

Computing Summary

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To be a good computational thinker we need to demonstrate the ability to solve problems, design systems and understand the power and limits of human and machine intelligence. We display this through the three aspects of the computing curriculum: computer science, information technology and digital literacy.

At Upton Westlea we do this by;

Computer Skills:

Our children should acquire and develop the skills associated with Computer Science in order to:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems
- Solve problems by decomposing them into smaller parts.
- Use sequence, selection and repetition in programs
- Work with variables and various forms of input and output.
- Use logical reasoning to explain how some algorithms work and detect and correct errors in algorithms and programs.
- Understand computer networks including the internet

Information Technology:

Our children should acquire and develop skills associated with Information Technology in order to:

- Use search technologies effectively.
- Select, use and combine a variety of software on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- Acquire and refine the techniques eg saving, copying and checking the accuracy of input and output needed to use IT.
- Develop the skills of collecting first hand data, analysing and evaluating it, making inferences or predictions and testing them, drawing and presenting conclusions, and use all these in their work with ICT.

Digital Literacy

Our children should acquire and develop their skills in Digital Literacy in order to:

- Understand the opportunities networks offer for communication and collaboration.
- Be discerning in evaluating and presenting data and information.
- Be able to use technology safely, respectfully and responsibly
- Recognise acceptable/unacceptable behaviour.
- Identify a range of ways to report concerns about content and contact.

| | Spiritual | Moral | Social | Cultural |
|-----------|--|--|--|--|
| Computing | Explore creativity and imagination in design and construction of digital products. | Encourage children to be good digital citizens when using digital technology including mobile devices and with due regard to e-safety. | Encourage good practice and respect in the use of social networking. (providing constructive feedback for peers on seesaw.) Encouraging children to work collaboratively and assist one another in problem solving. | Encourage an awareness and appreciation of the digital world and to be aware of differing cultural and spiritual or religious views towards the use of digital technology. |