Sleights Church of England
(Voluntary Controlled) Primary School

Computing Policy

July 2023

*This policy was reviewed following careful consideration of the Computing curriculum review, Covid-19 and its implication on the curriculum delivery.

Working together to be happy; to flourish; to succeed
through our Christian values
perseverance, respect and **trust.**

Computing at Sleights

"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."

The National Curriculum for Computing in Key Stage One and Two, 2014

The teaching of Computing at Sleights is underpinned by the ongoing development and acquisition of knowledge and skills. This development and acquisition occurs as a result of our own school's curriculum sequence and progression, which maps out the core knowledge and skills children need to be highly effective sports people.

About this policy

This policy intends to outline the policy and procedure for teaching and learning in Computing at Sleights Church of England (Voluntary Controlled) Primary School.

In our Church school, our vision is to "work together to be happy; to flourish; to succeed". This policy intends to outline how our whole school community lives this out in relation to curriculum planning and learning in Computing. The key aspects of this policy were established through "working together", as it has been written through consultation with staff and governors. The teaching of Computing is enhanced at Sleights through highly effective collaboration and "working together" through professionals and excellent hardware and software. Our Christian Values are firmly rooted in this policy.

Curriculum opportunities in Computing promote the respect, trust and perseverance our school values show us. With God's love we learn to trust ourselves and one another in the different challenges we face as individuals and in groups and teams. We learn to respect others when we compromise and co-operate with others and to be thankful for these opportunities we share.

Christian Value	How is this value lived out in our Computing policy?
Perseverance	*I can do all things through Christ who strengthens me* (Philippians 4.13) At Sleights, we believe that Computing should be high quality and challenging for children. Children are presented with challenges through debugging and coding. Perseverance is required to support successful completion in these areas.
Respect	*So in everything, do to others what you would have them do to you* (Matthew 7:12) The teaching of Computing at Sleights includes, modelling respectful behaviour during lessons to all pupils. This includes respectful and appropriate behaviour online.
Trust	*My God is my strength in whom I trust* (Psalm 18:2) In conjunction with respectful and caring consideration for a range of abilities and experiences, effective trust at Sleights ensures that families, children and staff can work together, in line with our school vision to deliver a highly inclusive, engaging and effective curriculum to all children.

Computing at Sleights

Computing at Sleights involves:

Dedicated curriculum time to engage in range of purposeful and practical experiences relating to computing.	Sequenced learning experiences, which build on prior knowledge and understanding.	Developing a secure understanding of declarative knowledge (knowing that) and procedural knowledge (knowing how)	Expert teaching, supported by a wide range of computing hardware and software.

Intent of our Computing curriculum

The National Curriculum states that Computing will:

- understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- create responsible, competent, confident and creative users of information and communication technology.

The children at Sleights will be provided with a curriculum offer for Computing designed meet these aims and:

- identify crucial learning, which is placed in context and connected to other knowledge.
- gain a secure understanding of core computing aspects.
- build on and develop computing knowledge and skills in a well sequenced and structured progression across their time at Sleights.
- support children's acquisition and progressive understanding of substantive and disciplinary knowledge.
- enable children to use a range of hardware and software.

Implementation of our Computing curriculum

Computing is implemented at Sleights through:

- timetabled, high-quality lessons, which enable children with the time and opportunities to develop their Computing understanding and skills over time.
- the use of a progressive long term plan, which is organised so that children can build an increasing knowledge base of Computing techniques, disciplines and skills.
- a revisit of key concepts in Computing, over time, to enable children to build on what they know and apply them across a range of hardware and software.
- ongoing opportunities to acquire and apply theoretical knowledge relating to Computing

Implementation: The content of the Computing curriculum at Sleights

At Sleights, Computing activities are planned, so that they build upon the prior learning of the children. While there are opportunities for children of all abilities to develop their skills, knowledge and understanding in each activity area, there is planned progression built into the scheme of work, so that the children are increasingly challenged as they move up through the school.

