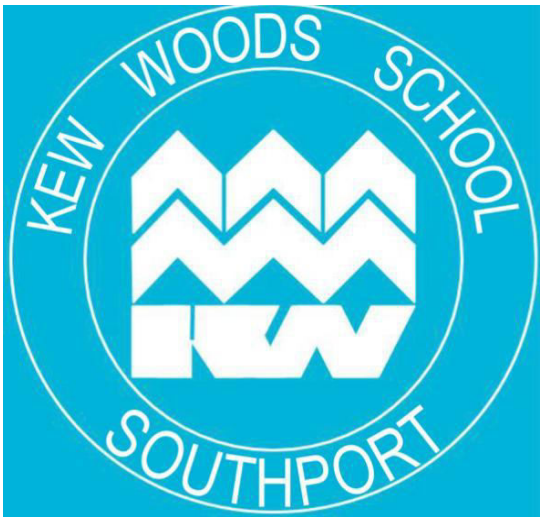
KEW WOODS
PRIMARY SCHOOL



Computing and Learning Technology Policy

Computing and Learning Technology Policy

This document is one of a series that make up the whole curriculum statement for the school. It states the school philosophy about the contribution which computing makes to our pupils' education and the way in which the National Curriculum 2014 is delivered in practice via a creative curriculum. In effect it is an expanded policy statement and together with the long, medium and short term planning, constitutes the school scheme of work.

This policy sets Kew Woods' aims and strategies for the successful delivery of Computing. This policy should be read in conjunction with other relevant school policies such as the Safeguarding, Equal Opportunities, Curriculum, Finance, Teaching & Learning, SEND and Assessment policies.
The policy has been developed by the Computing Leader, in consultation with the SENCO, Leadership Team and teachers. Guidance from consultants and pupil, parent and staff voice questionnaires have shaped and will continue to help shape this policy. This policy is based on government recommended/statutory programmes of study.

Due to the fast pace of technology innovation and constantly emerging trends, it is recommended that this policy is reviewed, at minimum, at the start of every academic cycle.

Aims and Objectives

Kew Woods Primary School believes that every child should have the right to a curriculum that champions excellence; supporting pupils in achieving to the very best of their abilities. We understand the immense value technology plays not only in supporting the Computing and whole school curriculum but overall in the day-to-day life of our school.

We believe that technology can provide: enhanced collaborative learning opportunities; better engagement of pupils; easier access to rich content; support conceptual understanding of new concepts and can support the needs of all our pupils.

- Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.
- Enthuse and equip children with the capability to use technology throughout their lives.
- Give children access to a variety of high quality hardware, software and unplugged resources.
- Instil critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with
- technology and its associated resources.
- Teach pupils to become responsible, respectful and competent users of data, information and communication technology.
- Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world,
- whilst being able to minimise risk to themselves or others.
- Use technology imaginatively and creatively to inspire and engage all pupils, as well as using it to be more efficient
- in the tasks associated with running an effective school.
- Provide technology solutions for forging better home and school links.
- Utilise computational thinking beyond the Computing curriculum.
- Exceed the minimum government recommended

The National Curriculum for Computing (2014) aims to ensure that all pupils:

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

Kew Woods Primary School Curriculum Map – Computing

Class/ Weeks	1 2 3 4 5 6	7 8 9 10 11 12	13 14 15 16 17 18	19 20 21 22 23 24	25 26 27 28 29 30	31 32 33 34 35 36
Year One	Online safety and exploring Purple Mash *Purple Mash Unit 1.1*	Programmable Toys **(Bee Bots)** On screen programming **(Bee Bot app)**	Capturing and Creating Images **Pic Collage on iPads**	Animated Story Books Purple Mash Unit 1.6 **2Create a Story**	Coding Purple Mash unit 1.7 **2Code**	Pictograms Purple Mash Unit 1.3 **2Calculate**
Year Two	Coding Purple Mash Unit 2.1 **2 Code**	Creating Pictures Purple Mash Unit 2.6 **2paint a Picture**	Spreadsheets Purple Mash Unit 2.3 **2Calculate**		Effective Searching Purple mash unit 2.5 **Search Engines**	Presenting Ideas Purple Mash Unit 2.8 **Various Programs**

