



Buckstones Community Primary School

Policy for Computing

Written and agreed by staff: 5th. September 2022

Adopted by Governors: 20th. September 2022

RATIONALE

Computing has a very important role with in society. Our pupils and staff need to be adequately equipped to use it.

Buckstones Primary School have decided to be part of Fingertip Solutions, to provide strategic and technical support for Computing Technology development.

At Buckstones School, we aim to promote the development of our pupils academically, physically, socially, morally and spiritually, by providing a high quality of teaching and varied learning experiences within a well ordered and stimulating environment which supports equality of opportunity.

Computing is planned and taught from the National Curriculum, using Fingertip Solutions Oldham Schools Collaborative Scheme of Work. It is presented through both the learning of necessary skills and also as an integral part of each curricular subject.

Computing can be used to instil confidence, independence, self-motivation, self-worth and co-operation; all of which are encompassed in our school ethos.

INTENT

To ensure all pupils have the right to have rich, deep learning experiences that incorporate all aspects of computing. With technology playing such a significant role in society today, we believe that 'Computational Thinking' is a skill that pupils must be taught at a level suitable for the future workplace, so that they are to be able to participate effectively and safely in this digital world.

- Pupils will:
- understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.

- analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.
- evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- be responsible, competent, confident and creative users of information and communication technology

Our Computing curriculum is centred on pupils knowing how to access technology around them, but, fundamentally, how to keep safe and be respectful at all times. This will start with our youngest pupils and continue to be developed throughout their time at Buckstones Primary School.

We strive to ensure that our pupils have the opportunity to demonstrate resilience, resourcefulness, reflectiveness and reciprocity and have the ambition to be successful learners.

IMPLEMENTATION

Our Computing curriculum is centred on pupils knowing how to access technology around them, but fundamentally, how to keep safe at all times, both online and off-line. Pupils have the right to be both physically and mentally healthy.

Implementation of our Computing curriculum allows pupils to build up a broad and balanced knowledge base through experiencing computing in two phases. First, is through the teaching of discrete computing skills where pupils learn how to investigate and program devices, use technology to communicate information in the form of words and graphics, use the Internet safely and effectively, handle data, store, and sort and retrieve information. Secondly, the pupils are provided with opportunities to use computing in other subject areas. They are encouraged to think about how computing can support their learning across the curriculum by using and applying the skills that they have learnt. Our school ensures consistency and progression through the provision of a well-sequenced curriculum.

We ensure that pupils develop depth in their knowledge and skills throughout each computing unit. We have a variety of hardware resources to support learning, both in computing lessons and across the curriculum. The pupils

have access to a range of computing devices to support their learning such as ipads, laptops, Bee-Bots, Probots.

Within our school, there is an interactive whiteboard in each classroom and wireless internet connection across the entire school. As a result of investing in a significant amount of devices, pupils's learning in the Computing curriculum is effectively provided for, as well as opportunities to enhance the development of skills, and access to a wide range of information, across the primary curriculum.

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

- Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation and communication.
- 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 computing technology.

ORGANISATION

The school believes that progress in computing is promoted through regular access and use of technology relevant to a task.

- The pupils work in our Computing Suite of at least 15 desktop computers which support the use of MAC and Windows.
- Each class from Reception to Y6 has an allocated time for the teaching of specific computing skills.
- The school ipads and laptops are available for use throughout the school day as part of computing lessons and for cross curricular use.
- New skills will be introduced to a group of pupils
- The practice of skills will occur discretely while using Computing Technology to support work across the curriculum.

The Teaching Assistants often lead the activities in the computer suite.

RESOURCES AND ACCESS

The school acknowledges the need to continually maintain, update and develop its computing resources. This is to make progress towards a consistent, compatible pc system by investing in resources that will effectively deliver the strands of the national curriculum and support the use of computing technology and ICT across the school.