Our school art and design curriculum provides a broad range of opportunities to learn how to use a range of hardware and software for E-Safety, Computing & Digital Literacy and Coding.

Computing at Sleights focuses on the acquisition of new knowledge and building on prior learning relating to:

- **declarative knowledge** (knowing that)
- **procedural knowledge** (knowing how)

For all phases in school, expected knowledge and skills has been identified, so that children learn more and remember more throughout their time at Sleights.

Implementation: Long Term planning

	Autumn		Spring		Summer	
Key Stage One	E – Safety	Computing Systems and Networks	Beebots	Digital Wellbeing	Music (Garage Band)	Coding (J2e)
Lower Key Stage Two	E – Safety	Coding	Scratch	E-Safety	Stop Motion/ Branching databases	Tynker/Scratch
Upper Key Stage Two	E – Safety	Google Sketchup/ Google Earth	Rapid Router/MicroBits	E-Safety/Digital Citizenship	Animation/ Spreadsheets	Microbits/Scratch

Implementation (use of hardware)

To support the delivery of the computing curriculum, the school uses a range of software and hardware, including:

- Chromebooks
- iPads
- Microbits
- BeeBots

Implementation in Early Years

At Sleights, Computing begins in the Early Years, where children are supported to build and develop knowledge and skills relating to a range of technology hardware and staying safe. As well as introductory messages to staying safe online, children are introduced to the use of iPads and Beebots.

The focus and development of these skills ensures that, before children embark on their Key Stage One journey, they have already acquired a secure understanding of early Computing skills.

Supporting pupils, including pupils with special educational needs and/or disability

Ensuring access to the curriculum for all children, regardless of background, special educational need and/or disability is an essential aspect of teaching and learning at Sleights. Our approach to the curriculum for children with special educational need(s) and/or disabilities aims to ensure that children with differences are able to learn about a subject, remain focused, manage and complete tasks with a sense of achievement, whilst also being challenged.

This will be supported and achieved through a range of ways, including:

- Additional repetition of learning to support embedding the knowledge (to help the children to remember the knowledge).

- Repetition tasks take the form of retrieval tasks and activities, in addition to learning the same information in different ways over several lessons.
- A wider range of practical activities in the curriculum to support children's individual needs, including a range of recording methods.
- A range of practical resources and support tools to enable access to the curriculum.

Inclusion issues will be considered and acted upon in consultation with parents, professionals (for example: Occupational Therapist, Physiotherapist) children, the school's SENCO, the school's Special Educational Needs policy and from the Local Authority, if necessary.

Impact: how do we ensure that children are making progress and learning?

Assessment for learning is fundamental to raising standards and enabling children to reach their potential. Assessment in Computing takes place during and after each taught session, using a range of strategies such as verbal feedback, verbal discussions with children and response time.

Teachers assess children's work in Computing by making assessments as they observe them working during lessons, using the same assessment framework throughout the school. Assessment decisions are made against one of four statements:

Emerging towards expectations	Children are starting to show a basic understanding of the knowledge and skills and need lots of guidance and support through scaffolds.
Working towards expectations	A child is beginning to demonstrate understanding key concepts but may still need support and guidance. These pupils are working towards expectations.
Meeting expectations	These children are securely working at age related expectations.
Exceeding expectations	Children are able to make informed decisions and responses using the skills and knowledge in a secure way.

Teachers record the progress made by children against the learning objectives for the lesson. At the beginning of a unit a baseline assessment is made and, at end of a unit of work teachers make a judgement as to whether the child has met, exceeded or is working towards the expectations according to age and stage of each individual unit. They record the information in their assessment tracker and use the information to plan the future work of each child. These records also enable the curriculum leader to make an annual assessment of progress for each child, as part of the child's annual report to families.

Assessments are made of children's progress, knowledge and skills formally each term (assessments recorded on the half term). Teachers make informed assessment decisions based on activities and learning. These assessment decisions identify whether a child is demonstrating that they are meeting the expected standard, working towards it or exceeding it.