**St Jerome’s Catholic Primary School**

**Computing Policy**

**Intent**

Within an ever changing and technological world, St. Jerome’s Catholic Primary School understands and values the importance of teaching Computing from a young age. We acknowledge that future generations will rely heavily on their computational confidence and digital skills in order to support their progress within their chosen career paths.

Therefore, it is our school’s aim to equip children with the relevant skills and knowledge that is required to understand the three core areas of Computing (Computer Science, Information Technology and Digital Literacy) and to offer a broad and balanced approach to providing quality first teaching of this subject. Computing is an integral part to a child’s education and everyday life. Therefore, we intend to support our pupils to access and understand the core principles of this subject through engaging and cross-curricular opportunities.

Computing and ICT are an integral part of daily life for children at St. Jerome’s Catholic Primary School. We envision that children become confident and capable users of technology who are able to develop their skills, knowledge and understanding of a range of technologies.

Children at St. Jerome’s are taught to use technology responsibly and carefully, being mindful of how their behaviour, words and actions can affect others.

Our children are taught Computing in a way that ensures progression of skills and follows a sequence to build on previous learning.

Children at St. Jerome’s will gain experience and skills of a wide range of technology in a way that will enhance their learning opportunities, enabling them to use technology across a range of subjects to be creative and solve problems, ensuring that they make progress.

**Implementation**

We follow a broad and balanced Computing curriculum that builds on previous learning and provides both challenge and support for learners. We follow the Purple Mash Computing Scheme of Work. The Computing Scheme ensures the progression of skills and covers all aspects of the Computing curriculum. Some aspects of digital literacy, with a focus on online safety, are covered in PSHE lessons as well as through theme days and whole school assemblies.

* Computer Science– the understanding of coding and programming across a range of physical devices and digital resources.
* Information Technology– the range of skills required to operate and manipulate specific programs, systems, and content.
* Digital Literacy– the knowledge required to use technology safely and to evaluate and react to any potential risks of the online/digital world.

All classes in KS1 and KS2 have a scheduled Computing lesson each week. In Reception (EYFS) weekly Computing activities are provided through continuous provision and planned for via focussed tasks.

We want to ensure that Computing is embedded in our whole school curriculum and that opportunities for enhancing learning by using technology are always taken.

The Curriculum overview document (Appendix 1) shows which Purple Mash units cover each of the National Curriculum attainment targets as well as each of the strands.

The Progression of skills document (Appendix 2) shows the skills that are taught within each year group and how these skills develop to ensure that attainment targets are securely met by the end of each key stage.

Knowledge organisers for each unit support pupils in building a foundation of factual knowledge by encouraging recall of key facts and vocabulary.

Children’s work is stored within individual and class folders on the Purple Mash Cloud and Google Drive for reference and assessment.

**Impact**

Our children enjoy and value Computing and know why they are doing things, not just how. Children are taught to understand and appreciate the value of Computing in context of their personal wellbeing and the technological, creative and cultural industries and their many career opportunities.

Progress in Computing is demonstrated through regularly reviewing and scrutinising children’s work to ensure that progression of skills is taking place. Namely through:

* Looking at pupils’ work, especially over time as they gain skills and knowledge
* Observing how they perform in lessons
* Talking to them about what they know.

The Computing curriculum will contribute to children’s personal development in creativity, independence, judgement and self-reflection. This would be seen in them being able to talk confidently about their work and sharing their work with others.

Progress will be shown through outcomes and through the important record of the progress leading to them.

**Safeguarding: Online safety (See the School Safeguarding Policy)**

Online safety has a high profile at St. Jerome’s. We ensure that this is maintained and that pupils’ needs are met by the following:

* A relevant up to date online safety curriculum which is progressive from EYFS to Year 6.
* Through our home/school links and communication channels, parents are kept up to date with relevant online safety matters, policies and agreements. They know who to contact if they are concerned.
* Up to date training for staff and governors.
* Pupils and staff have Acceptable Use Policies which are signed and copies are available.
* Our online safety policy (part of our Safeguarding Policy) clearly states how monitoring of online safety is undertaken and any incidents/ infringements are dealt with.
* Filtering and monitoring systems for all our online access.
* Data policies for 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 to their full potential. We are confident that the scheme of work more than adequately meets the national vision for Computing. It provides immense flexibility, strong cross-curricular links.

