St Oswald's Catholic Primary School

Policy for Computing

January 2018

Reviewed March 2021

Computing Policy		
Approved by	Board of Governors	23 March 2021
Next Review Due	March 2022	

1. Rationale and aims

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.

National Curriculum 2014

Our specific Aims for Computing are:

- Ensure a broad and balanced computing curriculum is provided for all children regardless of ethnic origin, gender, class, aptitude or disability.
- Meet the national curriculum requirements for Computing, including the requirements of the Foundation Stage.
- Embed computing across a curriculum that acknowledges its contribution to learning in all other subjects.
- Equip pupils with a progression of computing skills that they can apply both in and out of school.
- Support all staff to make effective use of ICT at a professional level.
- Ensure that children can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- Provide a base from which children can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- To develop pupils' growing awareness of how Computing is used in the world around them and of the benefits that it provides;
- To allow pupils to evaluate the potential of computers and also their limitations;
- To support the use of innovative resources.

2. Roles and Responsibilities

All teaching staff will support the delivery of the Computing curriculum in the following ways:

The Class Teacher will:

- Ensure the safe use of equipment, manage computer access for pupils and actively teach required Computing skills (across the while curriculum)
- To promote a positive image of Computing and ensure pupil's work is purposeful and appropriate and conducted with confidence and enjoyment.

The Computing Co-ordinator will:

- Formulate plans for the use of Computing across the curriculum to enhance teaching and learning in all subject areas.
- Develop use of Computing for planning, record keeping and tracking pupil progress.
- To monitor the work in Computing including assessment and recording. This will involve overseeing the development of a portfolio of exemplar work and assessments.
- Highlight areas for the development of Computing within the School Development Plan.
- Manage the school network with the help of technical support.
- Maintain an up to date inventory of Computing resources and ensure that all staff are aware of how to use the resources, which are available.
- Encourage and lead systematic development of knowledge and skills of teachers, support staff and adult help, to enable them to fully support, access and use Computing.
- Induct new staff to the Computing systems used for teaching and learning.
- Keep abreast of current thinking by reading and attendance at courses.

The Computing Technician will:

- Install and build new computer systems as directed by the Computing Coordinator.
- Evaluate the nature of any technical failures and following discussion with the Computing Coordinator may undertake necessary repairs.
- Support teaching staff in the setting up and organisation of Computing equipment
- Monitor the backing up of files onto server data tapes and will periodically run checks to ensure this process is running correctly.

3. Curriculum coverage and progression

At St Oswald's Catholic Primary School, pupil's entitlement to Computing will consist of Computing taught as a discrete subject and in supporting the broad curriculum. The teaching of a specific skill based programme of study is taught following the Rising Stars Switched On Computing Scheme of work, and supported by the PurpleMash coding scheme of work. The skills learnt will then be used to support teaching of the broader curriculum (e.g. using the internet to research a given topic in history). All children will receive at least 1 hours per week fulfilling the relevant task for that week. In order to ensure delivery of this entitlement, each KS1 and KS2 class has timetabled access to the computing suite.

4. Assessment and Monitoring

Teacher assessments of Computing capability are recorded throughout the year and reported to parents at the end of each academic year. Judgements of attainment should be completed against each unit of study using the Key Objectives for Computing. Formative assessment is used to guide the progress of individual pupils in their use of Computing.This involves identifying each child's progress, determining what each child has learned and what therefore should be the next stage in his/her learning.Additionally, children are encouraged to evaluate their own and others' work in a positive and supportive environment. In order to provide evidence of attainment, pupils should save suitable examples of the work they do within their space on the school network. Regular monitoring of all aspects of Computing informs the subject leader and school development plan/school evaluation form.

5. Learning styles and the learning environment

As in all subjects Curriculum planning should ensure continuity and progression. The school recognises that progression in Computing involves four main aspects:

- The progressive development of pupils' skills, knowledge and understanding
- Breadth of Computing applications
- Increased complexity of contexts in which Computing is applied
- The growing autonomy of the pupil in their learning

Adherence to the Rising Stars SoW and its emphasis upon the acquisition of specific Computing skills will establish an appropriately planned progression of skills and activities across both key stages. At each level, the children are required to use progressively more complex Computing skills and to increasingly make use of the features and capabilities of a software package. The development of the relevant skills, knowledge and understanding requires a progressive experience, from the Early Years and across all major curriculum areas, of using a variety of software in different contexts. Differentiation should be achieved both through differentiated activities and through differentiation of intended outcomes.

6. Inclusion and Equal Opportunities

Computing activities should be planned and recorded to ensure that all children's needs, including SEN and Gifted and Talented, are given the same opportunity to use and develop their skills and knowledge in accordance with the Inclusion policy.

7. Child Protection

Computer networks, including those that may be accessed via the Internet, are an important aspect of information technology education. However, they present possible risks to the spiritual, moral and social development of pupils, particularly in terms of the nature of some of the material, which may be obtained via the Internet. It is essential therefore that pupil use of the network and in particular the Internet is governed by the School Internet Acceptable Use Policy.

8. Internet Access and use of E-Mail

The Internet Acceptable Use Policy will govern access and use of the Internet at school. See Acceptable Internet Use Policy and Google Classroom Code of Conduct.

9.Health and Safety

In order to comply with the school's Health and Safety Policy, the school's equipment is maintained to meet the agreed safety standards. Children are encouraged to use the equipment safely and appropriately by teachers and support staff.

10. Resources

Resources are purchased and deployed effectively to meet the requirement of the Foundation Stage Curriculum and National Curriculum. Staff are consulted as to which software will be effective in teaching all aspect of the curriculum. Priorities are identified in the School Development Plan. Resourcing decisions for future are set out in the Computing Plan. An up to date Resource Register will be maintained by the Computing Co-ordinator, detailing all school hardware by location.Breakdown of hardware provision is currently as follows:

School Now Has A Total of 39 Computers and 10 iPad Minis for children's use	
KEY STAGE 1 (incl. FOUNDATION)	**KEY STAGE 2**
3 classrooms fitted with laptop, internet access, ceiling mounted projector and Smart Board. 4 iPad minis (assessment purposes) 8 Networked computers	4 classrooms fitted with laptop, internet access, ceiling mounted projector and Smart Board. 5 iPad minis (assessment purposes) 16 Networked computers
ADMIN	**Computing SUITE (location only)**
2 Networked computers.	15 Networked computers 1 Network server

Additional hardware Provision includes	
KEY STAGE 1	**KEY STAGE 2**
6 Beebots	

11. Staff Laptop Computers

The use of laptop computers is to allow staff to extend their usage if Computing to the home, allowing staff to be more flexible in their use. A Microsoft Office package is installed, which allows word processing and desktop publishing to be carried out. The computers are covered by the school's insurance policy. The computers are the responsibility of the individual who uses them. The software is licensed to the school, not to the individual user. Also, no software should be installed or used on the computer that has not been installed by the Computing Coordinator.

12. Covid-19

In the case where home learning may take place, such as, class isolation, individual isolation or complete school lockdown, much of the children's learning will take place online. It is the responsibility of the class teacher to ensure that each child has logins for any online platforms that they intend to use e.g. PurpleMash, TTRockstars, MyMaths, etc. If the class teacher is unable to obtain these logins they will contact the Computing Coordinator or Office and these will be provided. The class teacher will set the online work for their class. This must conform to a set time table where learning takes place between 9am and 2pm, including reading, writing, maths, RE and other topic based activities. The class teacher will give feedback to some of the children's work whether on the learning based platform or through email. The class teacher will check their school email daily in order to communicate with parents when necessary.