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Staff Responsibility:	S Riaz
Linked policies:	E-safety policy
Singed by chair:	L. Rowbotham
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Boarshaw Community Primary School
Policy

Purpose
This policy reflects the school values and philosophy in relation to the teaching and learning of and with computing. It sets out a framework within which teaching and non-teaching staff can operate and gives guidance on planning, teaching and assessment.

Introduction
Computing aims to prepare pupils to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technology. We recognise that computing is an important tool in both the society we live in and in the process of teaching and learning. Pupils use different tools to find, explore, analyse, exchange and present information responsibly and creatively. They learn how to employ computing to enable rapid access to ideas and experiences from a wide range of sources.

Our vision is for all teachers and learners in our school to become confident users of ICT so that they can develop the skills, knowledge and understanding which enables them to use the appropriate resources effectively as powerful tools for teaching & learning, for example beebots, ipads, tablets etc.

General Aims
Provide a relevant, challenging and enjoyable curriculum for ICT and computing for all pupils.
 • Meet the requirements of the national curriculum programmes of study for computing.
• Use computing as a tool to enhance learning throughout the curriculum.
• To respond to new developments in technology.
• To equip pupils with the confidence and capability to use computing throughout their later life.
• To enhance learning in other areas of the curriculum using computing.
• To develop the understanding of how to use computing safely and responsibly.

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 information and communication technology.

Teaching and Organisation
In all Key Stages ICT needs to be related to the children's own experiences and it must stimulate their imagination and desire to discover more. The Rising Stars

Computing curriculum which is directly linked to the National Curriculum will be followed. This will help ensure adequate coverage and help pupils working towards achieving end of key stage objectives. Every lesson will begin with a 5 minute input about e-safety (in line with the e-safety policy), as well as when any ICT equipment is being used by pupils.

Early years
It is important in the foundation stage to give children a broad, play-based experience of computing 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 program a toy. Recording devices can support children to develop their communication skills. This is particular useful with children who have English as an additional language.

Key Stage 1
By the end of 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 a sequence of instructions.
• Write and test simple programs.
• Use logical reasoning to predict and computing the behaviour of simple programs.
• Organise, store, manipulate and retrieve data in a range of digital formats.
• Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

Key Stage 2
By the end of key stage 2, pupils should be taught to:
• Design and write 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; generate appropriate inputs and predicted outputs to test programs.
• Use logical reasoning to explain how a simple algorithm works 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.
• Describe how Internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.
• 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.

<u>Planning</u>

Computing Lessons
- The Rising Stars Computing Curriculum to be followed by Years 1-6.
- Planning formats to be adapted and annotated on.
- Activities should be differentiated to best match the needs of the individuals within the context of the aspect of ICT that is being taught.

- Teachers will plan to begin every lesson with a 5 minute input about e-safety (in line with the e-safety policy), as well as when any ICT equipment is being used by pupils.

ICT across the Curriculum
Opportunities are used to encourage children to use their creative knowledge over all areas. ICT can help provide meaning to all other subjects within the curriculum, allowing research to be more thorough, discuss validity of sources and present work in a meaningful and varied way. ICT can be linked to all areas of learning.

Inclusion and Equal Opportunities
All children have an equal opportunity regardless of gender, race or ability, to progress and succeed in their ICT learning and understanding. We pay particular attention to ensuring there is no gender bias in materials or in access to resources, including ICT. Teachers should pay attention to the equal distribution of their questions across all groups. Any displays and references to this subject in society should show positive role models of gender, race, ethnicity and disabilities.

Internet Safety – E-Safety
See separate policy.

Assessment
Computing is assessed both formatively and summatively. Formative assessment occurs on a lesson by lesson basis based on the lesson objectives and outcomes in the scheme of work. These are conducted informally by the class teacher and are used to inform future planning. Activities are planned at the end of a unit of work which enable summative assessments to take place where children's ICT capability is assessed. This work is accompanied by a description of the context in which pupils completed the task and how it was undertaken. Assessment grids are provided for all foundation subjects including computing.

Monitoring and Evaluation
Provision for ICT is monitored and reviewed on a regular basis.
This is achieved by:
- The Computing Coordinator will monitor resource provision, identifying shortfalls, identify aspects within curriculum subjects to be included in teacher planning.
- SLT shall have oversight of this policy and monitor the provision of ICT