John Blandy Primary School

Computing Policy September 2025

Belong. Believe. Brilliant.

STATEMENT OF INTENT

At John Blandy Primary School we believe that Computing and the use of ICT is central to the education of all children. We aim to give each pupil the opportunity to apply and develop their technological understanding and skills across a wide range of situations and tasks. Pupils are encouraged to develop a confident and safe approach to Computing and the use of ICT, with the understanding of the capabilities and flexibility of their resources. With the knowledge that Computing and ICT will undoubtedly continue to form a major part in the children's life at home, in further education and places of work, we ensure the Computing and ICT experiences and abilities that the children are equipped with at John Blandy, are effective and transferrable life skills.

PURPOSE OF STUDY

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.

IMPLEMENTATION – TEACHING AND LEARNING

At John Blandy Primary School we make Computing an engaging and challenging learning experience. As a school we believe it is important to keep up to date with the technological changes that go on in the world. Our aim is to give children the skills that will allow them to thrive in the modern world. Our topic led curriculum allows children to engage with the National Curriculum objectives in a range of ways using a variety of tools including iPads, laptops and desktop computers. Children's learning is carefully planned, ensuring that skills are taught at an appropriate age and are being built on each term and year. Children in KS1 use BeeBots and other physical devices to create and execute simple algorithms. This is built on further as they progress through the key stage, where children learn to write and debug more complex algorithms using physical devices as well as coding software. In Key Stage 2, children develop this further by using a range of software to write their own computer programmes.

We recognise that all classes have children with widely differing ICT abilities. This is especially true when some children have access to ICT equipment at home, while others do not. We provide suitable learning opportunities for all children by matching the challenge of the task to the ability and experience of the children. We achieve this in a variety of ways, by:

- Setting common tasks which are open-ended and can have a variety of responses.
- Providing resources of different complexity depending on the ability of the child.

The National Curriculum for Computing aims to ensure that all pupils:

- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- Are responsible, competent, confident and creative users of information and communication technology.

SUBJECT CONTENT

KEY STAGE 1

Pupils should be taught to:

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- Create and debug simple programs
- Use logical reasoning to predict the behaviour of simple programs
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content
- Recognise common uses of information technology beyond school
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

KEY STAGE 2

Pupils should be taught 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 simple algorithms work and to detect and correct errors in algorithms and programs
- Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content

- Select, use and combine a variety of software (including internet services) 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
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

ORGANISATION

Across the school, each class teacher teaches six-10 hour-long computing lessons per whole term. This can be taught weekly or blocked into a smaller number of weeks. Either way, the children receive the equivalent of 6-10 hours of computing teaching per whole term. Technology is also used across the curriculum and children will have access to computing devices in these lessons as and when planned by the class teacher.

E-SAFETY

Computing and the use of technologies at John Blandy Primary School is underpinned by e-safety being central to the curriculum. While showing children the benefits of using new technologies we are also rigorous in teaching them about how to use technology safely and responsibly. E-Safety is taught as part of our PSHE Curriculum.

CURRICULUM PLANNING

Our school uses the National Curriculum in England 2014 Framework for Computing as the basis for its curriculum planning. Medium Term Plans are developed with a range of technologies in mind and we aim to use computing to support and link to the creative curriculum where appropriate. The approach of the school is to pro-actively identify and incorporate Computing into topic areas. It is important to give children the opportunity to use a variety of hardware and programmes/apps. While there are opportunities for children of all abilities to develop their skills and knowledge in each teaching unit, the planned progression built into the computing curriculum means that the children are increasingly challenged as they move through the school. Long-term plans identify when the different areas and skills of the National Curriculum in England 2014 taught across the year group phases. Computing is taught by individual class teachers who take responsibility for planning, resourcing and delivering the computing curriculum.

PROGRESSION & CONTINUITY

At John Blandy School we plan activities in Computing so that they build on the children's prior learning. Whilst we give children of all abilities the opportunity to develop their skills, knowledge and understanding, we also plan progression into the scheme of work, so that there is an increasing challenge for the children as they move up through school. Individual learners are able to make progress in the

acquisition of concepts, knowledge and skills at the rate most appropriate to their ability and stage of development.

CURRICULUM LINKS

Effective teaching of Computing and ICT involves making connections across other curriculum areas and through continuous provision in the EYFS and Key Stage 1.

Computing has deep links with mathematics, science and design technology and provides insights into both natural and artificial systems. E-safety is also an important part of PSHE. Throughout all subjects, children at John Blandy Primary School will have opportunities to gain skill, knowledge and understanding in the following areas:

- Finding things out, gathering information from a variety of sources, entering, storing, and retrieving information
- Developing ideas and making things happen through text, tables, images and sound
- Selecting and adding to information by planning and giving instructions to make things happen
- Exchanging and sharing information sharing ideas and presenting information in different forms, to best effect
- Reviewing, modifying and evaluating work.

