St. Peter’s Catholic Primary School

# COMPUTING POLICY

*St. Peter’s Catholic Primary School is at the heart of a Christ centred community where every person’s uniqueness is celebrated with joy and truly valued. We foster caring, supportive relationships based on mutual respect and love. We embrace the different communities to which we all belong – home, school and parish, as well as our local, national and global families. When we welcome the child, we welcome the family. We strive for excellence in all we do; to be the best that we can be.*

The following policy statement for computing sets out the aims for achieving a good computing education and how these relate to other curriculum areas and to the overall aims of the school. It is a statement of intention for the immediate future.

## INTENT

• To develop the computing capability of all children appropriate to age and ability.

• To develop ways of communicating, handling data, controlling, modelling and programming.

• To enhance learning in other areas of the curriculum through computing and cross-curricular themes. (Knowledge, skills and understanding)

• To learn to use computing tools effectively, model, measure, and control external events.

• To stimulate an interest in new and developing technologies.

• To teach children that computing is not simply the use of computers but a wide range of technical equipment which provides opportunities for logical and creative thought, investigation and communication.

• To develop a logical progression of thoughts and ideas within computing.

• To enhance children’s ability to independently select programs and processes appropriate for a particular purpose.

**IMPLENTATION**

**THE NATIONAL CURRICULUM PROGRAMMES OF STUDY AND ATTAINMENT TARGETS**

Our teaching is based on the programme of study for Key Stages 1 and 2 as taken from the National Curriculum. The statements of attainment inform our planning and ensure progression. In Nursery and Reception, teaching is based on Early Learning Goals.

**HOW WE PLAN COMPUTING**

In Nursery and Reception, computing activities are planned in order for children to achieve Early Learning Goals. From Year 1 to Year 6 we use the Kapow Computing units of study to plan and deliver computing lessons through a combination of computer software-based activities and practical activities. In addition to the Kapow Computing units of study, Years 5 and 6 use some bespoke unit plans to further enhance and challenge the children within the computing curriculum. The breadth of study strand is implemented into all aspects of computing teaching.

Computing should be covered within all areas of the curriculum as stated in the National Curriculum. At St Peter’s we make cross-curricular links with computing whenever possible. Computing is used in order to achieve literacy and numeracy objectives using a wide variety of different software applications as well as the use of the internet for research. Many different applications are used to support other curriculum areas such as Digi-map, various art packages, scratch when programming in science as well as data logging and presentation software.

**CONTINUITY, PROGRESSION AND RECORD KEEPING**

In order to ensure continuity and progression between years, computing planning and work is monitored by the ICT co-ordinator. Assessment trackers are completed at the end of each topic and individual work is saved on the server for evidence. Each unit of work in each year group has been assessed against end-points which link directly to the National Curriculum to ensure all the appropriate areas of the curriculum are covered whilst at St Peter’s. Each unit of work is enhanced with e-safety lessons in each year group.

**ASSESSMENT**

Continual assessment is built into our teaching through Key Stages 1 and 2 using the Kapow Computing Scheme. Evidence is gathered through a combination of observation, written tasks and saved practical tasks. Ongoing teacher assessment through observations is used to inform future planning and to highlight both strengths and weaknesses in children’s achievement. Assessment is recorded on annotated planning following each lesson. This is used to inform summative assessments at the end of the half term. These assessments are recorded on school’s internal foundation tracking sheets at the end of each unit. In Nursery and Reception assessment is carried out through observations which are recorded using Tapestry.

IMPLICATIONS FOR TEACHING AND LEARNING

Our role in developing effective computing teaching, should encompass the following:

• Provide enjoyable activities.

• Set clear targets which are relevant and relate to everyday experiences (where possible).

• Develop skills, both practical and processing, by offering ample opportunity for pupils to work independently to carry out computing projects and problem-solving activities.

• Groups should be made according to the nature of the task.

• Enable children to succeed at an appropriate level by offering activities differentiated either by outcome, support given or challenge through extension activities.

• Recognise, and be aware of, existing conceptual frameworks which may affect a child’s learning.

• Challenge and consolidate children’s understanding by requiring them to apply it to new contexts.

• Use a range of teaching styles.

RESOURCES

Computing resources include:

* 40 laptops
* 14 I-Pads
* 8 HD cameras
* 17 desktop computers
* 4 printers
* Cache server
* 9 smart interactive touchscreens
* 3 smart whiteboards with projectors
* 16 micro-bit devices
* 1 Raspberry Pi
* A wide variety of software

All children are timetabled to use a bank of laptops through the week. Where appropriate, teachers may block teaching in order to deliver a unit of work across a day or two days.

All of the classrooms within the main school building are networked with one or two PCs.

There are interactive touchscreens in every classroom.

Other technological equipment includes digital cameras, camcorders, multimedia projectors, stop-motion cameras, visualisers, laptop computers, Bee Bots, Knex modelling equipment, CD radio cassette players, fax, photocopier and telephone.

The school is equipped with a managed wireless network throughout.

SAFETY IN COMPUTING ACTIVITIES

All electrical equipment is tested annually for safety by a qualified engineer. Children and staff are encouraged to work safely at all times especially when using the World Wide Web. A unit of work on e-safety is taught across the year from Year 1 to Year 6. See E-Safety policy.

THE INTERNET

Parents and children have completed a home-school agreement in which the guidelines for the use of the Internet in school and the standards of the Internet’s acceptable use were given. Our internet provider has set up filters which will provide restricted access to the internet and from unsuitable websites. A live alert system is in place so that school is informed if there is any attempt to access undesirable content from its devices. Any undesired access will be reported to the computing co-ordinator. See E-Safety policy for further information.

REPORTING TO PARENTS

Children’s computing capabilities and progress will be reported to parents in the annual school report. Parents are regularly informed of e-safety updates via the school newsletter, school website and school leaflets.

THE ROLE OF THE HEADTEACHER

The Headteacher has a vital role in encouraging colleagues to teach effective computing. She has responsibility for ensuring that the policy is being implemented and that it is periodically reviewed and updated.

THE ROLE OF THE COMPUTING CO-ORDINATOR

The co-ordinator will:

• Liaise with staff and support colleagues in the planning and teaching of computing.

• Attend courses to keep abreast of developments in the subject.

• Organise and purchase resources.

SCHOOL WEBSITE

The school website is used to give information about all aspects of school life – including e-safety – not only to parents, but to the wider community.

IMPACT

This policy will ensure that all pupils become fluent and competent in the fundamentals of computing, including the varied and regular practice of increasingly challenging programming over time. Pupils will be enabled to reason logically and set step by step algorithms to solve problems. They will be able to follow a line of enquiry, understanding relationships between different parts of code, and developing efficient coding solutions to problems. Effective teaching will ensure that they can solve problems by applying their computing knowledge with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

This policy should be read in conjunction with other key policies including; assessment, teaching and learning, computing acceptable use, e-safety policy and SEND and equal opportunities.

R. Gould Sep 2022

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