Our Curriculum Implementation: Developing effective teaching with a research-based methodology

Our curriculum implementation is underpinned by high-quality educational research and pedagogy to ensure our unique learning approach includes the essential components of highly effective teaching.

Teaching staff have developed a consistent, shared understanding of evidence-based approaches, which underpin our effective teaching at Elizabeth Woodville. All our teachers are reflective practitioners, constantly seeking to improve their practice and, in turn, ensure that pupils achieve the best possible outcomes in all areas of the curriculum.

Underlying principles of our practice

- Evidence informed approaches
- Support pupils' learning and remembering more and building long term memory
- That learners are on a continuum from novice to expert and teaching needs to reflect that journey

What makes great teaching: Six components of great teaching

https://www.suttontrust.com/research-paper/great-teaching/

Two factors with the strongest evidence of improving pupil performance are:

- Teachers' content knowledge, including their ability to understand how students think about a subject and identify misconceptions
- Quality instruction, which includes using strategies such as effective questioning and the use of assessment

Six components of great teaching:

- Pedagogical content knowledge a deep knowledge of the subjects being taught and an understanding of the diverse way students think about the content, being able to evaluate the thinking behind students' own methods, and identify misconceptions. (Strong evidence))
- 2. **Quality of instruction** including elements such as questioning, modelling, scaffolding, responsive teaching, giving time to practise and embed knowledge and skills securely. (Strong evidence)
- 3. **Classroom climate** quality interactions between teachers and students, teacher expectations, attributing student success to effort rather than ability and valuing resilience to failure. (Moderate evidence)
- 4. **Classroom management** making effective use of lesson time, co-ordinating resources and space, and managing behaviour effectively and consistently (Moderate evidence)
- 5. **Teacher beliefs** the practices that teachers adopt, their understanding of theories of learning and how these influence their teaching (Some evidence)
- 6. **Professional behaviours** the ability to reflect on practice, involvement in professional development, supporting and communicating with parents (Some evidence)

Evidence from cognitive psychology

'Learning is a change in long term memory' (Kirschner, Sweller and Clark, 2006). Our approach to teaching is underpinned by our understanding of cognitive load theory. We know that learning is not a linear process and progress is evidenced in pupils knowing and remembering more. Only when knowledge has been rehearsed through practice, recall and assessment can it become truly embedded. We achieve this by careful, strategic planning that builds on prior learning.



Interrupting forgetting – Ebbinghaus' forgetting curve

Ebbinghaus' theory suggests that in order to secure knowledge in long term memory in such a way that it can be recalled, used and applied in different contexts, we need to revisit that knowledge a number of times. This will strengthen the memory and build strong schemata.

Typical Forgetting Curve for Newly Learned Information



Approaches that support children in securing knowledge in long term memory underpin the approach that we take in implementing a coherent, well sequenced curriculum.

Bjork and Bjork - Desirable Difficulties

https://bjorklab.psych.ucla.edu/wpcontent/uploads/sites/13/2016/04/EBjork_RBjork_2011.pdf

Some approaches that make learning harder in the short term result in better long term retention. Four specific examples of 'desirable difficulties':

- Varying the conditions of practice
- Spaced study or practice sessions
- Interleaving versus blocking instruction on separate to-be-learned tasks
- Generation effects and using tests (rather than presentations) as learning events

http://www.learningscientists.org/downloadable-materials

Retrieval practice	Practice bringing information to mind
Spaced practice	Space out studying over time
Elaboration	Explain and describe ideas with many details
Interleaving	Switch between ideas while you study
Concrete examples	Use specific examples to understand abstract ideas
Dual coding	Combine words and visuals

https://www.aft.org/sites/default/files/periodicals/dunlosky.pdf

Rosenshine's Principles of Instruction

https://www.aft.org/sites/default/files/periodicals/Rosenshine.pdf

https://teacherhead.com/2019/10/02/rosenshines-principles-10-faqs/

Rosenshine's Principles of Instruction provide a useful framework for delivering learning over a sequence of lessons. They are informed by research and relate to typical classroom practice; there is a lot of common sense. It is important to note that these are not a checklist and are not relevant to every lesson! They are helpful in developing effective practice and will be used intelligently by teachers and leaders to improve the quality of education across the school. They can be applied to all subjects, including reading.



