ ECT 2022-2024 Teacher Key Programme Resources

Journey so far

Notes:

Reflection

- What are you most looking forward to?
- Any questions so far?

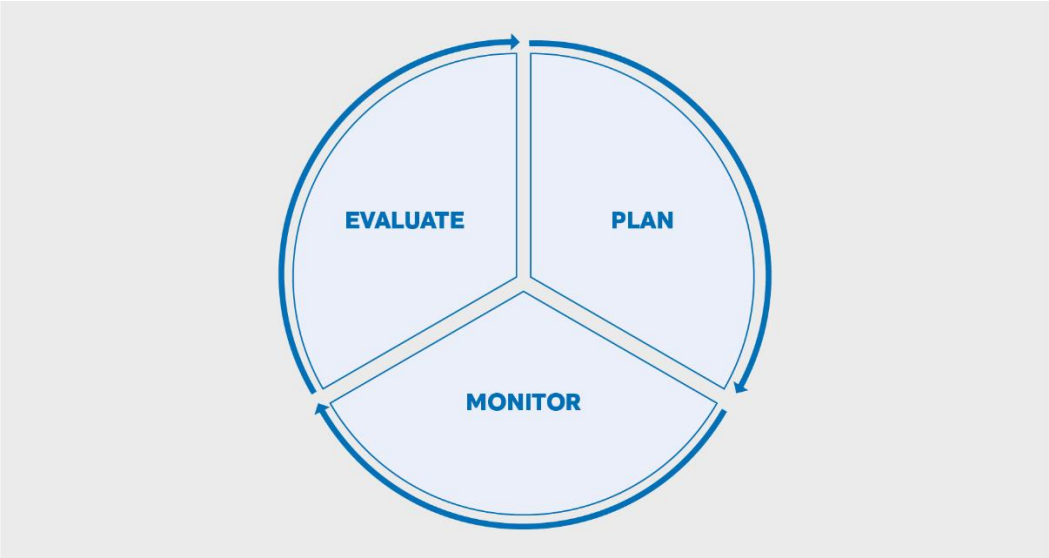
Notes:

Recap: self-regulation

Practising self-regulation allows you to have:

- a greater understanding of your strengths and weaknesses.
- a greater awareness of strategies that will help you learn.
- the ability to motivate yourself towards personal learning goals.

Recap: metacognition



Adapted from EEF, 2018. Metacognition and self-regulated learning

Metacognition example

Planning	I'm going to ensure that I really engage with my self-study time and make sure I make the most of this time. I have decided to use the intervention room which is usually free on a Wednesday afternoon.
Monitoring	The room I wanted to use was busy last week, so it took me 10 minutes before I found somewhere quiet to work, which meant that I lost out on some time as I am teaching straight after. I will talk to my mentor about finding a suitable space, where I can work and the time slot when I need to use it can be protected.
Evaluation	After changing where I carry out my self-study, I am now able to work more efficiently and concentrate on my self-study. I will continue to do this throughout this term as it works well.

Self-regulation in practice

Read the text around potential barriers and examples of how to respond to them.

Given the barriers, which do you think may be the biggest potential challenge for you getting the most out of the programme this year?

We anticipate a few common barriers teachers may face when engaging with the 40-minute weekly study component of the ECT programme. A non-exhaustive list might include:

> **Time**: Schools are busy places. ECTs tend to take longer to do things than experienced colleagues (and we all underestimate how long tasks take). We might have good intentions to complete our weekly study, but find it just falls off the bottom of our to do list and is forgotten.
> **Context**: We all teach different subjects and phases. The study materials have been written to be accessible to a general teaching audience. There will be times when you may think 'I would do this differently in my subject', 'our school policy doesn't allow this' or 'in my phase we don't do that' and write the materials off as not relevant to your context.
> **Motivation**: You might engage with weekly study and think 'I already do that' or 'I'll never be able to do that' and decide you're not going to try and implement it in your classroom.
> **Technology**: You will need to access weekly study through our Steplab platform. You may come to your planned time to study and find your classroom computer is in use, you've forgotten your headphones and the staffroom is full, or you can't connect to the WiFi, leading to you to run out of allocated time.

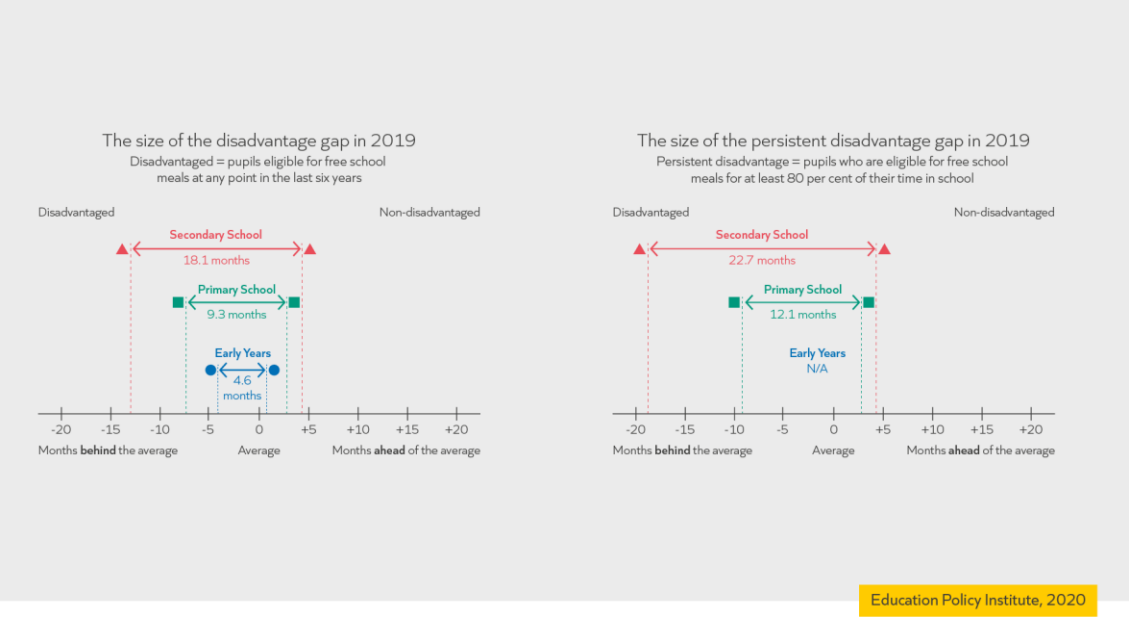
Self-regulation in practice (context)

Stage	Possible solution/response
Plan (start)	I want to ensure that I keep an open mind when watching development area videos and try to understand different contexts and phases.
Monitor (1-3 weeks)	The focus in the self-study module this week was on a secondary English lesson. Although this is not my subject or phase, I was able to observe how instructions might be implemented with older pupils. I then discussed adapting this for the pupils that I teach with my mentor.
Evaluate (end of half term)	I have been concentrating on the focus of the videos even if they do not relate to my setting or subject - my mentor has helped me to do this in our coaching sessions. My next step for Spring term would be to observe other members of staff who work across different phases during my study time to see what this looks like in their practice.

Self-regulation in practice (Time/workspace)

Stage	Possible solution/response
Plan (start)	I'm going to ensure that I really engage with my self-study time and make sure I make the most of this time. I have decided to use the intervention room which is usually free on a Wednesday afternoon.
Monitor (1-3 weeks)	The room I wanted to use was busy last week, so it took me 10 minutes before I found somewhere quiet to work, which meant that I lost out on some time as I am teaching straight after. I will talk to my mentor about changing my self-study time to a slot when I can work in my classroom instead.
Evaluate (end of half term)	After changing my self-study time, I am now able to work and concentrate on my self-study in my classroom, I will continue to do this throughout this term as it works well.

