

# Blanford Mere Nursery & Primary School



## Computing Policy

**Date adopted by governors.**

**April 2024**

**To be reviewed**

**April 2027**

## COMPUTING POLICY

**Article 17:** *Every child has the right to reliable information from the media. This should be information that children can understand. Governments must help protect children from materials that could harm them.*

As a values-led school, our curriculum is underpinned by promoting self-belief, honesty, achievement, respect, enjoyment and determination. It is through these values that we develop the whole child. We believe that the skills we equip our children with will enable them to go into the world as curious, independent thinkers who are able to appraise and consider any views they are exposed to.

### **Computing Subject Intent**

It is our intent that children will learn about the digital world in a way that relates to their everyday life. Through the computing curriculum, our children will gain an understanding of the modern world and will be exposed to differing ways they could fit into it. We insist that they connect with others safely and respectfully, understanding the need to act with moral and ethical integrity online, just as they should in all other aspects of life. Our pupils will discover and develop an understanding of the connected nature of devices. All children are provided with regular opportunities to use devices to assist them in learning new skills and completing high quality work.

### **What is 'Computing'?**

The National Curriculum Purpose of Study states that:

A high-quality computing education equips pupils to use computational thinking and 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. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Whilst the Computing Curriculum has an increased focus on Computer Science including developing pupils' programming skills and their understanding of what happens 'behind the scenes', it is important that they also continue to develop their Digital Literacy and e-safety capability and our school curriculum is designed to reflect this.

## **The School's Computing Curriculum**

As a school, we embrace the national vision for Computing and appreciate that, to achieve this, pupils must have access to a curriculum which is 'balanced and broadly based'.

Our aim is to produce learners who are confident, discerning and effective users of technology and who also have a good understanding of computers and how computer systems work, and how they are designed and programmed.

We strive to achieve this aim by:

- supporting all children in using technology with purpose and enjoyment
- Meeting, and building on the minimum requirement set out in the National Curriculum as fully as possible and helping all children to achieve the highest possible standards of achievement
- Helping all children to develop the underlying skills and capability which is essential to developing Computing capability (such as problem solving, perseverance, learning from mistakes) and apply them elsewhere
- helping all children to develop the necessary skills to exploit the potential of technology and to become autonomous and discerning users
- helping all children to evaluate the benefits and risks of technology, its impact on society and how to manage their use of it safely and respectfully.
- using technology to develop partnerships beyond the school
- celebrating success in the use of technology.

At Blanford Mere Primary School, teachers are encouraged to progressively develop pupils' Computing skills and capability through discrete learning opportunities, and also to exploit this capability as a tool to support objectives in other curriculum areas meaningfully. These links include, but are not limited to, the use of a range digital devices in a wide range of contexts.

Both plugged and unplugged learning opportunities are planned to support pupils' understanding of the underlying concepts in Computing. These opportunities may well be presented within other subject areas (e.g. sequencing instructions in English, problems solving in Maths or isolating variables in Science).

In this way Computing and the use of technology become integrated into the curriculum and are used as a truly beneficial tool for learning.

At Key Stages 1 and 2 the school's Computing curriculum is organised into the following aspects:

- Computer Science
- Information Technology
- Digital Literacy and E-safety

These themes are mapped in a long term plan for the whole school, with elements of each theme taught in most terms.

The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. At Blanford Mere, we use the Purple Mash scheme of to develop children's computer science skills. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content.

Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world

Information technology makes a contribution to the teaching of PSHE, SRE (*see PSHE and SRE policies*) and citizenship as children learn to work together in a collaborative manner. They develop a sense of global citizenship by using the Internet and e-mail. Through the discussion of moral issues related to electronic communication, children develop a view about the use and misuse of technology, and they also gain a knowledge and understanding of the interdependence of people around the world. At Blanford Mere, we use the Project EVOLVE scheme of learning which addresses:-

Managing Online Information  
Privacy & Security  
Self-image and identity  
Online Relationships  
Online Reputation  
Online Bullying and Harmful Behaviours  
Health Well-being and Lifestyle

### **Safeguarding Children: Online Safety**

At Blanford Mere Primary School we believe that the use of technology in schools brings great benefits. To live, learn and work successfully in an increasingly complex and information-rich society, our children must be able to use technology effectively. The use of these exciting and innovative technology tools in school and at home has been shown to raise educational standards and promote pupil achievement. Yet at the same time we recognise that the use of these technologies can put young people at risk within and outside the school.

The school has developed a separate policy which details our approach to online safety and safeguarding children and staff when using technology both within and beyond the school.

This policy has been developed according to local authority guidance provided at <https://theictservice.org.uk/e-safety/>. This includes reference to the online safety elements of the National Curriculum for Computing and the statutory Relationships and Health Education curriculum. It takes into account the government's 'Teaching online safety in schools' guidance and 'Education for a Connected World' from the UK Council for Internet Safety.

### **Key features of our computing curriculum:**

- Computing is taught using the Purple Mash schemes of learning, supplemented with other resources such as Project EVOLVE, the NCCE curriculum, Barefoot Computing and NOS.
- Each year group has access to devices to support them in their learning. PC's, iPads and chromebooks are centrally stored for the whole school to use.
- Devices are used in most computing lessons but also across the curriculum to further develop pupils' digital literacy.
- Every year group learns about online safety every term, building on previous knowledge and making sure it is at the forefront of teachers' and pupils' minds.

- We endeavour to make computing activities relevant to real-life problems and opportunities so our pupils can relate to the subject and see how it affects their everyday life.

### **Organisation of teaching and learning**

- Early Years – Skills and vocabulary drip-fed through provision and structured activities.
- KS1 and KS2 – Weekly computing lesson, duration 1 hour.
- Online safety taught during some PSHE lessons and during annual events such as Safer Internet Day, Anti-bullying week, Children’s Mental Health Week etc.

### **Planning**

- We use the Purple Mash scheme of learning supplemented by other resources such as the Project EVOLVE, NCCE Computing Curriculum as well as opportunities to apply IT skills using Microsoft Office and a range of other software packages.
- The whole school long term plan outlines the units to be covered by each year group, each term. The units are organised into the three different key areas of learning.
- Lesson plans provided by the Purple Mash Schemes of Learning Identify objectives, key vocabulary and outcomes for each unit, as well as indicating the skills being taught. Teachers can amend the LTP to ensure learning and retention are maximised.

### **Evidencing**

Computing learning can be evidenced on Purple Mash:

- Each pupil has their own Purple Mash account.
- Each class teacher is assigned to the three classes in the cohort they are teaching.
- Pupils save work completed in class into their class folder.
- Any collaborative work is saved in the class shared folder.
- Any work created using a different software package (such as Microsoft Word or Powerpoint) can be saved to a shared drive.

### **ONLINE RESOURCES FOR HOME USE**

In recent years there has been a boom in the education opportunities that are available online. We have bought into the following to give pupils safe access to online education opportunities outside of school. These include:

- Times Tables Rockstars – including Numbots
- EdShed – including Spelling Shed and Quiz Shed
- Mathletics
- Education City
- Purple Mash

Pupils have passwords that can be used to access these sites. Pupils have been shown how to use them and how to keep their passwords safe from others.

### **Access and Inclusion**

Each pupil's access to technology varies greatly dependent on the nature of the activity they are involved in (e.g. some activities benefit from prolonged access to a computer whilst others are best served with brief access to a digital device for a focused purpose). However, on average, pupils have one hour allocated to Computing each week using a mixture of unplugged activities and the following technology:

- ICT Suite
- Laptops
- iPads
- Chromebooks
- Programming equipment (Beebots, Micro:bits)

In addition to discrete Computing sessions, opportunities to develop and extend Computing capability are provided in other curriculum areas and technology is used to support most other subject areas.

