Crabbs Cross Academy
Computing Policy

Rationale

In today's world, where the internet is an ever-present part of life, many children—and increasingly, adults—have never experienced a world without it. The internet has fundamentally changed how we communicate, trade, and go about our daily lives. As the digital landscape continues to evolve, it is essential that children are equipped with the skills, knowledge, and opportunities to navigate it with confidence and safety.

Aims

- To provide an exciting, rigorous curriculum that addresses the challenges and opportunities offered by the technologically rich world in which we live.
- Enthuse and equip children with the capability to use technology throughout their lives.
- Instil critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with technology and its associated resources.
- Teach pupils to become responsible, respectful and competent users of data, information and communication technology.
- Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves or others.
- Use technology imaginatively and creatively to inspire and engage all pupils, as well as using it to be more efficient in the tasks associated with running an effective school.
- Utilise computational thinking beyond the Computing curriculum.

Curriculum

As a school, we have chosen the Purple Mash Computing Scheme of Work from Reception to Year 4. The scheme of work supports our teachers in delivering fun and engaging lessons which help to raise standards and allow all pupils to achieve to their full potential. We are confident that the scheme of work more than adequately meets the national vision for Computing. It provides immense flexibility and strong cross-curricular links. Furthermore, it gives excellent supporting material for less confident teachers.

Early Years

We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts. We believe the following:

- Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in roleplay.
- Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys.

- Outdoor exploration is an important aspect, supported by ICT toys such as metal detectors, controllable traffic lights and walkie-talkie sets.
- Recording devices can support children to develop their communication skills. This is especially useful for children who have English as an additional language.

Key Stage 1 Outcomes

- 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.
- 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 Outcomes

- 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 worldwide 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.

Assessment

- Formative assessments are carried out during and following short focused tasks and activities. They provide pupils and teaching staff the opportunity to reflect on their learning in the context of the agreed success criteria. This feeds into planning for the next activity or subsequent lesson.
- Summative assessment is undertaken in line with the assessment cycle. Using electronic work samples from children's portfolios on Purple Mash, teachers are able to make judgements against the statements within the National Curriculum, and the success criteria within every lesson.

Monitoring, Evaluation and Feedback

Monitoring will be achieved through:

- Work scrutiny.
- Learning walks.

- Observations.
- Pupil voice.

- Teacher voice.
- Teacher feedback.

Evaluation and feedback will be achieved through:

- Using recognised standards documentation for end of year expectations.
- Using recognised national standards for benchmarking Computing provision in primary schools.

Resources and Access

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards consistent, compatible computer systems by investing in resources that will effectively deliver the objectives of the National Curriculum and support the use of IT, computer science and digital literacy across the school. Teachers are required to inform the computing subject leader of any faults as soon as they are noticed. Computing network infrastructure and equipment has been sited so that:

- There are a class set of iPads that can be booked out throughout the day.
- There are a class set of Chromebooks that can be booked out throughout the day.
- All teachers have a laptop. There are also some spare laptops to be used for PPA cover or for small group intervention use.
- All classrooms have their own class iPad.
- Internet access is available in all classrooms.
- Subscriptions for Purple Mash, TT Rockstars and Numbots.
- Appropriate software installed on computers and iPads.
- An interactive whiteboard in all classrooms.
- The school has a technician from Concero who visits weekly.

Inclusion

At Crabbs Cross Academy, we aim to enable all children to achieve to their full potential. This includes children of all abilities, social and cultural backgrounds, those with SEND and EAL speakers. We place particular emphasis on the flexibility technology brings to allowing pupils to access learning opportunities, particularly pupils with SEN and disabilities.

Health and Safety

Crabbs Cross Academy takes all necessary measures to ensure both staff and pupils are aware of the importance of health and safety. Both staff and pupils are trained to handle electrical equipment correctly including how to power off and on. Pupils are reminded about the dangers of electricity and the danger signs to look out for. Adequate displays and warning signs are strategically placed around the school to reinforce health and safety.

Computing lead

The subject leader is responsible for:

- Monitoring the standard of the children's work and the progression of skills

- The quality of teaching in Computing
- Developments in the subject,
- Providing a strategic lead and direction for Computing in the school.
- Monitor and audit resources and allocate subject budget where needed.

The subject leader carries out planning and data monitoring, book trawls and pupil interviews and gives relevant feedback including areas of development as appropriate.