Power of effective teaching



Education Policy Institute, 2020

Notes:

"Teaching quality is important. It is arguably the greatest lever at our disposal for improving the life chances of the young people in our care, particularly for those from disadvantaged backgrounds."

McCrea (2016)

Teacher impact

Academic

Pupils are likely to achieve around 10% higher in English outcomes with a 'good' teacher than if they had been placed with an 'average' teacher. (Slater et al, 2019)

Wellbeing

Pupils who believe that their teachers showed care, provide a sense of perceived pupil autonomy, and monitor them closely report higher life satisfaction. (Rathmann et al, 2018)

Life choices

Pupils assigned to high value-added teachers in primary school are more likely to attend college, and earn higher salaries. (Chetty et al ,2014)

Motivation

Reflect and discuss the following:

- Where does your inspiration for being a teacher come from?
- What drives your motivation to teach?

Notes:

"..data modelling indicates that expectations for success have a unique and positive impact on [pupil] performance every year.."

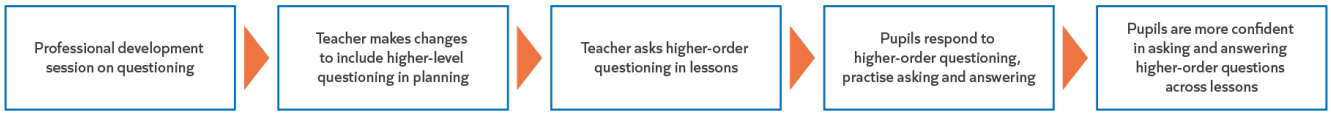
Centre for Education Statistics and Evaluation (2019)

High Expectations

When reflecting on high expectations we can ask ourselves:

- How do I articulate/communicate my high expectations to pupils?
- How do I know if students have high expectations of themselves?
- How do I model to pupils that I have high expectations of myself and of them?

Why is professional development important?



The science of learning

"Understanding a bit about how thinking happens will help you understand what makes thinking hard. That, in turn, will help you understand how to make thinking easier for your students, and therefore help them enjoy school more."

Willingham (2009)

"Learning involves a lasting change in pupils' capabilities or understanding."

ECF, p.10, 2019

Learning not performance

- **Performance**: Immediate change in behaviour or knowledge that can be observed and measured.
- **Learning**: Lasting change in capabilities and understanding, which happens over time and is hard to observe.

Why is this challenging for schools?

- Learning cannot be 'seen', it is an internal process.
- We can only make inferences about learning based on performance.
- Performance can differ based on classroom environment, pupils needs & emotions and complexity of a task.
- A pupil may answer correctly in lesson, but this information may not be 'learnt' or embedded and can be forgotten.

Lasting change: implications

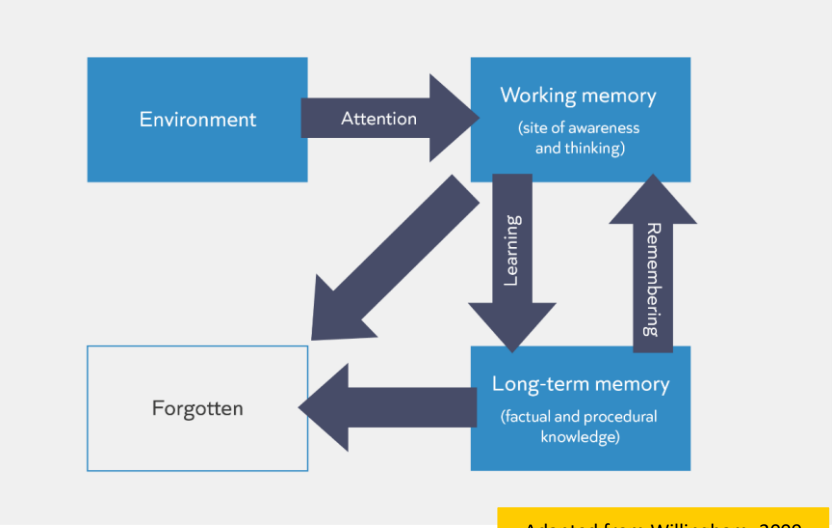
Pupil learning

When trying to gauge what pupils have learned, Ms. Gray knows she needs to look at data over time from a range of sources. She knows what she sees in a single lesson is pupil performance, not necessarily learning.

Your learning

After reading about a new topic in her weekly study module, Ms. Gray knows the value of revisiting these ideas in the instructional coaching session with her mentor, as well as in clinics and conferences.

Recap: simple model of memory

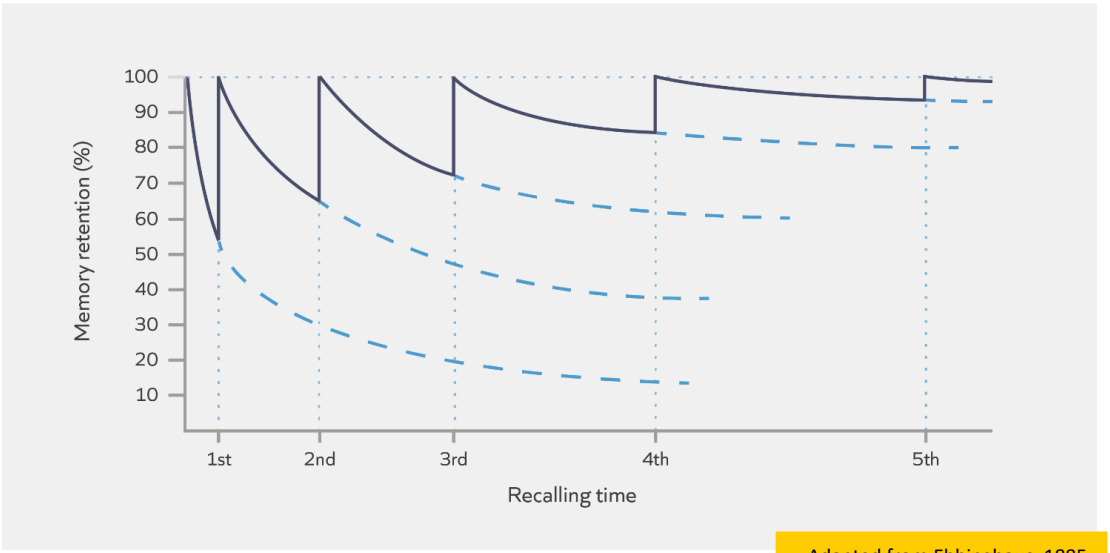


Adapted from Willingham, 2009

Working memory

Notes:

Learning happens over time



Adapted from Ebbinghaus, 1885

Learning and remembering: implications

Pupil learning	Your learning
Mr. Amo knows that he needs to build in opportunities within his lessons for pupils to retrieve prior learning from previous lessons.	Mr Amo understands the importance of having opportunities to retrieve key learning from self-study modules and coaching sessions so uses the checks for understanding quizzes in the weekly self-study, clinics and conferences to retrieve this learning.

Check for understanding

1. Which of these statements are true?
    A. Learning is a lasting change in the learner's capabilities or understanding.
    B. Building knowledge in long-term memory is important because the better our prior knowledge, the more easily we can make sense of new information.
    C. Learners will struggle to build knowledge in long-term memory if they are cognitively overloaded.
    D. It is possible to make direct inferences about both learning and performance, but it is easier to measure performance.

