Staplehurst School

ICT/Computing Policy

Policy reviewed and approved by the Head Teacher	**September 2024**
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Document History

Version	Release Date	Description of Changes	Author
1.0	June 2021	New policy.	Andrea Hodgkiss
2.0	July 2024	Support provider changed and updated.	Francesca Napier

1.VISION

The use of computers and computer systems is an integral part of the National Curriculum ad knowing how they work is a life skill. In an increasingly digital world there now exists a wealth of software, tools and technologies that can be used to communicate, collaborate, express ideas and create digital content. At Staplehurst School we recognise that pupils are entitled to a broad and balanced computing education with a structured, progressive approach to the learning of how computer systems work, the use of IT and the skills necessary to become digitally literate. The purpose of this policy is to state how the school intends to make this provision.

2.AIMS

The school aims are to:

• Provide a broad, balanced, challenging and enjoyable curriculum for all pupils.
• Develop pupil's computational thinking skills that will benefit them throughout their lives.
• Meet the requirements of the national curriculum programmes of study for Computing at Key Stage 1 and 2
• To respond to new developments in technology
• To equip pupils with the confidence and skills to use digital tools and technologies throughout their lives.
• To enhance and enrich learning in other areas of the curriculum using IT and computing.
• To develop the understanding of how to use computers and digital tools safely and responsibly

The National Curriculum for Computing aims to ensure that all pupils:

• can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication
• can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
• are responsible, competent, confident and creative users of information and communication technology.

3.RATIONALE

The school believes that IT, computer science and digital literacy:
• are essential life skills necessary to fully participate in the modern digital world.
• allows children to become creators of digital content rather than simply consumers of it.
• provides access to a rich and varied source of information and content.
• communicates and presents information in new ways, which helps pupils understand, access and use it more readily.
• can motivate and enthuse pupils.
• offers opportunities for communication and collaboration through group working
• has the flexibility to meet the individual needs and abilities of each pupil.

4. LEGISLATION AND GUIDANCE

This policy reflects the requirements of the National Curriculum Programme of Study which all maintained schools in England must teach. It also reflects requirements for inclusion and equality as set out in the Special Education Needs and Disability Code of Practice 2014 and Equality Act 2010 refers to curriculum-related expectations of governing boards set out in the Governance Handbook.

In addition, this policy acknowledges the requirements for promoting the learning and development of children set out in the Statutory Framework for the early years foundation stage.

5. ROLES AND RESPONSIBILITIES

THE GOVERNING BOARD

The governing board will monitor the effectiveness of this policy and hold the Headteacher to account for its implementation and will also ensure that:

- A robust framework is in place for setting curriculum priorities and aspirational targets.
- Enough teaching time is provided for pupils to cover the National Curriculum and other statutory requirements.
- Proper provision is made for pupils with different abilities and needs, including children with Special Educational Needs and Disabilities (SEND).
- The school implements the relevant statutory assessment arrangements.
- It participates actively in decision-making about the breadth and balance of the curriculum.
- It fulfils its role in processes to disapply pupils from all or part of the National Curriculum, where appropriate, and in any subsequent appeals.

HEADTEACHER

The headteacher is responsible for ensuring that this policy is adhered to, and that:

- All required elements of the Computing Curriculum, and additional provision which the school chooses to offer, have aims and objectives which reflect the aims of the school and indicate how the needs of individual pupils will be met.
- The amount of time provided for teaching the required elements of the curriculum is adequate and is reviewed by the governing board.
- Where appropriate, the individual needs of some pupils are met by permanent or temporary disapplication from all or part of the National Curriculum.
- They manage requests to withdraw children from non-statutory elements of the curriculum, where appropriate.
- The school's procedures for assessment meet all legal requirements.
- The governing board is fully involved in decision-making processes that relate to the breadth and balance of the curriculum.
- The governing board is advised on whole-school targets within the School Development Plan (SDP) in order to make informed decisions.
- Proper provision is in place for pupils with different abilities and needs including International New Arrivals (INA), those with English as an additional language (EAL) and children with Special Educational Needs and Disabilities (SEND).

