

**St. John Fisher Catholic Primary School**

*Growing through God, we learn, laugh and love.*



**COMPUTING POLICY**

In consequence of our school mission, it is a fundamental aim of St. John Fisher to be a school which is: -

Nurturing – so we feel closer to God.

Compassionate – so we will look after others.

Inclusive – so that everyone feels valued.

Inspiring – to reach heights that we thought we never could.

Creative – to use all our talents to the best of our ability.

Active – to live life to the fullest.

Determined – to always learn and discover new things.

### **Policy Statement**

This policy sets out our school's vision, aims, principles and strategies for the delivery of Computing and the use of technology to support the curriculum at St John Fisher. Computing offers unlimited potential for the enhancement of learning and the development of our children. The Computing Policy has been compiled to meet those criteria required by the National Curriculum and relevant Statutory Authorities. It aims to promote a high standard of classroom teaching and pupil learning using good educational teaching practice.

The National Curriculum Purpose of Study states that:

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems, and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

### **Aims**

- To equip children with the skills and attitudes to learn how to use new technologies.
- To develop children's motor skills in the use of hardware such as keyboard and mouse.
- To make children aware of the nature and function of different types of computer hardware and peripheral devices, providing access to PCs, laptops, IPADS, digital cameras, sound recorders, and control technology.
- To enable safe access to the internet.
- To use ICT to further the agenda for personalised learning.
- To develop children's ability to use ICT to further their learning in all areas of the curriculum.
- To provide access for all children to a learning platform which can be accessed in and out of school hours.
- To use ICT to deliver the curriculum in an appropriate and effective way.
- To foster a spirit of independent learning, through the discovery of knowledge and the development of skills, applying these to the whole range of learning.
- To keep up to date with current developments in Computing, including children's real-life experiences of technology and incorporate these into teaching and learning.
- To provide pupils with opportunities to develop Computing capabilities in all areas specified by the National Curriculum and meet National Curriculum requirements.
- To enhance delivery of other areas of the curriculum.
- To allow staff and pupils to gain confidence in, and enjoyment from, the use of ICT.
- Ensure that staff and pupils alike understand the capabilities and limitations of ICT and gain insight into the implications of its development for society

- Allow staff to develop professionally by enhancing their teaching skills, management skills and administrative skills, using ICT to streamline workload.
- To develop logical thinking and problem solving
- To allow pupils to find things out from a variety of sources, selecting and synthesising the information and to develop an ability to question accuracy, bias, and plausibility.

### **Intent**

At St. John Fisher, we aim to prepare our children for a rapidly changing world through the use of technology. Our high-quality computing curriculum is designed to enable them to use computational thinking and creativity to further understand our world. In its design, our curriculum also has deep links with mathematics, science, and design and technology. At the core of our computing curriculum is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, we intend for our children to use information technology to create programs, systems and a range of content. We aim to ensure that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

### **Organisation and Planning**

At Key Stages 1 and 2, the planning, organisation and delivery of the Computing curriculum is supported by Teach Computing Planning, which is inline with National Curriculum Programmes of study. In EYFS, opportunities for the use of technology are an integral part of each area of learning and the school ensures that children have access to both continuous and enhanced provision. Links are made between the EYFS Early Learning Goals and the Y1 curriculum to ensure a smooth transition takes place.

The Teach Computing statements are designed to break the curriculum down into possible ‘themes’ and provide guidance on progression across and between year groups. Using these materials, the school has developed its own flexible scheme of work for Computing which is adapted regularly to allow pupils’ capability to be used effectively in other curriculum areas. In addition, when planning and delivering Digital Literacy and E-Safety, the school uses ProjectEVOLVE. ProjectEVOLVE resources each of the 330 statements from UK Council for Internet Safety’s (UKCIS) framework “Education for a Connected World” with perspectives; research; activities; outcomes; supporting resources and professional development materials. At Key Stages 1 and 2 the school’s Computing curriculum is organised equally into the following 3 aspects:

- Digital Literacy
- Computer Science
- Information Technology

These themes are mapped in a long-term plan for the whole school, with elements of each theme taught in each term. (See School Website.)

### **Teaching and Learning Approaches**

When delivering the National Curriculum for Computing, teachers are expected to employ a range of strategies and to use their professional judgement to decide on the most appropriate teaching and learning approach for the class, groups of pupils or individual pupils.

Approaches and strategies used may include:

- an ‘unplugged’ approach to develop their understanding of some of the underlying concepts of Computer Science.
- ‘plugged’ activities which allow pupils to practise and demonstrate their levels of understanding.
- using presentation technology to demonstrate something to a group of pupils or the whole class.
- leading a group or class discussion about the benefits and risks of technology.

