**Computing Curriculum Subject Intent Statements for Website**

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| **Subject:** | **Computing, West Leigh Infants** |
| **Intent** | In line with the 2014 National Curriculum for Computing, our aim is to provide a high-quality computing education which equips children to use computational thinking and creativity to understand and change the world. The curriculum will teach children key knowledge about how computers and computer systems work, and how they are designed and programmed. Learners will have the opportunity to gain an understanding of computational systems of all kinds, whether or not they include computers.  By the time they leave Backwell Junior School, children will have gained key knowledge, concepts and skills in the three main areas of the computing curriculum: computer science (programming and understanding how digital systems work), information technology (using computer systems to store, retrieve and send information) and digital literacy (evaluating digital content and using technology safely and respectfully). We believe it is important for children to be given access to the breadth and depth of the computing curriculum, particularly beyond programming. The objectives within each strand support the development of learning across the key stages, ensuring a solid grounding for future learning and beyond. |
| **Implementation** | At West Leigh Infant School and Backwell C of E Junior School, we teach an inclusive and ambitious curriculum with sequenced lessons that builds on the learning from the previous lesson. Where appropriate, lessons are scaffolding so that all pupils can succeed and thrive.  Our computing curriculum is based on Teach Computing Curriculum created by the Raspberry Pi Foundation on behalf of the National Centre form Computing Education (NCCE). For KS1 and KS2, learning is based on a spiral curriculum meaning each of the themes is revisited regularly (at least once in each year group). Pupils revisit each theme through a new unit allowing consolidation whilst also building upon prior knowledge. All of our learning can be described through a high-level taxonomy of ten stands, including:   * **Algorithms** – be able to comprehend, design, create and evaluate algorithms. * **Computer networks** – understand how networks can be used to retrieve and share information, and how they come with associated risks. * **Computer systems** – understand what a computer is, and how its constituent parts function together as a whole. * **Creating media** – select and create a range of media including text, images, sounds and video. * **Data and information** – understand how data is stored, organised, and used to represent real-world artefacts and scenarios. * **Design and development** – Understand the activities involved in planning, creating and evaluating computer artefacts. * **Effective use of tools** – use software tools to support computing work. * **Impact of technology** – understand how individuals, systems and society as a whole interact with computer systems. * **Programming** – create software to allow computers to solve problems. * **Safety and security** – understand risks when using technology, and how to protect individuals and systems. |
| **Impact** | **A**fter the implementation of our computing curriculum, children at West Leigh Infant School and Backwell Junior C of E Junior School will be digitally literate and able to join the rest of the world on its digital platform.  They will be equipped, not only with the skills, concepts and knowledge to use technology effectively and for their own benefit, but more importantly – safely.  The biggest impact we want on our children is that they understand the consequences of using the internet and that they are also aware of how to keep themselves safe online.  As children become more confident in their abilities in Computing, they will become more independent and key life skills such as problem-solving, logical thinking and self-evaluation will ideally become second nature. |