



**Biscovey Primary Academy**  
**Teaching and Learning Principles**  
**Subject: Computing**  
**'Roots to grow, wings to fly'**

**School Vision:**

At Biscovey Primary Academy we aim for every child to flourish in a nurturing environment, demonstrate respect and kindness, whilst building resilience and ambition for the future.

Our curriculum ensures that we deliver a range of topics across the age phases which develops sequential learning where pupils know more and can do more, ensuring that they are ready for their next stage in education.

Our nurturing ethos endeavours to support all children and their families. Through this approach we are able to work together to ensure that we meet the needs of all learners in our school.

We pride ourselves on delivering an ambitious curriculum, focusing beyond the academic curriculum, developing a child's individual character. Our core values; 'nurture', 'respect' and 'ambition' run through all areas of school life and learning which allows the whole child to develop into a confident and caring young individual. The Biscovey child shows respect, and through ambition, self-belief and courage approaches learning with an inquisitive mind.

'Roots to grow, wings to fly'

**Subject Intent:**

Computing knowledge & understanding underpins modern life and the 21st Century. Children need to build vital confidence, knowledge and understanding of the way technologies work - and how internet-connected systems can be employed - in order to adapt flexibly to ever rapid change over coming years.

It is important that Computing knowledge begins to develop from the earliest years, and builds appropriately as children develop. As learners revisit areas of understanding, and become ever-more confidently equipped, they will be able to harness the many opportunities that modern technology presents, while remaining safe and necessarily critical.

Our intent for children's learning across Computing is mapped into three strands, dividing this broad subject into 3 main areas that build progressively throughout a child's time in primary education.

Computer Science

Information Technology

## Digital Literacy

The objectives of the National Curriculum have been used as a starting point for devising our ambitious curriculum milestones – the points at which we aim for children to have mastered specific aspects of knowledge and understanding. We cover everything contained in the National Curriculum but, in addition – to reflect the ever-growing breadth and importance of Computing – we have widened the scope of our milestones, with the intention that children become further equipped with a toolkit that is fit for their next steps in education, and for mastering the modern digital world. Going over and above the objectives of the national curriculum can be seen across all three strands, and is especially notable within Digital Literacy, with Internet Safety and Operational Core Skills becoming expanded aspects that have become evermore relevant to children's engagement with the modern world.

### **Subject Implementation:**

Our fully adaptable, collated Computing curriculum is broad but balanced; ambitious, yet understands the needs of a busy classroom and full teaching week. Materials are made available through the DLCornwall site in a way that provides a simple and accessible route through for teachers.

Schools need to make the most suitable, practical choices, using the hardware and software at their disposal - you will notice within the Easy Access documents that we often suggest alternative options for simpler access and better experiences for both teachers and children. We suggest that cross-curricular teaching, when possible and appropriate, is vital for bringing subjects to life; for making links to real world practice; for inspiring children; and for making such a busy and full curriculum possible. It is vital that teachers make choices on how units will integrate into the wider curriculum; that they pick, choose and adapt teaching elements and sequences to work best for individual classes of children and the timetabling constraints that exist. Examples: audio-themed lessons may fit into music; animation can work alongside a different subject's theme or topic; written or graphics or video work can fulfil the needs of another subject. Furthermore, we know that flexibility in when and how to deliver lessons is key to success within a teacher's exact school and class circumstances. For particular units of work, it may be better to block out afternoons to devote to Computing, or thinking in cross-curricular terms it may be better for the subject to filter across different subject areas. While we do everything we can to strip away the complexity that has thwarted teachers in the past with this subject, Computing does often involve equipment and preparation time. Being well-prepared for sessions does not need to take a lot of time, but will often result in much smoother sessions.

### **Subject Impact:**

5 key aims:

- Our curriculum is greatly ambitious and receives regular updates placing it above and beyond the aims and objectives stated in the national curriculum.
- Children will understand that information technology consists of a wide variety of computer systems and contexts, relevant to the ever-changing modern world.
- Our curriculum allows children to understand and apply the fundamental principles and concepts of computer science, including logic, algorithms, data and information, and programming, including hardware.

- Children are responsible, competent, confident and creative users of IT. The curriculum teaches children to be cautious and safe users of internet-connected technologies, as befits our modern age and digitally connected communities.
- The curriculum allows children to become confident creators of digital artefacts and media, applying new and unfamiliar technologies to their productions.

Units of work within our collated Computing scheme build upon previously taught knowledge, extending and building upon knowledge acquired within previous blocks of learning. Teachers will wish to gather an understanding of children's prior understanding, in order to ensure that upcoming sessions are most appropriate for children's next steps in learning. This can be an opportunity to plug any particular mis-understandings or gaps in knowledge, and to adjust future lessons appropriately to need. The approach taken will differ depending on the age of the children, but setting time aside in the first session (or possibly in a gap in run-up days) can be a good way to ascertain prior knowledge. Questioning and discussion alongside looking at selected slides of information – possibly from previous units - can be a useful way to proceed, particularly with the youngest children.

### **Skills Progression**

At Biscovey Academy, we use the objectives from the National Curriculum to ensure good coverage and challenge for all. We carefully track the objectives to ensure that new learning builds on prior knowledge and consolidates understanding showing sound progression across the depth and breadth of the subject. Within lessons and topics, we ensure sufficient time is given to recall prior learning so that children are able to see and develop links within their learning.

For further information, please see the skills progression document.