

BENGEO PRIMARY SCHOOL POLICY

Subject: Teaching and Learning Policy	Date Reviewed: Autumn 2021
Author(s): J Page	Frequency of Review: Every 3 years
Committee Responsible: Curriculum	Next Review Date: Autumn 2024

**Note – there is a separate policy for Early Years, English & Maths.*

Our intent is to provide a programme of education which is rich in powerful knowledge and underpinned by strong values. Powerful knowledge is knowledge seeped in the traditions of each subject which empowers our children to engage fully in their lives now and in the future.

For the children, we call this knowledge ‘sticky knowledge’ because we want them to understand that this is knowledge of such value it should stay with them forever. Our curriculum is both broad and deep, and is presented in a way to help knowledge stick by:

- ensuring that the entire national curriculum is well taught for all children
- strengthening the curriculum with cultural knowledge – the people, innovations and ideas which represent the very best of each subject – being mindful of those who have been overlooked in the past (BLM)
- having a ‘memory-friendly’ pedagogy which particularly enables the children from our vulnerable groups, PPG, SEND and EAL, to learn successfully
- explicitly teaching the ‘science’ of sticky knowledge, bringing children on board with their improving ability to learn
- constructing a fluent curriculum where connections are easily made and learning is built upon
- ensuring that learning is suitably challenging while remaining mindful of cognitive overload
- encouraging pupils to consider how each topic is personally relevant to them and promoting a culture of life-long learning
- infusing teaching and learning with strong shared values and an ethos of working together

IMPLEMENTATION

Creating a cohesive curriculum

1. Our curriculum starts with the National Curriculum: Subject leaders create whole-school subject coverage and progression overviews, with due reference to the National Curriculum, ensuring that each year group is teaching age-appropriate knowledge which builds upon prior learning and feeds forward to agreed end-points. The progression overview for maths is derived from White Rose; for English, Target Tracker.
2. Subject leaders also create sticky knowledge mats for each topic detailing the National Curriculum expectations in addition to the cultural knowledge children are expected to learn with a focus on diversity. In developing the sticky knowledge mats, subject leaders are cognisant of the need to balance challenge with cognitive overload. These mats also provide suggestions for assessment. There are also sticky knowledge mats for grammar concepts and for maths.
3. From the subject overviews, year group teams construct curriculum maps for the academic year including specific links to prior knowledge (green) and across subjects (blue). The links to prior knowledge enable teachers to plan the first lesson of each topic, reminding children about what they already know and how they will build upon their knowledge.
4. Science and foundation subjects are planned lesson by lesson towards an agreed end-point (sticky knowledge mats) for each topic. Planning also includes differentiated end-points and learning for SEND children and those working at Greater Depth plus assessment activities for all groups. This is also true for maths and for English but the learning objectives are derived from the White Rose schemes of learning and Target Tracker respectively.

5. When planning for SEND, teachers refer to Pupil Profiles and any other information in order to ensure that learning reinforces any relevant targets and is appropriately differentiated whether that be in terms of end-point expectation or level of support.
6. When planning for Greater Depth, teachers consider the characteristics of children who require more cognitive challenge and this is reflected in the activities planned for them so that they are:
 - a. Working independently
 - b. Applying what they've learned in one area of a subject to other areas
 - c. Applying their knowledge consistently, confidently and fluently
 - d. Being able to explain what they have been doing to others, including teaching other children what they have learned.
7. Some teachers add further detail to their planning, especially in KS1, in order to add structure to their lessons. KS2 teachers often create powerpoints which include learning objectives, success criteria, differentiated tasks and reviews. It is recognised, that at the point of lesson delivery, different teachers prefer to work in different ways. However, in order to provide consistency, pedagogical policies must be adhered to including the Planning, Feedback and Assessment policy.
8. Subject leaders and the Senior Leadership Team monitor planning and assessment in order to ensure that sticky knowledge is being taught and learned, feeding back to teachers over inconsistencies, dealing with misconceptions and supporting individuals/groups of learners.

