Winwick Church of England Primary School

In God's love, aspire and achieve to be the best'
1 Corinthians 16:14 'Do everything in love.'

Written by N.Henaghen

At Winwick C.E, the children learn that they are part of the Christian community and Christian World. They are taught through a values led approach with Christ at the centre of everything. All members of the school community are children of God and should be treated with love, respect and care. We ensure that all members of the school community respect, tolerate and celebrate the Computing and Online Safety curriculum by following the teachings of the Lord so that we can all aspire and achieve in God's love. This is driven by our core Christian Values of love, perseverance and respect. It is lived out in our mission statement through the love of God and our love of one another and how we respect all things and the world we live in.

The policy has been developed by the Computing Leader Mr Henaghen 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 of the Computing Curriculum

At Winwick C.E Primary we believe 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 Winwick C.E Primary 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 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.
- Online safety will also be taught using lessons by National Online Partnership

Curriculum

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.

Non-Negotiables

Alongside the Purple Mash Computing Scheme, children will be taught basic computing skills across year at an age appropriate level. These skills will include the use of Microsoft programmes (Office), use of search engines, saving and opening files and sharing information.

Early Years

We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts. We believe the following:

- Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in role-play.
- Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys.
- Outdoor exploration is an important aspect, supported by ICT toys such as metal detectors, controllable traffic lights and walkie-talkie sets.
- Recording devices can support children to develop their communication skills. This is especially useful for children who have English as an additional language.

Children no longer have to achieve the Early Learning Goal in Technology as this has been withdrawn from the curriculum. However, as a school we have made the decision to still teach Computing as part of our broad and balanced curriculum.

Key Stage 1 outcomes

- 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.
- 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.

Key Stage 2 outcomes

- 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.

Assessment

- Pupil attainment is assessed using the 2Simple 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.
- Teachers keep accurate records of pupil attainment by entering data using the 2Simple Computing Assessment Tool.
- 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 each session/interaction 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 will be carried out every half term throughout the year and progress will be tracked via the Foundation Subject Tracking Document. To aid with assessment key curriculum and challenge questions will be used and adapted from the Focus Education Not As We Know It download as well as the assessment tools available from Purple Mash. Work will be assessed that has been saved on the Purple Mash and Google Classroom server as well as through discussions with pupils. These discussions and demonstrations will allow pupils to show if their standard of computing knowledge.
- Within a child's book or through discussions children will be able to answer the key questions from the document to be working at the expected standard. For a child to be assessed at Greater Depth there should be evidence of the children answering the 'challenge questions'.
- Work from a range of classes and abilities are shared using the Noticeboard feature in Purple Mash. Additionally, exemplar pieces of work from individual pupils is shared with parents using Parent Portal (a feature in Purple Mash).
- Assessing pupils with SEND will include photo and video evidence that demonstrates how they are achieving the different learning objectives

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 Winwick C.E Primary, 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. 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 Lead and Assessment 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 Subject Lead

- 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.
- Attending training and keeping abreast with the latest educational technology initiatives.
- 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

Winwick C.E Primary 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 the school to reinforce health and safety.

Winwick CE Primary School   Computing Curriculum Coverage (Purple Mash)

