Our Lady and St Philomena's Catholic Primary School
Computing Policy

Approved by:	**Governing Body**	**Date: September 2024**
Last reviewed:	**September 2024**	
Next review due by:	**September 2025**	

Rationale

The Computing curriculum at Our Lady and St Philomena's is aimed at ensuring that our pupils are digi-natives who have a love of computing and see themselves as achievers who can use technology for the improvement of their world and seek employment in the digital world of the future.

Curriculum Intent

Through our computing curriculum we want to arouse curiosity and a thirst for learning so that our pupils:

- Learn how computer systems work.
- Learn how to create and manipulate computer systems.
- Develop analytical, problem-solving and critical thinking skills.
- Apply the approaches that they learn in computing to tackle real-life problems.
- Develop their creativity in their use of information and communication technology.
- Expand their initiative and lateral thinking skills.

Curriculum Implementation

The computing curriculum is reviewed in the Summer term of each academic year in readiness for the following year. Learning opportunities are fine-tuned and the Subject Lead works with the Senior Leadership Team of school to identify progress milestones across the various strands of the subject. Teachers ensure progression and repetition of key skills to embed key learning and subject knowledge. The specific skills that our computing curriculum is aimed at encouraging, and that progress is measured against, are:

- Digital Literacy;
- eSafety and use of the Internet;
- Computer science.

Curriculum Impact

Termly assessment is carried out by staff to measure the progress of students within a year group and across year groups and to identify those pupils who made need extra support. The progress statements for the subject are matched to year group expectations so that teachers can easily identify what pupils need to achieve to move to the next step.

We want our pupils to set themselves very high aspirations and constantly remind them of the further education and career prospects that are open to them if they succeed in this subject.
Pupils could consider studying computer science at university to begin a computer science career in roles such as:

- Computer programming
- Software engineering
- Website/app design/development
- Computer game development
- Cybersecurity

THE OBJECTIVES OF COMPUTING

Our Lady and St Philomena's believes that every child should have the right to a curriculum that champions excellence; supporting pupils in achieving to the very best of their abilities. We understand the immense value technology plays not only in supporting the Computing and whole school curriculum but overall in the day-to-day life of our school.
We believe that technology can provide: enhanced collaborative learning opportunities; better engagement of pupils; easier access to rich content; support conceptual understanding of new concepts and can support the needs of all our pupils.

Our aims:

- Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.
- Enthuse and equip children with the capability to use technology throughout their lives.
- Give children access to a variety of high quality hardware, software and unplugged 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.
- Provide technology solutions for forging better home and school links.
- Utilise computational thinking beyond the Computing curriculum.

THE DELIVERY OF COMPUTING

At Our Lady and St Philomena's Computing is delivered once a week. We follow Kapow Primary Scheme for Computing as this allows for progression with each year group and across the Key Stages.
Using Kapow utilises Chromebooks, iPads and offline Computing discussions. Work is evidenced on Seesaw weekly, either by children uploading work or a photograph from the teacher. Assessment is formative and consists of a starting assessment and an end of unit assessment to show improvement over the unit.

COMPUTING CURRICULUM PLANNING

As a school, we have chosen the Kapow Computing Scheme of Work from Year 1 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 and integrates perfectly with real world Computing scenarios. Furthermore, it gives excellent supporting material for less confident teachers.

Early Years

We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts.
We believe the following:

- Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in roleplay.
- Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys.
- Outdoor exploration is an important aspect, supported by ICT toys such as metal detectors, controllable traffic lights and walkie-talkie sets.
- Recording devices can support children to develop their communication skills. This is especially useful for children who have English as an additional language.

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

Teachers assess pupils by observing them during lessons and intervene to address misconceptions at the earliest opportunity. They use the information gathered during such observations to inform their planning/recap for the next lesson.

Children are encouraged to assess and evaluate their own work throughout units via the commenting tool when they hand in work on Seesaw. This helps them to appreciate how they can improve their performance and set targets for themselves for the future.

We assess pupils' learning which is specific to Computing on a termly basis by reference to the Kapow assessment at the end of each unit. It is important to know that learning has progressed from pupils starting points at the beginning of topics and from year to year. Information is passed on to the next teacher at the end of each year and is reported to parents in the end of year report.

COMPUTING IN RELATION TO OTHER CURRICULUM AREAS

Computing plays a key role in our teaching at Our Lady and St Philomena's and links across all other curriculum areas, in particular with Mathematics, Science and Design technology and provides insights into both natural and artificial systems. E-safety is also an important part of PSHE. Throughout all subjects, children will have opportunities to gain skill, knowledge and understanding in the following areas:

- Finding things out, gathering information from a variety of sources, entering, storing, and retrieving information.
- Developing ideas and making things happen through text, tables, images and sound,
- Selecting and adding to information by planning and giving instructions to make things happen,
- Exchanging and sharing information sharing ideas and presenting information in different forms, to best effect,
- Reviewing, modifying and evaluating work.

iPads and Computers are also used in English and Foundation subjects to develop research skills and create digital projects to showcase learning or trial out a new skill such as digital map reading in Geography.

Where possible the Computing curriculum links to Education in a Connected World to ensure that digi-natives are being taught how to live in their connected world.

Seesaw Usage

We use Seesaw to document this type of learning. Seesaw is a platform for class teachers and children to share their learning, since COVID we have introduced parents/carers to showcase learning, these posts can also be made private if needed be. Seesaw also enables children the chance to follow the etiquette of Social Media in a safe and controlled environment as all communication is monitored by the teacher. Mrs Sheriff is our designated Seesaw Educator, she undertakes yearly training to keep this status.

E-Safety (For a full breakdown see E-Safety Policy)

We live in a digital age where technology is playing an ever increasing part in our lives; it is changing the way that we do things both inside and outside of school and although we recognise the benefits of technology we must also be

aware of the potential risks and ensure that all staff, pupils and parents/carers associated with the school are able to use technology in a safe and responsible manner.

Some of the potential dangers of using technology may include:

- Access to illegal, harmful or inappropriate images or other content
- Unauthorised access to/loss of/sharing of personal information
- The risk of being subject to grooming by those with whom they make contact on the internet.
- The sharing/distribution of personal images without an individual's consent or knowledge
- Inappropriate communication/contact with others, including strangers
- Cyber-bullying
- Access to unsuitable video/internet games
- An inability to evaluate the quality, accuracy and relevance of information on the internet
- Plagiarism and copyright infringement
- Illegal downloading of music or video files
- The potential for excessive use which may impact on the social and emotional development and learning of the young person.

Many of these risks reflect situations in the offline world but it is important that as a school we have a planned and coordinated approach to ensuring that all involved with the school use technology in a safe and responsible way. As with all risks it is impossible to eliminate them completely but with a planned and coordinated approach they can be significantly reduced and users can be taught to manage them effectively.

The school have adopted the PIES model which is the basis of it approach towards E-Safety and helps to manage and minimise its risk.

PUPIL VOICE

Pupils have been involved in the creation of this policy through discussions with the school council. They are involved in the delivery of each topic when teachers explore the pupils' prior learning at the beginning of new topics.

INCLUSIONS AND DIFFERENTIATION

At Our Lady and St Philomena'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 SEND.
We place particular emphasis on the flexibility technology brings to allowing pupils to access learning opportunities, particularly pupils with SEN and disabilities.

COLLABORATION WITH PARENTS AND CARERS

We are committed to working with parents and carers in Computing. We offer support and advice via our school website.

This policy will be reviewed annually