



# **Whitefield Primary School**

## **Computing Policy**

**Updated: October 2021**

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**Written by C. Ginty**

This policy sets out Whitefield's aims and strategies for the successful delivery of Computing. This policy should be read in conjunction with other relevant school policies such as the Safeguarding, Equal Opportunities, Curriculum, Finance, Teaching & Learning, SEND and Assessment policies.

The policy has been developed by the Computing Leader (Mr Ginty) in consultation with the SENCO, Leadership Team and teachers. Guidance from consultants and pupil, parent and staff voice questionnaires have shaped and will continue to help shape this policy. This policy is based on government recommended/statutory programmes of study.

Due to the fast pace of technology innovation and constantly emerging trends, this policy will be reviewed, at minimum, at the start of every academic cycle.

## **Rationale**

Whitefield believes that every child should have the right to a curriculum that champions excellence; supporting pupils in achieving to the very best of their abilities. We understand the immense value technology plays not only in supporting the Computing and whole school curriculum but overall in the day-to-day life of our school.

We believe that technology can provide: enhanced collaborative learning opportunities; better engagement of pupils; easier access to rich content; support conceptual understanding of new concepts and can support the needs of all our pupils.

## **Our aims:**

- Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.
- Enthuse and equip children with the capability to use technology throughout their lives.
- Give children access to a variety of high quality hardware, software and unplugged resources.
- Instil critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with technology and its associated resources.
- Teach pupils to become responsible, respectful and competent users of data, information and communication technology.
- Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves or others.

- Use technology imaginatively and creatively to inspire and engage all pupils, as well as using it to be more efficient in the tasks associated with running an effective school.
- Provide technology solutions for forging better home and school links.
- Utilise computational thinking beyond the Computing curriculum.
- Exceed the minimum government recommended/statutory guidance for programmes of study for Computing and other related legislative guidance (online safeguarding).

**The national curriculum for computing has four main 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.

**Curriculum Overview**

**Early Year's Foundation Stage**

It is important in the foundation stage to give children a broad, play-based experience of ICT in a range of contexts, including outdoor play. Computing is not just about computers. We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts. We believe the following:

- Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in roleplay.
- Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys.
- Outdoor exploration is an important aspect, supported by ICT toys such as metal detectors, controllable traffic lights and walkie-talkie sets.

- Recording devices can support children to develop their communication skills. This is especially useful for children who have English as an additional language.

### **Key Stage 1**

By the end of Key Stage 1 children should be able 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; know where to go for help and support when they have concerns about material on the internet

### **Key Stage 2**

By the end of Key Stage 2 children should be able 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 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 accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour; identify a range of ways to report concerns about content and contact.

## **Assessment and Record Keeping**

By the end of each Key Stage, pupils are expected to know, apply and understand the matters, skills and processes outlined in the relevant programme of study. At the end of each year teachers have to report whether the children are emerging, developing or confident within their year expectations.

- Pupil attainment is assessed using the 2Simple Computing Assessment Tool for Years 1 to 6. The tool enables staff to accurately identify attainment of pupils through the detailed exemplification it has for each key learning intention.
- Teachers keep accurate records of pupil attainment by entering data using the 2Simple Computing Assessment Tool.
- Tracking of attainment by using the 2Simple Computing Assessment Tool is used to inform future planning.
- Summative assessment is undertaken in line with the assessment cycle. Using electronic work samples from children's portfolios on Purple Mash, teachers enter judgements about the samples into the 2Simple Computing Assessment Tool.

## **Online Safeguarding**

Online safeguarding has a high profile at Whitfield for all stakeholders. We ensure this profile is maintained and that pupil needs are met by the following:

- A relevant up-to-date online safeguarding curriculum which is progressive from Early Years to the end of Year 6.
- A curriculum that is threaded throughout other curriculums and embedded in the day-to-day lives of our pupils.
- Training for staff and governors which is relevant to their needs and ultimately positively impacts on the pupils.
- Scheduled pupil voice sessions and learning walks steer changes and inform training needs.
- Through our home/school links and communication channels, parents are kept up to date with relevant online safeguarding matters, policies and agreements. They know who to contact at school if they have concerns.
- Pupils, staff and parents have Acceptable Use Policies which are signed and copies freely available.
- Our online safeguarding policy clearly states how monitoring of online safeguarding is undertaken and any incidents/infringements to it are dealt with.

- Filtering and monitoring systems for all our online access.
- Data policies which stipulate how we keep confidential information secure.

