St. Cecilia's Catholic Primary School

COMPUTING POLICY

Computing Lead:

Mrs Lorne

"Alan Turing gave us a mathematical model of digital computing that has completely withstood the test of time. He gave us a very, very clear description that was truly prophetic."

George Dyson

Mission Statement

Rooted in gospel values St Cecilia's Catholic School Community lives together, learns together, loves together.

Rationale:

Computing: Computing at St Cecilia's Catholic Primary School, is to provide children with the essential skills and knowledge to be successful and responsible digital citizens.

Computing is an integral part of everyday life and will play an immeasurable part in our children's futures. Through our curriculum we aim to prepare our children for the rapidly developing and ever-changing technological world. It is essential that all pupils gain the skills, confidence and ability to use technology safely and responsibly.

We will provide opportunities to enable children to access the most effective and emerging technologies; through computing lessons and cross-curricular teaching. This will enhance and extend children's learning across the whole curriculum, whilst fostering their creativity and passion for Computing.

Aims: The aims of Computing in our school are to:

- prepare our children for the rapidly developing and ever-changing technological world
- develop children's knowledge and understanding of computing skills in age-appropriate ways
- develop and extend children's skills on the four strand of computing: data, computer science, multimedia and digital literacy
- enable children to develop their own computational thinking through making and developing their own algorithms/programs.
- Use technology as a tool across the curriculum to support learning
- Promote staying safe when children access the online world.

Curriculum

Computing is highly supported from an outside provider 'Hi-Impact', with specialist teachers and experts in the computing field to teach specific computing skills. We have access to our TIC (Tech Integrator Consultant) providing teachers with continuous professional development if they require it (CPD), through this, the company is able to provide children with access to the latest technology that emerges continuously.

Our planning is provided by our provider 'Hi-Impact' who have planned in accordance with national curriculum statuary requirements. Computing is taught through topics and as stand-alone lessons to ensure coverage/progression of the skills and knowledge across years' groups is covered.

A variety of teaching and learning methods are used to teach computing, including:

- Whole class teaching (acquiring knowledge)

- Group work (investigations, collaboration, support and teamwork)
- Independent work (problem solving and fostering creativity)
- Through other aspects of the curriculum

Teachers continually use formative assessment, which is carried out informally throughout the year, will be used to identify pupils' understanding of the subject and inform lesson planning. This is used alongside Code Studio which is program used for children to access Coding lessons. This assesses the children's skills and knowledge throughout each lesson.

Subject Content

All pupils in the EYFS are taught Computing as an integral part of the play-based learning covered during the academic year.

All Computing objectives within the EYFS are underpinned by the following three prime areas outlined in the 'Statutory framework for the Early Years Foundation Stage':

- Communication and language
- Physical development
- Personal, social and emotional development

There are four specific areas through which the three prime areas are strengthened and applied:

- Literacy
- Mathematics
- Understanding the world
- Expressive arts and design

The Computing curriculum in EYFS focuses on the specific areas of making things happen and sharing their ideas creatively.

Pupils will be taught to:
•Safely and appropriately use and explore a variety of apps and software to make things happen virtually on screen or with physical devices such as robots.

•Represent their own feelings through art, as well as music, dance, role play, storytelling and computing apps and software.

Key Stage 1:

Key Stage 1 pupils will:

- Be taught knowledge, understanding and skills needed understand fundamentals principles of computer science including abstraction, logic, algorithms and data representation

- Work in a range of relevant contexts to evaluate and apply information technology to solve programs including new or unfamiliar technologies,

- Become more responsible; and competent users of technology

Key Stage 2:

Key Stage 2 pupils will:

- Be taught knowledge, understanding and skills needed understand fundamentals principles of computer science including algorithms and logic
- Analyse problems in computational terms,
- Work in a range of relevant contexts to evaluate and apply information technology to solve programs
- Become are responsible, competent, confident and creative users technology

Resources

Our school has a wide range of resources to support teaching and learning, it is equipped with: Chromebooks, laptops and IPADs for children to use during lessons. Digital leaders are chosen in every class to look after this equipment, to ensure it is plugged in to charge at the end of every day – ready for the next day.

IT Technicians

Our school uses 'Hi-Impact' who supplies us with an IT technician to support us.
Their role includes:

- Dealing with hardware, software and technical queries
- Carrying out routine maintenance
- Auditing equipment
- Ordering and replacing equipment
- Supporting teachers and staff members with IT issues

TIC (Tech Integrator Consultant) enables teachers to access CPD when they require it and children have access to gain the skills and knowledge needed to progress in their learning.

Subject Leadership

The computing subject leader takes responsibility for leading, monitoring the standard of teaching and learning in Computing across the school. The lead supports colleagues across the school in teachings of Computing, keeping up to date with relevant technology and current developments in the subject. As well as identifying needs for CPD, communication with our outside provider and provides a strategic lead in driving improvement for the subject.

The lead also shares responsibility to safeguard children and promote online safety across the school. This is through school assemblies, coordinating yearly events for 'Safer Internet Day' celebrated in February and in lessons taught throughout the year. Additionally, through sharing new and current updates for parents to keep children safe whilst online at home, on our school website, X and newsletters.