- Every classroom from Reception to Y6 has a laptop connected to the school network and an interactive whiteboard with sound, DVD and video facilities.
- There is a computing suite of at least 15 desktop computers which support the use of MAC and Windows.
- Each class from Reception to Y6 has an allocated slot across the week for teaching of specific computing skills
- The school ipads and laptops are available for use throughout the school day as part of computing lessons and for cross curricular use.
- Pupils may use computing independently, in pairs, alongside a TA or in a group with a teacher.
- The school has a computing technician, from Fingertip Solutions, who is in school one afternoon every week.
- A governor will be invited to take a particular interest in computing in the school.
- We update our school hardware to support the National Curriculum for Computing.

Knowing more, remembering more and being able to do more are indicators of progress. Pupils should be prepared for their next stage of learning. Impact is measured by the pupil's progress against their expected outcomes and their ability to meet the key aims of the National Curriculum for Computing.

IMPACT

Pupils will be able to:

- Design, write and de-bug programmes 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 worldwide 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 and unacceptable behaviour; identify a range of ways to report concerns about content and contact;
- Enjoy using technology to develop their learning and ideas;
- Apply British Values and our school Golden rules to ensure they use technology safely and respectfully at all times.
- Become more independent and key life skills such as problem-solving, logical thinking and self-evaluation.
- After the implementation of this robust Computing curriculum, pupils at Buckstones Primary School will have developed the knowledge, skills and understanding to help them access and use a range of technology in a safe and creative way.

Pupils' skills will have progressed to enable them to not only have met the requirements of the National Curriculum but to also enjoy using technology to develop their own ideas. From this, they will become more independent and key life skills such as problem-solving, logical thinking and self-evaluation will become second nature.

ASSESSMENT, RECORDING AND REPORTING

There is a continuous assessment by the teacher through levelling of work, observation, questioning, listening, intervention and modification of tasks, so that individual level description can be noted to ensure progression. This continuous assessment is used to help teachers plan appropriate task, consolidating experiences or giving further practice where difficulties arise.

Independence and confidence are nurtured and developed throughout the school through the pupils explaining and evaluating their own work.

Attainment in Computing is reported to parents on an annual basis.

Computing can also be used to record evidence of learning in other subject areas; e.g. photographs of dance, P.E., art work, recordings of drama etc.

DEVELOPING AND MONITORING COMPUTING

To develop Computing we plan strategically for hardware purchases as part of a rolling programme within the S.D.P. The plan for developing the curriculum and managing change is outlined in the Action Plan.

The Computing medium term plans sets out the detail of the programs and skills that should be taught in each year group.

The Computing Co-ordinator is responsible for monitoring the planning and teaching of Computing. The co-ordinator is responsible for monitoring the use of Computing Technology.

Monitoring and moderation takes place regularly through:

- Monitoring of planning
- Learning Walks
- Observations
- Scrutiny of Books/Work
- Moderation of work
- Discussions with Pupils/Pupil Voice Questionnaires
- Staff Meetings and Staff Audits
- Meetings/observations with the nominated governor

The co-ordinator keeps staff informed of developments in Computing Technology.

EQUAL OPPORTUNITIES

Computer Technology is appropriate for all pupils from all backgrounds and abilities. All pupils are encouraged to become competent in the use of Computing skills. All teachers are encouraged to display a positive attitude towards Computing. Groups are mixed sex and ability and the class teacher ensures that no one pupil dominates within a group.

SEN/DIFFERENTIATION

Computing can be a great motivator for pupils with behaviour difficulties and can enable greater access to the curriculum for pupils with learning difficulties. Word processing skills can enhance the presentation of work and improve the self-esteem for pupils who have coordination difficulties. Interactive books can reinforce independent reading skills and phonic and spelling games can improve basic literacy skills. Software specifically recommended by SEN professionals is used with individuals and groups. Each subject Co-ordinator should consider how Computing can enhance access to the curriculum for pupils with difficulties.

This policy is to be read alongside Buckstones Internet Safety policy.

Computing Scheme of Work

See Long term plan