William Penn
Computing Policy

Rationale

This policy document sets out the schools aims, principles and strategies for the delivery of Computing. The curriculum divides Computing into 3 different aspects: Computer Science (CS), Information Technology (IT) and Digital Literacy (DL). Computing enables pupils to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technology. It equips children to use computational thinking and creativity to understand and be stakeholders in a digital world. Pupils use computing tools to find, explore, program, analyse, exchange and present information responsibly, creatively and with discrimination. They learn how to use computational thinking and creativity to understand and be stakeholders in a digital world. Children are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. As part of the Information Technology strand, children will be equipped to use Computing to create documents and a range of content; ensuring that they become digitally literate by being able to use and express themselves and develop their ideas through Computing. Through Digital Literacy in which pupils will be taught how to collaborate using Computing and how to use the technology safely and responsibly.

Aims

To enrich, develop and support teaching and learning for all pupils through the use of a range of quality electronic media.

Objectives

- In Key Stage One, children understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- In Key Stage 2, children 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.
- Develop pupils individual skills in using a range of hardware and software so as to enable them to gather and manipulate information
- To develop their ability to apply computing skills to their best advantage across the curriculum
- To develop and understand appropriate use of Computing according to circumstances
- To ensure that all children have the opportunity to develop the skills, confidence and enthusiasm to participate in high quality, technology-based learning.
- To provide a wide range of technology-based, creative learning opportunities, both within and outside the curriculum, for all children to participate in.
- To encourage all children to use technology in a responsible manner, understanding the risks associated with internet usage as well as the benefits of learning in a worldwide context.

How Our Objectives Are Delivered

Ethos and Environment

We recognise that all classes will have children with a wide range of prior knowledge, skills and understanding and therefore we use a range of teaching and learning styles in order to ensure that all children, regardless of their ability, are able to participate, enjoy and learn. These include setting open ended tasks that can have a variety of results, grouping children by ability and setting

differentiated tasks, grouping children in mixed ability groups to enable them to learn from one another and providing a range of challenge by varying the resources used. The view points of the children are collated by the subject leader and are used to help develop and improve resources and activities.

Curriculum and Planning

We use the Rising Stars, Switched on Computing which provides a complete coverage of the Programme of Study for computing. As a school we are working to provide all children with opportunities to access Computing discretely and as a tool to enhance all curriculum areas. Computing also plays a major role in staff planning and communications. This facilitates the delivery of an engaging, differentiated and interactive learning environment for pupils of all learning styles.

The subject leader monitors planning annually.

Cross-Curricular COMPUTING

Where possible Computing skills are taught in a cross-curricular context, for example a topic theme may be reflected in the creation of powerpoints, Word documents and e-mails. Computing skills are also used to support learning e.g. Maths Games and websites for learning accessed through the class set of Learn Pads.

Out-of-School-Hours Learning (OSHL)

Through the development of a dedicated school website and a school VLE (Moodle), the school seeks to encourage all stakeholders in future to access the available Computing outside of school hours.

Health and Safety

The school is committed to safe and effective use of all Computing equipment. For example:

- computer network has filters to block unsuitable (or unapproved) sites
- pupils in upper Key Stage 2 are required to sign a 'responsible use of e-mail' agreement
- children are trained in the safe use of cameras and laptops

The governing body expects all staff to set a positive example by adhering to the Approved Use of Computing Policy.

Monitoring and Evaluation

The monitoring of the standards of children's work in Computing is the responsibility of the Computing subject Leader. The work of the subject leader also includes supporting colleagues in the teaching of Computing, being informed about current developments in the subject, working with community links to develop provision and providing a strategic lead and direction for Computing in the school.
The aspects of Computing that are monitored include:

- The knowledge of and attitude towards Computing of children, staff and parents.
- Progress and attainment in Computing
- CPD opportunities for all staff.

The methods of evaluation include:

- Assessing and tracking the achievements of children.

- Reviewing schemes of work.
- Reviewing programmes of activities.
- Discussions with children and staff.

Assessment and Recording

Teachers assess children's work and achievement in Computing through observations during lessons and in saved work in pupils' electronic files of evidence. These observations are then used to plan future lessons. The Rising Stars Switched on Computing provides assessment guidance that enables teachers to identify children's knowledge and skills, and to set targets for progression. This information is provided to parents once a year via their child's annual written report. Pupils are encouraged to be reflective and participate in self-assessment activities.

Resources

Annual bids will reflect current needs within school. The children are expected to help set up and put away the equipment they use in a safe and sensible manner.

All classes are equipped with the following to be used on a regular, if not daily, basis:

- Interactive Whiteboard
- Learn Pads (stored centrally)
- An Ipad
- Audio equipment (Easy Speak voice recorders)
- Digital camera
- Digital video camera
- Digital microscopes (held centrally)

Appropriate technical support is in place; currently provided on weekly basis

Signed:

Date: