



# Computing Policy

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## 1. Aims

Computing is a foundation subject with the National Curriculum. The aims of the subject are to ensure that all pupils (DfE, Computing National Curriculum, 2014):

- 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.

Our school aims are for pupils:

- To understand Computing and its importance and relevance to today's world
- To enable children to develop Computing as a tool for learning and investigation in all subject areas and in a range of different contexts
- To enable children to acquire a broad, balanced, relevant, challenging, and enjoyable range of Computing capabilities and to be confident about using a range of hardware and software to equip them with the confidence and capability to use Computing throughout their education, home, future education, and further work life
- To ensure pupils know how to stay safe online
- To stimulate, develop interest and understanding of new technologies

These aims are consistent with our school philosophy and take account the National Curriculum non-statutory guidance. In order to achieve these aims, Computing is taught throughout Key Stage 1 and 2 (KS1, 2) according to pupils taught curriculum (EYFS, Pre-formal, Semi-Formal Experiential, Semi-Formal Bridge, Formal). Learning activities are sequenced to ensure progression and taught through direct teaching, providing pupils with real experiences, and planned experiences as appropriate to develop children's understanding. Termly

planning ideas will be highlighted on all Topic Webs, for teachers to include accordingly. Monitoring and Evaluation is at a class level with a Subject Lead for the whole school

### **2. Differentiation**

At Acorns Primary we cater for pupils from age 3-11 who have a diverse range of individual needs and have Educational and Health Care Plans (EHCPs) Computing is used to increase access to the curriculum, raise levels of motivation and self-esteem, improve the accuracy and presentation of work, and address individual needs across the curriculum. Computing Technology is also used to develop pupils' communication needs, such as EyeGaze and high tech AAC, pupils using such technology will be adequately timetabled and delivered by trained teachers and IT Technician.

When undertaking Computing, pupils will work at levels appropriate to their ability and progression will be in very small steps with much over learning and reinforcement. Computing is integrated throughout the day and is available in most lessons. Computing is also integrated in continuous provisions and choosing times.

With the knowledge that Computing will form part of the pupils' life at home, in further education and places of work, we will ensure the Computing experiences and abilities that pupils are equipped with, are effective and transferrable life skills. With this in mind, we are striving towards ensuring that current curriculum provision for Computing ensures that pupils' learning is supported with current teaching strategies and up to date technology.

Computing will be delivered by the class teacher and supported by their class teaching assistant. This should be taught in line with each classes theme-based curriculum, with emphasis placed on the key skills required. To ensure that individual pupils can make progress, show that they can achieve and acquire key skills, it may be necessary for staff to modify programmes to provide relevant and appropriately challenging work and deliver programmes out of key stage.

### 3. Planning

Throughout the school the class teacher is responsible for the delivery of Computing in their class, following consultation with and/or guidance from the Computing Lead. The Computing Lead will add relevant subject related ideas to the schools' curriculum. Each termly topic web will include relevant subject specific ideas to be included and integrated into Teachers planning. Cross curricular links are a key element to our Semi-Formal structure and Teachers will look to include computational thinking where possible.

### 4. Organisation

To help ensure pupils have the opportunity to develop a wide range of skills, experiences and competencies with technology, the curriculum covers 3 strands.

**Computer Science** – *is the study of the foundational principles and practices of computation and computational thinking, and their application in the design and development of computer systems. Following instructions (Algorithms), programming devices Beebots*

**Digital Literacy** – *is the ability to use computer systems and a broad range of digital devices such as tablets, laptops, cameras, toy with switches and desktop PCs confidently and effectively, including basic keyboard and mouse skills. Simple use of 'office applications' such as word processing, presentations and spreadsheets. Use of the Internet, including browsing, searching and creating content for the Web, communication and collaboration via e-mail.*

**Information Technology** - *deals with the creative and productive use and application of computer systems, especially in organisations, including considerations of online safety, privacy, ethics, and intellectual property.*

The coverage of each strand will vary year group by year group, with some areas being covered primarily in KS1 and others primarily in KS2

It is important that technology is used as a day-day element of school life and across all subject areas, therefore if opportunities to use Computing arise which do not fall within the curriculum for each year group, they should be taken advantage of

### **5. Assessment**

Computing progression will be demonstrated by children carrying out more complex tasks, applying more advanced skills, becoming more independent and confident using ICT and by using more sophisticated software. To monitor progress and allow for planned progression, records of children's attainment will need to be accurate and up to date. Ongoing assessment through teacher observations and recording of pupils work informs future target setting.

