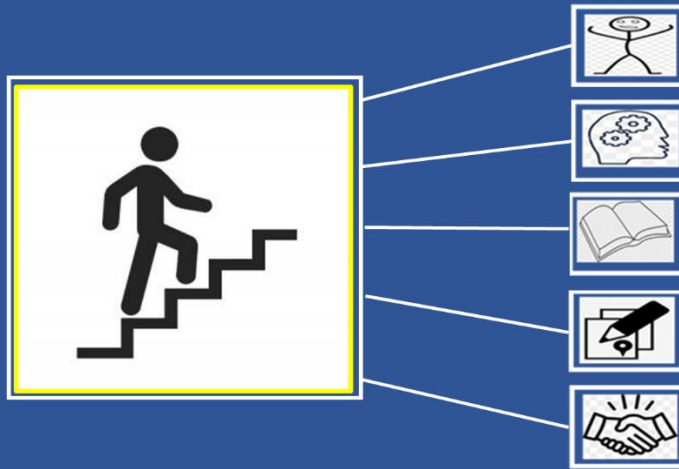
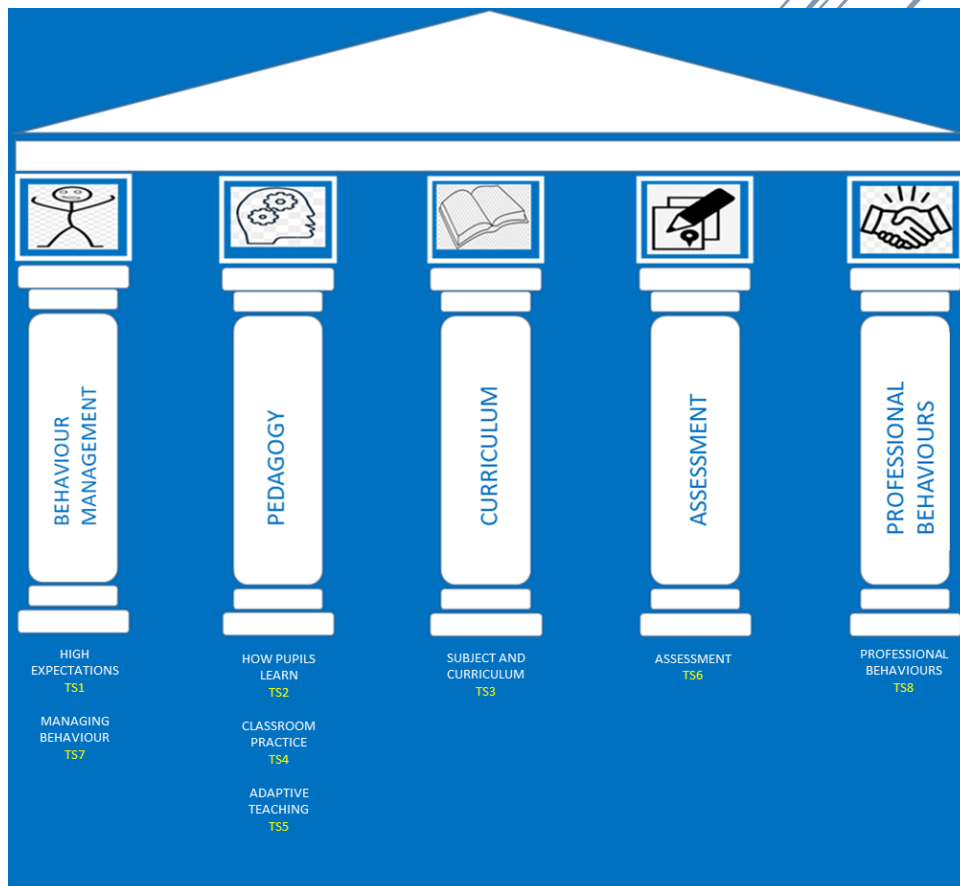


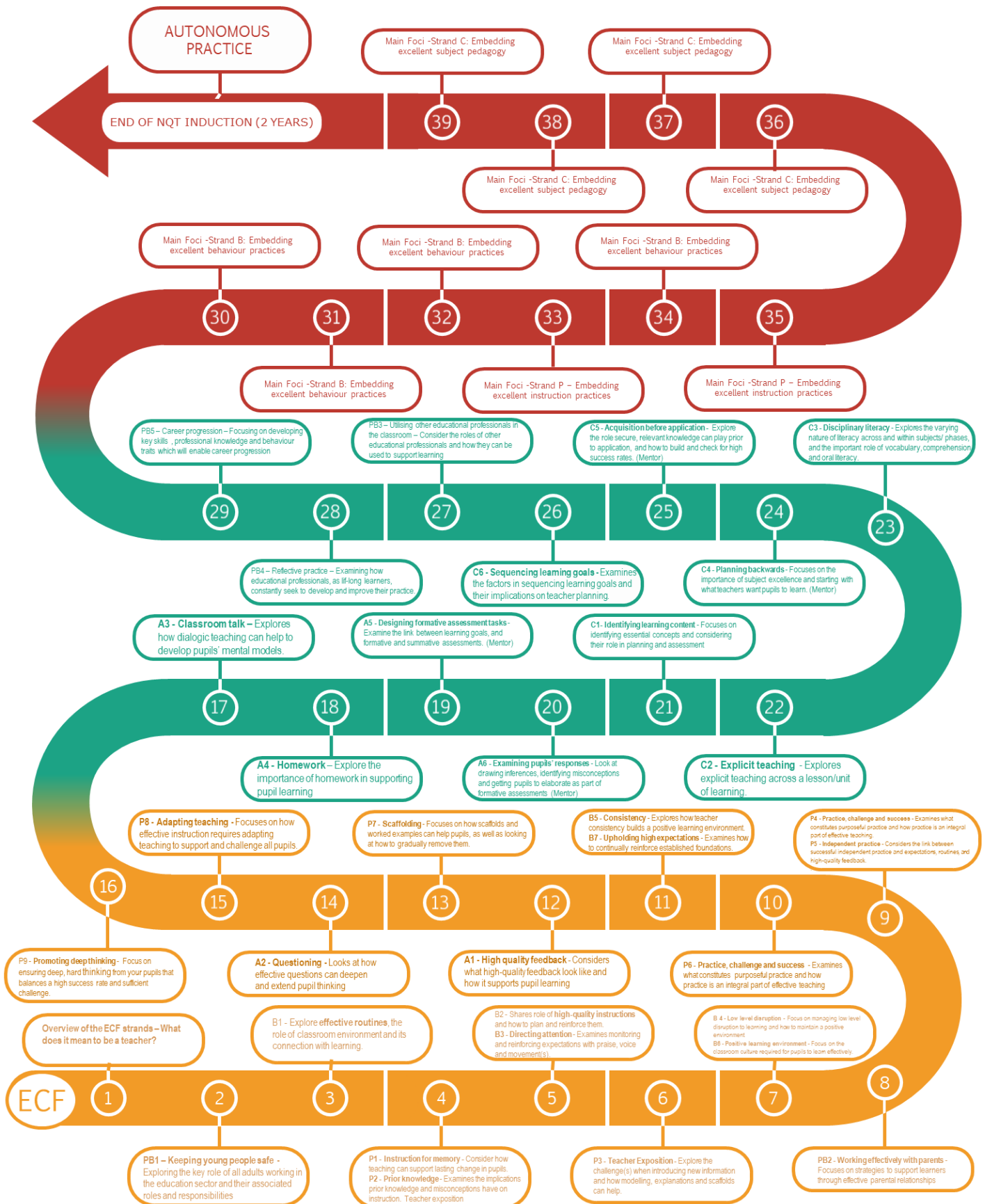
EARLY CAREER AT FLEGG HIGH ORMISTON ACADEMY



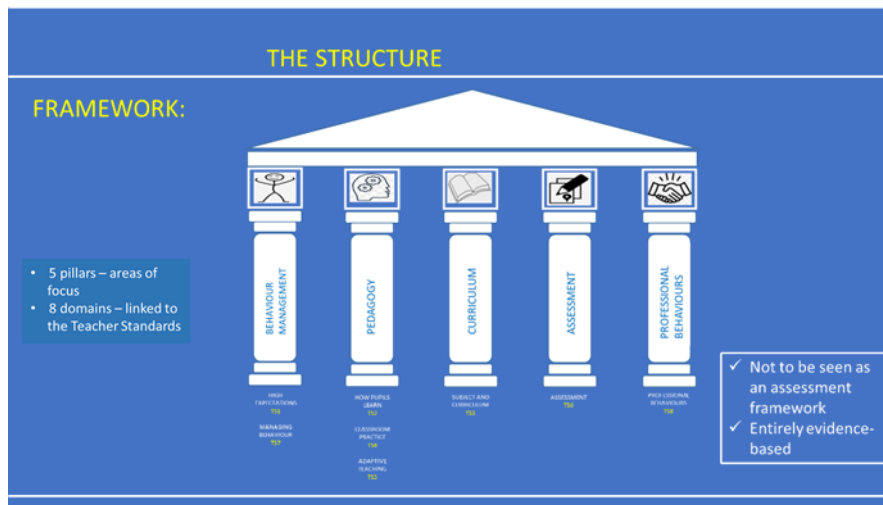
Commitment: At Flegg High Ormiston Academy we are committed to supporting the early career development of our teachers through high quality training informed by research and well evidenced pedagogy.



