Pedagogy at Thomas Jones

Pedagogy; Noun: 'the method and practice of teaching, especially as an academic subject or theoretical concept'.

At Thomas Jones we deliver our curriculum in a way that eases accumulation of learning, characterised by retention and redeployment of substantive knowledge and skills. Units of learning are sequenced in such a way that knowledge is retained and developed over time, alongside key skills in each subject. We have a relentless focus on high standards. Cognitive science underpins our pedagogy alongside the best evidence about how pupils learn. We understand that:

- Learning is an alteration in long-term memory. If nothing has altered in long-term memory nothing has been learned
- Progress means knowing more and remembering more
- Learning is about making connections
- Knowledge is generative (or 'sticky), so the more you know the more easily you can learn
- The biggest influence on learning is what the learner already knows, or has experienced, before a lesson takes place
- Disadvantaged pupils often lack rich experiences outside of school, limiting vocabulary and contextual knowledge.
- Teachers should encourage and help pupils to make connections with their prior knowledge (eliciting what they know). This helps develop conceptual understanding.
- Isolated knowledge will be subject to rapid forgetting in the natural course of time. Discrete, unconnected, decontextualized learning is easily lost
- Teachers are most effective when they see the learning situation through the eyes of their pupils and have an understanding of how pupils at different ages learn best.

Our key teaching and learning principles following our understanding of cognitive science are outlined below:

- **Pace** – Thomas Jones works on a 'less is more' basis so learning can be given context and can be deepened. Working deeper also enables children to make links with prior learning and understand it within a broader context rather than a stand-alone piece of learning.
  'If teachers race through the curriculum the material covered is atomised and pupils never get chance to see how their work sits within a bigger picture' Mary Myatt (1).
- **Knowledge rich** – at Thomas Jones we aim to ensure a coherently planned curriculum, sequenced towards cumulatively developing sufficient knowledge and skills for future learning and employment. We understand that knowledge is generative: the more you know the more easily you can learn. We are focused on children's ability to acquire, use and retain new information through our knowledge

(1) 'The Curriculum:to Coherence' – Mary Myatt
(2) *'Cognitive Load Theory'- Sweller, Ayres and Kalyuga, 2011*
(3) 'Principles of Instruction'- Barak Rosenshine
(4) 'Metacognition in Young Children'- Shirley Larkin, 2010
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rich and exciting curriculum that seeks to excite our pupils' imagination, develop a wealth of knowledge and enable children to become 'culturally literate'.
'If nothing has altered in long-term memory nothing has been learned. Progress means knowing more and remembering more' Sweller, Ayres and Kalyuga (2)

- **Vocabulary/Oracy rich** – our curriculum never 'dumbs down' vocabulary, quite the opposite in fact. Subject specific vocabulary is embraced by teachers as a great leveller for the children and knowing it is confidence boosting for children. It is much harder to re-learn a more complex word a second time around compared to learning this first time. Aside from this, subject specific vocabulary enables concepts to be 'mapped together' and links between learning made. At Thomas Jones we understand the correlation between vocabulary size and life chances and aim to ensure that our curriculum is vocabulary rich with Standard English insisted upon.
  Oracy is key in developing children's conceptual understanding. At Thomas Jones we ensure time is dedicated to speaking, listening, discussion, questioning and debate affording pupils opportunities to 'think aloud' (Sherrington (7)) and engage in their learning process. Teachers act to scaffold children's speaking and listening opportunities in order to build independence in this and encourage metacognitive learning to take place.
  We also aim to develop all children to be skilled readers and enjoy a love of reading with a strong reading and literacy culture across the school. This helps enable children to facilitate and develop their own learning.
  'Knowing subject specific terminology supports pupils to enter the domain of the academic discipline. This subject specific vocabulary is central to conceptual understanding'. Mary Myatt (1)
  '[I]t's clear that this needs to be a highly interactive, dynamic, responsive process.' *Sherrington (7)*
- **Teachers subject knowledge –** at Thomas Jones teachers have a sound understanding of what learning has come before and in planning look to build on this to develop pupils' existing conceptual understanding. Teachers create opportunities to generalise what is being learnt, enabling pupils to look at a 'bigger picture', seeing things from a wider perspective and linking the macro (where and how this fits with other things we have done/are doing/could know about) and the micro (today's lesson and where it is located within this unit).
- **Teaching style –** The episodic or 'ping-pong' style of teaching that benefits the children's cognitive development and engagement is apparent across all lessons at Thomas Jones with carefully structured lessons. Barak Rosenshines's Principles of Instruction, 2010 (3) emphasises the importance of breaking down learning into small steps / sets of instructions. With modelling and scaffolding helping pupils to organise information into schema (a personal categorisation system in the brain). Teachers orchestrate a continual back-and-forth dialogue with the children, using questions, short tasks, explanations, demonstrations, and discussions. This enables teachers to ensure all pupils are fully engaged in each segment of learning, vary the pace and direction of the lesson if necessary, and to continuously monitor the progress of the

