TEACHING AND LEARNING PRINCIPLES

SEPTEMBER 2025

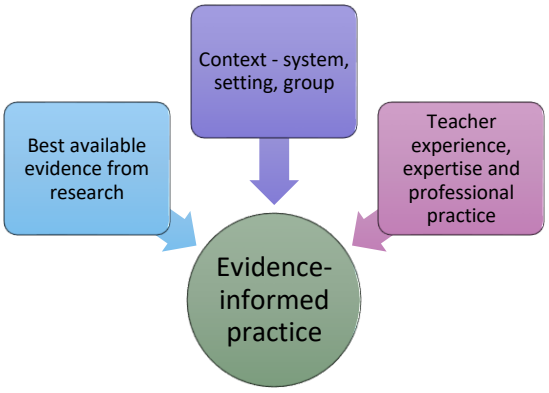
The Willesborough Schools Federation aspires to be a learning organisation in which all staff (teaching and non-teaching) think hard about their practice and take full ownership of it with the intention of developing their expertise throughout their careers. **In the context of these principles, "teachers" includes all adults involved in helping children to learn.**

"THE BEST AVAILABLE EVIDENCE INDICATES THAT GREAT TEACHING IS THE MOST IMPORTANT LEVER SCHOOLS HAVE TO IMPROVE PUPIL ATTAINMENT."
– EDUCATION ENDOWMENT FOUNDATION

To help pupils learn effectively, teachers understand and apply Research informed 'best bets' about how people learn. Research findings are, however, only one element of being evidence informed. Teachers need to reflect on evidence and interpret in the light of our context, and their own and others' experience.

Teaching is a complex, demanding skill that can be improved with practice. The more knowledge teachers have about how pupils learn, the more informed they can be about the decisions they take. Highly effective teachers may appear to teach effortlessly but this is due to expertise which can be developed through conscious effort and feedback.

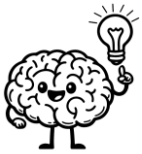
Every change of pupils, curriculum or context requires teachers to adapt and acquire new knowledge, so all teachers need to continually develop their expertise throughout their careers.



These principles should be interpreted in conjunction with the Curriculum design and other policies including marking and feedback, assessment principles and our school vision and values. The sequence below does not constitute an order of importance or effectiveness. It is recognised that the principles overlap and influence each other and all principles are underlined with strong learning environments conducive to learning.

In the context of the principles, "teachers" include all adults involved in helping children to learn.

1. Learning takes place most effectively when teachers create a climate combining inclusion with low threat and high expectations, based on positive relationships and clear rules and routines.



2. Due to clear, explicit instructions, all pupils know exactly what they need to do, and teachers ensure that students focus on what is to be learned.

3. The curriculum, and its delivery, are carefully planned so that all pupils can succeed. Teachers require deep knowledge of the curriculum and the most effective means of teaching it.

4. Teachers connect prior knowledge to new information by chunking content into small, manageable steps due to working memory. Chunks can get bigger over time but allows pupils to master learning before moving on.

5. Teachers develop fluency by giving students practice in using and retrieving information. Learning takes deliberate effort. It takes place over time and forgetting is part of this process.

6. Careful assessment, targeted questioning and effective feedback, at all stages of the process, are used to enable learning.

7. The key to unlocking the curriculum is literacy and foundational skills. Reading enables pupils to acquire knowledge and build on what they already know. High quality oracy practices deepen understanding and improve academic outcomes.

8. Metacognition and Modelling. Modelling worked examples of 'what a good one looks like' offers the prompts and support needed. e.g. I do, we do, you do. Teachers deliberately model how to learn as well as what to learn; they teach pupils to plan, monitor and evaluate their own learning.

1. LEARNING TAKES PLACE MOST EFFECTIVELY WHEN TEACHERS CREATE A CLIMATE COMBINING INCLUSION WITH LOW THREAT AND HIGH EXPECTATIONS BASED ON POSITIVE RELATIONSHIPS AND CLEAR RULES AND ROUTINES.

A teacher's abilities to make efficient use of lesson time, to coordinate classroom resources and space, and to positively manage pupils' behaviour with relentless routines and rules (Ready, Respectful, Safe and Kind) that are consistently enforced, are all relevant to maximising the learning that can take place. These environmental factors are necessary for good learning rather than its direct components. (WHAT MAKES GREAT TEACHING? - Sutton Trust.) Robert Coe, Cesare Aloisi, Steve Higgins and Lee Elliot Major (2016)

Teachers create a safe learning environment with positive teacher/pupil and pupil/pupil relationships. All adults behave calmly and have consistent expectations. Positive language is used, emphasising common purpose, with kindness and gratitude the default interactions. Lesson time is used efficiently. Good behaviour is noticed and praised. The classroom should be characterised by both trust and challenge. Teachers are patient and insistent on high standards. Teachers create classrooms that are safe bases where all children are not afraid to make mistakes and are therefore willing to put forward ideas, challenge themselves, helping them achieve at a high level and fulfil their potential.

