

Emmanuel Holcombe C of E Primary

Computing Policy

Vision Statement

Jesus came to give us life in all its fullness. Our vision is that through faith, family and friendship, each of us can grow in love and learning, being tolerant, having resilience and developing enquiring minds, so that we can all experience the abundance Jesus came to give us.

Mission statement

In our small, friendly school, everyone respects and cares for one another

In our community, church, home and school we work together to grown in faith and friendship

In our learning we encourage each individual to reach their potential to grow through skills, knowledge and understanding

Policy written: January 2022

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# Introduction

This policy sets out Emmanuel Holcombe Primary School’s 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 (Mrs Clough) 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

Emmanuel Holcombe 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.

# Our aims:

* + - 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/statutory guidance for programmes of study for Computing and other related legislative guidance (online safety).

# Safeguarding: Online safety

Online safety has a high profile at Emmanuel Holcombe 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.
* 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, staff and parents 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.

# Curriculum

As Emmanuel Holcombe, 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.

The computing curriculum is split into 3 key areas: Computer Science, Digital Literacy and Information Technology. According to the National Curriculum ‘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 ensure pupils become digitally literate – able to use, and express themselves and develop ideas through, information and communication technology.

Aims and Objectives

We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts. The National Curriculum for Computing 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

Early Years Foundation Stage:

* the Early Learning Goal states that by the end of the Early Years Foundation Stage ‘Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.’ Therefore, it is important in the Early Years Foundation Stage to give children a broad play-based experience of ICT in a range of contexts, including outdoor play e.g. metal detectors, walkie-talkie sets and remote-controlled toys. Also Computing within the early years should feature ICT scenarios based on experience in the real world, such as role play.

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 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

By the end of 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

In order to fulfil the above aims it is necessary for us to ensure:

* A continuity of experience throughout the school both within and among year groups.
* The systematic progression through Key Stages 1 and 2.
* That all areas of the National Curriculum for Computing are given appropriate coverage.
* That all children have access to a range of ICT resources.
* That cross curricular links are exploited where appropriate.
* That children’s experiences are monitored and evaluated.
* That resources are used to their full extent.
* That resources and equipment are kept up to date as much as possible.
* That staff skills and knowledge are kept up to date.
* That e-Safety is embedded at every opportunity.

# Organisation and Timetabling

On a whole-school computing timetable, each class from Years 1 – 6 deliver their discrete computing units in Blocks. Three units of computing are taught per block linking, where possible, to other topic areas.

Staff are encouraged to timetable cross-curricular opportunities for computing which will allow learners to consolidate and apply their computing skills, knowledge and understanding in different contexts.

Each class have 20 iPads to use and safely store at all times. If more iPads are needed for 1:1 allocation, staff will timetable this in to use iPads from other classrooms. It is the responsibility of the staff member using the resources to ensure the Non-negotiables below are followed:

• If issues arise with any form of computing, to give a detailed description in the “ICT fault logging” spreadsheet which can be accessed from computer desktops. If it is an emergency, staff member to phone In4tech (This is not the role of the secretaries.)

• Staff iPads to be used for photos. If Pupil iPads are to be used for photos, ensure photos are downloaded to the server and deleted from the iPads before putting them away. (They will be deleted if left)

* All iPads returned to the correct slots in the charging docks into their charger after use in order to ensure that they are ready for the next user

• If there are specific faults with a specific iPad or Laptop, please attach a post it note onto the device with a detailed description including your initials and class. Then add this to the ICT Fault log. (Please do not leave iPads or Laptops lying around school)

• Ask children or ICT monitors to close any internet tabs and opened apps on the iPads before putting them away.

* Children within their class are taught how to handle, organise and look after the computing equipment/resources correctly

• When using any form of software that requires a login, please encourage the children to make sure that they have signed out correctly.

• Ensure Staff iPads are charged when leaving for the evening.

• Year 6 Computing monitors to charge the iPad keyboards every Friday ready for the following week.

# Assessment

* Pupil attainment is assessed using the Target Tracker following the National Curriculum objectives. 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 Target Tracker is used to inform future planning.
* Formative assessment is undertaken each session 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.
* Summative assessment is undertaken in line with the assessment cycle (See Assessment Policy). Using electronic work samples from children’s portfolios on Purple Mash and Seesaw, teachers make judgements about the samples saved.
* Work from a range of classes and abilities is shared using Seesaw.

# Resources

* + - All resources are procured with the underlining considerations of value: The extent at which the resource impacts on learning and the material cost of this. Protocol details for procurement can be found in the school finance policy.
    - A range of resources is available which successfully supports delivering the Computing curriculum and enables all learners to reach their full potential.
    - Resources are suitably maintained and replenished when needed, which is overseen by the Computing Leader. An itemised list of all resources is shared with staff and kept up to date by the Computing Leader.
    - Audits of school resources are conducted regularly by the Computing Leader, which informs bidding for budgets allocations.
    - The Computing Leader keeps up to date with the latest technology resources and will make informed decisions about possible procurement of them through their own research.
    - Suggestions for getting the very best out of the resources are made available to teaching and support staff by the Computing Leader.
    - The Computing Action Plan details foreseen future resource procurement which is shared with senior leaders before the budget setting period.

# Inclusion

At Emmanuel Holcombe, we aim to enable all children to achieve to their full potential. This includes children of all abilities, social and cultural backgrounds, those with disabilities, EAL speakers and SEN statement and non-statemented.

We place particular emphasis on the flexibility technology brings to allowing pupils to access learning opportunities, particularly pupils with SEN and disabilities. With this in mind, we will ensure additional access to technology is provided throughout the school day and in some cases beyond the school day.

# Monitoring, Evaluation and Feedback

Monitoring standards of teaching and learning within Computing is the primary responsibility of the Computing Leader. All teachers are expected to keep an online portfolio or track children’s work using Purple Mash and/or Seesaw. This portfolio must contain work samples from all areas of the curriculum taught for the year group. Details of monitoring and evaluation schedules can be found in the Computing Action Plan and School Monitoring Schedule.

Monitoring will be achieved through:

* + - Work scrutiny. Learning walks. Observations. Pupil voice.
    - Teacher voice.
    - Reflective teacher feedback.
    - Learning environment monitoring.
    - Dedicated Computing Leader and Assessment Leader time.

Evaluation and Feedback will be achieved through:

* + - Dedicated Computing Leader and Assessment Leader time.
    - Using recognised standards documentation for end-of-year expectations.
    - Using recognised national standards for benchmarking Computing provision in primary schools.
    - Written feedback on evaluation of monitoring activities to be provided by the Computing Leader in a timely manner.
    - Feedback on whole school areas of development in regard to Computing to be fed back through insets/AOB/staff meetings.

# Roles and Responsibilities

Due to technology extending beyond the National Curriculum for Computing, there are key roles and responsibilities specific members of staff have.

Head Teacher

* + - Monitoring the implementation of the Computing Policy and its associated policies such as the Safeguarding and SEND Policies.
    - Ratifying (in conjunction with the Governing Body) the Computing policy, Safeguarding policy and Computing Leader’s Action Plan.
    - Securing technical support service contracts and infrastructure maintenance contracts.
    - Approving CPD and training which is in line with the whole school’s strategic plan.
    - Approving budget bids and setting them.
    - Creating in conjunction with the Computing Leader, a long-term vision for Computing which includes forecasted expenditure and resources.
    - Monitoring the performance of the Computing Leader in respect to their specific job role description for Computing.
    - Ensuring any government legislation is being met.

Computing Leader

* + - Raising the profile of Computing for all stakeholders.
    - Monitoring the standards of Computing and feeding back to staff in a timely fashion so they can act on areas for development.
    - Ensuring assessment systems are in place for Computing.
    - Maintaining overall consistency in standards of Computing across the school.
    - Reporting on Computing at specific times of the year to the Governing Body/Head/Staff.
    - Auditing the needs of the staff in terms of training/CPD. Actively supporting staff with their day-to-day practice.
    - Seeking out opportunities to inspire staff in developing their practice through modelling and sharing new ideas, approaches and initiatives.
    - Attending training and keeping abreast with the latest educational technology initiatives.
    - Using nationally recognised standards to benchmark Computing.
    - Creating Action Plans for Computing and supporting a long-term vision which feeds into the whole school development plan.
    - Creating bids for the annual budgets and monitoring budget spend. Keeping an up-to-date log of all resources available to staff.
    - Procuring physical and online resources that demonstrate best value. Reviewing the Computing curriculum and developing it as needed.
    - Overseeing the effectiveness of the technician.
    - Working as needed with the SENCO/Head Teacher to ensure online safety provision is above adequate and all legislation is in place.

Technician

* + - Conducts routine scheduled maintenance/updates on systems.
    - Supports the administration and set-up of online services including the school website
    - Fixes errors/issues with hardware and software set-up, prioritising as needed.
    - Routinely checks school filtering, monitoring and virus protection.
    - Sets up new hardware and installations.
    - Maintains network connectivity and stability.
    - Supports the Computing Leader and Head Teacher with future infrastructure needs and associated projected costs.

Administration Staff

* + - Maintains the school website content.
    - Posts approved requests to the school’s social media accounts. Supports procurement of resources and technical services.
    - Supports the technician with some data management.

# Health and Safety

Emmanuel Holcombe takes all necessary measures to ensure both staff and pupils are aware of the importance of health and safety.

Both staff and pupils are trained to handle electrical equipment correctly including how to power off and on. Pupils are reminded about the dangers of electricity and the danger signs to look out for. Adequate displays and warning signs are strategically placed around