Notes:

Common misconceptions

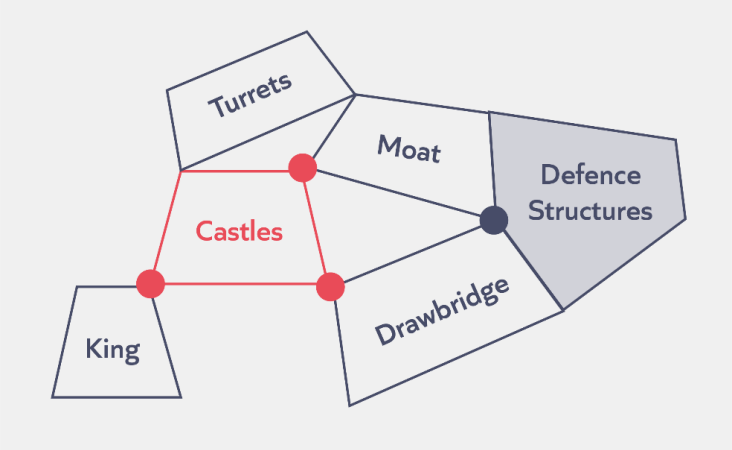
> People have different learning styles
> People are preferentially right or left brained
> Humans use 10% of their brains

Notes:

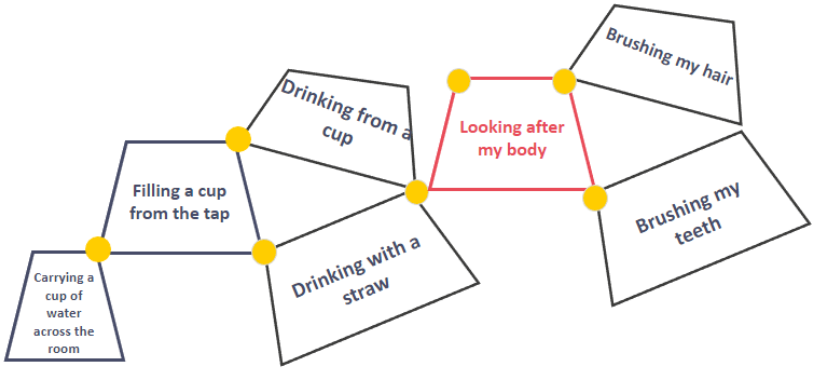
Mental models

The way information is organised in long term memory.

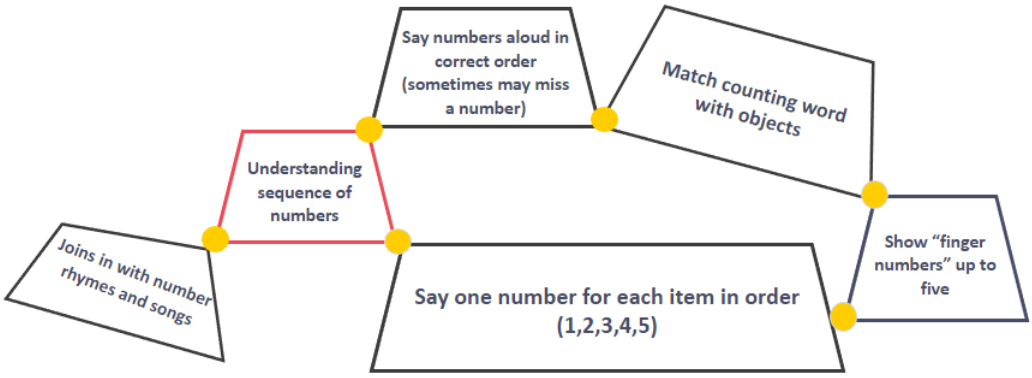
Y7 History Example



SEND Example

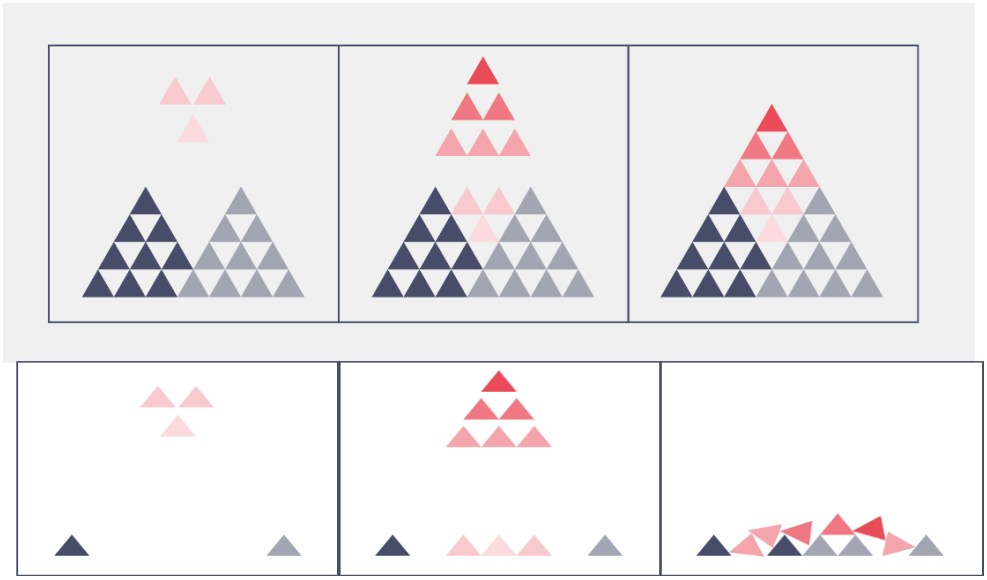


EYFS Example



Notes:

Building mental models



Efrat Furst, 2018

Check for understanding

1. Which of these statements are true?

    A. A teacher's mental model represents all knowledge they know about teaching and learning.

    B. Content should be broken down for novice learners because their mental models are not yet highly connected and developed.

    C. Retrieval and practice helps to prevent knowledge being forgotten from our working memory.

Prior knowledge: reflection

Read the scenario and consider the following:

> How does understanding the science of learning help Mr Tam decide about how much content to check/how to review pupil prior knowledge?

> Think of an upcoming lesson that you are teaching, what do pupils need to know before they can engage in the content?

Scenario

Mr Tam is teaching a lesson on time to his year 2 class. He needs to consider pupils prior knowledge, including what was taught in Year 1. There are many things he could list here, he chooses a few things to check before starting his unit on time:

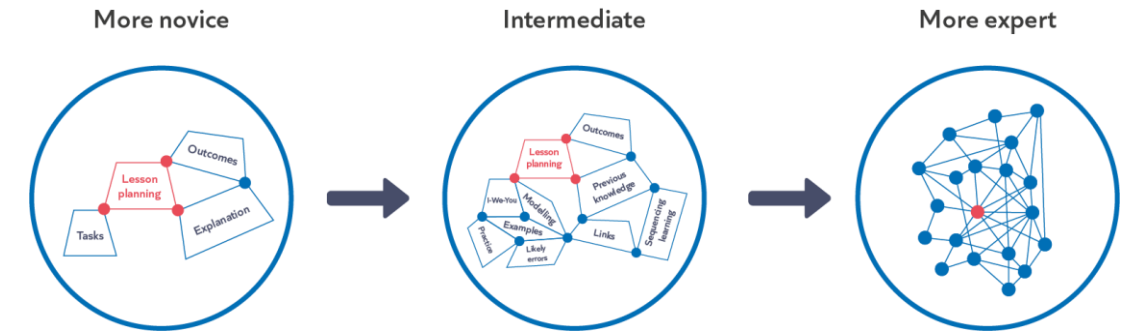
- To understand that the clock gives us the time of day
- Pupils' knowledge of half (to understand half past)
- Pupils' knowledge of o'clock
- Knowledge of the 5x table or counting in 5s.

Notes:

"Where prior knowledge is weak, pupils are more likely to develop misconceptions, particularly if new ideas are introduced too quickly."

Early Career Framework (2019)

How novices and experts learn



Fully guided instruction; **modelling and practice with feedback**.	Mix of guided instruction, modelling and practice, alongside reflection.	Minimal guidance with occasional corrective feedback.