Class/ Weeks	1 2 3 4 5 6	7 8 9 10 11 12	13 14 15 16 17 18	19 20 21 22 23 24	25 26 27 28 29 30	31 32 33 34 35 36
Year Three	**Coding on iPad** Get Started With Code 1 iBook *Tynker on iPads*	**Spreadsheets and Graphing** Purple Mash Units 3.3 and 3.8 *2Calculate and 2Graph*	**Branching Databases** Purple Mash Unit 3.6 *2Question*	**Email** Purple Mash Unit 3.5 *2Connect* *2Email* *2DIY*	**Touch Typing** Purple Mash Unit 3.4 *2Type*	**Multimedia Presentations** *PowerPoint*
Year Four	**Coding on iPad** Get Started With Code 2 iBook *Tynker on iPads*	**Spreadsheets** Purple Mash Unit 4.3 *2Calculate*	**Creating Digital Stories** *Book Creator and Brushes on the iPads*	**Stop Motion Animation** *Lego Movie on the iPads* *Pivot Stickman Animator*	**Creating Digital Video** *iMovie and Clips on iPad*	**Effective Searching and Hardware Investigators** Purple Mash Units 4.7 & 4.8 *Browser*
Year Five	**Coding on iPads** Learn to Code 1 & 2 *Swift Playgrounds on iPad*	**3D Modelling** Purple Mash Unit 5.6 *2Design*	**Digital Photography and Video** *Snapseed, Splice, iMovie*	**Podcasting** *Garageband and iMovie on iPad*	**Game Creators** Purple Mash Unit 5.5 *2DIY 3D*	**Spreadsheet Modelling** *Numbers on iPad*
Year Six	**Coding on iPads** Learn to Code 1 & 2 *Swift Playgrounds on iPad*	**Blogging** Purple Mash Unit 6.4 *2Blog*	**Quizzing** Purple Mash Unit 6.7 *2Quiz, 2DIY, Text Toolkit, 2Investigate*		**Movie Makers** *iMovie on iPad*	

Teaching and Learning

We use a variety of methods to provide an enquiry based learning situation. Work is planned, taught and assessed to involve the children in tasks, which will use any of our learning technology resources to give them the opportunity to show what they know, understand and can do. The nature of computing and the resources available are such that children can work as a whole class, in small groups or individually.

Computing skills are taught through modelling and demonstration leading on to activities in which the pupils develop the skills with adult support.

Differentiation can be provided through outcome i.e. where different children respond differently in the use of the same software for a given task, or may choose to use different software/ hardware for the same task. It can also be provided by task where separate tasks and software are provided for the different ability groups.

Team-teaching also enhances our provision of differentiated learning. When additional teachers/adults are available during Computing lessons they work in a variety of ways, including:

- Supporting / observing / recording the participation of individuals during lessons.
- Sharing an aspect of the whole class delivery.
- Working with groups during guided work.
- Supporting individuals during independent work.

The strategies employed are at the team's discretion and will be subject to change depending on the objectives of the lesson.

Peer cascading is used in the teaching of Computing, for pupils' pass on their knowledge and skills to others.

Computing Curriculum Planning

The class allocation for specific use of the Tim Berners-Lee Hub (learning technology room) is 1 session a week, however a range of technologies are available to be integrated into lessons at any time. These resources are on an open timetable and it is the responsibility of the class teachers to reserve them when needed. Computing skills should be taught and applied through cross curricular activities; however, there is a need for discrete skills based lessons. These discretely taught skills can then be applied in context.

The use of technology for learning is planned as an integral part of all curriculum subjects. The Computing element is based on the National Curriculum Programmes of Study and the Chris Quigley Essentials curriculum. Through monitoring we ensure that a balanced study of all areas of Computing takes place as well as progression of skills through the school.

These areas are: -

Research and word processing
Programming and algorithms
Creating digital content
Digital communication
Data collection, representation and analysis

Planning for Computing should form part of a class teacher's cross curricular weekly plan.

Foundation Stage

Children in the Foundation stage find out about and identify the uses of everyday technology and use technology to support their learning. They have constant access to computers, cameras, handheld technologies and programmable toys in their classroom, with adult support to enhance their learning. The Reception class also have specific computer based lessons in the Hub.

The contribution of technology and Computing to teaching in other curriculum areas

The use of technology is planned as an integral part of all subjects. Children will use a range of resources in core, foundation and non-foundation subjects, and cross curricular themes.