EARLY CAREER FRAMEWORK – LEARNING AND TEACHING CORE CONTENT



1	<p>All</p> <p>Link</p>	<p>Overview of the ECF strands</p>
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2	<p>Professional behaviours</p> <p>Link</p>	<p>PB1 – Keeping young people safe</p>
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What school staff should know

A child centred and coordinated approach to safeguarding

1. Schools and colleges and their staff are an important part of the wider safeguarding system for children. This system is described in statutory guidance Working Together to Safeguard Children.
2. Safeguarding and promoting the welfare of children is everyone’s responsibility. Everyone who comes into contact with children and their families has a role to play. In order to fulfil this responsibility effectively, all practitioners should make sure their approach is child-centred. This means that they should consider, at all times, what is in the best interests of the child.
3. No single practitioner can have a full picture of a child’s needs and circumstances. If children and families are to receive the right help at the right time, everyone who comes into contact with them has a role to play in identifying concerns, sharing information and taking prompt action.
4. Safeguarding and promoting the welfare of children is defined for the purposes of this guidance as:
 - protecting children from maltreatment;
 - preventing impairment of children’s health or development;
 - ensuring that children grow up in circumstances consistent with the provision of safe and effective care; and

- taking action to enable all children to have the best outcomes.

5. Children includes everyone under the age of 18.

The role of school and college staff

6. School and college staff are particularly important as they are in a position to identify concerns early, provide help for children, and prevent concerns from escalating.

7. All staff have a responsibility to provide a safe environment in which children can learn.

8. All staff should be prepared to identify children who may benefit from early help.³ Early help means providing support as soon as a problem emerges at any point in a child’s life, from the foundation years through to the teenage years.

9. Any staff member who has a concern about a child’s welfare should follow the referral processes set out in paragraphs 36-47. Staff should expect to support social workers and other agencies following any referral.

10. Every school and college should have a designated safeguarding lead who will provide support to staff to carry out their safeguarding duties and who will liaise closely with other services such as children’s social care.

11. The designated safeguarding lead (and any deputies) are most likely to have a complete safeguarding picture and be the most appropriate person to advise on the response to safeguarding concerns.

12. The Teachers’ Standards 2012 state that teachers (which includes headteachers) should safeguard children’s wellbeing and maintain public trust in the teaching profession as part of their professional duties.⁴

What school and college staff need to know

13. All staff should be aware of systems within their school or college which support safeguarding and these should be explained to them as part of staff induction. This should include the:

- child protection policy;
- behaviour policy;⁵
- staff behaviour policy (sometimes called a code of conduct);
- safeguarding response to children who go missing from education; and
- role of the designated safeguarding lead (including the identity of the designated

3	Behaviour management Link	B1 – Effective routines
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safeguarding lead and any deputies).

1. Know the school rules and stick to them

Find the behaviour policy in the staff handbook and learn it. If there isn't one (gulp!) ask your head of department what their expectations are. If pupils say, "But Miss Lackadaisical lets us..." ignore them. They may be lying, but if not Miss Lackadaisical is your enemy.

2. Never let pupils sit where they want

Seating plans, however, are your friend. They signal clearly you're in charge and they help your learn pupils' names. I always used to begin with boy/girl in alphabetical order and then tweak until I arrived at something functional.

3. Use agreed consequences fairly and consistently

Tell pupils what the consequence will be and then never, ever back down. For this reason avoid nuclear options. If the consequence is arduous for the pupils, it'll likely be arduous for you. Happily though, your average pupil feels as punished by a 5 minute detention as a 30 minute one. And always avoid the collective punishment. Quite apart from it being against the Geneva Convention, it's lazy and it'll turn the quite and well-behaved against you too. Even when a unidentifiably large number of miscreants have been annoying you, it's still easy to identify those who do not deserve punishment. But if you make a mistake, acknowledge it. An apology goes a really long way.

4. Never let pupils work off punishments

Seriously, don't. No matter how they wheedle or cajole, if you've levied a punishment you must carry it out. Otherwise they'll learn you don't mean what you say; that mucking about is fin as long as you sorry you're sorry and work really, really hard to get your name rubbed off the board.

5. Make 3 phone calls every day – talk about progress, not behaviour

4	<p>Pedagogy</p> <p>Link</p>	<p>P1 - Instruction for memory</p> <p>P2 - Prior knowledge</p>
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Parents can be powerful allies and are much more likely to be onside in your avoid criticising their precious darlings directly. Tell them how concerned you are and they will likely broach the subject of behaviour themselves.

What is cognitive load theory?

Cognitive load theory is built upon two commonly accepted ideas. The first is that there is a limit to how much new information the human brain can process at one time. The second is that there are no known limits to how much stored information can be processed at one time. The aim of cognitive load research is therefore to develop instructional techniques and recommendations that fit within the characteristics of working memory, in order to maximise learning.

Types of cognitive load

Load type	Source	Effect on learning	Example
Intrinsic load	The inherent complexity of the material and the prior knowledge of the learner	Necessary to learning (but potentially harmful if too high, because it can cause cognitive overload)	Learning how to solve the mathematical equation $a / b = c$, solve for a Learning this equation might have a high intrinsic load for a novice maths student, but would have a low intrinsic load for an expert mathematician
Extraneous load	Poorly designed instruction that does not facilitate schema construction and automation	Harmful because it does not contribute to learning	The student is required to figure out how to solve the equation themselves, with minimal guidance from the teacher This imposes a high cognitive load, but does little to encourage schema construction because the student's attention is focused on <i>solving</i> the problem rather than on <i>learning</i> the technique
Germane load	Well designed instruction that directly facilitates schema construction and automation	Helpful because it directly contributes to learning	The student is explicitly taught how to solve the problem and given lots of worked examples demonstrating how to do it This imposes a lower cognitive load on the student, enabling them to learn and remember <i>how</i> to solve the problem when faced with it again

1. Reducing cognitive load

Intrinsic cognitive load can be reduced by breaking down the subject content, sequencing the delivery so that sub-tasks are taught individually before being explained together as a whole. The idea is to not overwhelm a student too early on in the introduction of new work.

2. Extraneous cognitive load can be reduced by **the way in which instructions are presented**. We make sense of new material by referencing schema or mental models of pre-existing knowledge. Lack of clarity in instruction puts too high a load on the working memory, and so too much time is spent problem-solving the instructions as opposed to new schema formation.

3. Introducing ideas within a topic

Van Merriënboer et al. (Van Merriënboer et al., 2003) recommend using simple-to-complex sequencing to try to reduce cognitive load. They advise starting with worked-out examples (where a full solution is shown, which students then have to apply to a new question), then moving into completion assignments (where a partial solution is given and they have to complete it themselves), and then moving to conventional tasks, where they are simply given the question

Planning for
cognitive load
theory

4. **Begin with a model** (a complete example), gradually **removing completed steps**, which the learner will have to complete independently, and **finally leaving just the to-be-solved problem**.

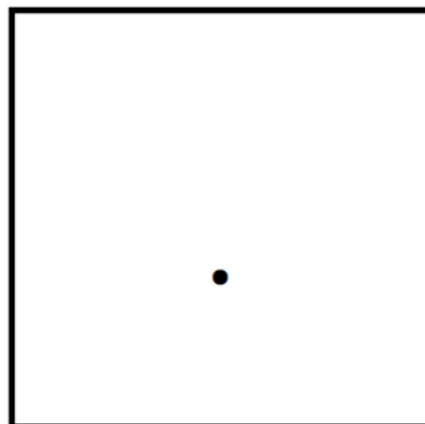
5. These principles can be readily applied in the classroom by beginning with a model answer, then providing a writing frame/structure with a lot of information, followed by a writing frame/structure with less information, then finally a question that learners must complete independently without a writing frame.

5

[Link](#)

Top Ten Ideas from Bill Rogers

1. The Black Dot in the White Square:



The Black Dot in a White Square: What do you focus on?

Avoid using sweeping statements that can harm positive working relationships

- The class is awful
- The group never works sensibly
- The student is unable to behave
- Everyone is being too noisy

2. Using Positive Language

This is so simple but packs a punch. Instead of “will you stop talking’ you say “I’d like everyone listening, please”. Instead of “John, stop turning around and distracting Mike” you say “John, I’d like you facing this way and getting on with your work... thanks.”

3. Choice direction and ‘when...then’

Classic parenting techniques that work brilliantly.

- When you have finished tidying up your area... then you can sit wherever you want...

This works so much better than crude belligerent ‘do what I say’ command language.

4. Pause Direction

Make a deliberate pause between gaining a student’s attention and a direction to ensure they have had sufficient ‘take up’ time. Eg. “Michael pause...David...pause...could you face this way and listen, thanks”.

5. Take-up Time:

This avoids the horrific teacher domineering – “come here Boy!” nonsense. Simply, “Michael...(pause to gain attention)... come up here a sec please.” Then deliberately look away... talk to someone else. Michael will come. He just will. In his own time.

6. ‘You establish what you establish’

This refers to the establishment phase with a new class. Right from the start, anything you allow becomes established as allowed; and anything you challenge is established as unacceptable. The classic is noise level and off-task talking. If you do not challenge students who talk while others talk, you establish that this OK.