Mental models: implications for teaching

- Can you think of an example of a specific schema for an area of learning or unit that your teach?
- What strategies would you use to support development of this schema?
- Why is this important?

Notes:

Mental models: implications as learners on the programme

- How does what we know about developing schemas link to how the programme is designed?

Notes:

Habits of planning

Key ideas

- Planning is one of the most important factors in determining your pupils' and your success.
- Planning is a thinking process, it should not be a form filling process.
- Planning can be learnt, practised and refined.

Planning habits

1. **Identify and break down knowledge** by analysing your end of unit task.
2. **Build on prior knowledge** by sequencing from what your pupils may already know.
3. **Make the learning accessible** by identifying gaps and misconceptions your pupils may have.
4. **Build lasting learning** by planning for multiple retrieval and practice opportunities to prepare pupils to apply key knowledge.
5. **Deepen understanding** by ensuring that, once key knowledge has been securely acquired, you vary the contexts in which pupils apply that knowledge.

Habit 1

1. **Identify and break down knowledge** by analysing your end of unit task.

Why might this be challenging in practice?

"The Curse of Knowledge: when we are given knowledge, it is impossible to imagine what it's like to lack that knowledge."

Heath (2007)

Read the extract below from Peps Mccrea's book 'Lean Lesson Planning: a practical approach to doing less and achieving more in the classroom' (2016)

- What are the key messages?

Backwards Design

I have worked with many teachers who have become frustrated by the planning habits they're developed over time. In some cases, this is because they have fallen unawares into one or both of the following classic traps.

- Activity-focused planning starts by trying to find a good activity, and then reverse engineering the lesson intentions to match the likely outcomes of the activity. Over time, this approach can end up becoming an exercise in *keeping students busy*.
- Coverage-focused planning begins with a set of lesson intentions that have been crafted by someone else (e.g. a colleague or a textbook), rather than taking the time to construct aims around your student needs. Over time, teaching can become an exercise in *getting through the curriculum*.

It *is* possible to experience some short-term gains with both of these approaches. They offer easy and compelling solutions to the problem of planning. However, they are economically flawed, and over time, are likely to stifle professional creativity and generate poor levels of return on student learning.

Starting with the end in mind

In his recent meta-analysis, John Hattie argues that one the best ways to optimise learning is to use backwards design. In the context of lean lesson planning this means two things.

- Start your planning with the question: w*hat do I want my students to have learnt by the end of the lesson?*
- Spending more time on this activity than you think you should.

Doug Lemov observed that effective teachers spend more time *identifying outcomes* and less time *selecting activities* than their colleagues. The clearer you are about where you want to go, the better chance you have of getting there. This logic may seem obvious, but in practice, it is frequently prone to abuse. Backwards design is about striving for *excessive clarity* about what you want your students to be able to do as they progress through the lesson. This involves mapping out, breaking down and thinking hard about how the various parts of the learning trajectory hang together.

Extract from Mccrea, Peps. *Lean Lesson Planning: a practical approach to doing less and achieving more in the classroom* (2016)

Planning process

Where do we start? At the end!

Backwards planning

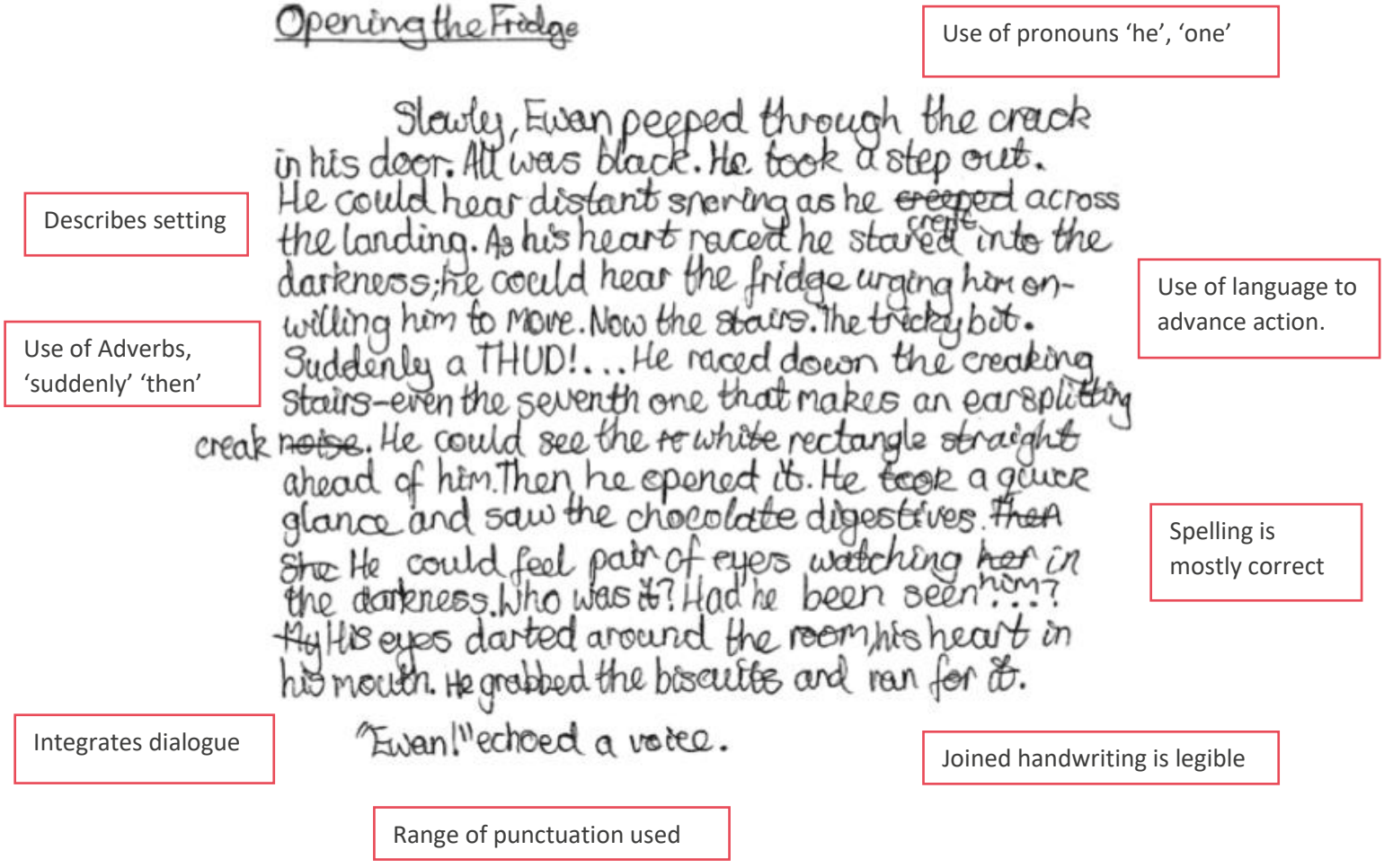
- What do I want pupils to understand, know and be able to do?
- How can I find the knowledge that needs to be taught? What does the end of unit task look like?
- Which learning activities will lead to the desired impact?

Habit 1 tools

Suggested tools
1a. Identify an end of unit task.
1b. Complete or source an end of unit task as an high attaining pupil.
1c. Break down the knowledge and skills needed to complete the task.

Examples

Notes:



Habit 1: Links to learning

Habit 1 allows us to:

- Specify exactly what pupils need to learn, know or be able to do.
- Break down the knowledge further.
- Allows for purposeful lessons without trying to 'cram'.
- By highlighting key knowledge, teachers can try to give information bit by bit so that pupils do not experience 'cognitive overload'.

Habit 2

2 **Build on prior knowledge** by sequencing from what your pupils may already know.

How can we sequence prior knowledge?