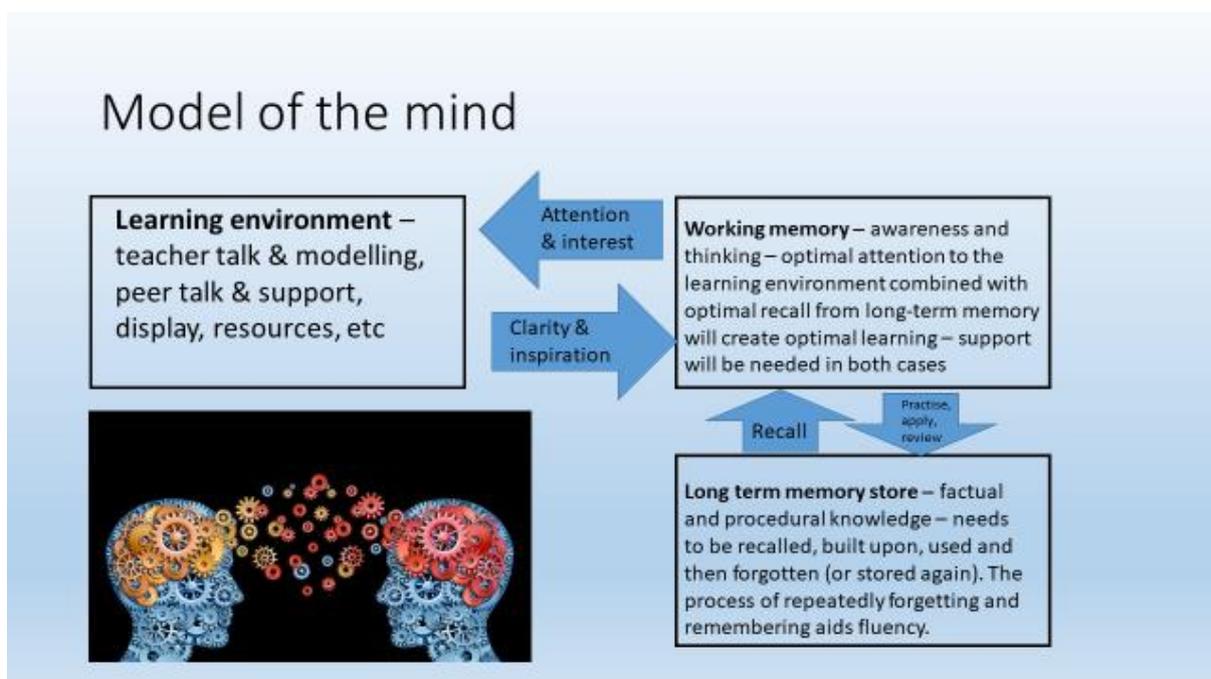
Teaching, learning and assessing the curriculum

Each topic of learning must include:

- at least one lesson at the beginning which explicitly refers to prior learning – what was learned and when – and encourages children to understand that that they have strong foundations from which to build their learning

Most lessons will include the following key elements:

- **imparting new knowledge** (usually the teacher/TA) and **recalling relevant knowledge** (usually the child) – combining both in the working memory (**building on**)
- **practising and applying the knowledge** (rote and elaborative rehearsal, problem-solving) – moving knowledge into the long-term memory (making it sticky) and/or using the knowledge in meaningful ways
- **cognitive closure** – choosing the most important bits to store in long-term memory



Engaging children in the learning

At the point of learning, children need to be focussing their attention and recalling their knowledge, applying some energy to their own learning. For the best lessons, teachers and children will be equally active. Many children will be naturally curious, others will need motivating.

One of the best ways to engage children is to ask them why this aspect of learning might be personally important to them, avoiding talking about jobs in the future or passing tests. See if they can come up with interesting uses for their learning now. (This activity alone will represent a form of elaborative rehearsal.)

Other ways to engage interest at the start of a lesson:

- A video
- A question
- A mistake
- An object
- A challenge
- A riddle

Recall

Thinking occurs when children combine information from the environment (the lesson) with what they already know (long-term memory) in new ways. This combination happens in the working memory and this is why recall of long-term memories (sticky knowledge) into the working memory is so important.

At the beginning of every lesson, children have an opportunity to recall relevant knowledge and be clear how it links with the learning objective. Teachers refer to schemes of learning and curriculum maps so that they too are clear about prior learning and how to build on it. It is important to keep reminding children to draw on their sticky knowledge – this will make learning less frustrating and more pleasurable/successful.

Rote and Elaborative Rehearsal

Rote rehearsal is usually practising a procedure whether it is how to spell a word, add 3 digit numbers, blend colours, play an instrument, kick a ball, conduct a fair test, etc. What is common to all these procedures is that they should be done in a specific way to be effective.