- individual or paired work.
- collaborative group work.
- pupil led demonstrations / peer mentoring. NB - Where one pupil is used to demonstrate or teach a skill to others, the teacher must feel confident that this is of benefit to all those involved.
- differentiated activities planned to allow different levels of achievement by pupils or to incorporate possibilities for extension work.
- teacher intervention where appropriate to support a pupil, reinforce an idea, teach a new point, or challenge pupils' thinking.

### **Cross Curricular Opportunities**

At St John Fisher we try to make meaningful links between Computing and all areas of the curriculum. We feel that Computing is one of the most fundamentally cross curricular subject areas in education. It's about using technology, logic, creativity, and computational thinking to solve problems that cross all disciplines.

### **Equality and SEND Statement**

At St John Fisher Catholic Primary School, we aim to provide equality of opportunity for all children whatever their age, ability, gender, race, religion, or background. We aim to create an environment that values each pupil and enables them to achieve their full potential. We provide a broad and balanced curriculum appropriately differentiated to respond to pupils' diverse learning needs. The opportunities and experiences we provide enable our pupils to participate fully and give their best across all aspects of school life. We place great value on the quality of relationships within our school community and celebrate the achievements of all pupils. Pupils with Special Education Needs benefit from using ICT at St John Fisher, as it enhances access to the curriculum and this in turn encourages motivation and the development of skills ensuring significantly higher achievements. Therefore, ICT will be used to address specific needs, wherever possible.

### **Assessment**

Assessment of the Computing curriculum is carried out in accordance with the advice provided by the Teach Computing Materials. Pupils' progress is assessed and monitored during the year through normal teacher planning and observation. We (will) ensure that:

- appropriate Assessment for Learning approaches are applied to formative assessment to inform future planning.
- pupils' achievement and attainment are assessed and recorded on at least an annual / termly / half termly basis.
- pupils' achievement and attainment are measured against the relevant National Curriculum requirements at the end of each Key Stage and reported according to government guidelines (including statutory requirements for reporting to parents).

### **Reporting**

All children receive an annual written report in which there is a summary of their child's attainment, effort, and progress in Computing over the year. Parent consultation evenings are held three times a year when children's progress in Computing can be outlined and discussed if appropriate.

### **Resources**

Each pupil's access to technology varies greatly dependent on the nature of the activity they are involved in (e.g. some activities benefit from prolonged access to a computer whilst other are best served with brief access to a digital device for a focussed purpose). However, on average, pupils have one hour allocated to Computing each week / half term / term using a mixture of unplugged activities and the following technology:

- ICT Suite
- Laptops

- iPads
- Programming equipment

### **Health and Safety**

Both staff and children are aware of the need for health and safety to be kept in mind when using technology. Signs displaying relevant warnings are displayed around the school and regular attention is drawn to the issue of safe use of equipment. In particular, the following safety issues have been considered when using technology in school:

Comfort - users should be comfortably positioned with easy access to all equipment.

Space - There should be enough space around a workstation including special educational equipment and peripherals.

Seating – this has been chosen so that it is the correct height for knees to fit comfortably under the desk.

Monitors - These should be moved to suit the needs of the users.

Keyboards - Users should have the option to have their keyboard flat or tilted and move it to a comfortable position.

Cables - Are covered and secure. Children are not to connect or unplug electrical equipment.

Digital Projectors – Users are aware that they must not look directly into the light beam emitting from the digital projector.

All pupils are taught to handle equipment correctly and to switch computers on and off using the correct procedures. The dangers of electricity are stressed, and all the above are presented to ensure the pupils respect the equipment and respect other people's work on the computer. All users are also reminded of the need to take regular breaks when using electrical equipment.

### **Monitoring and Evaluation and the role of the Computing co-ordinator.**

The monitoring of the standards of children's work and of the quality of teaching in Computing is undertaken by the Computing subject leader. The work of the subject leader also involves supporting colleagues in the teaching of, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. The Computing subject leader gives the Head Teacher an annual Action Plan in which they state the objectives for the coming year. At the end of the year, these actions are then evaluated and strengths and weaknesses in the subject are highlighted for further improvement in a subject evaluation.

### **Role of the Governors.**

Our governors determine, support, monitor and review the school policies in Computing. In particular they:

- support the use of appropriate teaching strategies by helping to allocate resources effectively
- ensure that the school buildings and premises promote successful teaching and learning
- ensure that high quality staff are appointed
- monitor how effective teaching and learning strategies are in terms of raising pupil attainment through link visits to the school and in consultation with subject leaders
- ensure that staff development and performance management policies promote good quality teaching and learning
- monitor the effectiveness of the school's teaching and learning policies through the school self- review processes. These include reports from subject leaders and the termly Head Teacher's report to governors as well as a review of the in-service training sessions attended by our staff.