Computing Policy

Intent

The intent of our computing curriculum is to deliver a curriculum which is accessible to all and that will maximise the development of every child's ability and academic achievement in computing. We want our children to know more, remember more and understand more in computing so that they leave primary school computer literate. Computing skills are a major factor in enabling children to be confident, creative and independent learners and it is our intention that children have every opportunity available to allow them to achieve this.

The key intentions for our computing curriculum are to:

• build a computing curriculum that develops pupil's learning and results in the acquisition of knowledge of the world around them;

• design a curriculum with appropriate subject knowledge, skills and understanding as set out in the National Curriculum so that children can reach and exceed their potential in the key strands of information technology, computer science and digital literacy;

• build a computing curriculum that prepares pupils to live safely in an increasingly digital British society;

• prepare pupils for the challenges posed by digital systems in a modern British society.

Implementation

Technology is changing the lives of everyone. Through teaching Computing, we equip children to participate in a rapidly-changing world where work and leisure activities are increasingly transformed by technology. At St. Clare's, teachers plan, teach and assess using the Purple Mash Computing scheme of work. By teaching these progressive units, the pupils gain a knowledge and understanding of all areas of the computing curriculum including digital literacy; computer science; information technology and online safety.

We ensure that all children are provided with rich and stimulating learning experiences that aim to:

• offer our pupils a broad and balanced curriculum that prepares them to use 'computational thinking and creativity to understand and change the world';

• enable pupils to understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation;

• equip pupils to analyse problems in computational terms, and have repeated practical experiences of writing computer programs in order to solve such problems;

• allow opportunities for pupils to evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems;

• empower pupils to be responsible, competent, confident and creative users of information and communication technology.

Impact

Our approach to the curriculum results in a fun, engaging, and high-quality computing education. The children at St. Clare's will leave equipped, not only with the skills and knowledge to use technology effectively and for their own benefit, but more importantly – safely. The biggest impact we want on our children is that they understand the consequences of using the internet and that they are also aware of how to keep themselves safe online. As children become more confident in their abilities in Computing, they will become more independent and key life skills such as problem-solving, logical thinking and self-evaluation will become second nature.

Curriculum planning

The computing curriculum is structured across key stages, ensuring progression in skills, knowledge, and understanding. Purple Mash provides tools for:

EYFS: Early technology skills like using devices, dragging and dropping, and simple problem-solving.

Key Stage 1: Basic coding, understanding algorithms, simple debugging, and e-safety.

Key Stage 2: More advanced coding, understanding variables and loops, multimedia projects, data handling, and further reinforcement of e-safety.

The scheme of work allows for adaptation to meet the specific needs of each class and ensures national curriculum objectives are met.

Teaching and Learning Styles

Computing lessons combine:

Direct instruction on specific skills (e.g., how to use Purple Mash tools).

Inquiry-based learning where students use technology to solve problems.

Group work to encourage collaboration and sharing of ideas.

Independent exploration where students are encouraged to complete open-ended projects.

Lessons are designed to be hands-on and interactive, with opportunities for creative output such as animations, digital art, and storytelling using Purple Mash tools.

Cross-Curricular Links
Computing skills are integrated across the curriculum:

English: Purple Mash's writing tools allow for the development of literacy skills through blog writing, digital storytelling, and collaborative projects.

Mathematics: Data handling tools in Purple Mash help students understand graphs, charts, and statistical data. Coding activities develop logical thinking and problem-solving.

Geography: Using Purple Mash's mapping tools and global learning resources, pupils develop geographical knowledge and digital mapping skills.

Resources
The primary resource for computing is Purple Mash, which provides a wide range of tools, including:

Coding platforms like 2Code.

Multimedia tools for animation, video, and music creation.

Digital art and writing tools.

Data-handling and graphing tools.

Alongside Purple Mash, physical resources such as interactive whiteboards, iPads, laptops, and programmable devices like Micro-bits are also used to support learning.

Health and Safety
Students are taught to use technology safely and responsibly, both in the classroom and at home. Our e-safety policy includes:

Guidelines for safe internet use.

Recognizing potential risks online, such as cyberbullying and inappropriate content.

Secure management of personal data.

Regular audits of the ICT equipment ensure that all hardware and software meet health and safety standards.

Assessment and Recording
Ongoing assessments are made through observations, questioning, and review of pupils' digital portfolios in Purple Mash. Teachers assess:

Pupils' progression in computational thinking and digital literacy.

Ability to apply skills in different contexts.

E-safety understanding.

Extra-Curricular Activities

Computing clubs are offered to extend learning opportunities beyond the classroom. These clubs include:

Online safety and computing club.

Our statement of SMSC

Spiritual, Moral, Social and Cultural development through computing promotes the following:

Spiritual Development:

- Students are encouraged to use technology creatively to express their ideas, thoughts, and feelings.

Moral development:

- E-safety education helps pupils understand the moral implications of online behavior, including respect for others and responsible use of digital content.

Social Development:

- Collaborative projects on Purple Mash foster teamwork, communication, and the sharing of ideas.

Cultural Development:

- Students explore global issues through digital storytelling, research, and multimedia projects, developing an appreciation for diversity and digital citizenship.

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