All relevant evidence will be capture and stored on Evidence for Learning (EFL). Evidence will be tagged as 'Computing' and set against any relevant IEP targets.

Summative assessment reviews pupils' progress and abilities and will be undertaken biannually (December and July) using the B-Squared (B<sup>2</sup>) assessment scheme.

### **6. Scheme of Work**

The scheme of work available in school is accessible via the Teacher Shared Drive. The scheme of work is the Sheffield Computing SEN Scheme of Work. However teachers can use this as a planning guide and do not have to teach it. Teachers can use this as a bank of ideas to help with their planning, as it shows progressive steps. Teachers can also freely use any activities they find on the internet and/or Twinkl. All activities should be linked to their termly topics webs.

### **7. Online Safety**

Online Safety is a fundamental element of Computing teaching and technology use at Acorns Primary School. The school has a separate Online Safety policy that is embedded into the curriculum and is overseen by the designated online safety lead. Online Safety should take place regularly as part of both Computing and

Personal, Social, Health education (PSHE) sessions. Focused Online Safety week will be arranged by the Computing Lead during National Online Safety week

## **8. Computing Lead role**

~~The Computing Lead role involves general oversight (monitoring and evaluating) of the subject through school. They will be involved in planning with teachers, maintain progress of the subject, attending courses where relevant and keeping abreast of changes and developments, which may affect the subject. They will develop the Policy and program of study in consultation with the headteacher/staff/governors and recommend INSET/Teachers Meeting (TM) as appropriate. Monitoring the policy in operation is the responsibility of all those staff involved in the teaching of Computing. The Computing Lead will be asked to contribute towards the School Development Plan, estimating and projecting costs and resources relevant to the subject appropriately.~~

It is the responsibility of the Computing Lead (with support and advice from the IT Technician) to:

- Keep under review and make suggestions for the upgrading of all equipment
- Research the range of equipment and resources appropriate to the needs of all the pupils at Acorns School
- Liaise with the Head, Deputy and staff regarding the development of teaching and learning of ICT/Computing throughout the school
- Review on a regular basis the provision for this subject at Acorns School in line with new Government initiatives
- Offer help and support to all members of staff (including teaching assistants) in their teaching, planning and assessment of Computing
- Monitor classroom teaching or planning following the schools rolling programme of monitoring.
- Attend appropriate in-service training and keep staff up to date with relevant information and developments.
- Have enthusiasm for Computing and encourage staff to share this enthusiasm!!
- Review schemes of work, policies and published materials and share this with all teaching staff.



The Policy shall be reassessed and updated annually

Appendix 1

Computing			
Three and Four-Year-Olds	Personal, Social and Emotional Development		<ul style="list-style-type: none"> <li>Remember rules without needing an adult to remind them.</li> </ul>
	Physical Development		<ul style="list-style-type: none"> <li>Match their developing physical skills to tasks and activities in the setting.</li> </ul>
	Understanding the World		<ul style="list-style-type: none"> <li>Explore how things work.</li> </ul>
Reception	Personal, Social and Emotional Development		<ul style="list-style-type: none"> <li>Show resilience and perseverance in the face of a challenge.</li> <li>Know and talk about the different factors that support their overall health and wellbeing:                             <ul style="list-style-type: none"> <li>-sensible amounts of 'screen time'.</li> </ul> </li> </ul>
	Physical Development		<ul style="list-style-type: none"> <li>Develop their small motor skills so that they can use a range of tools competently, safely and confidently.</li> </ul>
	Expressive Arts and Design		<ul style="list-style-type: none"> <li>Explore, use and refine a variety of artistic effects to express their ideas and feelings.</li> </ul>
ELG	Personal, Social and Emotional Development	Managing Self	<ul style="list-style-type: none"> <li>Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.</li> <li>Explain the reasons for rules, know right from wrong and try to behave accordingly.</li> </ul>
	Expressive Arts and Design	Creating with Materials	<ul style="list-style-type: none"> <li>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</li> </ul>