Notes:

Reading: Recap Prior knowledge

Read the extract from Didau and Rose, 'What every teacher needs to know about psychology'.
Consider the following:

1. According to Didau and Rose, why is prior knowledge important?
2. How do these ideas relate to what you know about progression in your subject?

Prior knowledge is the most important difference between students. Students' minds are not a blank slate; when children arrive at school they already know lots of stuff. Even though students in the same lesson might all go through essentially the same learning process, their background knowledge, experiences, interests and motivations can be wildly different. Obviously enough, this prior knowledge affects how students acquire new knowledge and skills; what is already known interacts with the materials being learned. …perhaps the single most important implication arising from working memory research is the importance of prior knowledge when learning new material. Whilst attempts to expand the capacity of working memory directly through training programmes have proved disappointing, one sure-fire way we can build up the complexity of material children can hold in

mind is by ensuring they have the background knowledge to help them process the new material we want them to learn. Knowledge doesn't just sit in long-term memory waiting to be called upon – it appears to actively help to increase working memory capacity within a domain or type of activity. This is a marvellously positive message for educators. Whilst we may be able to very little to directly improve working memory in a generic way, we can help children to reason in complex and creative ways when they possess lots of background knowledge. The more you know, the more complex and interesting the connection you can make. By ensuring children have a confident grasp of the inflexible knowledge which forms the foundations of new learning, we provide them with a greater 'mental workspace' which they can use for more complex analytical and evaluative tasks.

Didau and Rose, *What every teacher needs to know about psychology* (2016)

Notes:
> According to Didau and Rose (2016), why is prior knowledge important?
> How do these ideas relate to what you know about progression in your subject?

"Carefully structured sequences of learning allow the foundations of a subject or topic to be consolidated in long-term memory; this helps students to later go on to tackle complex and novel problems."

Didau and Rose (2017)

Habit 2 allows us to:

- Find out what pupils already know.
- Build on prior knowledge.
- Reduces the chances of cognitive overload.
- Increase the chances of successful long-term learning.

Habit 3

3 **Make the learning accessible** by identifying gaps and misconceptions your pupils may have.

Barriers and misconceptions

Misconceptions:

- Pre-existing beliefs that interfere with learning.
- *Example: The moon changes shape during a month, rather than different parts of it being illuminated.*
- *Non-example: Mixing up the phases of the moon when learning it.*

Maths example

Misconception:

- Thinking that the shorter hand on the clock refers to minutes.

Let's see this in practice. We are going to watch a video of a Year 3 teacher teaching her class about time. Firstly, she is going to consider the misconceptions pupils may have before delivering the lesson.

Whilst watching the video, make notes on the following:

- How does the teacher identify the gaps and misconceptions that are likely to arise before her lesson, how does she plan to overcome this?
- How does she ensure that learning is accessible for pupils?

Notes:

Task

Consider an upcoming lesson or unit that you will be teaching.

> What misconceptions may arise?

> How will you plan to overcome these?

Lesson/Unit	
Misconceptions	
Strategies to overcome these	

Habit 3 allows us to:

- Consider misconceptions and gaps in the long-term memory.
- Helps to form the basis of learning, before moving on to trickier content.
- Supports all pupils, including those with SEN to think about potential barriers.

Habit 4

4 **Build lasting learning** by planning for multiple retrieval and practice opportunities to prepare pupils to apply key knowledge.

Retrieval:

- Actively recalling from memory

Re-exposure:

- Representing the same material to build up familiarity

How does retrieval affect the strength of a memory?

Notes:

"Retrieval practice is a strategy in which calling information to mind subsequently enhances and boosts learning. Deliberately recalling information forces us to pull our knowledge "out" and examine what we know [...] by trying to recall information, we exercise or strengthen our memory, and we can also identify gaps in our learning."

Institute of Education Sciences (2018)

Massed vs. spaced practice

Massed Practice

'This is practising a skill without a break and occurs when an activity is repeated continuously over a period of time with very little or no rest period.'

Examples:

- 30-minute weekly spellings homework
- 15 minutes of 3x table practise
- 20 minutes of practising scoring a goal

Spaced Practice

'…consists of short, frequent practise sessions interspersed with rest intervals or intervals of learning another skill.'

Examples:

- 10-minute daily spelling practise
- 5-minute 3x table practise daily
- Penalty shoot-out and peer review

Reflection: Spaced practice

How can spaced practice promote learning through habits of planning 2-4?

Notes:

Habit 4 allows us to:

- Helps to ensure fluency and quick recall
- Aims to develop strong subject knowledge and mental models for our pupils.
- Ensures that content is not 'forgotten'.

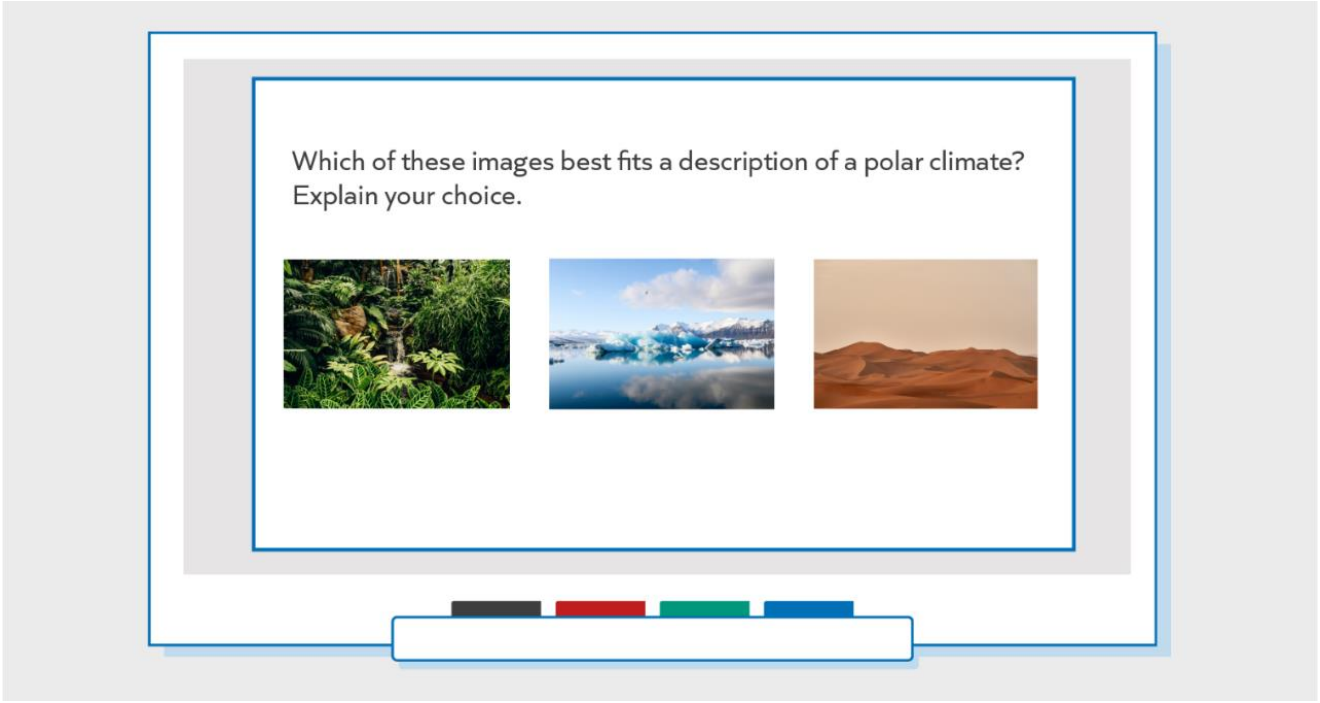
Habit 5

5	**Deepen understanding** by ensuring that, once key knowledge has been securely acquired, vary the contexts in which pupils apply that knowledge.

