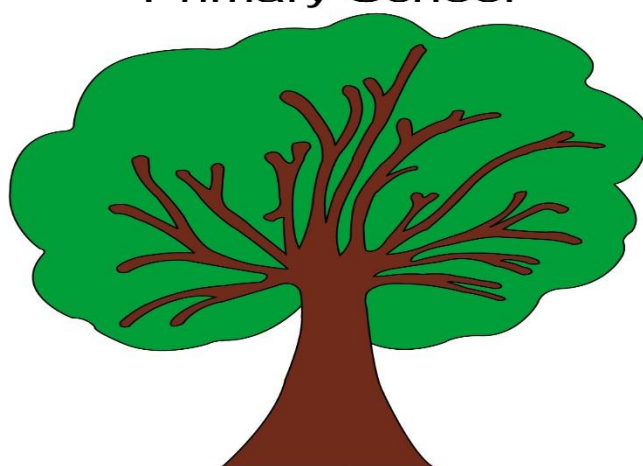


BURSTWICK COMMUNITY **PRIMARY SCHOOL**

Burstwick Community
Primary School



Branching Out
Into The Community

COMPUTING POLICY

At Burstwick Community Primary School we aim to provide a safe, secure and stimulating environment within which all children feel cared for, supported and happy, where children can achieve highly and let their imagination flourish.

We aim to prepare children for adult life and the world of work through developing an enthusiasm for learning and a willingness to persevere in the face of challenge.

At Burstwick Community Primary School, it is our intention to raise standards by promoting a school ethos which is underpinned by core values. These values support the development of the whole child as a reflective learner within a calm, caring, happy and purposeful atmosphere.

The values we focus on are:

**** Believe * Unique * Resilient * Safe * Tolerant * Worthy * Independent * Creative * Kind-hearted ****

We are BURSTWICK!

Statement

Information and communication technology (ICT) provides our school with an enormous curriculum challenge. It is vital that we teach today's children the skills for the demands of tomorrow. A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. We must provide a broad range of experiences and learning situations that will equip them to live comfortably and to cope in a future workplace and as active participants in a digital world. We teach Computing as both a subject and as a cross-curricular theme.

Aims

- To develop every child's computing capability.
- To enhance learning in other curriculum areas.
- To apply the learning of these skills to the children's everyday and future lives.

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.

In accordance with the Programmes of Study for Computing in Key Stage 1 (KS1) pupils will 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.

In Key Stage 2 (KS2) pupils will 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.

Teaching and Learning

Across the Computing curriculum we want our children to acquire and then secure knowledge and transferable skills that are progressively embedded from the Early Years to KS2 and beyond.

At Burstwick Community Primary School, we follow the National Curriculum programme of study which covers all three areas of Computing;

- Computer Science,
- Information Technology and
- Digital Literacy.

We have carefully selected two schemes of work that we feel more than adequately cover the National Curriculum statements for Key Stage 1 and Key Stage 2. Computing is planned and taught using Purple Mash to enable pupils to embed their understanding and skills.

Computing Curriculum Planning

	Computer Science
	Information Technology
	Digital Literacy

**Most units will include aspects of all strands*

Early Years (Reception) Rather than a scheme with set lessons, the early years resources are designed to integrate into the day-to-day routine and set-up of an early years setting with opportunities for using Mini Mash or Purple Mash as part of the Early Years curriculum to support children in working towards early learning goals. In addition, there are units of suggested ideas that focus on computing skills specifically, that can also be provided as opportunities for learning as part of the topics in other areas to give children a sound basis to explore topics using technology and to be ready for progressing through the Computing curriculum. These are as follows and are designed to be integrated and linked to wider early years curriculum areas. These have been loosely classified into the three streams but there is overlap between all three streams.

<u>Mouse & Trackpad Skills</u>	<u>Keyboard Skills</u>	<u>Drawing Skills</u>	<u>Robots</u>	<u>Sounds</u>	<u>Photography</u>
<i>Technology around us</i>	<i>Hardware</i>	<i>Safety & Privacy</i>	<i>Quizzes</i>	<i>Using PupleMash with an individual login</i>	

Year 1

UNIT	1.1 <i>Online Safety & Exploring Purple Mash</i>	1.2 <i>Grouping & Sorting</i>	1.3 <i>Pictograms</i>	1.4 <i>Lego Builders</i>	1.5 <i>Maze Explorers</i>	1.6 <i>Animated Story Books</i>	1.7 <i>Coding</i>	1.9 <i>Technology outside school</i>
------	--	---	---------------------------------	------------------------------------	-------------------------------------	---	-----------------------------	--