LEADERS OF LEARNING (COMPUTING LEAD)

Leaders of Learning in close liaison with the Senior Leadership Team (SLT) will ensure that the school curriculum is implemented in accordance with this policy by:

- Monitoring in line with the school's Monitoring and Assessment Timetable.
- Attending and disseminating relevant continuing professional development (CPD) courses.
- Devising and implementing a subject specific action plan.
- Sharing effective practice.
- Supporting staff, including Newly Qualified Teachers (NQTs).
- Raising the profile of and championing their subject within school and the wider school community.

- Through evidence checks on purple mash, drop-ins and triangulating this with pupil voice, we will monitor pupil retention and understanding.

CLASS TEACHERS
Day to day responsibility for the delivery of the computing curriculum rests with class teachers. As does the responsibility for the on-going evaluation of their own teaching and their children's learning.

6.LEARNING

Staplehurst School Curriculum is broad and ambitious, and designed to give all our pupils, particularly those that are disadvantaged and pupils with SEND, the knowledge and cultural capital they need to succeed in life.

Our computing curriculum is based around three main headings in the KS1 and 2 programme of study:

Computer science
Information Technology
Digital Literacy (e-safety)

Computer science and digital literacy are timetabled in our school, information technology is integrated into the whole curriculum.

Early years (see also early year's policy)

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 such as Beebots floor robots. Outdoor exploration is an important aspect and using digital recording devices such as video recorders, cameras and microphones can support children in developing communication skills. This is particularly beneficial for children who have English as an additional language.

By the end of key stage 1 pupils are 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 are 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.

Staplehurst School's Computing Curriculum is designed in a way that allows pupils to transfer key knowledge to long-term memory; it is sequenced so that new knowledge and skills build on what has been taught before and towards defined end points. For further information refer to Teaching and Learning Policy, Assessment Policy, Marking and Feedback Policy and subject specific policies. Our key principles include:
- Teachers have expert knowledge of the subjects they teach
- Teachers present key concepts clearly and invite appropriate discussions
- Teachers check pupils' understanding effectively, identifying and correcting misunderstandings
- Teachers ensure that pupils embed key concepts in their long-term memory and apply them fluently
- Teachers enable pupils to transfer key knowledge to long-term memory, sequence the learning and ensure that it is building towards the defined end points
- Teachers use assessment to check pupils' understanding
- Teachers use assessment to help pupils embed and use knowledge fluently, develop their understanding, and not simply memorise disconnected facts.

As a school, we have chosen the Purple Mash Computing Scheme of Work from Reception to Year 6. The scheme of work supports our teachers in delivering fun and engaging lessons which help to raise standards and allow all pupils to achieve to their full potential. We are confident that the scheme of work more than adequately meets the national vision for Computing. It provides immense flexibility, strong cross-curricular links and integrates perfectly with the 2Simple Computing Assessment Tool. Furthermore, it gives excellent supporting material for less confident teachers:

	Term 1		Term 2	Term 3		Term 4	Term 5		Term 6
EYFS	Internet Safety			Internet Safety & Safer			Internet Safety		
Year 1		Exploring Purple Mash Technology			Lego Builders Maze Explorers	Animated Story Books		Coding	Spreadsheets (Excel) Pictograms

		Outside School							
Year 2		Coding			Spreadsheets (Excel)	Questioning		Making Music Creating Pictures	Presenting Ideas Effective Searching
Year 3		Coding	Spreadsheets (Excel) Graphing		Email (inc Online Safety)			Branching Databases	Core Skills
Year 4		Coding	Spreadsheets (Excel)		Effective Searching Core Skills	Logo		Animation	
Year 5			Coding		Spreadsheets	Databases		Game Creator	Core Skills
Year 6		Coding	Coding Networks		Spreadsheets (Excel)	Text Adventure			Blogging Quizzing

In addition, we recognise the importance of our children developing computing skills. Our Computing Skills Framework (below) runs alongside the Purple Mash Curriculum to ensure the development of key skills.