Habit 5 in action

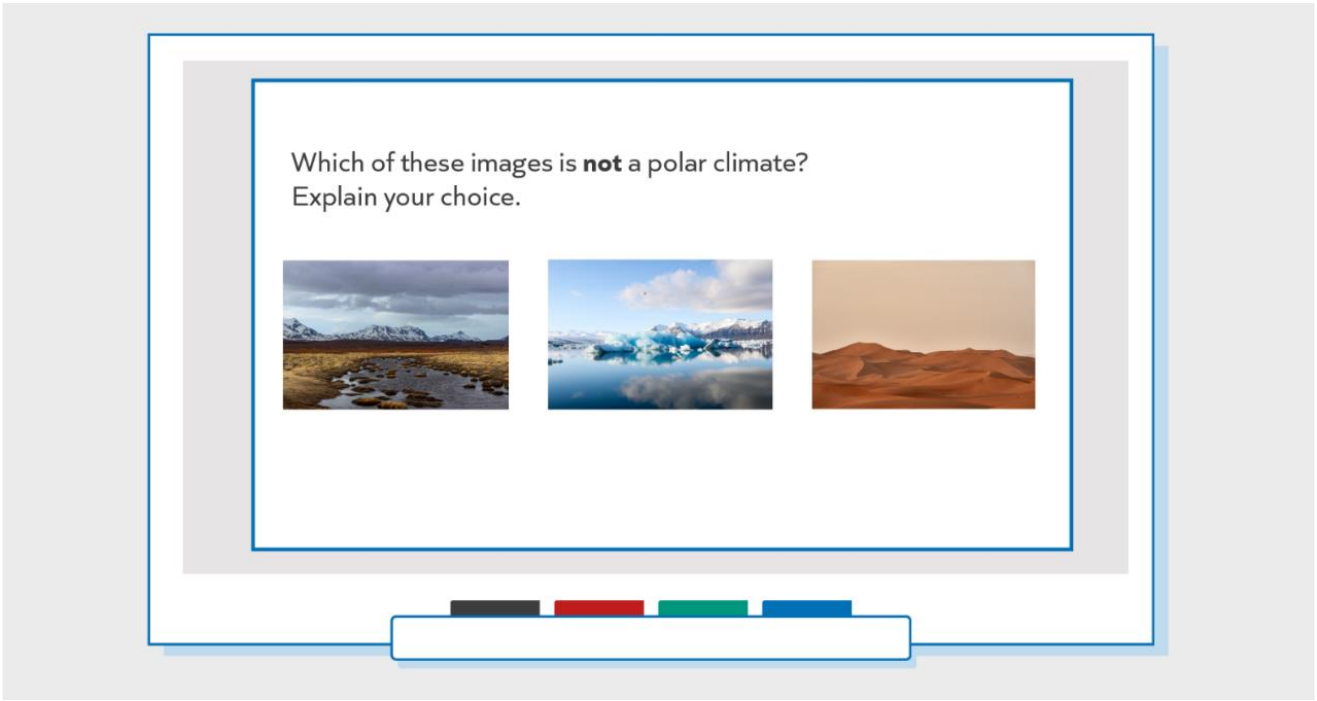
- Ensure acquisition before application
- Apply learning to a range of different contexts
- Ask open ended questions that promote higher order thinking
- Use a range of examples and non-examples

Example



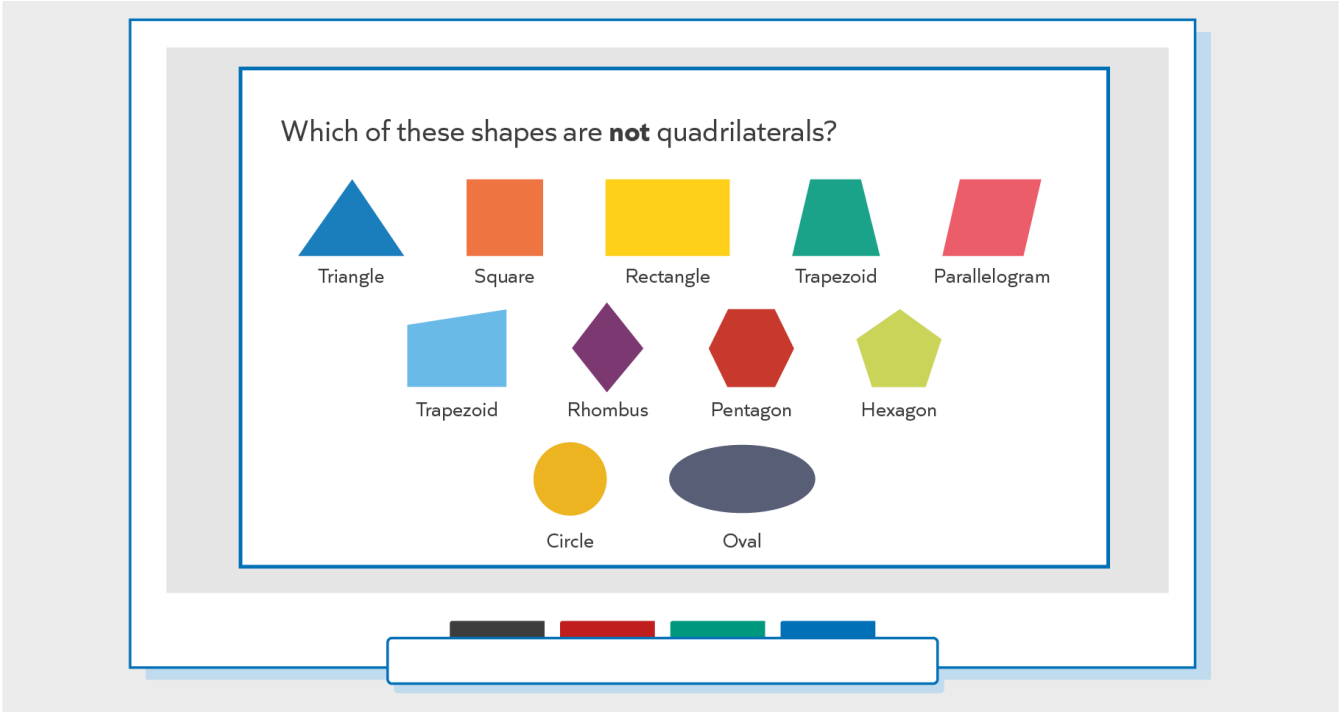
Kyle Cleveland, Jeremy Bishop and Wolfgang Hasselmann on Unsplash

Non-example



Viktoria Spokojna, Jeremy Bishop and Wolfgang Hasselmann on Unsplash

Non-example



Practical examples and non-examples

- **Balancing across a beam: Physical Development (Early Years)**
- **Example:** Teacher models walking along the beam and jumping off onto the mat at the end, landing on both feet.
- **Non-example:** Teacher makes a deliberate mistake (e.g. jumps off balance beam halfway, lands on one foot), pupils to correct the non-example.
- What might an example and non-example look like for a topic or unit that you will be teaching?

Notes:

Habit 5: Links to learning

Habit 5 allows us to:

- Further increase the subject knowledge or 'deep learning' of pupils.
- Draw on knowledge in a variety of different contexts.
- Plan assessment tasks that help us to specific the subject knowledge that pupils need to acquire.

Experience a clinic

Purpose of clinics

- Builds on key content covered in self study modules.
- All content covered is linked to the Early Career Framework.
- Provides opportunity to look at content which isn't as "coachable".
- Provides opportunity to discuss with peers supports you to develop networks.
- Enables you to explore different perspectives around teaching and pedagogical practices in different key stages/phases and school settings.