Year 2

UNIT	2.1 <i>Coding</i>	2.2 <i>Online Safety</i>	2.3 <i>Spreadsheets</i>	2.4 <i>Questioning</i>	2.5 <i>Effective Searching</i>	2.6 <i>Creating Pictures</i>	2.7 <i>Making Music</i>	2.8 <i>Presenting Ideas</i>
------	-----------------------------	------------------------------------	-----------------------------------	----------------------------------	--	--	-----------------------------------	---------------------------------------

Year 3

UNIT	3.1 <i>Coding</i>	3.2 <i>Online Safety</i>	3.3 <i>Spreadsheets</i>	3.4 <i>Touch Typing</i>	3.5 <i>Email (inc. email safety)</i>	3.6 <i>Branching Databases</i>	3.7 <i>Simulations</i>	3.8 <i>Graphing</i>	3.9 <i>Presenting</i>	3.10 <i>Micro:bit</i>
------	-----------------------------	------------------------------------	-----------------------------------	-----------------------------------	--	--	----------------------------------	-------------------------------	---------------------------------	---------------------------------

Year 4

UNIT	4.1 <i>Coding</i>	4.2 <i>Online Safety</i>	4.4 <i>Writing for Different Audiences</i>	4.5 <i>Logo</i>	4.6 <i>Animation</i>	4.7 <i>Effective Searching</i>	4.8 <i>Hardware</i>	4.9 <i>Making Music</i>	4.10 <i>Intro to AI</i>	4.11 <i>Micro:bit</i>
------	-----------------------------	------------------------------------	--	---------------------------	--------------------------------	--	-------------------------------	-----------------------------------	-----------------------------------	---------------------------------

Year 5

UNIT	5.1 <i>Coding</i>	5.2 <i>Online Safety</i>	5.3 <i>Spreadsheets</i>	5.4 <i>Databases</i>	5.5 <i>Game Creator</i>	5.6 <i>3D Modelling</i>	5.7 <i>Concept Maps</i>	5.8 <i>Word Processing</i>	5.9 <i>External Devices</i>	5.10 <i>Micro:bit</i>
------	-----------------------------	------------------------------------	-----------------------------------	--------------------------------	-----------------------------------	-----------------------------------	-----------------------------------	--------------------------------------	---------------------------------------	---------------------------------

Year 6

UNIT	6.1 <i>Coding</i>	6.2 <i>Online Safety</i>	6.4 <i>Blogging</i>	6.5 <i>Text Adventures</i>	6.6 <i>Networks</i>	6.7 <i>Quizzing</i>	6.8 <i>Understanding Binary</i>	6.9 <i>Spreadsheets</i>
------	-----------------------------	------------------------------------	-------------------------------	--------------------------------------	-------------------------------	-------------------------------	---	-----------------------------------

Equal Opportunities

All children have equal access and inclusive rights to the curriculum regardless of their age, gender, race, religion, belief, disability or ability. We plan work that is differentiated for the performance of all groups and individuals. We are committed to creating a positive climate that will enable everyone to work free from racial intimidation and harassment and to achieve their full potential.

Inclusion

Care will be taken to ensure that all children will have the same access to all learning opportunities in Computing. With ever changing technology and restricted access, we endeavour to support all children in the Computing curriculum.

Special Educational Needs & Disabilities (SEND)

Care will be taken to ensure that children, who have SEND, have adaptations made to the curriculum provision that meets their needs. This can include adapting tasks as well as resources. Some children may have the use of IT specified in their Support Plans or Statement of Need.

Help to provide appropriate work may be found by consultation with the Computing Co-ordinator and/or SEND Co-ordinator.

Organisation of Computing

The main focuses of the new curriculum involve planning for:

- Computer Science (CS);
- Information technology (IT);
- Digital Literacy (DL).

Early Years Foundation Stage (EYFS)

It is important in the Foundation Stage to give children a broad, play-based experience of in a range of contexts, including outdoor play. Computing is not just about computers.

Early years learning environments should feature Computing scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to 'paint' on the whiteboard or drive a remote-controlled toy.

Outdoor exploration is an important aspect, supported by Computing toys such as controllable traffic lights and walkie-talkie sets. Recording devices can support children to develop their communication skills.