	Reception	**Year1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Basic Computer Skills	• Turn on/off digital equipment. • Know the names of technology around me e.g. video camera, camera,	• Log on and off a computer. • Shut down a computer. • Use a mouse/mouse pad to select and move words	• Find and open previously saved work. • Print work. • Minimise and resize windows on the desktop.	• Create folders to store digital documents. • Take screenshots. • Copy and paste through right clicking.	• Organise folders to store digital documents. • Copy and paste using Ctrl and C or V.		

	photocopier, printer etc.	and pictures. • Open and close programmes using the start menu or a folder. • Use the double click function. • Navigate a touch screen device.	• Get back to the desktop.				
Touch Typing	• Use the keyboard to enter letter strings.	• Type upper and lower case letters using Caps Lock. • Know the function of a space bar. • Know the position of keys on a keyboard.	• Type tier one punctuation, e.g. full stops and commas. • Touch type ten words per minute. • Delete using delete and backspace	• Type upper and lower case letters using the shift key. • Type tier two punctuation, e.g. speech marks and question marks.	• Touch type fifteen words per minute.		• Touch type twenty words per minute.
Word Processing		• Write simple words and sentences using a basic word programme.	• Type an extended piece of writing using a word processing programme. • Use a simple word programme to edit words, e.g. text size, colour, font,	• Use bold, underline and italic • Use bullet points and numbers • Use undo and redo tools • Create a simple text box • Move a text box or any other object	• Alter font type, size and colour for emphasis and effect • Highlight text • Resize, rotate and format text boxes	• Use 'select all' • Align left, align right and centre text • Orient the page view and page size	• Use the find and replace tool • Save a copy of a word file as a PDF

			create labels etc. • Use spellcheck.	around the page			
Multimedia		• Look at information from different ICT sources e.g. internet, video, sound recording, photos etc. • Use paint to create an image. • Take photographs or videos using appropriate technology.	• Insert pictures into a document and change the size of the picture. • Drag and drop a picture. • Record and play back a sound.	• Insert and manipulate Word Art • Insert and format shapes	• Insert a table.	• Group and ungroup objects • Insert and format a table e.g. add a border, change the background colour etc • Insert a table and adjust its formatting adding new columns and rows and merging cells	• Layer objects for a purpose
Powerpoint				• Understand that programs like PowerPoint are primarily about presenting information in manageable chunks/slides • Add slides and change their layout		• Change the running order of animations and slide timings • Use transitions and animations for effect	

				using the options available • Add text to a slide and how to modify it using simple formatting tools • Add pictures or clip art onto a slide • Place my slideshow into and out of presentation mode			
The Internet			• Navigate an internet page using hyperlinks, and the forward and backwards buttons.	• Open multiple tabs without leaving the search e.g. by right clicking and opening in a new tab • Use and save favourites in the web browser	• Use *define* before a word using google to get the dictionary definition	• Use ~ on google to return synonym results e.g. ~*large lakes* will find results for great lakes as well • Use a minus (-) to exclude words on a web search e.g. Manchester –football would take out results for Manchester that	•

						involved football • Google search using or to give equal value	
Excel					• Use a spread sheet to make various types of charts • Ask and answer questions from a spreadsheet or graph.	• Use the sort and order buttons	• Enter formula e into a spreadsheet
Communication					• Send and receive an email • Reply to an email • Use an address book to store and select email addresses	• Send an attachment via email	

7.ASSESSMENT OF COMPUTING

We recognise that assessment is central to classroom practice. Effective assessment establishes what a child knows, understands and can do. It also informs the planning of future learning and enables a school to review the effectiveness of the curriculum and teaching.

All teachers report annually to parents, describing progress in computing.

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 each session in Computing with flashbacks to encourage remembering. We also use tailored questioning and checks for understanding through lessons to assess understanding.

Annually, we report to parents whether children are at, below or above the national curriculum standard for computing.

RESOURCES

Physical environments: technology and its deployment

We recognise that computing capability is best developed when there is a real reason both to develop and apply the particular aspect of the computing curriculum and when children have access to resources as a normal part of their learning. For this reason, we endeavour to ensure that technology is as accessible to children as possible in their normal learning environment.

Sets of iPads, sufficient for a class to work effectively, are available to be booked via a central booking system.

In addition, there are free times when iPads are available to all classes and are booked out on a weekly basis via a shared time table.

iPads are returned to the trolley and plugged in for charging when not in use

A number of laptop computers are also spread around the school, some in classrooms and some in shared areas.