Clinic outline

- 30 minutes of accompanying reading materials
- 1 hour clinic

Introduction

Mr Suarez has worked hard to ensure that the lessons he is planning are broken down in sufficient detail but when pupils come to end of unit tasks, he realises that he hasn't taught certain knowledge and skills which they needed to be successful.
Prompts:
- What might Mr Suarez do to prevent this from happening?
- How might backward planning prevent this type of scenario from occurring?

Notes:

Audit

- What do you feel your current strengths are when planning?
- What would you like to improve on?

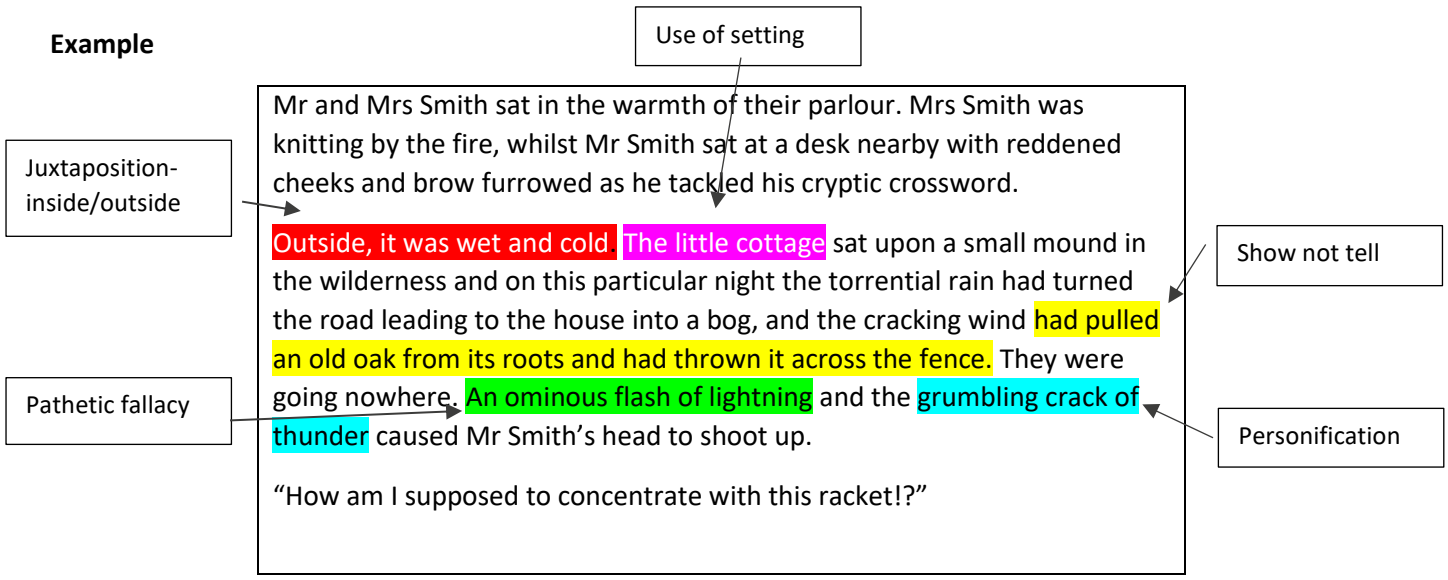
Notes:

Model

Tools for habit 1

Suggested tools
1a. Identify an end of unit task.
1b. Complete or source an end of unit task as a high attaining pupil.
1c. Break down the knowledge and skills required to complete the task.

Example



Practice

Practice: Breaking down the knowledge

What might your end of unit example look like for your subject/phase?

(e.g., a demonstration, a story, an investigation, a performance)

- If you have an end of unit example for your phase/subject, complete the assessment/task as an "ideal" student and break down the knowledge and skills.

Notes:

Reflection

- What do we gain by focusing on the specific details of one task or assessment?
- How can you apply what you have learnt in this clinic to your practice?

Notes:

Self-regulation

- How might you plan to ensure that you engage with the accompanying materials (either before or after) the clinics?
- How did reading the accompanying material support your understanding of the theory behind effective lesson planning?
- How does the structure of the clinic support you to develop your mental models around the content?

Reflection

Reflect on what you have learnt today/in this section. Consider the following:

- What impact will this have on your teaching?
- What impact will this have on your pupils?
- What is your main takeaway from today's session?

Notes:

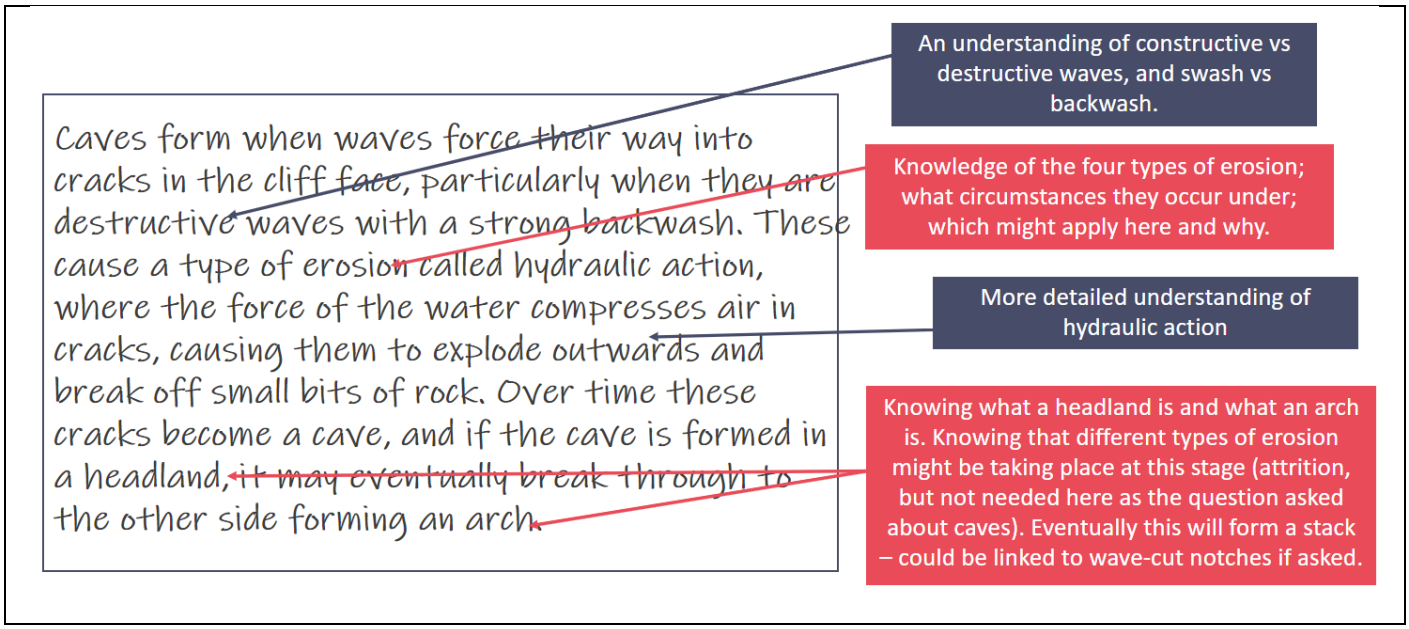
Appendix

These examples of broken down end of unit tasks may support you to understand what broken down knowledge and skills may look like within your subject/phase.

Habit 1: Identify and break down knowledge by analysing your end of unit task.
1a: Source an end of unit task. **1b:** Complete or source and end of unit task as a high attaining pupil. **1c:** Identify and break down the knowledge and skills needed to complete the task.