By the end of Key Stage 1 (KS1) pupils should be able to:

- Create simple presentations, debug simple programmes, publish work using word processing features
- Take digital photos and combine them in a movie
- Understand that algorithms are implemented as programs on digital devices
- Understand that programs execute by following precise and unambiguous instructions
- Use a computer to sort information and present data, use art package tools to create a picture/pattern, use logical reasoning to predict the behaviour of simple programs

- Use the internet to find information

By the end of Key Stage 2 (KS2) pupils should be able to:

- Create simple stop motion animations with voice-over/backing track
- Evaluate information found on the internet effectively, record multi-layered music parts using ICT
- Solve problems by decomposing into smaller parts, take and edit digital photos and/or video and combine them in a movie with audio commentary
- Use different presentation software to create an online presentation, use a spreadsheet to carry out calculations using formulae
- Use logical reasoning to explain how algorithms work and detect and correct errors
- Use object based drawing packages, use online documents to collaborate with other, use selection and variables in programs

Assessment for Learning

It is the responsibility of the class teacher to assess children's knowledge, skills and understanding through the year.

Assessment criteria will be shared with children – making them aware of what is expected at the end of the unit in terms of the finished product, the skills learnt (related to knowledge of software and hardware used and also to skills of co-operation with others in order to achieve a target). Outcomes and date will be recorded using the assessment tool FLiC (Framing Learning in Classrooms).

Resources

A record of resources within the school (software and hardware) is maintained and kept by the Computing Coordinator and Computanet (School IT Provider). This information is kept in a database and updated as new equipment is purchased. The vehicle used to support the teaching of Computing at our school, is Purple Mash.

Support for Teachers and Teaching Assistants

An audit of staff capabilities will be carried out to assess their current capabilities and future needs. Staff development will be tailored to meet these needs.

There will be regular opportunities for staff to have small group familiarisation of software. Staff will be encouraged to know how to 'troubleshoot' regular problems that are easily resolved. Staff will be taught how to use the equipment safely. Training/sharing of good practice will also be developed to ensure that skills and knowledge are maintained and developed.

Health and Safety

1. Children should be taught about the dangers of working with electrical equipment and how to operate it safely.
2. Children should be taught about safe and comfortable working positions.
3. Furniture should be monitored and checked regularly to ensure safe working conditions.
4. Children and adults should be reminded of the need for regular breaks to prevent fatigue and other health issues.

5. Children should only use the internet under supervision.
6. All children (or carers on the behalf of younger children) will sign an Acceptable Use Policy, copies of which are placed on the walls of the computer room.
7. Teachers will monitor the content and transmission of e-mail.
8. The school ensures that all students have an awareness and understanding of e-safety and Cyberbullying (see related policies).

Roles and Responsibilities

Computing Lead

The ICT/Computing Lead will undertake the following roles –

1. To have awareness of the teaching and learning of Computing skills, knowledge and understanding across the school.
2. To review and assist with teachers' planning in accordance with the National Curriculum, so that Computing teaching and learning opportunities can be capitalised.
3. To monitor and assess standards in the teaching and learning of Computing across the school.
4. To be responsible for Computing resources in the school and take appropriate action, within budget, to ensure that all equipment is operational. (Technical help is available on a regularly timetabled basis with technicians based at Withernsea)
5. To be personally aware of new ideas in Computing and to share ideas with colleagues accordingly.
6. To review the teaching and learning of Computing across the school and the Computing policy annually and share an action plan with the Senior Management team and the governor responsible for Computing accordingly.

Class Teacher

Even though whole school co-ordination and support is essential to the development of computing capability, it remains the responsibility of each teacher to plan and teach appropriate Computing activities and assist the co-ordinator in the monitoring and recording of pupil progress in computing.

Safeguarding

The school is committed to safeguarding and promoting the welfare of all children and staff. We expect all staff and volunteers to share this commitment. Through the construction and writing of policies, we share our commitment; and through our curriculum provision, safeguarding is taught both explicitly (directly) and implicitly (indirectly).

We believe that all children have the right to learn in a supportive, caring and safe environment, which includes the right to protection from all types of abuse. Staff are vigilant for signs of any child in distress and we are confident about applying our safeguarding procedures to avert and alleviate any problems.

Monitoring and Review

Burstwick Community Primary School's Computing Policy is monitored regularly by the Senior Leadership Team (SLT), who report to the governors about its implementation and effectiveness. This is to be done through regular work scrutiny and will be monitored for whole school consistency and evaluated for impact on children's learning and outcomes. Governors are kept informed via the termly Headteacher's Report.

This Policy will be reviewed at every 3 years through discussion with all staff and Governors.

Date agreed: February 2025

Date to be reviewed: February 2028 or as guidance is issued from the Department for Education (DfE) and/or Local Authority (LA).

Approved	Name	Signature	Date
Chair of Governors	<i>Mr Andrew Johnson</i>		
Headteacher	<i>Mr Ian Cutts</i>		