We have a shared **ICT room** equipped with sufficient laptops / desktop PCs for a class

Our **ICT room** is timetabled for each class once per week. The remaining time is available to be booked by teachers via a shared booking timetable

Each classroom is fitted with an interactive screen and a Visualizer. This is connected to a desktop computer / laptop

Internal and online connectivity

The school receives Internet and Broadband services via Kent County Council (Cantium) (through a service level agreement). This provides us with a connection to the internet that is filtered for our needs

We have a wireless network in place in school giving closed access to ICT on the school's mobile technology throughout the site.

Network points are available where they need to be throughout the school for the connection of non-mobile devices.

All members of our school community sign acceptable use agreements before they are permitted to use any technology (see online safety policy)

Digital learning resources

ONLINE LEARNING AND HOMELEARNING

Purple Mash (2Simple) (www.purplemash.com) … supports our online and homelearning activities (see blended learning and homework policy)

INCLUSION

We recognise the advantages of the using of computing / technology for pupils with additional needs and we use ICT to:

- address pupil's individual needs
- increase access to the curriculum
- improve language skills

We promote equal opportunities for computer usage.

The school is conscious of the varying levels of access to technology in the home environment to ensure no pupils are unduly disadvantaged.

Hardware, software and peripherals used in the school are chosen to ensure that they are non-discriminatory and promote equal opportunities.

All pupils follow the National Curriculum including computing.

ONLINE SAFETY

Please see the school online safety policy.

SAFEGUARDING

See Staplehurst School policies on Online Safety and Data Security.

HEALTH AND SAFETY

Pupils are made aware of health and safety issues relating to the use of technology. These include:

- showing pupils how to adjust the brightness and contrast settings of displays
- seating position with computers and tablets
- correct procedure for using a mouse / glide pad
- regular reminders not to look directly into projector beams.
- How to transport portable equipment (especially laptops and tablets) safely
- The dangers of prolonged use of screens (home).

When using the ICT suite all staff will make a visual check of equipment specifically to ensure that:

- they are aware of the location of the closest fire extinguisher suitable for electrical fires
- there are no trailing cables or leads which could constitute a health hazard
- there are no daisy-chained electrical extension sockets in use
- there are no damaged chairs or other faulty or potentially hazardous equipment

Lessons involving substantial use of technology should be structured to ensure that there are periodic breaks where pupils' attention is directed away from screens to a distant object such as the teacher.

Static computers located in classrooms are positioned, wherever possible, away from light reflection and glare. The optimum position is at right angles to the natural source of light.

All equipment is checked annually under the Electricity at Work Regulation 1989.Health and Safety information relating to individual pieces of technology (provided by manufacturers / suppliers and other independent organisations) is carefully considered when making procurement decisions. This guidance it also taken into account when using such equipment.

Regular Risk Assessment surveys are conducted by the designated health and safety representative; faults are logged and appropriate action taken. Risk assessments are reviewed annually.

MANAGEMENT OF TECHNOLOGY

PROCUREMENT

All procurement decisions are informed by the learning and teaching agenda.

We make use of local purchasing agreements in order to achieve best value with procurement.

We endeavour to take into account the total cost of ownership when making procurement decisions.

Every effort is made to ensure that equipment is disposed of safely and in an environmentally friendly way at the end of its useful life.

TECHNICAL SUPPORT

We receive technical support from NCS Technology.

We subscribe to 1 day of school technician service per week term time plus 14 days in school holidays including Remote support. The precise nature of the support we receive can be found in Technical Support Agreement.

Access to the NCS Technology Technical Service Desk is available for teachers to report issues:

helpdesk@ncstechnology.co.uk

ENVIRONMENT IMPACT

Our school takes seriously all issues relating to the environment and this is no less true with computing resources. We strive to ensure that all purchasing decisions are backed by sound research and guidance so that every piece of ICT equipment will last as long as possible.

With the assistance of our technical support providers we strive to ensure that the life of any piece of ICT equipment is extended as long as is reasonably possible without making unnecessary demands on technical support or causing unnecessary problems in lessons.

We operate a “print once” policy in school: all staff and children are encouraged to check work thoroughly on screen before printing and only then to print when appropriate.

Documents that are better kept as electronic copies are left in that format and shared as is appropriate usually using online storage.

We strive to operate a paper free policy for all meetings where as many documents as possible remain electronic, staff bring laptops to meetings, ICT facilities are provided for children where possible and paper copies are not circulated.

We are moving to place as much information to parents as possible is electronic and fewer letters are being sent home.