

**St Leo's and Southmead Catholic
Nursery and Primary School**



Nurture, Inspire, Succeed

**Computing Policy
2022-2023**

As part of the St Leo's and Southmead family; our children are happy, resilient and successful. Our school community is enriched by positive role models who nurture and support; delivering a curriculum which embraces memorable opportunities and lifelong skills.

Our Promise

Nurture



We will provide a safe, warm and welcoming environment where everybody is valued

We will develop the whole child through our pastoral approach where inclusive attitudes are modelled every day

Inspire



We will celebrate the skills, talents and natural abilities of everybody in our school community

We will deliver exciting and memorable learning opportunities through our creative curriculum in order to provoke thoughts, dreams and life-long goals

Succeed



We will guide our children so that they are eager to exceed their full potential in all that they do

We will encourage confidence and risk taking through quality first teaching, effective feedback and challenge

Our Values

*Everybody is valued
We are all role models
Talents are celebrated
We never give up*

(Pending governor approval)

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. Our mission 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)

National Curriculum Aims in Computing

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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

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;
- grouping in mixed ability and working together on tasks;
- 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.

The Computing Scheme of Work

The Knowsley Computing Scheme is a curriculum that meets the needs and interests of all learners. It contains a range of fun, exciting and creative activities, all based on the essential requirements of the computing program of study. It ensures full coverage of the National Curriculum and allows for a broad and deep understanding of the three areas of Computing: Computer Science, Information Technology and Digital Literacy.

The Teaching Model

The termly units are organised into a series of hour long whole-class lessons, with the children working together on the same lesson content at the same time. Every unit have reflection and assessment points, which ensures that all children can process and articulate the concepts within the lesson before moving to the next activity, with no pupil left behind. The children create their own digital learning journals that record their understanding and tell their own story of the content they create.

The Computing units and progression model is broken down into four strands that make up our computing curriculum. These are Essential Skills, Computer Science, Information Technology and Digital Literacy.

Essential Skills: ensure the children have the core basic skills to use multiple devices, this is designed to promote independence.

Computer Science: underlines the knowledge and skills relating to computational thinking, coding, algorithms and networks.

Information Technology: underlines the knowledge and skills relating to digital communication, creating multimedia content and data representation/handling.

Digital Literacy: underlines the knowledge and skills relating to online safety and technology in society.

We participate in annual events such as safer Internet day and anti-bullying week.



Planning and Delivering the Lesson

When planning, teachers are able to ensure that children can build on their understanding, as each new concept is taught with opportunities for children to consolidate and reapply their skills and knowledge throughout the year. Each computing unit is planned to provide new challenges and variety, to ensure we keep the child's interest at a maximum. There is a strong emphasis on improving computing/digital vocabulary, core fundamental digital skills and computational concepts.

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. The Reception class also looks at the Knowsley scheme of work when suitable throughout the year.

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.

Children's portfolios of work are saved. This forms a record of progression and the tasks achieved, as they move from class to class.

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. The coordinator will observe lessons as part of the subject monitoring timetable.

Subject Leader Roles and Responsibilities

- Take a lead in policy development
- To have an impact on raising standards of attainment for Computing across the whole school.
- Ensure the correct implementation of the National Curriculum for Computing.
- To monitor teaching and learning throughout the school and provide feedback to develop practice.
- Take responsibility for the purchase of resources and renew any subscriptions
- Keep up to date with developments in Computing education and disseminate information to colleagues through INSET days and staff development meetings.
- Monitor knowledge organisers
- Write progression maps (skills and knowledge)
- Keep aware of new developments, through reading and social media
- Be aware of standards in Computing across the school
- Keep website up to date

This policy will be reviewed in September 2023

Signed J McIntyre