St. John's Catholic Primary School

<u>Computing Policy</u>

"I am the vine, you are the branches."

Introduction

The use of information and communication technology (ICT) is an integral part of the national curriculum and is a key skill for everyday life. It prepares pupils to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technology. We recognise that ICT is an important tool in both the society we live in and in the process of teaching and learning. At St. John's we recognise that pupils are entitled to quality resources and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively. The purpose of this policy is to state how the school intends to make this provision.

Aims

The national curriculum for computing has four main aims to ensure that all pupils:

- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Can analyse problems in computational terms and have repeated practical experience of writing computer programs in order to solve such problems.
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Are responsible, competent, confident and creative users of information and communication technology.

It is the aim of St. John's Catholic Primary School to:

- Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.
- Meet the requirements of the National Curriculum Programmes of Study for Computing.
- Use ICT and computing as a tool to enhance learning throughout the curriculum.
- Instil critical thinking, reflective learning and a 'can do' attitude for all our pupils particularly when engaging with technology and its associated resources.
- Teach pupils to become responsible, respectful and competent users of data, information and communication technology.
- Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves or others.
- Use technology imaginatively and creatively to inspire and engage all pupils, as well as using it to be more efficient in the tasks associated with running an effective school.

Rationale

The school believes that ICT and Computing:

- Gives pupils immediate access to a rich source of materials.
- Can present information in new ways which help pupils understand access and use it more

readily.
- Can motivate and enthuse pupils.
- Can help pupils focus and concentrate.
- Offers potential for effective group working.
- Has the flexibility to meet the individual needs and abilities of each pupil.

Safeguarding: Online safety

Online safety has a high profile for all stakeholders. We ensure this profile is maintained and that pupil needs are met by the following:

- A relevant up-to-date safety curriculum which is progressive from Early Years to the end of Year 6.
- A curriculum that is threaded throughout other curriculum areas and embedded in the day-to-day lives of our pupils.
- Through our home/school links and communication channels, parents are kept up to date with relevant online safety matters, policies and agreements.
- Pupils, staff and parents have Acceptable Use Policies which are signed and copies available.
- Our online safety policy (part of our safeguarding policy) clearly states how monitoring of online safety is undertaken and any incidents/infringements to it are dealt with.
- Filtering and monitoring systems for all our online access.
- Data policies which stipulate how we keep confidential information secure.

Curriculum

As a school, we have chosen the Purple Mash Computing Scheme of Work from Reception to Year 6. The scheme of work supports our teachers in delivering fun and engaging lessons which help to raise standards and allow all pupils to achieve their full potential. We are confident that the scheme of work more than adequately meets the national vision for Computing.

Early Years Foundation Stage

It is important in the Early Years Foundation Stage to give children a broad, play-based experience of ICT in a range of contexts, including outdoor play. ICT is not just about computers. EYFS learning environments should feature ICT scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to 'paint' on the ActivPanel or programme a toy. Recording devices can support children to develop their communication skills. This is particularly useful with children who have English as an additional language.

Key Stage 1

By the end of key stage 1 pupils should be taught to:

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following a sequence of instructions.

- Write and test simple programs.
- Use logical reasoning to predict the behaviour of simple programs.
- Organise, store, manipulate and retrieve digital content.
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

Key Stage 2

By the end of key stage 2 pupils should be taught to:

- Design and write 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; generate appropriate inputs and predicted outputs to test programs.
- Use logical reasoning to explain how a simple algorithm words and to detect and correct errors in algorithms and programs.
- Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration.
- Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Assessment

Pupil attainment is assessed using the 2Simple Computing Assessment Tool for Years 1 to 6. The tool enables staff to accurately identify attainment of pupils through the detailed exemplification it has for each key learning intention.

Resources

ICT and computing network infrastructure and equipment has been sited so that:

- Every classroom has a laptop connected to the school network and an ActivPanel with sound, DVD and video facilities. Each classroom also has an additional staff laptop and mini iPad.
- There are 3 laptop trolleys containing 16 laptops each, these are shared between classes in each phase across the school.
- There are 16 iPads, which are for class use to support learning across the curriculum as well as part of computing lessons.
- School currently subscribes to Espresso which provides a huge library of cross-curricular, digital resources for use in the classroom at all levels across the school.
- School currently subscribes to Education City which provides English, Mathematics and Science activities for all key stages.

Inclusion

Children with special educational needs or a disability will be entitled to the same access to ICT as their peers. In planning lessons teachers will identify the learning outcomes for the majority of children as well as extension activities for the more able. Consideration will be given to modifying the task, or providing peer or adult support, for children with difficulties. It is important to note that children with learning difficulties may achieve well in ICT and should be given the opportunity to provide support for others.

Health and Safety

The school is aware of the health and safety issues involved in children's use of ICT. All electrical appliances in school are tested accordingly. It is advised that staff should not bring their own electrical equipment into school but if this is necessary, then the equipment must be pat tested before being used in school. This also applies to any equipment brought into school by, for example, people running workshops, activities, etc. and it is the responsibility of the member of staff organising the activity to advise those people. All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the Computing Lead, Technician or Head Teacher who will arrange for repair or disposal.

Monitoring, Evaluation and Feedback

Monitoring will be achieved through:

- Work scrutiny.
- Learning walks.
- Observations.
- Pupil voice.
- Teacher voice.
- Reflective teacher feedback.
- Learning environment monitoring.

Evaluation and Feedback will be achieved through:

- Using recognised standards documentation for end-of-year expectations.
- Using recognised national standards for benchmarking Computing provision in primary schools.
- Written feedback on evaluation of monitoring activities to be provided.
- Feedback on whole school areas of development regarding Computing to be fed back through insets/AOB/staff meetings.

Policy date: October 2018