EYFS	Exploring Purple Mash Various	Coding – Bee Bots Simple City	2sequence	Photos and Digital Media	Creating Pictures 2PaintAPicture	2Beat
Year 1	Grouping and Sorting 2DIY	Pictograms 2Count	Lego builders/Maze explorers 2DIY 2Go	Animated Story Books 2Create A Story	Coding 2Code	Spreadsheets 2Calculate
Year 2	Coding 2Code	Spreadsheets 2Calculate	Questioning 2Question 2Investigate	Effective Searching Browser	Creating Pictures 2PaintAPicture	Making Music Presenting Ideas 2Sequence Various
Year 3	Coding 2Code	Spreadsheets Touch Typing 2Calculate 2Type	Email 2DIY 2Connect 2Email	Branching Databases 2Question	Simulations 2simulate 2Publish	Graphing 2Graph
Year 4	Coding 2Code	Spreadsheets 2Calculate	Writing for different audiences (RE Link) 2Email, 2Connect, 2DIY	Logo Logo	Animation 2Animate	Effective Search Hardware Investigators Browser
Year 5	Coding 2Code	Spreadsheets 2Calculate	Databases 2Question 2Investigate	Game Creator 2DIY 3D	3D Modelling 2Design and Make	Concept Maps 2Connect
Year 6	Coding 2Code	Spreadsheets 2Calculate	Blogging 2Blog	Text Adventurer 2Code, 2Connect	Networks & Quizzing 2Connect, 2DIY, 2Quiz	Understanding Binary 2Connect 2Question

Appendix 2

Winwick CE Primary Non-negotiable Planning

ICT Non-negotiables – Reception to Year 2 (Basic ICT Skills)		
Reception	**Year 1**	**Year 2**
- Explore multimedia programme. - Begin to record text and images (with support). - Sort and match objects in onscreen games. - Capture images with a camera. - Begin to record sounds (with appropriate hardwear). - Use programmable remote control toys: understand forward/backwards. - Talk about online safety. - Log onto the school system. - Begin to understand how to use a mouse. - Understand the difference between left and right click using a mouse. - Be able to double click to select.	- Access and use a word or picture bank. - Word process simple text. - Collect basic data in a chart. - Create a pictogram and answer simple questions (2Simple package). - Create a simple series of instructions: understand 'left' and 'right'. - Use forward and back when navigating a web site. - Follow safety rules on the web. - Develop keyboard skills such as:- delete, shift, enter, space bar. - Understand the vocabulary – desktop, icon. - Able to log into Google Classroom with support.	- Create pictures - Predict outcomes of set of instructions when using control. - Create simple series of instructions: using right angle turns and simple repeats. Test and amend a series of instructions. - To understand what a hyperlink is and open to redirect to a different website. - Understand the importance of keeping passwords safe and secret. - Begin to research and answer own and other's questions. - Begin to understand what a spreadsheet is and how it can be used. - Able to log into Google Classroom with support.

ICT Non-Negotiables – Year 3 to Year 6 (Basic ICT Skills)			
Year 3	Year 4	Year 5	Year 6
- Combine text, images and sounds. - Input data into database; generate graphs and charts. - Use pictograms to answer questions. - Use email. - Understand how to keep safe when using email. - Perform web searches. - Understand the safety of personal information. - Begin to understand when to use the different Microsoft packages. - Access and use Google Classroom independently.	- Create text, images and sounds for specific audience (capturing images from range of sources) and use in a presentation. - Make a branching database. - Create questionnaire: record, analyse data and answer questions. - Use spreadsheets (linked to maths). - Make and edit a simple film; including title scenes. - Draw regular shapes using control technology: using range of angle turns. - Select relevant information from websites. - Open, edit and send email attachments. - Add attachments to email. - Access and use Google Classroom independently.	- Experiment with variables to control models and simulations: use 90^0 and 45^0 turns. - Plan and devise multi-modal texts containing hyperlinks. - Create a formula in a spreadsheet. - Develop animation skills: scripting, recording and editing sound, using narration and dialogue. - Edit short films and evaluate quality. - Compare bias and accuracy on web. - Present to an audience drawing materials from a range of sources. - Access and use Google Classroom independently.	- Create presentations with range of links, images and sounds. - Collect live data using data logging equipment identifying data errors, patterns and sequences. - Undertake film making; including scripting, roles, rehearsal, evaluation, quality of shots, appropriateness of sound, saving to different media. - Use cause and effect, eg input from sensors to trigger events; or virtually. - Create and refine series of instructions. - Manipulate images. - Design own webpage. - Access and use Google Classroom independently.