7. Teacher Styles

- Be an **Assertive teacher**: This teacher *expects compliance* but refuses to rely on power or role status to gain respect. The teacher plans for discipline, uses clear, firm direction and correction, but acts respectfully, keeping the aims of discipline clearly in mind.

8. Controlled severity – but where certainty matters more than the severity

Most great teachers establish very clear boundaries. How? Well, usually, this happens through the occasional dose of ‘controlled severity’. A sharper, harder corrective tone that conveys: “No! You will not do that –EVER!” Followed quickly by a return to the normal friendly, warm tone.

9. Partial agreement (aka being the Grown-up)

Partial Agreement is an essential strategy for avoiding or resolving conflict. It means teachers not trying to have the last word, or asserting their power in a situation when a student disputes their judgement.

- Student : “I wasn’t talking, I was doing my work”

- Teacher : “OK, Maybe you were but now I want you to press on to finish the task.

10: Behaviour Management is an emotional issue

If you do ‘lose it’... acknowledge it.. “I am angry because....”; “I am raising my voice now because

6	Pedagogy Link	P3 - Teacher Exposition
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I’m so frustrated...” And then, after a cool-off, as soon as you can, model the behaviour you want to – calm, measured, warm, encouraging and showing you care. ‘Repair and Rebuild’ is a great concept.

Good-quality explanation sits at the heart of what we do. It is through explanation that we can allow our subject to come alive within the classroom.

- Our job as specialists is to provide the link between the canon of knowledge about our subject and our subjects.

Plan Carefully

- Explaining something well takes thought, care and planning.
- Utilise notes within your lesson when explaining difficult concepts – this avoids you thinking that your subject knowledge is much better than it is.

Consider 5 questions:

1. What else do the students need to know if they are going to understand this?
2. How can this explanation help them to picture what is being said?
3. What will they struggle with the most and how will we support them with this?
4. What must they remember at the end of this explanation?
5. How can this be explained in a way that will support their working memory?

Know what they know

- Try to adapt your explanation to take into account misconceptions that students are likely to have and to address them before they become embedded.
- Check what the students have learnt through low-stakes quizzes, so we can see what they have actually remembered and can recall on demand.

Use analogies

- Students are more likely to remember your explanation of a new concept if they can relate it to something well-known.
- The aim of the analogy is to make the abstract more concrete.
- The analogy enables students to be able to picture what that abstract idea might look like if made physical, so analogies are best drawn from things they have seen or experienced themselves.

Tell stories

- The use of stories can also aid the process of making an abstract concept more concrete and can help make your explanation stick. For C’s of storytelling – causality, conflict, complication and character (Daniel Willingham)

- We should build these into our explanations if we want students to remember
- Be cautious of the fact that the stories you pick are mainly based on your own experiences and subject knowledge – this is why our subject knowledge is so important to keep updated and relevant.

Case studies and examples

- The selection of the best possible case study or example can make an explanation all the more powerful and memorable.
 - Try to avoid selecting the same locations or examples to typify content every time – this will create a risk that students will have a shallow understanding of certain places.
- As teachers we need to ensure we regularly update our schemes of work to reflect our changing planet.

Support working memory

- If we give students too much new information, we can run the risk of overloading their memory and much of what we say will be forgotten.
- When discussing new topics or content it is essential we avoid the possibility of distractions e.g. making sure students know when is an appropriate time to ask questions.
- Distractions from within an explanation can be most difficult to target – this is why it is good to plan your explanations beforehand.
- Support students through your explanation by making notes of key points on the board while

7	<p>Behaviour management</p> <p>Link</p>	<p>B4 - Low level disruption</p> <p>B6 - Positive learning environment</p>
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you're talking so they have something to refer back to – a visualiser can help with this

1. Tell them they're your favourite class

Every class is my favourite class, even if I dread them. If pupils suspect you don't like them, they're very quick to meet your expectations. And likewise, we all respond well to being liked. I'd balk at saying pupils' respect must be earned, it shouldn't: teachers have a right to be respected just for turning up, but it'll certainly grease the wheels if we can find it in our hearts to be respectful of our pupils. Being respectful is just part of being a decent human being.

2. It's good to talk

Talking to colleagues is an obvious way to get the low down on kids, but parents are a more overlooked avenue. Parents love teachers taking an interest. A quick call or email to tell them their son or daughter is making progress/coasting/lagging behind works wonders. But simply complaining to parents about their beloved offspring is not normally a successful strategy. Focus discussions on progress rather than behaviour, and ask questions – show you're interested in finding out more. Few are the parents who are completely uninterested in their children's academic progress and, even if they're powerless to help, they still want to know.

3. Learn their names

It might seem obvious, but the first step is to know and use their names; if I use a pupil's name, I will get to know her. There are some kids whose names you will know before the end of your first lesson. And there are others whose names you will struggle to conjure when facing their parents on parents' evening. It's inevitable that the gobbier a pupil is, the quicker you'll get to know them. For this reason alone seating plans are worth their salt. Without them I'm likely to descend to gesturing weakly at a sea of faces and saying, 'Yes, you.' But having a printout of my plan to hand ensures that I can direct questions at individuals confident in whom I'm addressing. If you're the adventurous sort, you could also try some memory palace tricks to get to know a class in just 1 lesson – I did this for an interview once and it went down very well. Names have power and once we know them we can start to join the dots of our pupils' lives.

4. Know the data

Knowing all this stuff about kids and yet remaining ignorant of their data is the realm of social workers, not teachers. It's a professional duty to know where they are, where they should be heading and what they need to do to get there. And hopefully it won't surprise you to learn that slapping a level or grade on the front of exercise books is not good practice. Looking at attendance figures, past attainment and the plethora of information schools hold on their pupils can be jolly useful if it's combined with our knowledge of the pupils we teach. Obviously, any attempt to reduce human beings to something so simplistic as numbers is fraught with problems, but it's a start.

Establishing Relationships – David Didau – Toolkit

5. Mark their books

I've said before that marking is an act of love. It's reasonable that if we've asked our pupils to go to the trouble of writing something in their books, the least we can do is read it. As well as all the other excellent reasons for making kids' books, you also get to know them through their work. On one level you learn about their effort and ability but you also get to see what kind of a person they are. We English teachers are afforded privileged access into our pupils' minds due to the nature of our subject. Reading creative writing can be very revealing. Pupils often choose to enact their worries and fears in response to creative writing tasks and along with sundry expositions on summer holidays and day trips I've read harrowing accounts of the death of parents, cases of possible abuse and the struggle for identity. The fact that this stuff goes unread in some classrooms appalls me.

8	Professional Behaviours Link	PB2 - Working effectively with parents
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Remember that parents are human too and sometimes will have off days. They may be feeling under pressure or respond to you in a negative way. Try not to take this to heart but reflect on the situation to see if you can improve it. However, if you ever feel threatened it is important that you quickly and calmly leave the situation and report the event to a member of senior staff. 'I can see that you are clearly upset regarding this issue and I am sorry that you feel that way. The best way to go forward with this is to speak to a member of senior staff who can take this further. I am going to go and find one now.' If you have reason to believe that a parent may behave in a threatening way, never meet with them alone – always arrange for another member of staff to accompany you and always position yourself in a public place or with a clear path to an exit.

Consider your wording when you need to talk about areas for improvement. Ask for the parents' advice / suggestions with the situation. Ask them what they think may help to improve the situation as well as what you think will help. By involving the parents you will be able to create a positive, united message for the child. Teachers and parents working together will be far more effective than working against each other.

Take time to contact parents for positive reasons. This can be done in a variety of ways depending on time, age of children and access to parents. (Telephone call, ask if they can see you after school when you are dismissing the children, send a special note/certificate home, stickers - 'ask me why I got this sticker', postcards posted home when the child has reached targets, ask a parent to come in and see a special piece of work or photocopy it and send it home with a note etc). By showing that you value their child's achievements, you will have started to build a positive relationship.

Communicating with Parents and Carers

Share targets with the parents. These may be behavioural or academic targets and your school will probably already have a system in place. By sharing these targets with the parents you are encouraging them to support them in the home environment as well as at school

Take time to value parent contributions. There are many ways to do this and they all add up! Write replies to comments in reading records and homework books, say thank you after school events, if sending any cards address them to the child and their family, if your school agrees- ask for parents to help by sharing a skill – art, sewing, reading, times table recall. At parents evening praise the parent for supporting the work the child does at home-spellings/times tables/reading/homework etc.

9	Pedagogy Link	P4 - Practice, challenge and success P5 - Independent practice
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Rosenshine's Principles of Instruction

1. Review the last lesson

Research finding: The first recommendation from the research, is that a daily review is an important component of instruction. A review can help teachers strengthen the connections from the material to what students have learned.

In the classroom: The most effective teachers in the research of classroom instruction understood the importance of practice, and they began their lessons with a five-to-eight-minute review of the last lesson.

2. Present new material

Research findings: Our working memory where we process information is small. Presenting too much material at once may confuse students because their working memory is swamped. Therefore, the more effective teachers do not overwhelm their students by presenting too much new material at once

In the classroom: Successful teachers teach by giving a series of short presentations using many examples and guided practice.

3. Ask a large number of questions

Research findings: Students need to practice new material. The teacher’s questions and student discussion are a major way of providing this necessary practice. The most successful teachers in these studies spent more than half of the class time lecturing, demonstrating, and asking questions.