## **Monitoring and Evaluation**

Monitoring computing will enable the Computing subject leader to gain an overview of computing teaching and learning throughout the school. This will assist the school in the self evaluation process, identifying areas of strength as well as those for development. In monitoring the quality of computing teaching and learning the Computing subject leader will:

- Analyse children's work through scrutiny of work folders on Google drive or within Purple Mash
- Carry out Learning Walks
- View portfolios of evidence
- Hold discussions with teachers and pupils.
- Follow action plan.
- Audit and review the technology resources regularly so that they are readily available and maintained (through the help of Virtue Technologies)
- Engage in dedicated Computing Leader and Assessment time

Evaluation and Feedback will be achieved through:

- Dedicated Computing Leader and Assessment Leader time.
- Using recognised standards documentation for end-of-year expectations.
- Using recognised national standards for benchmarking Computing provision in primary schools.
- Written feedback on evaluation of monitoring activities to be provided by the Computing Leader in a timely manner.
- Feedback on whole school areas of development in regard to Computing to be fed back through insets/AOB/staff meetings.

## **Teaching and Learning**

At Whitefield Primary school we follow the Lancashire curriculum plans for Computing alongside the plan from Purple Mash. These ensure that the National Curriculum objectives are taught through a variety of key skills. Teachers will ensure that they understand the skills and concepts to be taught and the role of discussion in developing a critical awareness of the use of computing. Teachers will need to plan their work so that skills are taught and that they are practised and developed during work in other subjects. Activities using computing will be planned to allow for different levels of achievement by pupils and will provide opportunities for AGT (Able, Gifted and Talented) pupils and those with SEND (Special Educational Needs and Disabilities).

## **Inclusion**

We recognise computing offers particular opportunities for pupils with special educational needs and gifted and/or talented children and/or children with English as an additional language. Computing can cater for a variety of learning styles, which a class of children may possess.

Using computing can:

- Increase access to the curriculum
- Raise levels of motivation and self esteem
- Improve the accuracy and presentation of work
- Address individual needs

We aim to maximise the use and benefits of computing as one of the many resources to enable all pupils to achieve their full potential. If the situation arises, the school will endeavour to provide appropriate resources to suit the specific needs of individual or groups of children.

## **Roles and Responsibilities**

Due to technology extending beyond the National Curriculum for Computing, there are key roles and responsibilities specific members of staff have.

### **Head Teacher**

- Monitoring the implementation of the Computing Policy and its associated policies such as the Safeguarding and SEND Policies.
- Ratifying (in conjunction with the Governing Body) the Computing policy, Safeguarding policy and Computing Leader's Action Plan.
- Securing technical support service contracts and infrastructure maintenance contracts. Approving CPD and training which is in line with the whole school's strategic plan. Approving budget bids and setting them.
- Creating in conjunction with the Computing Leader, a long-term vision for Computing which includes forecasted expenditure and resources.
- Monitoring the performance of the Computing Leader in respect to their specific job role description for Computing.
- Ensuring any government legislation is being met.

## Computing Leader

- Raising the profile of Computing for all stakeholders.
- Monitoring the standards of Computing and feeding back to staff in a timely fashion so they can act on areas for development.
- Ensuring assessment systems are in place for Computing.
- Maintaining overall consistency in standards of Computing across the school.
- Reporting on Computing at specific times of the year to the Governing Body/Head/Staff.
- Auditing the needs of the staff in terms of training/CPD.
- Actively supporting staff with their day-to-day practice.
- Seeking out opportunities to inspire staff in developing their practice through modelling and sharing new ideas, approaches and initiatives.
- Attending training and keeping abreast with the latest educational technology initiatives. Using nationally recognised standards to benchmark Computing.
- Creating Action Plans for Computing and supporting a long-term vision which feeds into the whole school development plan.
- Creating bids for the annual budgets and monitoring budget spend. Keeping an up-to-date log of all resources available to staff. Procuring physical and online resources that demonstrate best value. Reviewing the Computing curriculum and developing it as needed. Overseeing the effectiveness of the technician.
- Working as needed with the SENCO/Head Teacher to ensure online safeguarding provision is above adequate and all legislation is in place.

## Technician

- Conducts routine scheduled maintenance/updates on systems.
- Supports the administration and set-up of online services including the school website. Fixes errors/issues with hardware and software set-up, prioritising as needed. Routinely checks school filtering, monitoring and virus protection. Sets up new hardware and installations.
- Maintains network connectivity and stability.
- Supports the Computing Leader and Head Teacher with future infrastructure needs and associated projected costs.

## Administration Staff



- Maintains the school website content.
- Posts approved requests to the school's social media accounts.
- Supports procurement of resources and technical services. Supports the technician with some data management.

### **Review Policy**

There is an annual review of this policy by the Computing subject leader. A major review involving all staff will take place every three years.