**EYFS**

We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts. In Reception the learning environment features ICT scenarios based on experience in the real world, such as in role play. Pupils gain confidence, control and language skills through opportunities to use the interactive board and control remotely operated toys. Outdoor exploration is an important aspect supported by ICT toys such as metal detectors and walkie-talkie sets.

**Key Stage 1 Outcomes**

* 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
* Organise, store, manipulate and retrieve data in a range of digital formats.
* Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

**Key Stage 2 Outcomes**

* 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 works 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 2 Simple Computing Assessment Tool and the Balance assessment Tool for Years 1to 6. Balance enables staff to accurately identify attainment of pupils through the detailed exemplification for the detailed exemplification it has for each learning intention.

Teachers keep accurate records of pupil attainment by entering data using the Balance assessment tool. Tracking attainment through Balance is used to inform future planning.

Formative assessment is undertaken each session/interaction in Computing and pupils are very much encouraged to be involved in that process. Through using the progression of skills documents and the Balance Wheel, both teachers and pupils can evaluate progress. Features such as preview and correct in Purple Mash can be used to further support feedback and assessment.

Summative assessment is undertaken using samples from children’s portfolios on Purple Mash, teachers enter judgements about the samples into the Balance Assessment Tool.

Children are encouraged to self, peer and group assess work in a positive way using collaborative tools such as 2Blog in Purple Mash. Work from a range of classes and abilities is shared using the Noticeboard feature in Purple Mash.

**Resources**

A range of resources is available which successfully supports delivering the Computing curriculum and enables all learners to reach their full potential. Resources are suitably maintained and replenished when needed, which is overseen by the Computing Leader.

Each classroom at St. Jerome’s is equipped with 3 PCs, a Class iPad and a Prowise interactive screen. In addition to this we have a Computing Room which houses 30 iPad (in a charging trolley) 15 Windows laptops and 12 Chromebooks (in a charging trolley). The laptops, Chromebooks and iPad are used in the Computing Room or in individual classrooms. An itemised list of all resources is shared with staff and kept up to date by the Computing Leader.

**Inclusion**

At St. Jerome’s, we aim to enable all children to achieve to their full potential. This includes children of all abilities, social and cultural backgrounds, those with disabilities, EAL speakers and SEN children.

We place particular emphasis on the flexibility technology brings to allowing pupils to access learning opportunities, particularly pupils with SEND. With this in mind, we will ensure additional access to technology is provided throughout the school day.

**Monitoring, Evaluation and Feedback**

Monitoring standards of teaching and learning within Computing is the primary responsibility of the Computing Leader. All teachers are expected to track children’s work using Purple Mash.

Monitoring will be achieved through: work scrutiny, learning walks, observations. pupil voice, teacher voice, reflective teacher feedback, learning environment monitoring and dedicated Computing Leader and Assessment Leader time.

**Evaluation and Feedback will be achieved through**:

Dedicated Computing Leader and Assessment Leader time, 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 by the Computing Leader in a timely manner, and feedback on whole school areas of development in regard to Computing to be fed back through staff meetings.

**Role of the Subject Leader**

The coordination and planning of the Computing curriculum are the responsibility of the subject leader, who also:

* keeps colleagues and school governors informed about developments in Computing and provides a strategic lead and direction for the subject by keeping abreast with the latest educational technology initiatives;
* keeps own CPD up-to-date and regularly feeds back to colleagues;
* discusses progress with the Head Teacher and evaluates strengths and weaknesses in Computing
* reviews the success of the Purple Mash Computing scheme and reviews evidence of children’s work;

Updated: July 2022

Agreed by Governors:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Next Review: July 2023