In the classroom: Effective teachers increased the number of factual questions and process questions they asked during this guided practice. Test results showed that their students achieved higher scores.

4. Provide models

Research findings: Students need cognitive support to help them learn to solve problems. A teacher modeling and thinking aloud while demonstrating how to solve a problem are examples of effective cognitive support.

In the classroom: This can be conveyed by providing prompts, modeling use of the prompt, and then guiding students as they develop independence. In the most effective teaching, students were given words such as “who,” “where,” “why,” and “how” to help them begin a question.

5. Guide student practice

Research findings: It is not enough simply to present students with new material, because the material will be forgotten unless there is sufficient rehearsal. Students must spend additional time rephrasing, elaborating, and summarising new material in order to store the information in their long-term memory.

In the classroom: The most successful teachers presented only small amounts of material at a time. After this short presentation, these teachers then guided student practice – and spent more time doing so. The result? Students were better prepared and achieved higher success rates.

6. Check for student understanding

Research findings: The more effective teachers frequently checked to see if all the students were learning the new material. These checks provided some of the processing needed to move new learning into long-term memory to let teachers know if students were developing misconceptions.

In the classroom: Effective teachers stopped to check for student understanding, by asking questions and asking students to summarise. In less effective teaching, the teacher asked students: “Are there any questions?” If there are no questions, the assumption is made that students understand.

7. Obtain a high success rate

The research suggests that the optimal success rate for fostering student achievement appears to be about 80 percent; judged by the quality of students’ oral responses during guided practice and their individual work.

Research findings: The most effective teachers obtained this success level by teaching in small steps. Practice, we are told, makes perfect. So, ignore the term ‘rote learning’ and consider repeating tests and questions as excellent ‘practice’.

In the classroom: Rosenshine elaborates this principle that I think is the most crucial for effective teaching: ‘providing systematic feedback and corrections’. Not only is this imperative for students to make progress, but it’s also the devil’s work if misinterpreted by school inspection frameworks and classroom observers because they are focusing solely on marking in students books and not much else.

More importantly, it’s completely pointless if a student doesn’t actually act on the teacher’s feedback – and yes, not all feedback needs to be written, recorded and evidenced! In some cases, it is often not the best, most reliable or quickest method if you require the student to improve the work in the lesson!

8. Provide scaffolds

Research findings: A scaffold is a temporary support that is used to assist a student. These scaffolds are gradually withdrawn as learners become more competent, and include the teacher ‘thinking out aloud’ as they solve the problem.

In the classroom: One example, a teacher would show the thought processes they go through as they determine the topic of the paragraph and then use the topic to generate a summary sentence. The teacher would also anticipate likely mistakes...

Resource: Try [Live Marking: Feedback in Lessons](#).

9. Require and monitor independent practice

Research findings: Guided practice is followed by independent practice – by students working alone and practicing the new material.

In the classroom: The more successful teachers in this research provided for extensive and successful practice, both in the classroom and after class. The research also found that students were more engaged when their teacher circulated around the room and supervised seat work. The optimal time, according to the research, is 30 seconds or less.

10. Engage students in a weekly and monthly review

Research findings: Students need extensive, broad reading and extensive practice in order to develop well-connected networks of ideas (schemas) in their long-term memory... Knowledge stored in long-term memory that is organized into patterns only occupies a tiny amount of space in our limited working memory. So having larger and better-connected patterns of knowledge frees up space in our working memory.

In the classroom: One way of achieving this goal is to review the previous week’s work every week and the previous month’s work every fourth week. Research suggests that classes that had weekly quizzes scored better on final exams than did classes with only one or two quizzes during the term!

As I’ve discussed before, teachers face a difficult problem when they need to cover curriculum material and don’t feel they have the time for sufficient review. But the research is clear, that material that is not adequately practiced and reviewed is easily forgotten! So, go forth and test – and test again!

10	Pedagogy Link	P6 - Practice, challenge and success
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The aim of practice to ensure that students have learnt what we intended them to learn; that there has been a change in their long-term memory. But it is essential to remember that practice doesn’t make perfect it makes it permanent. Students may practice a large amount but be doing something wrong, this includes embedding mistakes.

The following strategies consider the ways in which we can ensure that practice leads to secure learning:

The testing effect

- We are expecting students to remember a lot! Some of which include tier 3 words – these are words students are unlikely to encounter in everyday life. We need to ensure we are offering support and regular recall on using this terminology.
- We also need students to recall a wealth of information regarding case studies and examples. This can be done through recall in the form of low-stake quizzes. The idea here is to ensure students are recalling information from their long term memory to their working memory to strengthen their ability to recall it in the future. Look both ways
- We need to plan our curriculum carefully and make the links between content explicit at every opportunity.
- Students need to learn the content and be able to recall it in the future. This means looking forward as well as back.

To make connection explicit we could

- Provide students with a topic overview
- Use knowledge quizzes at the start of a lesson
- Ask students themselves to make links between the topics
- Provide a corridor display showing the big picture
- Use of questioning

Micro-details

To enable students to get better at something, it would be better to help them practice the component parts and improve each aspect.

- Take into consideration however, that to effectively practice we need to equip the students with the knowledge and skills to do this. • Show them various different methods for completing a task and work with them in various contexts.
- Treat it like a drill – students practice smaller components of a task until they have mastered a skill.
- For this to be most successful your strategies will need effective explanation and modelling.
Return to fertile questions
- At the heart of enquiry-based learning should involve setting powerful, or fertile, questions.
- By framing a topic as a fertile question, students are taught to link together different pieces of relevant knowledge and draw on things they have learn in the past.

Functional fitness

There are things we can, and should do to prepare students for important exams but there is no better preparation than teaching them well. • If students practise specific past exam questions then there is a danger that we are just preparing them to answer those questions. We need to look beyond the exam questions and the specification to explore the underlying subject knowledge

- Do not allow the exam paper to become the curriculum.
- We practice because it enables us to learn; we don't learn to enable us to practice.

Support self-regulation


There is a natural tension between our desire to see what students are able to do by themselves and the need to intervene to make sure they are getting it right.

- Self-regulation is the ability of students to reflect on their own work and make improvements to it.

- By being aware of these areas of misunderstanding, we can pre-empt them and intervene appropriately.
- Some strategies that can be used to encourage self-regulation include; creating success criteria, asking students to proofread their own work, using peer assessment and encouraging self-testing to practise recall.

11	Behaviour management Link	B5 - Consistency B7 - Upholding high expectations
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Source: EEF



1. Know and understand your pupils and their influences

- Pupil behaviour has multiple influences, some of which teachers can manage directly
- Understanding a pupil's context will inform effective responses to misbehaviour
- Every pupil should have a supportive relationship with a member of school staff
- f-regulated learners are aware of their strengths and weaknesses, and can motivate themselves to engage in, and improve, their learning.
- Developing pupils' metacognitive knowledge of how they learn—their knowledge of themselves as a learner, of strategies, and of tasks—is an effective way of improving pupil outcomes.
- Teachers should support pupils to plan, monitor, and evaluate their learning.

2. Teach learning behaviours alongside managing misbehaviour

- Teaching learning behaviours will reduce the need to manage misbehaviour
- Teachers can provide the conditions for learning behaviours to develop by ensuring pupils can access the curriculum, engage with lesson content and participate in their learning
- Teachers should encourage pupils to be self-reflective of their own behaviours

3. Use classroom management strategies to support good classroom behaviour

- Effective classroom management can reduce challenging behaviour, pupil disengagement, bullying and aggression
- Improving classroom management usually involves intensive training with teachers reflecting on their classroom management, trying a new approach and reviewing their progress over time
- Reward systems can be effective when part of a broader classroom management strategy

4. Use simple approaches as part of your regular routine

- Some strategies that don't require complex pedagogical changes have been shown to be promising
- Breakfast clubs, use of specific behaviour-related praise and working per parents can all support good behaviour
- School leaders should ensure the school behaviour policy is clear and consistently applied

5. Use targeted approaches to meet the needs of individuals in your school

- Universal behaviour systems are unlikely to meet the needs of all your students
- For pupils with more challenging behaviour, the approach should be adapted to individual needs
- Teachers should be trained in specific strategies if supporting pupils with high behaviour needs

6. Consistency is key

- Consistency and coherence at a whole-school level are paramount
- Whole-school changes usually take longer to embed than individually tailored or single-classroom approaches
- However, behaviour programmes are more likely to have an impact on attainment outcomes if implemented at a whole-school level

12	Assessment Link	A1 - High quality feedback
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10 Feedback strategies that make pupils think – Wiliam

1. Marking for improvement

When grading student work, record a grade in your grade-book, but only give students written comments on how to improve. Give students time to read the comments in class and one week to resubmit the work. The final grade is the average of the first and resubmitted grade.

2. Mastery marking

Only accept student work when it is of a specific quality. You might only give one grade, an A. Students are expected to continue to redraft and resubmit their work as many times as necessary in order to achieve an A. The overall grade is then determined by the number of As.

3. +, -, = (Plus, Minus, Equals)

Mark student work in relation to previous work. If the latest work is of the same quality as the last, it receives an '=', if it is better than the last, it receives a '+', and if it is not as good as the last, it receives a '-'.

