Computing at

Bibury C of E Primary School

and

North Cerney C of E Primary Academy

Intent

All pupils at Bibury C of E Primary School and North Cerney C of E Academy have the right to have rich, deep learning experiences that balance all the aspects of computing. With technology playing such a significant role in society today, we believe 'computational thinking' is a skill that children must be taught if they are to be able to participate effectively and safely in this digital world. A high-quality computing education equips pupils to use creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. At both schools, the core of computing is computing science in which pupils are introduced to a wide range of technology, including tablets, allowing them to continually practice and improve the skills they learn. This ensures they become digitally literate so that they are able to express themselves and develop their ideas through information and computing technology.

We teach a curriculum that enables children to become effective users of technology who can:

- understand and apply the essential principles and concepts of Computing Science, including logic, algorithms and data representation
- analyse problems in computational terms, and have repeating practical experience of writing computing programs in order to solve such problems
- evaluate and apply information technology analytically to solve problems
- communicate ideas well by utilising appliances and devices throughout all areas of the curriculum
- become digitally literate and are active participants in a digital world
- are equipped with the capability to use technology throughout their lives
- understand the importance of e-safety legislation regarding how information is used, stored, created, retrieved, shared and manipulated

- Have a ‘can do’ attitude when engaging with technology and its associated resources
- understand and follow the SMART E-Safety rules
- understand the E-Safety messages can keep them safe online
- apply their learning in a range of contexts, e.g. at school and at home

Technology is ever evolving and we aim to develop pupils who can use and express themselves, develop their ideas through, information and communication technology at a suitable level for their next steps at each key stage transition and as active participants in a digital world.

Implementation

Teaching at Bibury C of E Primary School and North Cerney C of E Academy is supported by a fully comprehensive computing scheme created by ‘PurpleMash’. As part of this scheme teachers have access to a rich range of resources, including:

- a cycle of lessons for each subject, which carefully plan for progression and depth;
- all resources and programmes needed to deliver these lessons;
- a knowledge organiser which outlines knowledge all children must master within a unit;
- key vocabulary and linking definitions;
- challenging questions for pupils to apply their learning in a philosophical/open manner;
- cross-curricular activities and intervention tools;
- school and class virtual noticeboards and blogs to facilitate communication with the wider school community.

Children also experience ICT through the use of Espresso, which is used to resource lessons and provide home learning activities.

We plan for the progression of skills across computing in the whole school, where skills are revisited, applied and extended every year. In order to do this effectively, our Computing progression model is broken down into three strands that make up the computing curriculum. These are Computer Science, Information Technology and Digital Literacy. Units from each strand are taught every year to all children. Computer Science underlines the knowledge and skills relating to programming, coding, algorithms and computational thinking. Information Technology underlines the knowledge and skills relating to communication, multimedia and data representation and handling. Digital Literacy underlines the knowledge and skills relating to online safety and technology uses all of which are covered at Bibury Primary School and North Cerney C of E Academy whether combined or discreetly.

Our Computing Progression Model is supplemented by the Purple Mash scheme of work which we follow from Year 1-6, ensuring consistency and progression throughout the school. EYFS access Mini Mash as part of the Purple Mash suite of resources. This allows

them to become familiar with interacting with technology in preparation for their next steps in learning in KS1.

Pupils are fully encouraged to engage with ICT and technology outside of school. Each teacher and pupil has their own unique Purple Mash login and password. Computing work can be stored and saved using pupil log in details and homework or '2do's' can also be set for pupils to access and complete tasks at home that link with their current class learning.

Every year the children have E-Safety lessons with the local Police Education Service who come into school and share advice using the ThinkuKnow resources. Advice and information is also given to families at this time. They also cover e-safety topics in various SCARF RSHE units so that every year group has a comprehensive understanding of how to stay safe online.
We also annually take part in Safer Internet Day to raise the profile of online safety further.

Impact

Our pupils live in a rural area of the Cotswolds and it is vital that they are aware of the technological advances that are not always evident in this rural location. We ensure that when children leave school, they are competent and safe users of computers and related technology. They will have developed skills to express themselves and be creative in using digital media and be equipped to apply their skills in Computing to different challenges.