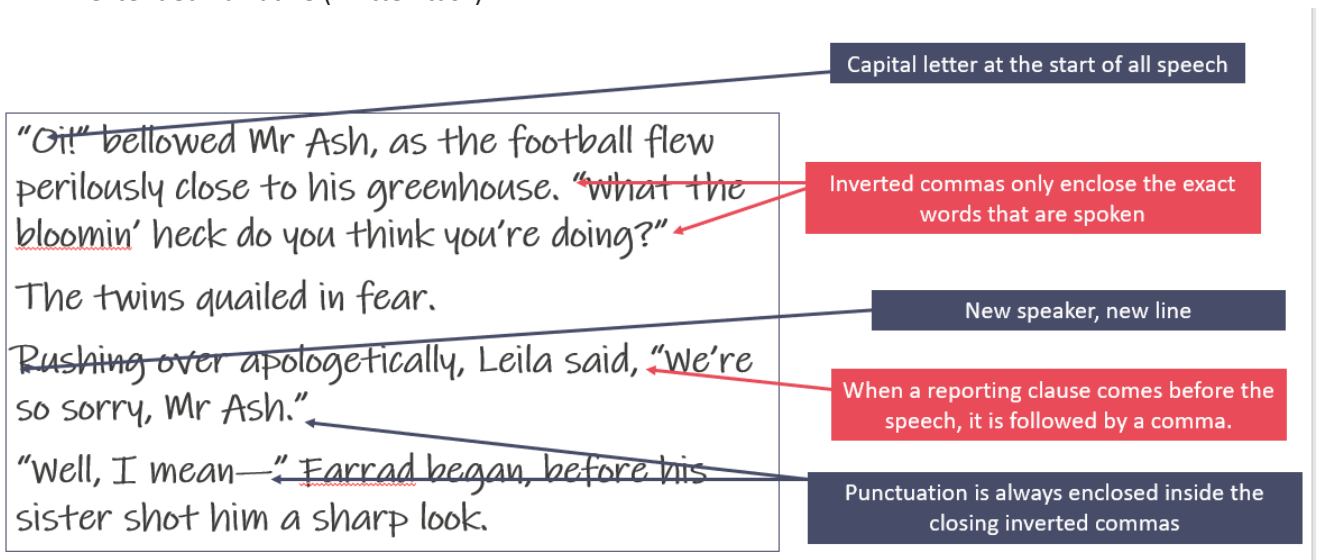
Model: SEND
Learning objective: To communicate our feelings > Recognise the sensations and body cues associated with different feelings > Recognise the visual symbols for different feelings > Communicate which feelings they feel at a given moment (by pointing or holding up card or saying the word on the card). Engagement model > exploration > realisation > anticipation > persistance > initiation 

Model: Geography
> **Concept**: The formation of caves > **End point task objective**: Describe the formation of a cave (written task)



Model: Primary English

- Task: To write a paragraph using inverted commas for speech
- **End of unit task objective**: Accurate and appropriate use of inverted commas denoting speech in an extended narrative (written task)



Model: PE

> **Procedure**: Shooting in basketball
> **End of unit task objective**: To develop and practise effective basketball shooting technique

> *They would know how to position their body in order to shoot*
> *They would be able to position their body in order to shoot*
> *They would know how to position their hands on the ball in order to shoot*
> *They would be able to position their hands on the ball in order to shoot*
> *They would know how to move their body in order to take a shot*
> *They would be able to move their body in order to take a shot*

Body position can seem secondary to pupils – they just want to use their hands, but this is a pre-requisite for effective shooting!

The placement of hands on the ball can make or break effective shooting – getting this clear as a component in isolation, and developing automaticity with lots of practice of this will be essential

As with the first point, pupils often don't recognise the importance of not just their hand and arm movements, but their body movements. Effective modelling of this and the consequence when it is not done right will help!

Model: History

> **Key concepts from medium term plan:** War, conflict and the factors determining military success
> **End of unit task objective:** Justify the factors that led to a Norman victory at the Battle of Hastings, by prioritising the strengths and weaknesses of both William and Harold's troops and then explain the reasons for the first and last positions.

Harold (ordered from biggest strength to biggest weakness)

3. Harold organises his soldiers behind a shield wall on Caldbec Hill
6. There are over 6000 Fyrd.
1. After beating Hardrada at Stamford Bridge Harold marched his army south.
4. Excited, the inexperienced Fyrd men left the shield wall and chase the Normans.
5. Harold is killed.
2. King Harold arrives in the south with 7500 exhausted men.

William (ordered from biggest strength to biggest weakness)

2. William charges up the hill to show he is alive. The Normans then pretend to run away again.
3. Williams army arrived two weeks before the battle so had set up a base and were rested.
6. William's 2000 knights were highly trained and very loyal, professional soldiers.
1. The Normans attack the English shield wall by charging up the hill and slaughter the Fyrd men coming down the hill.
4. William had 1500 Archers with bows that could fire 6 or 7 arrows a minute. A skilled archer could kill a man from 180m away.
5. Archers do not have much armour and they are not very useful in close combat.

Preparation affects performance and therefore who won the battle.

Fighters' experience is important

Strategy of battle is key to success in war

Large numbers of soldiers/fighters don't necessarily lead to victory.

Model: Science

> **End of unit task objective:** To explain why metals are conductors of electric current and plastics are not.

Metals are conductors because their metallic structure is made up of fixed positive ions that vibrate on the spot, surrounded by a sea of free, delocalised electrons. These electrons are negatively charged, and can carry a current by flowing through the metal if a potential difference is applied to the metal and there is a complete circuit. Plastics on the other hand have no free electrons in their internal structure – the electrons are bound within atoms – and so current cannot flow and there are no charged particles that can flow.

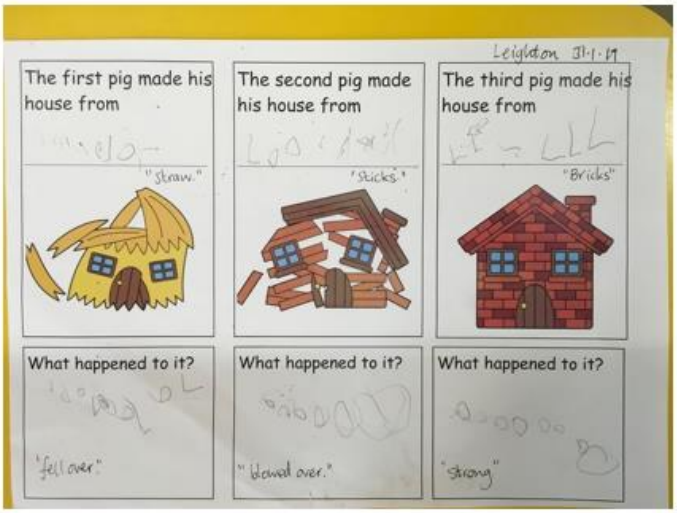
An understanding of metallic structures is required to answer this question accurately

To understand metallic structures, pupils first need to have secure understanding of the atomic structure of atoms, and what ions are

The idea of current as the flow of charged particles needs to be clear to explain this

Whilst this isn't necessary to explain why certain structures do or don't conduct electric current, pupils' understanding of the relationship between PD and current, and the importance of a complete circuit is important more broadly.

Model: EYFS
End of unit task objective: To answer questions from "Three little pigs"



- Show a preference for a dominant hand.
- Begin to use anticlockwise movement and retrace vertical lines.
- Begin to form recognisable letters.
- Use a pencil and holds it effectively to form recognisable letters
- Distinguishes between the different marks they make
- Sometimes gives meaning to marks as they draw and paint.
- Ascribes meanings to marks that they see in different places.
- Begins to break the flow of speech into words.
- Attempts to write short sentences in meaningful contexts.
- Listens to stories with increasing attention and recall.
- Joins in with repeated refrains and anticipates key events and phrases in rhymes and stories.
- Maintains attention, concentrates and sits quietly during appropriate activity.

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