



St Cuthbert's Primary School

Computing Policy

Vision:

In our family school, we strive to be the best for today, for tomorrow, for ourselves, for each other, the wider world and for God.

As a Christian family we nurture an understanding that we are all of equal value and infinite worth.

In the safety of our unique family we will flourish and grow towards being Global Citizens and Courageous Advocates.

('You are now citizens together with God's people and members of the family of God'. Ephesians 2:19)

Mission statement:

Learning to love, loving to learn in the family of Christ.

('Encourage one another and build each other up'- 1 Thessalonians 5:11)

St Cuthbert's Computing Policy

Intent

Through our computing curriculum at St Cuthbert's, we strive to give our pupils the life-skills that will enable them to embrace and utilise modern technology in a socially responsible and safe way so as they grow, they flourish. We want our pupils to be able to leave us with the skills to access, use and understand computers in the modern world so when they complete their educational journey, they are prepared for a vast array of career opportunities that will rely on computing and technology. We want children to grow and become autonomous, independent advocates of computing technologies, gaining confidence and enjoyment from their activities. We want the use of technology to enrich learning opportunities across the entire curriculum and to ensure that our curriculum is accessible to every child. We want our pupils to have a breadth of experience to develop their understanding of themselves as individuals within their community but also as members of a wider global community and as responsible digital global citizens.

To ensure a broad range of skills and understanding, Computing is taught across three main strands: digital literacy, computer science and information technology. As part of information technology, children learn to use and express themselves and develop their ideas through ICT for example writing and presenting as well as exploring art and design using multimedia. Within digital literacy, children develop practical skills in the safe use of ICT and the ability to apply these skills to solving relevant, worthwhile problems for example understanding safe use of the internet, networks and email. In computer science we teach children to understand and apply the fundamental principles of computer science, including logic, algorithms and data representation. At St Cuthbert's, we give children access to a wide range of good quality resources and supply cross curricular opportunities for children to apply their Computing knowledge and skills. Online safety encompasses our core values and is taught with an emphasis on not just their safety but their moral responsibility to treat all they encounter online, with equal value and infinite worth.

Aims

Staff at St Cuthbert's aim to cover the curriculum under three strands:

Throughout **Computer Science** we aim to:

- Enable children to become confident coders on a range of devices.

- Create opportunities for collaborative and independent learning.
- Develop children's understanding of technology and how it is constantly evolving.

Within **Digital Literacy** we aim to:

- Enable a safe computing environment through appropriate computing behaviours.
- Allow children to explore a range of digital devices.
- Promote pupils' moral, social and cultural development.

During **Information Technology** we aim to:

- Develop ICT as a cross-curricular tool to enhance and enrich learning and progression.
- Promote learning through the development of thinking skills.
- Enable children to understand and appreciate their place in the modern world.

Roles and Responsibilities

Subject Leader	<p>In consultation, with the headteacher, the subject leader will:</p> <ul style="list-style-type: none"> • Provide professional management and leadership of computing within school. • Determine the ways in which Computing and ICT supports, enriches and extends the curriculum. • Monitor standards to ensure high quality teaching, effective use of resources and improved standards of learning and achievement. • Observe different aspects of computing in school and check in on pupil's work. • Collect, analyse and distribute, where applicable, information relating to the subject to the relevant.
Class teachers	<p>Class teachers are responsible for:</p> <ul style="list-style-type: none"> • Managing computing within their classrooms. • Ensuring that their class is taught all elements of the computing curriculum as set out in the National Curriculum programme of study. • Be responsible for planning and delivering the computing curriculum in line with 'Purple Mash' schemes of work. • Liaising with parents and carers to develop appropriate computing skills and behaviours.

All staff	It is the responsibility of all staff to make themselves aware of legislation relating to the use of ICT and computing, including copyright and data protection issues.
Governors	All governors are interested in the development of computing to promote high quality teaching and learning in the school. A governor is nominated to be responsible for monitoring and evaluating the impact and value of computing on children's learning. They liaise with the subject leader and report back to the governing body with their findings annually.

Inclusion

At St Cuthbert's believe that all children have the right to access ICT and computing. In order to ensure that children with special educational needs achieve to the best of their ability,

It may be necessary to adapt the delivery of the computing curriculum for some pupils. We teach computing to all children. ICT and computing forms part of the national curriculum to provide a broad and balanced education for all children.

Through the teaching of computing we provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's different needs. Where appropriate, ICT and computing can be used to support SEN children on a one to one basis where children receive additional support. Additionally, as part of our Autism friendly approach to teaching and learning, we will use adapted resources wherever possible such as visual timetables, different coloured backgrounds and screen printouts.

Curriculum

The Children follow the Purple Mash Scheme of Work.

1. Early years

It is important in the foundation stage to give children a broad, play-based experience of IT and computing in a range of contexts, including off-computer activities and outdoor play.

Computing is not just about computers. Early years learning environments should feature IT scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities such as 'programming' each other using directional language to find toys/objects,

creating artwork using digital drawing tools and controlling programmable toys. Unplugged activities are included throughout all year groups.

Outdoor exploration is an important aspect and using digital recording devices such as video recorders, iPads, cameras and microphones can support children in developing communication skills.

By the end of 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 a sequence of instructions
- write and test simple programs
- use logical reasoning to predict the behaviour of 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.

By the end of key stage 2 pupils should be taught to:

- 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.

British Values within Computing

Children at St. Cuthbert's Primary School demonstrate the following values whilst learning about Computing by:

Democracy

- Listening to everyone's ideas in order to form a majority.
- Working as part of a team and collaborating to use computing devices effectively.

Rule of Law

- Developing knowledge of lawful computing behaviours.
- Demonstrating respect for computing laws.

Individual Liberty

- Taking responsibility for our own computing behaviours.
- Challenging stereotypes and bias.
- Exercising rights and personal freedoms safely through knowledge of E-safety.

Respect and Tolerance

- Showing respect for other cultures when undertaking research using computing devices.
- Providing opportunities for pupils of all backgrounds to achieve in computing.

Online Safety

A progressive, safe curriculum ensures that all pupils are able to develop skills to keep them safe online. Opportunities for learning about online safety are part of our Computing and RSE lessons and are reinforced whenever technology is used.

Clear rules for online safety are agreed by each class at the beginning of every year. Parents and pupils sign an Acceptable Use Policy when a pupil first starts at the school.

Purple Mash Computing and Online safety schemes of work are used to ensure progression and coverage; and provides positive rewards for responsible use of technology.

St Cuthbert's supports the International Safer Internet Day each February. The school has an online safety policy in place that details how the principles of e- safety will be promoted and monitored both in school and at home.

Assessment

At St Cuthbert's, your child's attainment for computing is assessed using the 2Simple on Purple Mash Computing Assessment Tool for Years 1 to 6. The tool enables staff to accurately identify attainment of pupils through the detailed exemplification it has for each key learning intention. Tracking of attainment by using the 2Simple Computing Assessment Tool is used to inform future planning.

Children are encouraged to self, peer and group assess work in a positive way using online collaborative tools such as 2Blog in Purple Mash. Formative assessment is undertaken during each topic in Computing and pupils are very much encouraged to be involved in that process. Through using the progression of skills documents and displays from 2Simple, both teachers and pupils can evaluate progress. Features such as preview and correct in Purple Mash are used to further support feedback and assessment. Using electronic work samples from children's portfolios on Purple Mash, teachers are able to (should they wish) enter judgements about the samples into the 2Simple Computing Assessment Tool.