All children have equality of access to appropriate technology in order to develop their personal Computing capability. When children are working in groups, we endeavour to ensure that their hands-on experience is equitable. We check resources, software and documentation to ensure that gender and ethnicity are reflected in a balanced way without stereotyping.

The SEND lead and Computing Subject Leader jointly advise teachers on examples of technology which can be provided to support individual children with particular physical, linguistic and educational needs, including gifted and talented pupils. Where appropriate, an external specialist is used to assess a child's specific needs.

Children with access to technology at home are encouraged to use it for educational benefit and online safety guidance is offered to both pupils and parents where appropriate. The school has identified those pupils who have limited or no access to appropriate technology outside of school and provide additional opportunities for these pupils to gain access during the school day.

### **Monitoring**

The Computing Subject Leader follows a systematic and regular programme of evaluation and monitoring of the Computing curriculum, across the school. This is so that she can monitor the quality of education being provided to all pupils, including:

- Checking that the school's curriculum 'Implementation' matches its 'Intent'
- Evaluating the success (or otherwise) of curriculum planning and delivery
- Having an awareness of impact and be able to demonstrate progression and attainment
- Having an overview of resource and staff training needs

Monitoring is completed via a variety of methods including:

- Observations
- Collecting and analysing planning
- Work scrutinies
- Gathering information from observations of other subjects
- Pupil interviews / pupils voice
- Staff interviews / feedback

As a result of monitoring, appropriate CPD opportunities are provided for staff on an individual, group and whole school basis in line with the school's wider CPD policy and School Development Plan.

### **HEALTH AND SAFETY (SEE ALSO HEALTH AND SAFETY POLICY)**

The school is aware of the health and safety issues involved in children's use of ICT and computing. An electrical inspection is carried out in school every five years. Portable electrical equipment in school is tested by the site manager every twelve months. It is advised that staff should not bring their own electrical equipment in to school but if this is necessary, then the equipment must be PAT tested before being used in school. This also applies to any equipment brought in to school by, for example, people running workshops, activities, etc. and it is the responsibility of the member of staff organising the workshop, etc. to advise those people. All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the computing technicians.

- children should not put plugs into sockets or switch the sockets on.
- trailing leads should be made safe behind the equipment
- liquids must not be taken near the computers
- e-safety guidelines will be set out in the e-safety policy, RSE and PSHE policies & AUP

### **SECURITY**

- The ICT and computing technician will be responsible for regularly updating anti-virus software.
- Use of ICT and computing will be in line with the school's 'acceptable use policy'. All staff, volunteers and children must sign a copy of the schools AUP.
- Parents will be made aware of the 'acceptable use policy'.
- All pupils and parents will be aware of the school rules for responsible use of ICT and computing and the internet and will understand the consequence of any misuse.
- The agreed rules for safe and responsible use of ICT and computing and the internet will be displayed in all ICT and computing areas.

### **PARENTAL INVOLVEMENT**

Parents are encouraged to support the implementation of computing where possible by encouraging use of computing skills at home during home-learning tasks and through the school website. They will be made aware of e-safety and encouraged to promote this at home.

## **RELATED POLICIES**

Our policy relates to Computing, aspects of which sit within a suite of other policies. Our policy applies to all staff (teaching and non-teaching), governors and volunteers, temporary and supply staff working in our school.

Other policies that may be referred to within this policy include:

- Anti-bullying
- Acceptable Use
- E-safety
- Health & Safety
- GDPR
- Remote Learning
- SRE Policy
- Behaviour Policy
- Personal, Social, Health and Economic (PSHE)
- Sex and relationships (SRE)
- Safeguarding and Child Protection

### **Members of staff responsible:**

Mrs J Cameron (Computing Subject Leader)

### **Consultation Process:**

Full consultation with governors, teaching and non-teaching staff.

### **Review Date:**

April