An ethic of excellence (Ron Berger, 2003)

Berger identifies five principles that underpin an ethic of excellence. These apply to all the curriculum work that happens at school. We expect that learning experiences will reflect high expectations and constant striving for the best possible work.

5 pedagogical principles

- Assign work that matters
- Study examples of excellence
- · Build a culture of critique
- Require multiple revisions
- Provide opportunities for public presentation



This model illustrates the mastery learning cycle that we use to implement a high quality maths curriculum.



Metacognition and self-regulated learning

https://educationendowmentfoundation.org.uk/tools/guidance-reports/metacognitionand-self-regulated-learning

Evidence suggests the use of 'metacognitive strategies' – which get pupils to think about their own learning - can be worth the equivalent of an additional +7 months' progress when used well. The potential impact of these approaches is very high, particularly for disadvantaged pupils, but they need to be implemented with thought and expertise. The guidance report provides information about available research and offers teachers and senior leaders practical advice on how to develop their pupils' metacognitive skills and knowledge.



Mick Waters uses this diagram to illustrate the ways in which teachers can use different approaches at different stages of the learning process. He suggests that the pedagogical cycle involves explicit teaching of an element of knowledge or key concept, and develops conceptual understanding and/or deep understanding through a process of explicit instruction, exposition, problem-solving, deliberate practice and inquiry.



Bloom's Taxonomy

Bloom's Taxonomy is often misinterpreted. Knowledge and retrieval are at the base of the pyramid to indicate their essential place as the foundation required for the other elements to be possible. We use this to approach to support planning and delivery.



Oracy

An explicitly taught Oracy 'framework for talk' provides pupils with a platform to demonstrate their thinking, beliefs and decisions with confidence - enhancing pupils' capacity for exploration, explanation and critical evaluation through a dialogic teaching approach.



Reading

Reading is at the heart of everything we teach at Elizabeth Woodville Primary. Alongside reading being taught discretely, reading is also a focus in the majority of our lessons. In discrete lessons, pupils are exposed to high-quality ageappropriate texts that are often linked to topic work. The different skills of comprehension are taught which include decoding, word meanings, retrieval, inference, summarising and predicting from the start of their schooling and embedded and extended to the end of the seven-year journey. In whole class lessons, all pupils have the opportunity to read aloud and discuss reading strategies which links to our high expectations in Oracy.

To promote a love of reading, we have forged excellent links with parents and all pupils read at home independently and with adults. We ensure an author visit each year which in recent years have included:

- Visiting the theatre and bringing in theatre companies also enhance and bring to life a love of reading
- Introducing pupils to texts that they may not otherwise read. This year we have linked with 'Shakespeare in the West End' where after a day's visit, all pupils will be involved in a performance of 'A Midsummer's Night's Dream.
- Using 'reading for pleasure' assemblies (linked to reading lessons in class) enthusing children with the pleasure of reading, while offering continued practise of high-level inference skills.
- Annual audit of pupils' reading books and library provision.

Attitudes, Skills, Knowledge (ASK)

Pupils' learning is at the heart of our planning and as such is linked directly to attitudes, skills and knowledge. Lessons naturally lead into our different attitudes to learning. Highlighting this form of metacognition to our pupils enables them to consider the attitudes they will need to adopt to enhance their learning further. These attitudes are so well embedded that pupils are often able to identify which attitude they will be using without prompting.



Alongside this, teachers ensure that skills and knowledge are introduced, secured and embedded across each year group and are extended throughout their whole school education through carefully curated curriculum mapping and mediumterm planning.