

# Computing Policy

<b>Review Date</b>	May 2025
--------------------	----------

# Computing Policy for Colham Manor Primary School

## Intent

The Computing curriculum is broad, balanced and skilfully designed to be inclusive, progressive and safe. Where the curriculum allows, strong cross curricular links are made. The contexts in which Computing is taught reflects the increasing use of Computing in the world of industry. At Colham Manor there are a wide range of innovative resources and teaching strategies to stimulate pupil's active participation in their learning.

We aim to give our children the life-skills that will enable them to embrace and utilise new technology in a socially responsible and safe way. We strive to create digitally literate, computational thinking learners who can apply information technology, including new and unfamiliar technologies. This will prepare our children and allow them to participate effectively in a rapidly changing digital world. We aim to challenge and inspire our children to be creative, make connections and problem solve.

## Implementation

Computing / ICT is taught through a combination of subject knowledge and development of specific skills and competencies. Learning takes place mainly inside the classroom through the use of Chromebooks and iPads. This ensures children are able to develop depth in their knowledge and skills over the duration of their primary schooling. Teachers use the programme of study ('Learning means the world') as a starting point for the planning of their Computing lessons.

Through a sequence of lessons, we intend to inspire children to develop a love of the digital world and see its place in their future. Our lesson plans and resources help children to build on prior knowledge at the same time as introducing new skills and challenges. Children have a balance of working independently to hone in on individual skills but are also provided with the opportunity of paired/group learning. Children will receive instant formative feedback and carry out their own evaluation in order to reflect upon their learning and consider ways to improve their work.

## What do we learn about in Computing?

**Programming:** the process of creating a set of instructions that tell a computer how to perform a task.

**Networking:** the exchange of information and ideas among people with a common profession or special interest, usually in an informal social setting.

**Sequencing:** the specific order in which instructions are performed in an algorithm.

**Multimedia:** using more than one medium of expression or communication that crosses platforms (e.g. web, radio, text, motion).

**Data Handling:** the process of ensuring that research data is stored, archived or disposed of in a safe and secure manner during and after the conclusion of a research project.

**Presentations:** a speech or talk in which a new product, idea, or piece of work is shown and explained to an audience.

**Word Processing:** the production, storage, and manipulation of text on a computer or word processor.

Animation: the technique of photographing successive drawings or positions of puppets or models to create an illusion of movement when the film is shown as a sequence.

Email: messages distributed by electronic means from one computer user to one or more recipients via a network.

E-Safety: Keeping safe on online platforms.

Computer-Aided Design: use of computer software to help create, change, analyse or optimise designs. It is meant to help the designer create better quality, more precise, and neater designs.

Research: the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions.

Podcasts: a digital audio file made available on the internet for downloading to a computer or mobile device, typically available as a series, new instalments of which can be received by subscribers automatically.

Sound FX: Sound effects - a sound other than speech or music made artificially for use in a play, film, or other broadcast production.

### **Assessment**

Teachers assess children's work in Computing through formative assessments as they observe students during lessons. Throughout the lessons, teachers should follow the verbal feedback section of the marking policy. On completion of a piece of work, the teacher will view and assess it, highlighting next steps for improvement as necessary (this may be written or verbal – see marking policy). The final work will not always be a hard copy, it may be on Google Classroom or was in the form of a practical activity. Staff are encouraged to use the Dimensions assessment wheels at the end of a thematic unit to support their planning further. The monitoring of the standards of the children's work and of the quality of teaching in computing is the responsibility of the computing subject leader. The subject leader is also responsible for supporting colleagues in the teaching of computing, for keeping informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school. Regular monitoring of the standards of pupils' work and the quality of teaching and learning will take place through: monitoring and evaluation of pupil's work, lesson observations, monitoring of planning.

### **Differentiation within Computing**

- Every pupil has the opportunity to be challenged
- Key questions will be planned for and differentiated
- Actively support all abilities
- Actively moving the children's learning forward and intervening at appropriate level
- Resources available reflect different needs
- Children are grouped differently for different learning activities
- Work differentiated to enable independence
- High quality resources prepared so that children can access the learning

- Work adapted in to small achievable chunks
- A range of different scaffolding / templates used to support children

### **Subject Specific Guidance**

- Teaching is informed by strong subject knowledge and understanding of continuing developments in teaching and learning in Computing.
- Learning is effectively secured through a high level of teacher competence and expertise, in both their specialist knowledge, technical skills and in their understanding of active learning in Computing.
- Children are able to make connections between individual topics and in seeing the 'big picture'.
- Children's understanding of important concepts and progression within the lesson and over time is central to teaching.
- Lessons address children's misconceptions very effectively.
- Teachers' responses to children' questions are effective in stimulating further thought.
- Children secure good or exceptional progress due to carefully planned, imaginative lessons.
- Teachers communicate high expectations, enthusiasm and passion about Computing to children. They challenge and inspire children to produce the best work they can.
- Children's active participation in learning and their outstanding progress across all aspects of the subject are stimulated through the use of a very wide range of innovative and imaginative resources and teaching.

### **Equal opportunities within Computing**

To promote equality of opportunity throughout the school and through planned teaching programs. Ensuring ethnic, gender, and disability issues are fully considered, promoting measures to prevent discrimination on the basis of race, religion, gender, age or any other protected characteristic.

At Colham Manor we carefully consider whether any groups of children who are from disadvantaged homes and plan carefully for those. For example, basing lessons on mobile phone apps or computer games may disadvantage those without access to such technology at home. At Colham Manor we offer an after-school club as a practical way of making access available to all.

Children with special educational needs or disabilities are carefully considered. Teachers will evaluate whether software and digital content are accessible to users with special needs. Adapted mice or keyboards, screen readers and braille displays can be provided for those who need it.