Rhydri Primary School
Information and Communication Technology (ICT) Policy

(This policy should be read in conjunction with the Teaching and Learning and Curriculum Policy, Inclusion Policy, The National Literacy and Numeracy Curriculum Mapping document, Assessment, Marking and Feedback Policy, Learning Environments Policy, Homework Policy and other curriculum policies.)

At Rhydri Primary School, our vision is to cultivate excellence and enjoyment in learning and teaching, within a stimulating and caring environment, where the achievements of all are celebrated. One of the many ways in which we achieve this ambitious vision, is to provide a creative, broad and balanced approach to the teaching of ICT across the curriculum. Our ICT curriculum encourages children to embrace new skills to participate in a rapidly changing world where work and leisure activities are increasingly transformed by emerging technologies.

Objectives:

We aim to help pupils to use ICT to:
- communicate confidently and effectively for a range of audiences and purposes;
- enhance their imagination and inventiveness to fulfil their creative potential;
- develop ICT capability in finding, selecting and using information;
- apply their ICT skills and knowledge to their learning across the curriculum, whilst appreciating its limitations;
- provide equal opportunities for all children in ICT regardless of cultural background, gender, age or special need;
- monitor and control events both real and imaginary;
- apply hardware and software to creative and appropriate uses of information;
- explore their own attitudes towards ICT and consider the contribution towards ICT to society in general;
- develop a genuine passion for ICT which will encourage children to maintain their interest outside school;
- achieve ambitious targets in ICT, thereby preparing them for a successful transition to secondary school.

Statutory Requirements
Statutory requirements for the teaching and learning of ICT are laid out in the *'ICT In The National Curriculum'* (Welsh Government, 2008) and in the *'National Literacy and Numeracy Framework'* (Welsh Government, 2013) documents. Legislation and guidance on approaches to delivering ICT is currently undergoing a period of transition. The school aims to reflect these changes as they occur.

Leadership

The development of ICT across all aspects of school life is an integral part of the school's vision. This commitment to ICT is also recognised each year in the annual school development plan. An ICT strategic leadership team is also in place consisting of the Head Teacher, ICT Coordinator, ICT support staff liaison and ICT link Governor.

The Implementation of the ICT Scheme of Work

ICT units of work are used by year groups to plan and deliver the ICT curriculum. Weekly planning ensures that work is differentiated to ensure there is appropriate challenge for all pupils. Units are reviewed on a

regular basis to ensure that the use of IT reflects ongoing developments with emerging technologies in society.

Objectives linked to school based 'skills ladders' in ICT ensure continuity and progression across the school. Many of these units have strong links with other aspects of the curriculum and also fulfill many of the requirements of the revised Literacy and Numeracy Framework.

Key Stage 2 foundation subjects identify additional 'wider skills'. These lessons provide opportunities for children to practise and consolidate their ICT skills. Teaching ICT across a wide range of subjects will also allow children to begin to use and apply their skills in real contexts.

The foundation phase profile has recently been updated and is currently a main area for school development. In light of this, an ICT skills ladder is being created which will reflect the revised profile.

Teachers employ a range of generic teaching strategies including:
- instructing/directing
- modeling/demonstrating/scribing
- explaining
- questioning
- discussing
- consolidating
- evaluating
- summarizing

Lessons include a range of whole class, small group, paired and individual work.

Homework and Opportunities for Additional Learning

Homework reinforces learning in the classroom and supports the aim for effective partnership between school and home. In Key Stage 2, a variety of set tasks are provided through the Welsh Government 'Hwb' resource. For example, upper juniors are expected to reflect on their learning using personal blogs. The school also purchases 'My Maths' online software to set activities linked to mathematics lessons taught in school during the week.

Inclusion

The school aims to provide for all children so that they achieve as successfully as possible according to their individual abilities. The school will identify pupils or groups at risk of under-achieving and take steps to improve their attainment. More able and talented children will be identified and suitable learning challenges provided.

Equalities

Rhydri Primary School has universal ambitions for every child, whatever the background or circumstances. Children learn and thrive when they feel safe in their environment, are healthy and have an appetite to learn. The cultural diversity, home languages, gender and religious beliefs of our school community are all celebrated. Our curriculum includes a wide range of resources that celebrates 'Welshness' and also represents the diversity and backgrounds of all other children across the school.

Role of the Subject Leader

The Subject Leader is responsible for improving the standards of teaching and learning in ICT through monitoring and evaluating ICT including:
- pupil progress;

- provision of ICT;
- quality of teaching of ICT;
- taking the lead in policy development,
- auditing and supporting colleagues in their CPD;
- purchasing and organising resources;
- keeping up to date with recent ICT developments.

Assessment and recording

Teachers assess children's work in ICT by:

- making written evaluations of children's outcomes against the identified objectives outlined in weekly planning;
- making informal observations during lessons which will inform future planning;
- providing marking and feedback in line with the school's 'Assessment, Marking and Feedback' policy.
- Making judgements about pupil progress using the school's leveled ICT portfolio of children's work. This portfolio identifies the expected level of achievement in ICT for each year group as well as providing indicators for taking the children's learning in ICT to the next stage of progression.

Resources

We aim to maintain a stable, high quality hardware and software environment where all children will develop their ICT skills and be e-confident. ICT systems are sustained by qualified technicians through a Caerphilly LA service level agreement. Regular audits of all resources enable us to target expenditure and ensure that resources match the needs of the curriculum.