4. Responding to marking

Write your teacher feedback, signed and dated, at the start of the exercise book. Students then make an appropriate response below the teacher feedback, including where to find any redrafting. Do not mark the next piece of work until the student has responded to the last feedback provided.

5. Focused marking

Mark student work against one or two specific criteria, even though there may be many criteria that could be marked. This allows you to provide more focused and detailed feedback on these criteria than if everything was marked. The grade-book contains the skill marked rather than the title of the work set.

6. Find and fix your mistakes

Instead of marking answers as correct or incorrect, tell the students the number of answers that were wrong. Give them time in class to find and correct their mistakes, either individually or in groups.

7. Margin marking

Instead of marking each spelling or grammar mistake on essays, place a mark in the margin. Students then find their own mistakes and correct them.

8. Traffic lights

Give students a RED, AMBER or GREEN mark for a piece of work. All RED and AMBER work can be redrafted in an attempt to achieve a GREEN mark. The final grade is calculated from the number of GREEN and AMBER marks.

9. Aim for the next level

Students identify areas of improvement by comparing their work to exemplars at the next level of achievement. Students realize that they need to set themselves higher standards. Able students find that they can improve a good piece of work.

10. Match comments to work

Write comments about students' work on strips of paper without names. Sit students in groups of four. Each group of four students gets back their four pieces of work and their four comments. The group needs to decide which comment goes with which piece of work.

13	Pedagogy Link	P7 - Scaffolding
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10 Methods to Scaffold Learning

Make teaching more precise and explicit.

Scaffolding

Scaffolding offers temporary supports, such as a writing frame, that is gradually removed as the pupil becomes increasingly independent. Scaffolding is commonly considered part of guided practice in explicit instruction. Scaffolding can also be used to reinforce consistent expectations for behaviour - for example, what equipment is needed for each lesson and classroom routines within the school day.

- 1** Show what a similar piece of work looks like, and how it is created, step by step.
- 2** Talk it through, not only the things you decide to do, but also the things that you don't.
- 3** Speak your thoughts. It is the very thoughts that our students cannot hear or see that they need to understand.
- 4** Make mistakes! One of the hardest skills is editing, especially when you're not wise or good enough.
- 5** Show students what to do when they don't know what to do.
- 6** Don't use up all your modelling tips at the start of the lesson.
- 7** A visualiser is your friend and a piece of work can be the next top model.
- 8** Never make assumptions about what students already know.
- 9** Model the learning in many ways — as imaginatively as possible.
- 10** Have at the forefront of your mind your end-goal.

14	Assessment Link	A2 - Questioning
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Questioning is a vital part of any lesson. Rosenshine found that effective teachers ask significantly more questions than less effective ones.

- Teachers ask questions for three main reasons: to check understanding, to improve recall and to deepen thinking.
- There are excellent geographical questions asked by students which cut to the heart of many topics, but answering them in class is near impossible – it is worth making a note of these questions and checking at the end of the topic to see whether students can now answer them themselves.

Plan your questions

- Always take the time to plan your questions; otherwise there is always a risk that your questioning becomes a guessing game.
- It is worthwhile considering the particular threshold concepts students will encounter and may cause issues.
- You also need to think about how you are going to direct different questions. This is one reason why it is very important to know your class, as questioning allows you to address their specific strengths and weaknesses.
- By planning questions in advance you can carefully consider their exact purpose and ensure that we carefully consider their exact purpose and ensure that we ask the right type of question at the right time to the right student.

Go off-piste

Although lessons benefit from careful planning, we have to acknowledge the dynamic nature of the classroom

- Questioning is a phase in the lesson when misconceptions are often revealed – when this occurs it would be negligent to continue the lesson without addressing and correcting the misconceptions.
- It is important however to have a deep well of knowledge to draw on and be well-practised at delivering clear and concise explanation before we can go off plan and address misconceptions. Socratic questions
- Socratic questions are designed to challenge the accuracy and completeness of students' thinking about a topic.

Socratic questions are designed to achieve six different purposes: Classify their thinking, Probe assumptions, Demand evidence, Consider alternative viewpoints, Explore implication and Question the question.

Hinge questions

Hinge questions are often framed as multiple-choice questions, as the potential answers are limited and can be chosen in a way that is actually very revealing.

- Daisy Christodoulou explains that multiple choice questions are often dismissed as being too simple, but as long as all the potential answers appear plausible they can be fiendishly tricky.
- Planning in these hinge questions can be useful to quickly identify whether students have the understanding of the topic needed to proceed with the lesson.

Involving everyone

One potential problem with questioning is making the assumption that we have been led to believe that a whole class has fully understood a topic on the basis of just a couple of students answering questions.

- To avoid this you can ask students at random. Once students realise they could be called upon to answer a question, they are more incentivised to pay close attention to what is being said or to ask for clarification
- To use mass participation you could use strategies such as: mini-whiteboards, quiz apps, sticky notes, homework planners etc.

Asking questions

We want our students to look at the world around them and ask questions.


- The first step in encouraging questioning is to equip students with the knowledge to explore and to interrogate, and to question with.
- The next step in encouraging students to ask questions is to model it
- Once the process has been modelled, we need to give students the opportunity to ask questions. At the start of a topic you could pose a fertile question and ask students to develop the enquiry questions that they would need to answer this fully. This will help in creating mental hooks and links between what they already know about the issue and what they will learn.

15-16	Pedagogy Link	P8 - Adapting teaching
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What are the most effective ways to support disadvantaged pupils' achievement?

Research undertaken by NFER has identified seven building blocks that are common in schools which are more successful in raising disadvantaged pupils' attainment.


1. Whole-school ethos of attainment for all: Schools have an ethos of high attainment for all pupils and avoid stereotyping disadvantaged pupils as all facing similar barriers or having less potential to succeed.




2. Addressing behaviour and attendance: Schools ensure effective behaviour strategies are in place, respond quickly to poor attendance and provide strong social and emotional support, including through working with families.




3. High quality teaching for all: Schools emphasise 'quality teaching first' and provide consistently high standards by setting expectations, monitoring performance and sharing best practice.




4. Meeting individual learning needs: Staff identify each pupil's challenges and interests. They seek the best strategies to help each pupil make the next step in his or her learning. Schools provide individual support for specific learning needs and group support for pupils with similar needs.




5. Deploying staff effectively: Schools devolve responsibility to frontline staff, use their best teachers to work with pupils who need the most support and train teaching assistants to support pupils' learning.



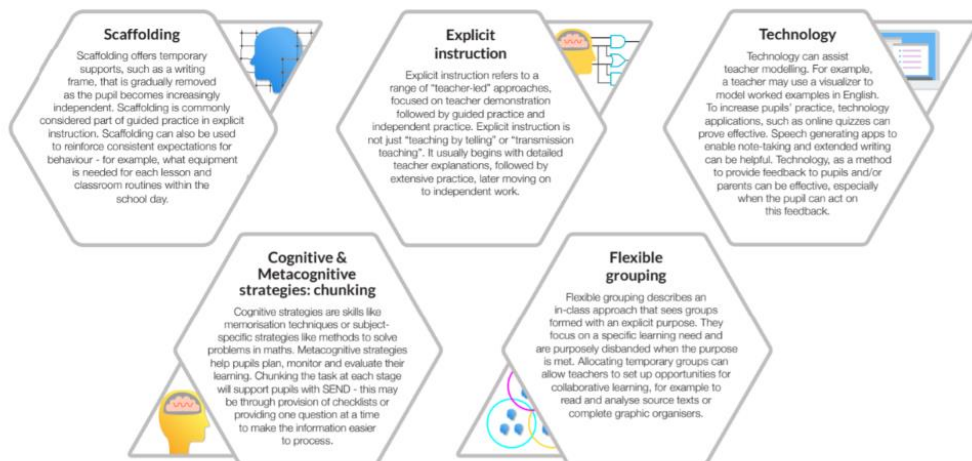
6. Data driven and responding to evidence: Teachers use data to identify pupils' learning needs, review progress every few weeks and address underperformance quickly. They have manageable Assessment for Learning systems, which provide clear feedback for pupils. Schools use evidence to make decisions about their support strategies.



7. Clear, responsive leadership: Senior leaders set ever higher aspirations and lead by example. They hold all staff accountable for raising attainment, rather than accepting low aspirations and variable performance. They share their thinking and invest in staff training.



High-quality teaching for pupils with SEND



17	Pedagogy Link	P9 - Promoting deep thinking -
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Questions that unlock thinking

Explanation – Why might that be the case? How would we know that? Who might be responsible for...?

Hypothetical – What might happen if...? What would be the possible benefits/impact of X?

Evidence - How do you know that? What evidence is there to support this view?

Clarification - Can you put that another way? Can you give me an example? Can you explain that term?

Linking and extending - Can you add to what X just said? How does this idea support/challenge what we explored earlier in the lesson?

Summary and synthesis – What remains unknown at this point? What else do we need to know or do to understand this better?

Metacognition – What was the most difficult part of that task? How would you do it differently next time? How could you approach this question?

Think-Pair-Share

- Teacher asks a question
- Students are given time to think about their responses
- Students pair up and discuss their responses

Think-Pair-Share Various Perspectives

State a question and ask pairs to “think” in terms of a different perspective e.g. A character in a story, a particular scientist or thinker, a person from history. Etc...