Therefore the practice activities provided enable children to use the correct procedure with increasing fluency. If they start 'thinking outside the box' too quickly, they will only become fluent in ineffective or inefficient procedures. Rote rehearsal has the reputation for being boring but it actually eases anxiety for children while they get to grips with the procedure or concept. If children appear bored, it is time to move on to elaborative rehearsal.

Elaborative rehearsal is building on knowledge in new and exciting ways. It is still practice but in a way which links to learning in other subjects or contexts and creates a deeper understanding (hence the term 'elaborative'). These activities are much more open-ended and involve investigation, discussion & debate, trial and error, imagination and creativity. Anything transformational - drawing a poem, turning maths procedures into mini-dramas, telling a story about a science concept, dancing a map, finding the maths in music, singing history – constitutes elaborative rehearsal.

Guided practice

Guided practice is an important and universal strategy for teaching at Bengo. Based on Vygotsky's ZPD, it is commonly described as 'I do, we do, you do' and means that teachers move from modelling to shared learning to independence within one lesson, aiding fluency and avoiding misconceptions.

Applying sticky knowledge to problem-solving

A 'problem' is work that presents a moderate challenge, including things like understanding a poem or thinking of interesting sandwich fillings. Children need regular opportunities to use their knowledge independently and apply it to a problem (in most lessons) or investigation (at least once per unit).

Cognitive closure

Cognitive closure describes the process whereby the working memory selects what will be passed to the long-term memory and what will be discarded. It completes the rehearsal process and attaches sense and meaning to new learning, enhancing the likelihood of it being retained. It is different from review when the teacher does most of the work.

It is usually at the end of the lesson in order to tie everything together. It should involve attaching importance to the key parts of the lesson, usually at least mentally. It will always help to talk it through and, for older children, write it down.

Examples are:

"In your head, I would like you to say to yourself the 3 most important things you learned today about... Be prepared to explain to your talk partner."

"In your head, think about what you learned today and how it linked/built upon something you had learned already. Be prepared to explain to your talk partner."

"Here are 3 possible future uses for what you learned today. Think, in your head, which one you can see yourself doing or think of another use. Write down your thoughts."

Self-regulation and values

In addition to knowledge, teachers help children become self-regulated learners by developing the following executive functions:

- Focusing on learning
- Planning and organising
- Flexibility and emotional resilience
- Metacognition and reflection

Teaching and learning is also underpinned by our core values (cooperation, respect, honesty, integrity, thoughtfulness, appreciation, patience, collaboration and tolerance). These values are introduced each week during the Monday assembly and reinforced throughout the week.

The School's motto – engage, explore, thrive – as well as its Code of Conduct (see appendix) encapsulates the holistic approach to learning and development.

Impact

Assessment drives pupil progress and outcomes. There are robust assessment procedures (see policy) which ensure that teachers quickly understand what children know and to what degree, in addition to what helps and what hinders each child.

As a consequence:

- All children make good progress from their individual starting points academically, emotionally, creatively, socially and physically
- All children, including SEND and PPG, achieve the best possible outcomes
- Children are conscientious, confident and curious – applying themselves to learning and doing their best, producing work, across the curriculum, of high quality

- Knowledge, understanding and skills are secured and embedded in part due to children's metacognition and increasing understanding of the role of memory in their learning
- Children listen respectfully and with tolerance to the views of others; they display good communication skills, both written and verbal
- Children demonstrate emotional resilience and are able to persevere through challenges
- Children demonstrate inclusive attitudes and have a sense of responsibility towards the wider society
- Children are fully prepared for secondary school and beyond

End-Points

The curricular end-points for our children, by the time they leave Bengeo, are detailed, subject by subject, in Appendix A.

Appendix A – End-Points

Maths

By the end of Year 6, we expect children to:

- be fluent in the conceptual, factual and procedural knowledge of the primary maths curriculum, able to recall and apply knowledge with efficiency, accuracy and effectiveness
- solve problems by applying their mathematical knowledge to a variety of real-life or abstract scenarios, making appropriate and confident decisions as they work through steps and seek solutions
- reason mathematically by following a line of enquiry and presenting justification, argument or proof using precise mathematical language
- be resilient and exploratory in their approach to maths, recognising and learning from mistakes, noticing and using patterns, and applying a 'trial and error' approach