

St Leo's and Southmead Catholic Primary School
Serving the Community

Computing Policy

Our Mission Statement

*In our school, we want to celebrate God's gift of life together; by
inspiring, enhancing and developing tomorrow's talent, today!
We respect all; aiming to achieve and live our values.
A place to allow everyone to flourish.*

SAFEGUARDING STATEMENT

Safeguarding and promoting the welfare of children is defined for the purpose of this guidance as:-

- Preventing children from maltreatment
- Preventing impairment of children's health or development
- Ensuring that children grow up in circumstances consistent with the provision of safe and effective care and
- Taking action to enable all children to have the best outcomes.

PROMOTING BRITISH VALUES AT ST LEO'S AND SOUTHMEAD
CATHOLIC PRIMARY SCHOOL SERVING THE COMMUNITY

At St Leo's and Southmead Primary School we aim to help, guide and prepare our children as future citizens. As our Mission Statement says, our school is "A place to allow everyone to flourish!" This statement permeates everything that we do in school and captures what British Values are about:-

- Democracy
- The Rule of Law
- Individual Liberty
- Mutual Respect
- Tolerance of those of different faiths and beliefs.

We grasp every opportunity throughout the school day to teach, model and show by examples all of the above. We have provided further information on our school website. We are proud of our school and are proud of the British Values that we live and learn about.

Spiritual, Moral, Social and Cultural Development

St Leo's and Southmead Catholic Primary School is committed to developing pupil's spiritual, moral, social and cultural awareness. Computing makes a contribution to the teaching of SMSC as children learn to work together in a positive manner. They develop a sense of global citizenship by using the Internet and e-mail.

Through discussions relating to electronic communication and E-Safety children develop a view about the use and misuse of Computers. Video clips and software is also used which will help the children view different social situations. Children tackle important issues around safety on the internet and cyber bullying.

“A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.”

(National Curriculum 2014)

The 2014 national curriculum introduces a new subject, computing, which replaces ICT. This represents continuity and change, challenge and opportunity to provide an even more exciting and rigorous curriculum that addresses the challenges and opportunities offered by the technologically rich world that we live in.

We strive to ensure that are young people are equipped with the foundational skills, knowledge and understanding of computing they will need for the rest of their lives. Through the New Curriculum, children will find out how computer systems work, they will design and build programs, develop their ideas using technology and create a range of content.

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 precise and unambiguous instructions

- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Key stage 2

Pupils should be taught to:

- design, write and debug 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
- use logical reasoning to explain how some simple algorithms work 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
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

The Essential Characteristics of Effective Coders and Users of Technology

- Competence in coding for a variety of practical and inventive purposes, including the application of ideas within other subjects.
- The ability to connect with others safely and respectfully, understanding the need to act within the law and with moral and ethical integrity.
- An understanding of the connected nature of devices.

- The ability to communicate ideas well by using applications and devices throughout the curriculum.
- The ability to collect, organise and manipulate data effectively.

(Chris Quigley Education Ltd 2013)

Teaching and learning style

Teachers are expected to employ a range of strategies and to use their professional judgement to decide on those most appropriate to cater to all learning styles and across all abilities within their class. Such strategies could be:

- using the computer to demonstrate to a group of pupils or the whole class
- leading a group or class discussion about the benefits and limitations of Computing
- individual or paired work
- co-operative activities in groups.
- individual work

Equal Opportunities

We recognise that all classes have children with widely differing Computing abilities. This is especially true when some children have access to Computing equipment at home, while others do not. We provide suitable learning opportunities for all children by matching the challenge of the task to the ability and experience of the child. We achieve this in a variety of ways by:

- setting common tasks which are open-ended and can have a variety of responses;
- setting tasks of increasing difficulty (allowing children to progress at their rate);
- grouping children by ability in the room and differentiating tasks for each ability group;
- providing resources of different complexity that are matched to the ability of the child;
- using classroom assistants to support the work of the individual children or groups of children.

Curriculum planning

When planning teachers in both Key Stage 1 and Key Stage 2 follow the National Curriculum 2014. For computing, these objectives have then been broken down into individual units of work by Knowsley CLC. Teachers then plan incorporating all of the above.

The long term plan maps the Computing topics that the children study in each term during each key stage. The Computing subject leader works in conjunction with teaching colleagues in each year group and the children study computing as part of their work in other areas. Our long term computing plan shows how teaching units are distributed across the year groups, and how these fit together to ensure progression within the curriculum plan.

Foundation stage

Computing is taught in reception and nursery as an integral part of the work covered during the year. As the reception class and nursery are part of the foundation stage of the National Curriculum, we relate the Computing aspects of the children's work to the objectives as set out in the E.Y.F.S Curriculum.

Computing across the curriculum

Wherever possible, teachers will use Computing across the curriculum in creative and diverse ways to enrich and excite. Computing contributes to teaching and learning in all curriculum areas. For example, graphics work links in closely with work in art, and using databases supports work in mathematics, while the Internet proves useful in curriculum subjects. Computing enables children to present their information and conclusions in the most appropriate way.

Assessment and recording

Assessing computing work is an integral part of teaching and learning and central to good practice. It should be process orientated - reviewing the way that techniques and skills are applied purposefully by pupils to demonstrate their understanding of the concepts of Computing. By the end of each Key Stage, pupils are expected to know, apply and understand the matters, skills and processes outlined in the relevant programme of study.

Resources

Our school has a number of resources to support the teaching and learning of Computing. These include :

Laptops
iPads (12 plus 10 hired)
Smartboards
Cameras
Video cameras
Listening centres
Bee bots
Pro bots
Mp3 players

Monitoring and review

The monitoring of the standards of the children's work and of the quality of teaching in Computing is the responsibility of the Computing subject leader. The Computing subject leader is also responsible for supporting colleagues in the teaching of Computing.

This policy will be reviewed in October 2018

Signed _____ October 2017