Think-Pair-Share (Listen)

When students are sharing ideas in their pairs remind them to listen to their partner’s ideas. When are asked to share, students share the idea of their partner not their own.

Think-Pair-Silent Share

The students share their ideas as a silent written dialogue in the form of a spider diagram. This allows students to deepen thinking by taking time to present information in a written form.

Think-Pair-Square

Students share with two other students after they have completed Think-Pair-Share (4-square).

Think-Write/Draw-Share

Students write or draw their own ideas paired discussion with a partner. This allows ideas to be developed more before sharing.

The Thinking Hard Process

Knowledge and Understanding: Reduce

- Reduce the key argument into a tweet (140 characters) OR 12 words.
- Reduce the paragraph to three key points
- Reduce this paragraph to 6 words. In pairs compare your words, add to of the best to your list
- Explain ... in a maximum of 12 words

Knowledge and Understanding: Transform

- Change this image into six words/a paragraph.
- Transform this paragraph into a diagram/chart/sketch. No words allowed.
- How does this text/image/performance make you feel?
- Change this idea/event/character into a model.

Analysis: Prioritise

- Change the most serious problem here into an image. No words allowed! Label your partner’s image. Why do you think that this problem is so serious?
- Diamond Nine activity. Justify your top three choices.
- Any ranking exercise and justification of top and bottom responses.
- Which of these questions is the most difficult/easiest? Explain why.
- Underline the most important/thought provoking/surprising/ shocking statement.
- Neatly cross out the least important point. Explain your thinking.

Analysis: Categorise

- Sort this information into three categories. Highlight and think of a suitable title for each category.
- Group together questions that require the same technique to answer. Highlight in three different colours.

Flexibility: Extend

- Write down three questions you would like to ask...about....

Flexibility: Making connections

- How is this question/text/image similar to X? How is it different?

Flexibility: Deconstruct

- Write a three-step guide for a Year 12 student to answer these types of question.

18	Assessment Link	A3 - Classroom talk
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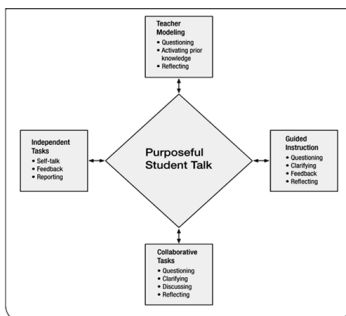
Teacher modelling

During whole-class instruction, teachers model behaviours, skills, and strategies that they expect to see from their students. This modelling is based on an established purpose and provides students with a mental model for completing tasks they will encounter in another phase of instruction. Questioning can be used during teacher modelling, but teachers can also activate their students’ background knowledge during this time (for example, a GCSE biology teacher might ask his students to talk with a partner about cell life before he explains cell division to them). In this phase, teachers model the use of academic language as they engage in think alouds, shared readings, read alouds, lectures, and other whole-class events. After modelling, students can reflect on what they learned through both writing independently and talking with a partner.

Guided Instruction

During guided instructional events, teachers use talk to determine what students know and what they still need to know. This is an opportunity to use questions, prompts, and cues to help students complete tasks. Although guided instruction is teacher led, this does not mean that students are not talking. They use talk to ask questions—of the teacher, of peers, and of themselves—as well as to clarify understanding, provide feedback to a partner, and reflect once more on their learning.

Teachers can use talk during guided instruction in a number of ways. For example, an art teacher might meet with a small group of students to discuss their drawings. He asks them to describe their drawings and then asks them to compare and contrast several drawings from his collections of books and then has them give one-word explanations of the differences. The students use words such as *proportion, line, and shading*. Through this talk, this art teacher is able to facilitate increased understanding for their students.



Collaborative Tasks

In this phase of instruction, students are provided an opportunity to work together, with the teacher monitoring and supporting as needed. Talk critical when students discuss tasks or ideas and question one another, negotiate meaning, clarify their own understanding, and make their ideas comprehensible to their partners. It is during collaborative tasks that students must use academic language if they are to focus on the content. Here again, their understanding grows as they talk with their partners to reflect on their learning. A number of classroom structures, such as reciprocal teaching, literature circles, partner discussions, and so on, require students to talk together.

Independent Tasks (Focus 15)

It might seem strange to suggest that talk plays a critical role during independent activities. But think about the self-talk (inner speaking) you use when you complete independent tasks. Some of this self-talk occurs in your mind, whereas some is vocalized. Again, thinking occurs as we use language, and this type of talk is an important aspect to learning. As students work independently, they may also use talk to receive input on their work and give feedback to others. Reporting out after independent work may require a more formal register of language than that used during collaborative activities.

19	Assessment Link	A4 - Homework
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1. **Elaborative interrogation:** Generating an explanation for why an explicitly stated fact or concept is true.
2. **Self-explanation:** Explaining how new information is related to known information, or explaining steps taken during problem solving.
3. **Summarization:** Writing summaries (of various lengths) of to-be-learned texts.
4. **Highlighting/underlining:** Marking potentially important portions of to-be-learned materials while reading.
5. **Keyword mnemonic:** Using keywords and mental imagery to associate verbal materials.
6. **Imagery for text:** Attempting to form mental images of text materials while reading or listening.
7. **Rereading:** Restudying text material again after an initial reading.

8. **Practice testing:** Self-testing or taking practice tests over to-be-learned material.
9. **Distributed practice:** Implementing a schedule of practice that spreads out study activities over time.
10. **Interleaved practice:** Implementing a schedule of practice that mixes different kinds of problems, or a schedule of study that mixes different kinds of material, within a single study session.

Most effective

20	Assessment Link	A5 - Designing formative assessment tasks
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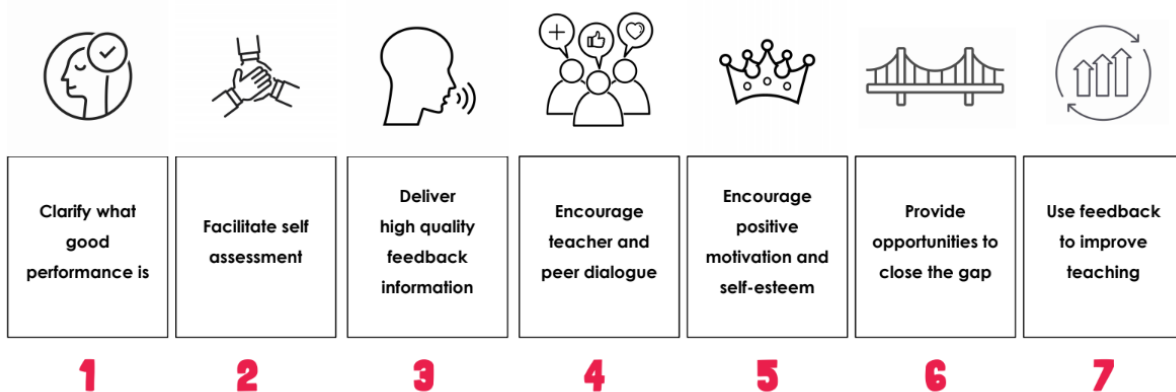
To effectively use assessment for learning teachers need to:
know their pupils well, know why pupils make mistakes, and be able to make judgements about next steps or interventions
share learning intentions with pupils and use them to mark work or give feedback or rewards
build in review time for themselves and their pupils
encourage pupils to take responsibility for their learning by providing opportunities for pupils to describe their response to learning intentions or targets, the strategies they use and the judgements they make in relation to their progress
give pupils examples of a variety of skills, attitudes, standards and qualities to aim for
analyse pupils' performance in tests and use the information for future learning plans

feel confident and secure in classroom practice
In addition, teachers need to produce plans with:
emphasis on learning intentions and on sharing them with pupils and other adults in the classroom
assessment criteria for feedback and marking, peer and self-assessment
differentiated classroom groups
built-in review time and flexibility
notes of pupils who need additional or consolidation work
time for guided group sessions for explicit formative assessment opportunities
adjustments highlighted or crossed out: what did or did not work and why.
To effectively use assessment for learning schools need an ethos that:
values attitudes to learning and promotes trusting relationships
encourages and builds self-esteem
believes that all pupils can improve and measures individuals against their own previous attainment instead of against other pupils
uses value-added data
provides support, guidance and appropriate training for teachers
manages change well and includes maintenance systems
encourages review and self-evaluation at individual, subject and school level.

21	Assessment Link	A6 - Examining pupils' responses -
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7 Principles of Good Feedback

@TeacherToolkit
Classroom Ideas, Teacher Training & School Resources



22	Curriculum Link	C1- Identifying learning content
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Philosophies of Education

- To Develop the Potential of the Child (Personal Empowerment)
- To Pass On “the Best that has been Thought and Said” in the Past (Cultural Transmission)
- To Prepare Young People for Life and Work (Preparation for Work)
- To Build Communities and Overcome Social Disadvantage (Preparation for Citizenship)

Seven good principles of curriculum design

- Balanced
- Rigorous
- Coherent
- Vertically Integrated
- Appropriate
- Focused
- Relevant

- Pupils study the full curriculum; it is not narrowed. In primary schools, a broad range of subjects (exemplified by the national curriculum) is taught in key stage 2 throughout each and all of Years 3 to 6. In secondary schools, the school teaches a broad range of subjects (exemplified by the national curriculum) throughout Years 7 to 9, [or is in the process of transitioning to such arrangements.*] The school’s aim is to have the EBacc at the heart of its curriculum, in line with the DfE’s ambition, and good progress has been made towards this ambition.