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class. This practice follows Rosenshine's theory and supports children's ability to acquire, use and retain new information.

- **Metacognition and questioning –**
  'Metacognition is reflective thinking; keeping track of how the way you are approaching a task is getting you closer to a goal you are aiming for. The development of metacognition enables children to develop skills and strategies that can transfer knowledge from one domain to another.' Shirley Larkin (4)
  At Thomas Jones we recognise the importance of using probing questions to explore and deepen pupils' thinking. *Eliciting children's understanding and supporting their metacognitive skills in order to make sense of their understanding, organise and explain.*
  '*Reasoning in all subjects has the power to transform material into deep learning. It makes what has been understood visible. It provides the cement which holds organising ideas together.' Mary Myatt (1)*
  We also value the importance of making mistakes and understand that through mistakes and the exploration of misconceptions children learn and develop their metacognition skills. Teachers anticipate common errors and misconceptions in their modelling, tackling these head on and talking children through the process of how to use a mistake as a learning advantage.
- **Challenge –** at Thomas Jones we recognise that learning is deeper and more durable when it provides challenge and ensure that we offer challenge and intellectual enquiry to our pupils.
  'When learning is effortful it changes the brain, making new connections and increasing intellectual ability' Brown, Roedigler and McDaniel (5)
- **Curriculum Essentials –** At Thomas Jones we have carefully considered our core values, our 'curriculum essentials', and ensure that these are embedded within our curriculum. These have been considered alongside our pedagogical approach and in consideration of the Thomas Jones community and the immediate and wider environment. Our curriculum essentials are: community, language and literature, personal development and health and wellbeing, awe and wonder, enquiry and knowledge and understanding of the world.
- **Multimedia Input –** All children learn most effectively through linking images with words and so at Thomas Jones a multimedia input is used (visual, auditory, kinaesthetic) incorporating all 5 senses where possible. These help promote learning for children with a range of learning styles. This may include auditory stimulus from a teacher talking, peer input, music, rhyme or choral reading used alongside visuals such as artefacts, real items, photographs, film clips or slide shows. This approach is strengthened when words and images are made meaningful through accessing prior knowledge.
  'When the mind actively does something with a stimulus, it becomes memorable' Hattie and Yates (6)
  Alongside this the use of ICT is incorporated across the curriculum to support pupils to become learners in a digital age.

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- **Connecting Learning, Revisiting and Practice (retrieval) –** at Thomas Jones we understand that revisiting and practicing what children have learnt is essential to ensure that knowledge sticks. We also recognise that all pupils have differing experiences and prior knowledge. With this in mind we pre-teach concepts where needed and afford pupils opportunities to re-load what they already know, apply this to new situations, practice their skills and develop their understanding further. Rosenshine emphasises the importance of reviewing material: eliciting prior knowledge to reduce the cognitive load in order for pupils to then build on this knowledge- our curriculum includes cyclical opportunities for pupils to revisit previously learned material in this fashion. We also find meaningful ways to connect learning to children's own experiences where possible to strengthen connections in their understanding.
  'Learning is an interactive process that requires you to revisit what you have learned: continually update it and connect with new knowledge.' Brown, Roedigler and McDaniel (5)
  'The more one can elaborate on how new learning relates to what one already knows the stronger one's grasp of the new learning will be' Brown, Roedigler and McDaniel.(5)
  Connected learning is more likely to be retained and recalled at a point in the future. Not only that, learning content becomes more 'joined up': it makes more sense to the learner. Making links, essentially, helps information move into our long-term memory.

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