The 6 principles of Nurture underpin all activity within the classrooms ensuring that they are accessible to all pupils. Students benefit from an understanding of child development, high expectations, predictable classroom routines, clear guidance and consistently enforced rules. Teachers should help pupils to observe the connections between their learning behaviour and their accomplishments.

Students tend to enjoy learning and to do better when they are intrinsically rather than extrinsically motivated to achieve. Children are unlikely to be intrinsically motivated if they do not have a high degree of success or feel that their efforts are recognised. Feedback focuses on the effort and the learning, not task completion.

Recommended further reading: High challenge, low threat — Mary Myatt Learning

2. DUE TO CLEAR, EXPLICIT INSTRUCTIONS, ALL PUPILS KNOW EXACTLY WHAT THEY NEED TO DO, AND TEACHERS ENSURE THAT STUDENTS FOCUS ON WHAT IS TO BE LEARNED.

"Explict instruction refers to a range of teacher-led approaches focused on teacher demonstration followed by guided practice and independent practice" EEF 2020

Teachers influence the motivation to learn in their students. When pupils are motivated, they pay more attention, put in more effort, persist for longer, and work more independently. For information to enter the working memory, pupils must think about it consciously. People struggle to process multiple stimuli, so teachers aim to reduce distractions in the learning environment. If pupils have not given their attention to the new learning, or thought hard about it, little learning can take place. Teachers aim for 100% participation through techniques such as: 'I do, we do, you do', targeted questioning and mini whiteboards.

Teachers believe that most children can master age-appropriate content given time, the right provision and sufficient effort. Children that grasp new concepts quickly are given opportunities to deepen their understanding.

3. THE CURRICULUM, AND ITS DELIVERY, ARE CAREFULLY PLANNED SO THAT ALL PUPILS CAN SUCCEED. TEACHERS REQUIRE DEEP KNOWLEDGE OF THE CURRICULUM AND THE MOST EFFECTIVE MEANS OF TEACHING IT.

The most effective teachers have deep knowledge of the subjects they teach, and when teachers' knowledge falls below a certain level it is a significant impediment to students' learning. As well as a strong understanding of the material being taught, teachers must also understand the ways students think about the content, be able to evaluate the thinking behind students' own methods and identify students' common misconceptions. *WHAT MAKES GREAT TEACHING? - Sutton Trust. Robert Coe, Cesare Aloisi, Steve Higgins and Lee Elliot Major (2016)*

Careful lesson design minimises the irrelevant load (distractions) allowing pupils to direct their capacity to the relevant material. When students' working memory is overloaded, they are unable to retain or process some of the information they have been presented with. Teachers must ensure students focus on a few ideas, processes or pieces of information at a time.

A persistent problem for teachers is the range of previous levels of prior attainment and differing capacities to engage with the work. Lower-attainers may take longer and need more help, but the job of teachers is to 'disrupt the bell curve', not just to preserve it (Wiliam, 2018). Teachers can plan to scaffold tasks (temporary support) then remove it as ideas and procedures become secure and fluent: by the end, those complex tasks are accessible to all.

For most children, the expectation is that by teaching to the top and providing additional support for those who need it, as well as challenge for those who are capable of greater complexity, all are exposed to a rich and demanding curriculum.

Coe et al. (Coe et al., 2014) found that a teacher's subject knowledge, and their understanding of how pupils handle this subject, has the strongest evidence of impact on student outcomes. Teachers should seek to maintain and develop their subject knowledge throughout their careers. There are persistent problems that are common to all teachers, for example:

However, expertise is highly domain specific. Teachers take time to acquire substantive knowledge, disciplinary knowledge and pedagogical knowledge for all subjects. Subject content is carefully placed in a curriculum sequence and broken down into small steps. Teachers make explicit connections between units of work and subjects. There is strong research evidence that the quality of the instruction provided by teachers has a significant influence on students' learning. Techniques such as questioning, modelling and scaffolding can be improved through observing skilful practice and then practising. Teachers adapt the means of instruction according to the level of expertise of the learners, using worked examples with novice learners and independent work with expert learners.

4. TEACHERS CONNECT PRIOR KNOWLEDGE TO NEW INFORMATION BY CHUNKING CONTENT INTO SMALL, MANAGEABLE STEPS DUE TO WORKING MEMORY. CHUNKS CAN GET BIGGER OVER TIME BUT ALLOWS PUPILS TO MASTER LEARNING BEFORE MOVING ON.

New things are understood in terms of what we already know. The more relevant prior knowledge students have, the less working memory will be required for a new idea, and the more easily they can process new information. Pupils cannot think well about a topic if they have little factual knowledge about it.

Our working memory capacity is limited (around four ideas), so by storing more in our long-term memory, we can free up working memory capacity (Paas et al., 2004). With careful teaching we can construct schemas, complex architectures of knowledge stored in long-term memory, with a view to automating their use (Paas et al., 2004). Schemas allow individual items of knowledge to be 'chunked' together into an overarching principle or concept and processed as a single element.