Word processing software is not only used to develop English skills, but is also used across the whole curriculum, especially in History, Geography and RE to enhance the children's work. A high standard of word processing is expected.

Data bases and spreadsheets are used in Maths, Science, Geography, History and Technology.

Computer aided design software (such as Google Sketchup) is used in Technology.

Art packages, e.g. Dazzle, Paint and 2Paint a Picture, are used throughout all Key Stages to enhance work in all areas of the curriculum as well as to develop a new dimension in children's artistic activities.

Programmable devices, including Roamer, Beebots, calculators, digital cameras, video cameras and tape recorders are used to enrich work in most core and foundation subjects.

Portable hardware (iPads) is available, featuring a wide range of applications and software programs.

iPads are used heavily in our Computing scheme of work, both as a working tool and an evidencing tool.

We use a platform called Seesaw to upload and store digital evidence. This is a secure platform that complies with GDPR.

Special Needs

In Computing, a broad balanced and relevant curriculum is provided. It is matched to the needs of individual pupils and is the most effective means of ensuring the optimum educational development of children across the whole continuum of educational needs. Therefore, this approach is appropriate for children in Nursery and mainstream classes who have particular Special Educational Needs.

Computing is also used to help children with special needs to increase their independence and develop their interests and abilities.

Specific software is available on all devices to supplement teaching and learning across a range of areas

Equal Opportunities

Technology contributes to the whole school policy for equal opportunities in two respects; through the taught curriculum and by its teaching and learning strategies.

Computing is taught as an integral part of core and foundation subjects and all children are encouraged to use it for topics and tasks which interest them.

We use software and tasks which are not gender biased, pupils see male and female staff members using technology with confidence.

A variety of teaching styles and methods are used which give all children equal access to computers and other technology resources. Care is taken to ensure that all children take an active role and are questioned fairly.

Children are given opportunities to work in ability and mixed-ability groups and receive similar opportunities in differentiated forms.

Individual and collaborative learning provides all children with an equal opportunity to develop their own specific strengths in the field of Computing.

Assessment, Recording and Reporting

The following assessment in Computing is used for formative and diagnostic purposes:

- Assessment of Computing in the Curriculum will be in line with the Chris Quigley assessment milestones.
- Pupils' work is primarily stored either on the school network or online via Seesaw, Busy Things, Purple Mash etc.
- Presentation work will be printed and displayed in class and Topic books.
- Pupils complete an overview of tasks in Topic books allowing for reflection and self assessment

At the end of each academic year, achievement profiles and additional assessments are handed to the next class teacher.

Termly parents' meetings are arranged to allow parents to have the opportunity to discuss their child's progress with the teacher.

Resources

A vast range of resources are available to teach Computing and enhance the overall curriculum. We aim to keep these resources relevant and up to date by the implementation of a four year rolling replacement schedule. The subject leader will take responsibility for the identification of new technology.

KS2 pupils will have password access to online learning sites: Purple Mash.

KS1 Pupils will have password access to the online learning sites Purple Mash and Busy Things.

iPads are available to enhance learning. Apps are purchased in accordance with Apple's Volume Purchasing Programme. Staff members can request specific apps, but it is to the discretion of the subject leader whether or not it is installed.

Teaching Resources

All class teachers will have access to the following resources to aid planning, teaching and assessment of computing.

- A class computer tat is linked to an interactive display and audio system
- Year group specific curriculum guidance documents
- The Chris Quigley Essentials website
- A laptop to use for planning
- An iPad linked to the school's iTunes account
- Guidance on assessment, Computing expectations, rules for Internet use and Health and Safety information.
- Copies of the acceptable usage policies for pupils and adults at school.

All users of technology in school will agree to and sign an acceptable usage policy, outlining the expected appropriate use of school resources. There is further information on this in the school e-safety policy.

Monitoring and Evaluation

The subject leader monitors planning throughout the year in accordance with the action plan agreed with the curriculum coordinator. They will scrutinise yearly and half-termly plans for each class which are evaluated to ensure coverage of the agreed curriculum.

At least once a year work from pupils in each class will be scrutinised looking for evidence of Computing, quality application of skills, continuity and progression.

In addition, the co-ordinator has at least one monitoring focus each year which includes lesson observations, pupil interviews and demonstrations, and work scrutiny to further aid development of the curriculum.

