



Willow Wood Community Primary School
Computing Lesson Design Toolkit

1.Retrieval and Retention	Provide a starter that recaps and reviews prior learning and consolidates knowledge e.g. what have you learned last week, last topic or last year? Encourage children to explain what they can remember by using the correct vocabulary – displaying word banks would help with this as well as providing prompts.
2.Purpose and Sequencing	Explain the concept you are teaching and the purpose of the lesson and how it fits into the bigger picture and wider aspects of computing – which strand does it fall into - computer science (programming and understanding how digital systems work), information technology (using computer systems to store, retrieve and send information) or digital literacy (evaluating digital content and using technology safely and respectfully). Ensure that all children are explicitly aware of the aim of the lesson. Ensure that all children are working towards securing gaps in their learning by building on prior knowledge, dropping back steps if needed but all children should be working towards the same objective.
3.High Expectations and Communication	Ensure you ‘teach to the top’ with high and ambitious expectations. Scaffolds, including practical resources, must be provided to support learning. Ensure instructions are concise, using the correct computing vocabulary, and communication is clear and that language is positive and encouraging. Questions need to be targeted and illicit well thought out responses. Make sure you allow discussion time, where appropriate, as well as thinking time.
4.Knowledge and Deliberate Practice	Ensure you are explicit about the core knowledge, vocabulary and small steps in learning you are teaching to the children and how this will be built on lesson by lesson. Ensure this is communicated to pupils during the lesson and links throughout the block of learning are explored and revisited. Ensure you are offering and allowing pupils opportunities to practice and develop their computing thinking: allowing them time to explore and experiment with the software as well as time to evaluate and debug is crucial.
5.Modelling and Questioning	Ensure new concepts and ideas are presented in small steps and that you are explicitly modelling and showing pupils what ‘success’ looks like. Ensure probing questioning is used to aid computational thinking and discussions. Use explanation, timely intervention and peer support to address misconceptions at the point they are made to ensure there is a drive for whole class understanding.
6. Key Vocabulary	Ensure that there is an explicit focus on improving and developing vocabulary throughout the whole lesson, modelled by all adults within the classroom. Encourage and check for new technical vocabulary to be applied to all work, displaying these when needed to allow the children to accurately use them.
7. Metacognition and Self-Regulation	Ensure you are explicit in communicating and teaching effective learning strategies that children can adopt themselves in independent work and at home. Ensure that you are active in explaining ‘computational thinking’ to children. Ensure that when ready, scaffolding is gradually removed to develop children’s independence and confidence. Ensure lessons are inclusive for all.
8.Feedback and Review	Ensure feedback is clear and timely. It needs to be manageable, specific and targeted. Ensure formative assessment is acted upon and that you are constantly aiming to gain as much feedback as possible from children during the lesson. Ensure that a plenary activity reviews information from the lesson and indicates next steps (whether that is moving on or consolidation / review work). It is imperative that time is then given at the beginning of the following lesson to review any errors and correct these before beginning the lesson. Make sure children have saved their work in an easily accessible place to allow you time to review the work before the next lesson. During the lesson, take pictures to capture in the moment learning and create PicCollages with the learning intentions on which can be used to review learning at each stage by both staff and children.