Teaching and Learning Policy

Intent:

- To ensure a **consistent approach to high quality teaching and learning** throughout the school in order to **raise standards of achievement** for **pupils of all abilities**, including the most disadvantaged pupils and pupils with SEND or high needs through effective scaffold and challenge
- To ensure pupils are given opportunities to become imaginative, innovative and creative thinkers
- To ensure pupils build positive relationships with others by working collaboratively whilst also building their skills as independent learners
- To ensure pupils are able to develop and extend sound and secure knowledge and skills to apply what they know and can do with increasing fluency and independence in order to enable pupils to commit an increasing percentage of knowledge to long term memory, freeing up pupils working memory and avoid cognitive overload
- To ensure that remembering difficulty is appropriate. It should be hard in order to strengthen neurons and commit knowledge to long term memory
- To develop pupils schema through the teaching of specific content and allowing time to forget (spaced practice). Retrieval is interfering with the forgetting to commit to long term memory
- To ensure all pupils have secured key age and/or stage related basic skills to enable them to be fully prepared for their next year group

Implementation:

Our Teaching and Learning Policy is based on Rosenshine's Principles of Instruction (2012) which are drawn from the following three sources:

1. Research in cognitive science
2. Research on the classroom practices of master teachers
3. Research on cognitive support to help pupils learn complex tasks

1. Daily Review:

- Provide opportunities to review prior learning
- Daily review reinforces prior learning and strengthens the connections
- Desirable difficulty ensures that learning tasks which require a considerable but desirable effort, thereby improving long term performance
- Aim of developing automatic recall to free up working memory for problem-solving and creativity

2. New Material in Small Steps:

- The curriculum is coherently planned and sequenced towards accumulating sufficient knowledge and skills for future learning
- Long, medium and short term planning should chunk new learning into small steps which build progressively upon prior knowledge and move on only when first steps are mastered
- Pupils are consolidating and embedding previous skills/knowledge as well as learning something new
- Episodic teaching allows pupils to multiple opportunities to explore new skills in small steps under the guidance of the teacher

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- Present subject matter clearly, promoting appropriate discussion about the subject matter and teaching
- This is because the working memory is small, only handling a few bits of information at once so we present new material in small steps to avoid overload

3. Ask Questions:

- Balance of open and closed questions
- Questions to check and deepen understanding
- Opportunities for pupils to ask questions to teachers, each other and themselves
- Questions allow teachers to determine how well the material is learned

4. Provide Models:

- Pupils need cognitive support to help them learn how to solve problems
- Learning objectives and intended outcomes are clearly communicated and understood by all pupils
- Clear and concise teacher modelling
- Thinking out loud, explaining the metacognitive process to help clarify the specific steps involved
- Use a range of resources to deepen understanding, including worked examples, concrete resources and WAGOLLs
- Use of working walls and the development of an enabling learning environment which supports pupils' growing independence

5. Guide Student Practice:

- Provide opportunities for pupils to practice taught skills
- Give pupils additional time to rephrase, elaborate and summarise new material in order to store it in their long term memory
- Support staff have an active supportive role for pupils and have a direct impact on moving learning forward whilst promoting pupil independence

6. Check Student Understanding Systematically:

- Staff use assessment for learning strategies routinely to enable them to differentiate and direct support effectively in order to meet the needs of all pupils by:
  - Asking questions to check pupil understanding by asking them to explain their thinking and summarise their learning
  - Providing opportunities for pupils to explain to each other, requiring retrieval of that information
  - Identifying and addressing misconceptions in pupils work through instant feedback
  - Staff respond and adapt their teaching as necessary

7. Obtain High Success Rate:

- Episodic teaching and active learning provide pupils with opportunities to explore new concepts and practise new skills in small steps to ensure a high success rate.
- Pupils move through the curriculum at broadly the same pace with appropriate scaffolds and challenges

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- Providing systematic feedback and corrections through the use of instant verbal feedback and live marking
- Expectations of work presentation and behaviour for learning are consistently high

8. Scaffolds for Difficult Tasks:

- Temporary scaffolding to assist learning with the expectation that this will be removed
- Scaffolds are part of pupils cognitive apprenticeship
- WAGOLLs
- WABOLLs which anticipate pupils' likely errors/misconceptions
- Teacher modelling
- Teacher thinking aloud to model the metacognitive process
- Resources, e.g. concrete, cue cards, checklists, word banks, sentence stems
- Resources are well prepared, appropriately matched to support the learners and are fully utilised

9. Independent Practice:

- Independent practice produces 'overlearning' – a necessary process for new material to be recalled automatically
- Independent practice ensures no overloading of pupils' working memory, increasing the storage strength of the information as it becomes more embedded in long term memory
- Opportunities for independent practice in every lesson ensures that children practise skills and build on previous learning

10. Weekly & Monthly Review:

- Pupils must have extensive practice in order to develop well-connected networks of ideas (schemas) in their long-term memory
- Material should be adequately practiced and reviewed so that it is not easily forgotten
- Regular opportunity to recall recently learned material he will result in the material being embedded within long term memory. The more this happens, the easier it is to connect new material to such prior knowledge
- Knowledge stored in long term memory that is organised into patterns only occupies a tiny amount of space in our limited working memory. Having larger and better connected patterns of knowledge frees up space in pupils' working memory
- Weekly low-stakes quizzes are used to review prior learning
- Desirable difficulty ensures learning tasks require a considerable but desirable effort, thereby improving long term performance

Impact:

- Development of pupils' vocabulary
- Development of pupils' understanding of key concepts
- Development of pupils' knowledge base

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- Pupils ability to follow taught procedures

Science of Learning theory
1. Cognitive load
2. Building Knowledge
3. Storage and retrieval (long term memory)

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Appendix 1: Rosenshine's Principles of Instruction (2012):