Review and Continuing Professional Development

Information is collected annually to inform the school's development plan. The INSET coordinator monitors staff training needs and ensures that there is a balance in the courses provided, both in terms of the school development plan and professional requirements as manifested through the performance management process and informal staff discussions.

The Computing subject leader and members of the Leadership team will continue to use the NAACE Self Review Framework to assess the school's use of technology and plan for future provision.

The school's Computing subject leader will develop the school's learning platform (Purple Mash) and will provide staff INSET on how to use it.

Maintenance of the school website is continuous, with class teachers updating class pages and blogs on a regular basis.

In addition, advice and training will be given, by the co-ordinator, to individual members of staff on specific software as necessary. The intended outcome is to further develop and strengthen the delivery of the Computing curriculum.

The Computing subject leader will keep up to date with new initiatives and technologies through networking, including:

- Maintaining a leading role in the CORE collaborative and the Southport Learning Partnership.

- Attending Teach meets (opportunities for sharing of good practice)

- Regular discussion with colleagues via the Internet (eg. Twitter)

- Attending events provided by LEA and other suppliers (e.g. MGL)

Digital Leaders and Digital Council

Technology has a high profile at Kew Woods. We strive to include many stakeholders in our planning and implementation of learning technology and the Computing curriculum. To aid this, two interlinking groups have been established by the Computing subject leader: 'Digital Leaders' and the 'Technology Team'.

The 'Digital Leaders' consist of pupils from Years 5 and 6 who demonstrate a high level of computing capability. The digital leaders meet regularly and their duties involve:

- Trying out new technology.
- Sharing skills with others at school.
- Researching and developing the use of new technologies.
- Monitoring the use of technology to support learning.
- Helping teachers to develop their computing skills and knowledge.
- Helping teachers to deliver lessons.
- Running a club.
- Running parent workshops.
- Blogging about what's happening with technology.
- Raising the profile of e-safety in school.

The 'Digital Council' consists of staff members who have put themselves forward for the role. It is a prerequisite that they have a good level of capability when it comes to the use and upkeep of technology. They meet half termly and duties involve:

- Trying out new technology.
- Sharing skills with others at school.
- Researching and developing the use of new technologies.
- Monitoring the use of technology to support learning.
- Helping teachers to develop their computing skills and knowledge.
- Helping teachers to deliver lessons.
- Running a clubs.
- Running parent workshops.
- Blogging about what's happening with technology.
- Liaising with Digital Leaders.
- Supporting with e-safety promotion in school.

Online Wellbeing

At Kew Woods Primary School we strive to safeguard and educate our school community in the digital world that we live in. Online Safety is high profile at Kew Woods and is taught and practiced throughout the curriculum. A growing aspect of this is how technology can impact on wellbeing.

We strive to educate all stakeholders on the causes and effects of using technology on wellbeing, including the impact social media and too much screen time can make.

Through our staff development plans, pupil curriculum and parent workshops, we deliver guidance and raise awareness of this crucial area.

Online Safety

Online safety has a high profile at Kew Woods for all stakeholders. We ensure this profile is maintained and that pupil needs are met by the following:

- A relevant up-to-date online safety curriculum which is progressive from Early Years to the end of Year 6, that deals with online threats and the mental health aspects of Internet use and social media.
- A curriculum that is threaded throughout other curriculums and embedded in the day-to-day lives of our pupils.
- Training for staff and governors which is relevant to their needs and ultimately positively impacts on the pupils.
- Scheduled pupil voice sessions and learning walks steer changes and inform training needs.
- Through our home/school links and communication channels, parents are kept up to date with relevant online safety matters, policies and agreements. They know who to contact at school if they have concerns.
- Pupils and staff have Acceptable Use Policies which are signed and copies freely available.
- Our online safety policy (part of our safeguarding policy) clearly states how monitoring of online safety is undertaken and any incidents/infringements to it are dealt with.
- Filtering and monitoring systems for all our online access.
- Data policies which stipulate how we keep confidential information secure.

Maintenance

School works closely with the local authority to ensure that physical systems and technology is operational. If a member of staff wishes to report a fault they should do so via the secure on site form.

An engineer works with school half a day a week. In this time they liaise with the subject leader, who reports issues logged and raises any other business.