162. At the heart of an effective key stage 4 curriculum is a strong academic core: the EBacc. The government’s response to its EBacc consultation, published in July 2017, confirmed that the large majority of pupils should be expected to study the EBacc. It is therefore the government’s ambition that 75% of Year 10 pupils in state-funded mainstream schools should be starting to study EBacc GCSE courses nationally by 2022 (taking their examinations in 2024), rising to 90% by 2025 (taking their examinations in 2027). It is important that inspectors understand what schools are doing to prepare for this to be achieved, and they should take those preparations into consideration when evaluating the intent of the school’s curriculum.

KNOWLEDGE-LED

In order to understand, reflect on and, if they desire, seek to change their society and their place within it, our young people must **know** about the world. To do that, young people must engage with the evidence about the world which has been gathered into *bodies of knowledge* and *modes of thinking* we call “**disciplines**”.

SUBJECT-SPECIFIC

Different academic disciplines create and curate different knowledge and have different procedures and processes for doing so. Whilst disciplines do not always directly correspond to a single **subject** in school, all subjects draw on one or more academic disciplines, and the shape and form of an individual subject’s curriculum should be authentic to the discipline(s) it draws from.

COHERENTLY-DESIGNED

Subjects are an **induction** into knowledge, and must unite the different strands of knowledge within them into a **coherent** experience across the whole of a students’ journey through education. To achieve coherence, students’ encounters with knowledge must be **sequenced** carefully over time; material taught at one point in time builds on material taught earlier. *This means a curriculum may not always start with the “easiest” knowledge, but with the most fundamental, helpful and extending.*

23	Curriculum Link	C2 - Explicit teaching
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Modelling is tricky business. Too little can leave students unsure of the expectations you have for their work and blind to what a finished piece should look like.

- Be aware however, that we do not just want to show them a finished article; we want to develop their metacognition, the ways in which they think about their learning so they understand WHY their work should look like this.
- It is important that we don’t miss out on steps or assume a level of prior knowledge.
 - For students to believe that they can be successful, they first need the support that will allow them to experience the feeling of success
- Might be worth you keeping evidence of ‘excellent work’ in a portfolio so that you are able to refer to these during lessons.

Choosing to model

- When students are exposed to a new skill it would be extremely beneficial for you to model it very thoroughly – working step by step.
- The next time they encounter the same skill you can just run through the basics once more and focus more on the common errors.
- We don’t necessarily need to lower our expectations but we do need to model exactly how to reach it.

Using exemplars

An exemplar is a piece of work that demonstrates the standard you are expecting – this is why you need to have an idea in your mind of what an excellent piece of work looks like at each different stage.

- Instead of just showing them examples, we need to break exemplars down into their component parts so that students can see how they work and why they are of a high standard
- Use exemplars focused on subject specific skill rather than generic task completion. This will avoid students trying to mimic or copy the work and instead think hard about their answer.
- Help them to identify a logical structure and discuss how this comes from planning an answer before you begin writing.

Going Live

Models can be created in advance, but we can also produce them live, working through the steps with the class in real time e.g. producing a graph.

- Live model starter sentences when setting extended answers. This might help students understand the key components that makes up a great answer
- Live modelling allows us to show how we make correction and edits to our work and that we do this as an on-going process.

Search and Destroy

- It is often useful to provide models at a range of standards and to unpick the features that make one more successful than another. This is extremely useful when dealing with mock exams when students seem to contain an amalgamation of the errors they made.
- We are trying to develop self-regulation in students
- Ask students to create success criteria for a model answer you are using and then when giving them a similar question they are able to apply the same skills.
- They will develop an excellent understanding of the standard required and, importantly the experience of applying this understanding to a range of questions.

Talk the walk

- Encourage the students to think like a specialist from your discipline

Removing the scaffolding

- If your students have become over-reliant on support, you might want to look again at how you are using modelling.
- Students should be able to refer back to previous experiences of working with the aid of a model and apply this when they encounter something similar again.
- Using, and removing scaffolding takes careful planning and a long view through the curriculum

24	Curriculum Link	C3 - Disciplinary literacy
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Source: EEF

1. Prioritise 'disciplinary literacy' across the curriculum

- Literacy is key to learning across all subjects in secondary school and a strong predictor of outcomes in later life.
- Disciplinary literacy is an approach to improving literacy across the curriculum that emphasises the importance of subject specific support.
- All teachers should be supported to understand how to teach students to read, write and communicate effectively in their subjects.
- School leaders can help teachers by ensuring training related to literacy prioritises subject specificity over general approaches.

2. Provide targeted vocabulary instruction in every subject

- Teachers in every subject should provide explicit vocabulary instruction to help students access and use academic language.
- Effective approaches, including those related to etymology and morphology, will help students remember new words and make connections between words.
- Teachers should prioritise teaching Tier 2 and 3 vocabulary, which students are unlikely to encounter in everyday speech.
- Teachers and subject leaders should consider which words and phrases to teach as part of curriculum planning.

3. Develop students' ability to read complex academic texts

- Training focused on teaching reading is likely to help secondary school teachers teach their subject more effectively.
- To comprehend complex texts, students need to actively engage with what they are reading and use their existing subject knowledge.
- Reading strategies, such as activating prior knowledge, prediction and questioning can improve students' comprehension.
- Strategies can be introduced through modelling and group work, before support is gradually removed to promote independence.

7. Provide high quality literacy interventions for struggling students (see scaffolding toolkit)

- Schools should expect and proactively plan to support students with the weakest levels of literacy, particularly in Year 7.
- Developing a model of tiered support, which increases in intensity in line with need is a promising approach.
- Assessment should be used to match students to appropriate types of intervention, and to monitor the impact of interventions.
- Creating a co-ordinated system of support is a significant challenge requiring both specialist input and whole



Literacy across the curriculum

4. Break down complex writing tasks

- Writing is challenging and students in every subject will benefit from explicit instruction in how to improve.
- Teachers can break writing down into planning, monitoring and evaluation, and can support students by modelling each step.
- Targeted support should be provided to students who struggle to write fluently, as this may affect writing quality.
- Teachers can use a variety of approaches, including collaborative and paired writing, to motivate students to write.

6. Provide opportunities for structured talk (see oracy toolkit)

- Talk matters: both in its own right and because of its impact on other aspects of learning.
- High quality talk is typically well-structured and guided by teachers.
- Accountable talk is a useful framework to ensure talk is high quality, and emphasises how talk can be subject specific.
- Teachers can support students by modelling high quality talk, for example including key vocabulary and metacognitive reflection.

5. Combine writing instruction with reading in every subject

- Combining reading activities and writing instruction is likely to improve students' skills in both, compared to a less balanced approach.
- Reading helps students gain knowledge, which leads to better writing, whilst writing can deepen students' understanding of ideas.
- Students should be taught to recognise features, aims and conventions of good writing within each subject.
- Teaching spelling, grammar and punctuation explicitly can improve students' writing, particularly when focused on meaning

26	Curriculum Link	C5 - Acquisition before application
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Retrieval Practice

KATE JONES

The act of recalling learned information from memory (with little or no support) and every time that information is retrieved, or an answer is generated, it changes the original memory to make it **STRONGER!**

THE MULTI-STORE MODEL OF MEMORY BY ATKINSON & SHIFFRIN (1968)

Peterson & Peterson (1959)
→ Almost all information stored in short-term memory that is not rehearsed is lost within 18 to 30 seconds!

'Using your memory shapes your memory'

RETRIEVAL STORAGE
→ how well information is embedded in long-term memory

RETRIEVAL STRENGTH
→ how easily a piece of information can be brought to mind when required

Learning = a change in long-term memory

'if nothing has changed nothing has been learned'

Meaningful learning is about producing organised, coherent and integrated mental models that allow people to make inferences and apply their knowledge. (Karpicke, J. 2012)

THE BENEFITS:

- Retrieval practice aids later retention 'every time you retrieve a memory it becomes deeper, stronger and easier to access in the future'
- Testing identifies gaps in knowledge
- Testing causes students to learn more from the next learning episode
- Testing produces better organisation of knowledge
- Testing improves transfer of knowledge to new contexts
- Facilitates retrieval of material that wasn't tested
- Improves metacognition
- Prevents interference from previous material when learning new content
- Provides valuable feedback to teachers
- Regular testing encourages students to study more

Retrieval Practice Principles (TOM SHERINGTON)

① **Involve everyone in the retrieval practice and review process**

"Good techniques involve all students checking their knowledge."



⑤ **Vary the diet and mix it up**

"This will allow students to explore their schema in different ways, strengthening future recall."



② **Make checking and correcting accurate and easy to do**

"The best person to mark the test is the person who has just took it."
- Dylan William



⑥ **Make it time efficient**

"A good technique can be used repeatedly in an efficient manner without dominating whole lessons."



③ **Specify the knowledge**

"It's better if students know the set of knowledge any retrieval will be based on, so they can study, prepare and self-check."



⑦ **Make it workload efficient**

"The best methods do not involve the teacher checking the students' answers, creating unsustainable workload."



④ **Keep it generative**

"Students need to explore their memory to check what they know and understand. This means closing the books and making students think for themselves."