SPECIAL EDUCATIONAL NEEDS

We teach computing to all children, whatever their ability, in accordance with the school curriculum policy of providing a broad and balanced education to all children. Teachers provide learning opportunities matched to the needs of children with learning difficulties. Different technologies are used to allow children with special educational needs to have access and contribute to lessons.

EQUAL OPPORTUNITIES

Ensuring equality of opportunity does not mean that all learners are treated the same. At John Blandy Primary School, in accordance with the Learner's Act 1989, children are considered as individuals with particular needs and potentialities. Each child is given encouragement and the opportunity to develop their full potential in Computing and ICT, with appropriate support provided as necessary, whatever their gender, race, religious belief, cultural background or disability.

SPIRITUAL, MORAL, SOCIAL & CULTURAL DEVELOPMENT

Within computing lessons, children are given the opportunity to work collaboratively and communicate effectively with each other. We encourage children to reflect on evaluate their ability to work together and to discuss how their communication had an effect on their learning. The cultural and social impact

of computing and digital technology are made clear in the ability to share, add to and create content in a connected way with others.

RESOURCES

At John Blandy Primary School, children and staff have access to a range of I.C.T equipment, including computers which may be controlled by QWERTY keyboard and mouse control, chrome books and iPads. The technologies are linked to the school network and server and have facilities to connect to the Internet through Broadband connection. Classes have access to chrome books and iPads in a trolley, for shared use throughout the school. All classes have a P.C or laptop and there is a laptop and Clever Touch board in the school hall.

At John Blandy School we are constantly evaluating our use of different resources and equipment as technology changes at a fast pace.

Key pieces of software are used throughout the school and use of these is developed as the children progress. Other software is used to support I.C.T work in a range of curriculum areas. Teaching resources are kept within each class and the internet is used regularly as a rich and varied provider of a variety of resources. Interactive Whiteboards or Clever Touch Boards are installed in all classrooms. Equipment other than computers is also available and is used throughout the National Curriculum. These include CD players, scanners, Digital cameras, Bee Bots and remote-control toys.

A range of other electronic devices used within school, home and other areas of day- to-day life, also play their part in a child's experience of I.C.T. Music, video recorder (with remote control), microwave oven, photocopier, burglar alarm, central heating system and radiator thermostats are all located within the school. Other devices used in the home are also identified, discussed and, where possible, demonstrated in order to examine the use of 'control' technology, e.g. automatic washing machine, tumble drier, oven timer, radio alarm.

Through the use, experience and discussion of a varied range of equipment, children gain knowledge about the use of I.C.T. and its implications in day to day life.

IMPACT – ASSESSMENT AND RECORDING

Teachers assess children's work in computing by making informal judgements as they observe them during lessons. On completion of a piece of work, the teacher looks through each piece of work. Whole class feedback is used at the start of each lesson to provide the children with meaningful feedback that they can then take with them as they move on to the next task. When appropriate, teachers set the tasks on Google Classroom. This means that the children can then complete their work and submit it as an assignment. This way, the class teacher and computing lead, have access to the children's work for assessment and monitoring purposes. Other work may be printed and filed within the subject from which the task was set. At the end of each unit, teachers fill out their teacher assessment, recording the level of each child against the objectives of that unit. This is then used by the class teacher for subsequent planning that year, as well as by the class' next teacher to help them with their planning.

THE ROLE OF THE COMPUTING SUBJECT LEADER

The Computing Subject Leader is responsible for:

- Co-ordinating all aspects of Computing and ICT provision for learners throughout the school
- Developing the Computing Policy, in consultation with teachers, the Head teacher and the Governing Body
- Advising and supporting teachers and support staff in relation to Computing and ICT, including contributing to in-service training
- Monitoring Computing, in conjunction with the Head teacher, through discussion with staff, by checking the Medium Term Planning of individual teachers to ensure coverage and progression, and through analysis of learners' work
- Purchasing and the organisation of Computing and ICT resources
- Keeping up-to-date with developments in Computing teaching and learning, and disseminating information to colleagues as appropriate

WIDER COMMUNITY LINKS

John Blandy Primary School supports the use of technology throughout the wider community and with the use of the school website, we share children's work, latest information, developments, newsletters and policies with parents and carers. Opportunities are also planned for children to experience the necessities of technology in the wider community and in working environments.

MONITORING & REVIEW

Individual teachers are responsible for the standard of children's work and for the quality of their teaching in computing. Teachers and phase teams work collaboratively to support each other in the teaching of computing, understanding and applying current developments in the subject and providing direction for the subject in the school. Team phases should evaluate the strengths and weaknesses in the subject and indicate areas for further improvement.