Poorly organised information (not connected to previous learning) is difficult to retrieve and easily forgotten. Information in the long-term memory is forgotten quickly unless it is consolidated by being anchored to prior knowledge and revisited regularly in increasingly varied ways.

5. TEACHERS DEVELOP FLUENCY BY GIVING STUDENTS PRACTICE IN USING AND RETRIEVING INFORMATION. LEARNING TAKES DELIBERATE EFFORT. IT TAKES PLACE OVER TIME AND FORGETTING IS PART OF THIS PROCESS.

"…the aim of all instruction is to alter long-term memory. If nothing has changed in long-term memory, nothing has been learned" [Kirschner, Sweller and Clark.]

Fluency in the basics is a necessary precursor to higher order thinking. For a relatively complex task, we can reduce the extraneous cognitive load by teaching components to fluency. These can then be used or retrieved from the long-term memory as part of the overall task. For example, securing basic number facts enables a pupil to focus on problem-solving.

Teachers provide adequate time for guided and independent practice. Students' knowledge of a concept extends and deepens when they practise it in new situations and contexts.

Spaced retrieval (waiting longer for forgetting to set in before revisiting material) may be more beneficial for memory than revisiting material too soon (Cepeda et al., 2008).

Although purely remembering facts has some value, deep knowledge is the real goal. Deliberately teaching understanding of concepts through making links, non-examples, discussion, questioning, etc. allows pupils to apply their knowledge to different scenarios.

Concepts are learned through actual examples and reinforced through being revisited in different contexts.

Recommended further reading and listening:

'Retrieval Practice- What Every Teacher Needs to Know'

6. CAREFUL ASSESSMENT TARGETED QUESTIONING AND EFFECTIVE FEEDBACK AT ALL STAGES OF THE PROCESS ARE USED TO ENABLE LEARNING.

"The single most important factor influencing learning is what the learner already knows. Ascertain this and teach them accordingly" David Ausubel - Cognitive Psychologist

"Responsive teaching is setting clear goals and planning learning carefully; identifying what students have understood and where they are struggling; responding, adapting our teaching to support students to do better." (Harry Fletcher Wood)

Teachers use assessment for learning strategies for ascertaining understanding during a lesson – determining prior knowledge, checking for understanding and addressing any misconceptions.

It is understood that what has been taught is not the same as what has been learned. Crucially, effective teachers plan and adapt their teaching to respond to what assessment tells them.

7. THE KEY TO UNLOCKING THE CURRICULUM IS LITERACY AND FOUNDATIONAL SKILLS. READING ENABLES PUPILS TO ACQUIRE KNOWLEDGE AND BUILD ON WHAT THEY ALREADY KNOW. HIGH QUALITY ORACY PRACTICES DEEPEN UNDERSTANDING AND IMPROVE ACADEMIC OUTCOMES.

Learning to read is a challenge that demands expertise from teachers and school leaders. Due to the complexity of our writing system, lots of reading is required for pupils to learn these associations between visual symbols, sound and meaning. Pupils learn aspects of reading at different rates. While the same principles apply to all developing readers, struggling readers require targeted, consistent teaching and timely intervention to consolidate their phonics knowledge and reading skills, ensuring they keep pace with their peers and build a strong foundation for fluent, confident reading. Equally, we strive to motivate all readers by providing engaging, meaningful texts and opportunities for discussion that foster a love of reading and help pupils see themselves as lifelong readers.

Oracy is central to learning across the curriculum, deepening understanding, aiding knowledge retention, supporting vocabulary acquisition and developing reasoning skills. Pupils' spoken language and their knowledge of the world is key to fostering their ability to read. Effective teachers prompt students to give explanations and justifications for their answers, to improve an initial response, to describe their thinking processes, to elaborate on their answers, exploring implications, 'what-if's and connections with other ideas and knowledge (Dunlosky et al., 2013; Praetorius et al., 2018).

Understanding can be thought of as the ability to explain. Oracy plays a critical role in supporting young people's wellbeing and mental health by providing students with the skills and opportunities to: express their

thoughts, feelings and emotions; ask for help; interact effectively and positively with peers and adults; and feel listened to and valued.

8. METACOGNITION AND MODELLING. MODELLING WORKED EXAMPLES OF 'WHAT A GOOD ONE LOOKS LIKE' OFFERS THE PROMPTS AND SUPPORT NEEDED. E.G. I DO, WE DO, YOU DO. TEACHERS DELIBERATELY MODEL HOW TO LEARN AS WELL AS WHAT TO LEARN; THEY TEACH PUPILS TO PLAN, MONITOR AND EVALUATE THEIR OWN LEARNING.

“Too often, we teach students what to think but not how to think.” (OECD Insights 2014)

Metacognition makes a unique contribution to learning over and above the influence of intellectual ability. Learners who use metacognitive strategies are likely to be able to achieve more. Research shows that improving a learner’s metacognitive practices may compensate for any cognitive limitations they have. (Getting started with Metacognition (cambridge-community.org.uk)

Self-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. Research suggests that developing skills in metacognition is particularly helpful for disadvantaged pupils.