"The closer you are to forgetting a piece of information, the more likely it is that you will benefit from revisiting it."

(SUSH & WATSON (2019))

Retrieval Practice in the Classroom

① **Retrieval Practice Placemat**

Example questions:

- What keywords did you use last lesson?
- State 3 key facts from last lesson.
- Explain a key concept from last lesson.
- Ask your partner 3 questions based on the content covered this term.

② **Brain Dumps**

- Dumping as much information from the brain about a specific topic
- Low effort, HIGH impact!

③ **Cops & Robbers**

- Cops - students write as much as they can from memory about a certain topic.
- Robbers - students get out of their seats, sharing and stealing ideas from their peers.

④ **Retrieval Grids**

- A grid with a range of questions that vary in the level of difficulty
- Each question is worth a certain amount of points. The points increase with the level of difficulty.

⑤ **Flash Cards**

- How effective flashcards are depends on how they're USED!
- It is important that students consciously recall the answer to the question on their flashcards, either verbally or through writing.

⑥ **Flashback Friday**

- As an end of lesson task on a Friday ask students to create a series of 5-10 questions based on the lesson content.
- Students answer these a week later.

27	Curriculum Link	C6 - Sequencing learning goals
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HOW CAN I IMPLEMENT SPACED PRACTICE?

Break up lessons into smaller sessions.

Instead of teaching one long lesson over a topic, divide up the lesson into smaller lessons and space them over multiple days. For example, in teaching students to conjugate verbs in a foreign language, conjugation rules can be introduced and practiced in a brief session, followed by additional practice with the same rules on subsequent days. The same goes for any academic material, such as practicing mathematical procedures, practicing to recall terms and definitions, comparing and contrasting different concepts, or generalizing knowledge to new situations.

Revisit concepts that have been taught in previous lessons

It is easy for us as teachers to think that once a topic has been "covered," there is no need to cover it again. To the contrary, students who are learning information for the first time need to revisit it, think about it more, and process it multiple times. Such opportunities can be provided by working into class lessons some of the concepts that had been encountered in previous lessons. These can take the form of class discussions, class activities, or homework assignments that require students to retrieve previously learned information and relate it to new concepts.

Harness technology to help students set a spaced study schedule.

Students can use a number of accessible online tools—such as online flashcards or electronic calendars—to create and set a schedule with built-in reminders for studying course information.

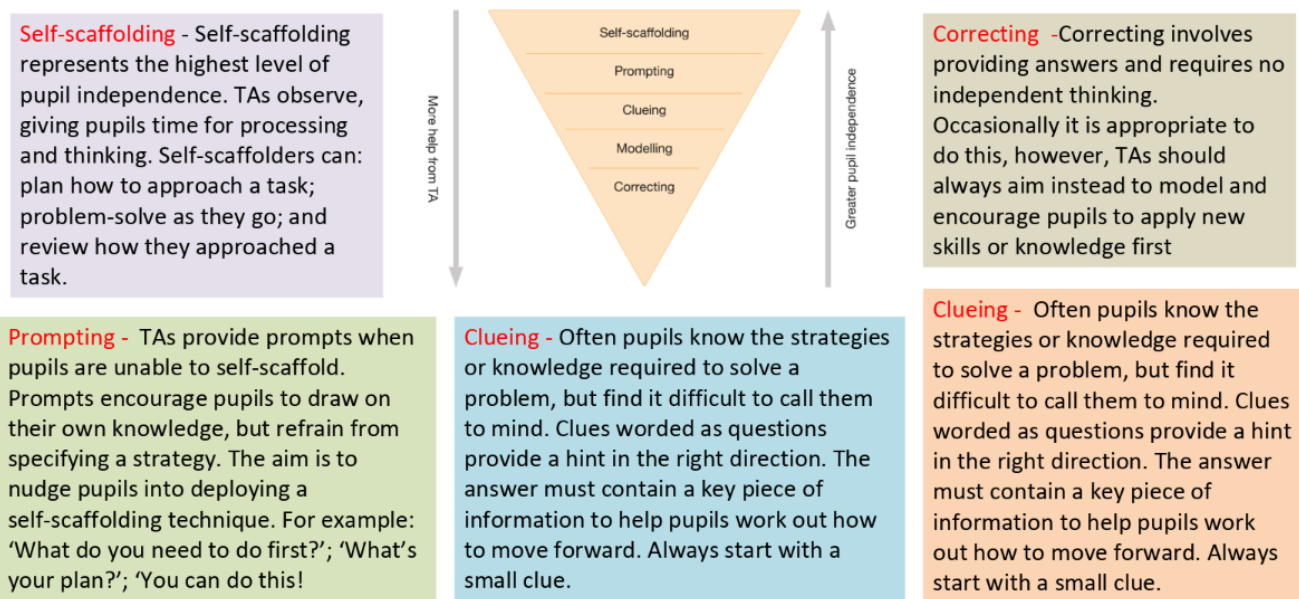
With the help of online course management systems, teachers can also set regular (i.e., daily or weekly) review quizzes and other assignments designed to provide spaced retrieval practice of the concepts being learned.

Include cumulative retrieval practice.

Cumulative quizzes and exams require students to maintain proficiency with information they have learned earlier in the course. Cumulative retrieval practice involves spacing by including concepts learned at earlier points in the course, and it also encourages students to review previously-learned information in order to prepare for the exams. Always make sure to use spacing as a learning strategy throughout the semester or school year, not simply as part of high-stakes assessments.

28	Professional Behaviours Link	PB3 – Utilising other educational professionals in the classroom
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This practical framework is designed to help TAs scaffold pupils' learning and encourage independent learning. TAs should move down the layers in turn. The initial expectation is that pupils self-scaffold whilst the TA observes their performance. TAs should then intervene appropriately when pupils demonstrate they are unable to proceed. It is important the tasks set by teachers, and supported by TAs, provide pupils with the right level of challenge.

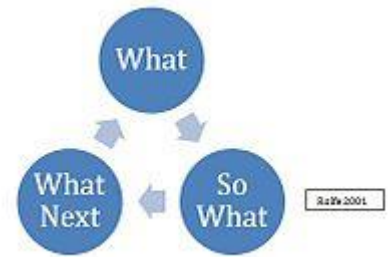


29	Professional Behaviours Link	PB4 – Reflective practice
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Reflective practice is the ability to reflect on one's actions so as to engage in a process of continuous learning.

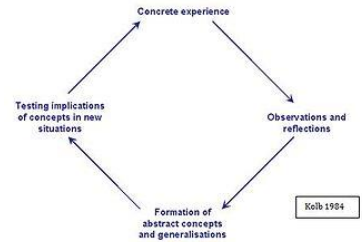
Benefits to reflective practice include:

- Increased learning from an experience or situation
- Promotion of deep learning
- Identification of personal and professional strengths and areas for improvement
- Identification of educational needs
- Acquisition of new knowledge and skills
- Further understanding of own beliefs, attitudes and values
- Encouragement of self-motivation and self-directed learning
- Could act as a source of feedback
- Possible improvements of personal and professional practice



Limitations to reflective practice include:

- Not all practitioners may understand the reflective process
- May feel uncomfortable challenging and evaluating own practice
- Could be time-consuming
- May have confusion as to which situations/experiences to reflect upon
- May not be adequate to resolve classroom problems



30	Professional Behaviours Link	PB5 – Career progression
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Why coaching?

- learner academic standards are improved
- the school develops a more positive culture of support
- teamwork is enhanced
- the school has a collective achievement mentality.

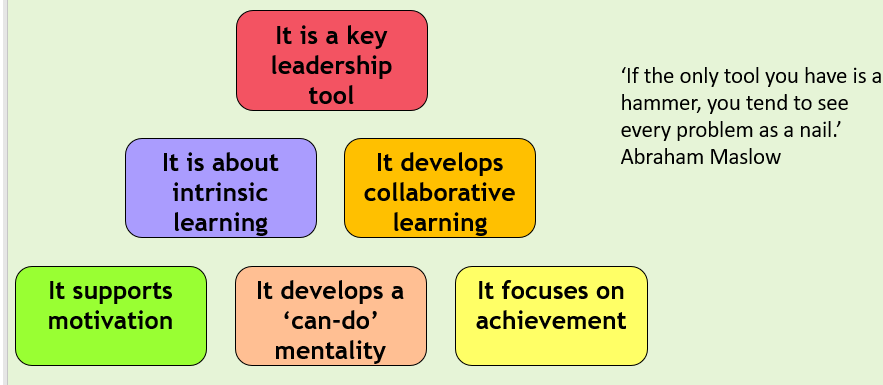
TS8c – ‘Take responsibility for improving teaching through appropriate professional development, responding to advice and feedback from colleagues.’

Coaching is both an art and a science that helps to release a person’s potential in order that they can achieve their goals.

‘The coaching relationship is firmly based around confidentiality and the belief of the coach that the coachee can arrive at their own solution.’

Tony Swainston

Key features of coaching



Coaching	Mentoring
Advice is not given	Specific advice given
Solutions focused	May be solutions focused or explorative
Belief that individuals hold the answers	The support person has the 'real' answers
Generic helping skills	The support person has expert knowledge/experience
Strengths focused	Deficit model
Promotes high degree of independence	Can promote dependence upon the support person
Commitment to specific actions	May/may not result in specific actions