



## Non Statutory Policy

# Computing Policy

## **Subject vision statement (Ill statement from website)**

### **Why do we teach what we teach? (Our intent)**

Computing is a practical subject, in which invention and resourcefulness are encouraged; this leads to children who are curious, creative and courageous. We want our children to be prepared to thrive in the technologically-rich every changing world that we live in. Furthermore, we also want our children to use technology effectively, responsibly and safely. We want our pupils to have a high level of computer literacy so they are better able to conceptualise, understand and use computer-based technology, better prepared as they move on through education and into adult life. We teach them to become good digital citizens, to know how to stay safe online and emphasise that what they share and view creates their own digital footprint.

### **How do we teach it? (Our implementation)**

At Oak Green School, we follow the [National Centre for Computing Education](#) scheme of work which has six different units that are followed in year groups 1-6. With the units being structured the same across every year group, following the same unit headings, it allows for progression to be clear across all classes. The tasks provided are set to build on prior knowledge from the previous year, develop the use of subject specific vocabulary, make links to the wider life of the school environment and challenge pupils in their computing knowledge.

We have a variety of resources for teaching computing here at Oak Green, including laptops, (Google) Chromebooks, as a Google School, and 15 iPads per year group, amongst other resources. These are all well-utilised and timetabled by staff for pupils to use each week. We are enabled for Remote Learning through our use of Google Suite applications, including Google Classroom and several online and software packages and our extensive loaning of equipment.

As well as hardware, we have numerous pieces of software to support staff and pupils with the teaching and learning of computing. We use Teach computing to support our curriculum and use software such as Scratch, Microsoft Office and practical hardware such as 'Beebots' to provide children with an enriched learning experience.

### **What is the difference that this makes? (Our impact)**

We measure the impact of our curriculum through pupil discussions and interviewing the pupils about their learning through pupil voice, monitoring with our subject computing lead and through completed lessons and photographic evidence.

## **Teaching and Learning (including planning)**

### **EYFS**

EYFS - The EYFS provides activities and experiences for children in seven important and interconnected areas of learning and development. The three 'prime areas' are crucial for igniting children's curiosity and enthusiasm for learning, and for building their capacity to learn, form relationships and thrive: communication and language; physical development; personal, social and emotional development. Children are also supported in four 'specific areas', through which these three 'prime areas' are strengthened and applied: literacy; mathematics; understanding the world; and expressive arts and design.

In EYFS, children will be learning about their online identity and beginning to appreciate e-Safety. They will begin to use the Internet to access information and experience the wider world around them; also using programs relevant to their age to enhance other areas of learning. Key Stages 1 and 2 - Programmes of Study for computing are set out annually for Key Stages 1 and 2. We teach the relevant Programme of Study by the end of the Key Stage, recognizing that we have the flexibility to introduce content earlier or later than set out in the Programme of Study within each Key Stage or introducing key stage content during an earlier key stage if/as appropriate.

## KS1

The NC Programmes of Study for KS1:

- 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.

## KS2

The NC Programmes of Study for KS2: Pupils should 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 Computing is taught as both a discrete subject – where specific computing skills are taught - and as part of the wider curriculum, with opportunities to use computing to further understanding in other subjects.

Teachers build computing into the wider curriculum so that children appreciate digital literacy as a part of life. Through both strands, the skills will be consolidated and all pupils will access the computing curriculum. Programming requires logical thinking, planning and reviewing, of which some is taught outside the IT Suite. Pupils will look at ways to develop programming and application design to enhance their work or life and understand that computing is a tool for learning and a way of thinking. Teachers ensure that learning is progressive; building on previously learnt skills and knowledge. Children will be able to use the language of computing and be able to explain their thinking logically and fluently. Staff must be alert to expectations for Health and Safety considerations in computing

## Resources/scheme

At Oak Green School we use **Teach Computing** which is associated with National Centre for Computing Education, who share the same vision as us which is for every child in every school in England to have a world-leading computing education. We continually evaluate the impact that our programmes, services and resources are having on improving the quality of teaching computing in schools, and the learning experience

for young people. Our pupils have access to iPad, chrome books, beebots and other wonderful resources to support them in and outside of the classroom.

### **Assessment**

Formative assessment - Teacher assessments are made throughout the units of work, through discussion, observation and marking/ scrutiny of work and this informs planning. Summative assessment - By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study

### **Equal opportunities/ Inclusion**

This policy applies to all children regardless of their preferred gender description, ethnicity, colour, ability or disability, English language proficiency, religion, lifestyle or nationality. The accurate match of work to individual and group need is met through effective planning and delivery, based upon assessment and monitoring of progress. All children are challenged through provision, especially 'more able' pupils in computing. Strategies are used accordingly, such as scaffolding learning, differentiation, e.g. variation in presentation of work or recording, targeted adult support or intervention strategies, mixed ability groups in investigative work which can be beneficial to all learners etc. Vocabulary will be reinforced for all children, in particular EAL pupils, e.g. through displays etc.

### **The role of the subject leader and monitoring standards**

- To support and guide the classroom practice of teachers and support staff.
- To ensure pupil entitlement to the National Curriculum
- To ensure coverage, continuity and progression in planning.
- To monitor and evaluate the effectiveness of geography teaching and learning and provide support for and development of the subject where appropriate.
- To update documentation where necessary.
- To produce action plans for the School Development Plan and manage the budget allocated effectively.
- To liaise and consult with outside agencies where appropriate.
- To prepare and lead INSET.
- To attend relevant INSET training.
- To review regularly the contribution made by geography to a meaningful curriculum.
- To conduct book scrutiny to monitor outcome and progress.
- To conduct pupil interviews.
- To assess learning environments.

### **Review**

This policy will be reviewed every year by the Computing lead. At every review, the policy will be shared with the governing board.

### **Links with other policies**

This policy links with the following policies and procedures:

- Curriculum policy
- SEN/SEND policy and information report
- Marking and Feedback policy
- Assessment policy
- Behaviour policy
- Early Years Foundation Stage (EYFS) policy