Policy Written by Anna Slater
ICT Coordinator
December 2015

Date of review: December 2017

Signature of Chair of Governors: _____

Appendix 1: 'ICT' Units – Two Year Cycle

Key Stage 2: Year 1

Term	Silver Class	Gold Class
Autumn I	Introduction to blogs Text and Graphics (2type/BBC typing/Word)	E Safety (2 weeks) Text and Graphics (Revelation Art) (Link with History)
Autumn II	Databases	Vlogs
Spring I	Oracy using ICT (Prezi) Digital Research	Wikipages linked to Wreck of the Zanzibar.
Spring II	Photography	Stop motion animation
Summer I	Animation/literacy through ICT	Numeracy through ICT (Spreadsheets, data handling)
Summer II	Control - Turtle Sound (2 simple)	Music composition

Year 2

Term	Silver Class	Gold Class
Autumn I	Introduction to blogs Text and Graphics – Powerpoint	E Safety (2 weeks) Intro to blogs Typing Text and Graphics (Word)
Autumn II	Branching Databases – Introduction to coding (Y4)	Multimedia (radio drama – World War II)
Spring I	Databases - history	Spreadsheets (Excel) Geography In The News link
Spring II	Email	Scratch
Summer I	Digital Research	Scratch
Summer II	Health Related podcasts	Control (Lego Dacta)

		Create & Communicate		Preparing for Computer Science	Find & Analyse	
	Communicating	Exchange & Share information safely	Creative Multimedia	Problem Solving & Computing	Data Handling	Modelling
Y6	- Independently plan tasks with a purpose and audience in mind. - Combine a variety of information and media when creating, refining and developing their own ideas and information. - Make judgements and choices on the most appropriate software to use for a given purpose. - Manage workspace area on network or within cloud. - Evaluate the effectiveness of a variety of digital communication tools.	- Be aware of the dangers of misusing the internet and independently report misuse. - Abide by the SMART rules for using the internet. - With regard for e-safety select and use appropriate communication tools within and beyond school independently. (e.g. Hwb, e-mails, and forums.) - Develop use of more advanced searching techniques e.g. search for phrase using quotation marks. - Choose the most appropriate search engine for a task e.g. images, web, maps. - Be aware that all information online is not reliable linked to domain names and extensions e.g. .com and .org. - Add and edit email address books. - Use the CC and BCC tools when sending an e-mail and know their purpose. -Send group and individual e-mails and know benefits and risks.	- Plan a flow diagram showing how a user navigates through a program. - Create a hyperlink to another slide or other digital media using images and buttons e.g. PowerPoint, wiki, internet. - Create an organised layout for multimedia with increased consistency e.g. font size, type, headings, images. - Plan automated routine and pre-set timings. - Capture, import/export, save and edit video images. - Capture, import/ export and edit photographic images independently. - Use ICT to produce music or sound effects for a specific purpose, considering the impact on the audience, e.g., length, style, genre. - Create own sounds and compositions to add to presentations and films. - Chose an appropriate device/software to record sounds. - Independently select, edit, manipulate and combine sound files from a range of sources to create a composition. - Plan, create and refine a short animated sequence using appropriate software.	- Plan, create, test, modify and refine control sequences which use inputs and outputs, e.g. using if… then… commands to control events taking account of purpose and needs. - Devise, test and refine more effective control sequences incorporating conditional statements, procedures and sub-routines, taking account of purpose and needs. - Write script using standard commands involving variables to create a scoring system.	- Construct, refine and interpret a variety of charts and graphs including scatter, line and pie. - Solve complex enquiries by processing data. - Design questions and perform complex searches using key words, to search a large pre-prepared database looking for relationships and patterns e.g. data on the internet, census data. - Check the reliability of the data; identify and correct inaccuracies. - Choose and use appropriate software to present data and display findings. - Create, update and edit records and databases. - Search data according to more than one criterion. - Create, organise, update and refine spreadsheets. - Enter formulae into prepared spreadsheets to explore the effects.	- Use ICT to explore patterns and relationships. - Create models or simulations. - Make predictions about how changing one variable affects another and test their predictions. - Investigate the effect of changing variables/data within the model.
	Typing	- Use the correct fingers on the keyboard. - Use the keyboard with accuracy and increasing speed. - Use shortcuts in various programs e.g. CTRL + S and SHIFT + lower case letter.				

		Create & Communicate		Preparing for Computer Science	Find & Analyse	
	Communicating	**Exchange & Share information safely**	**Creative Multimedia**	**Problem Solving & Computing**	**Data Handling**	**Modelling**
Y5	- Plan tasks with a purpose and audience in mind. - Combine a variety of information and media when creating and developing their own ideas and information. - Begin to make judgements and choices on the most appropriate software to use for a given purpose. - Begin to organise workspace area on network or within cloud. - Evaluate the effectiveness of a variety of digital communication tools.	- Be aware of the dangers of misusing the internet and report misuse. - Abide by the SMART rules for using the internet. - With regard for e-safety select and use appropriate communication tools within and beyond school. (e.g. Hwb, e-mails, and forums.) - Begin to develop use of more advance searching techniques e.g. search for phrase using quotation marks. - Begin to choose the most appropriate search engine for a task e.g. images, web, maps. - Be aware that all information online is not reliable and begin to recognise the relevance to domain names and extensions e.g. .com and .org. - Create and add to an email address book. - Use the reply and CC tool when sending an e-mail and know their purpose. –Send group and individual e-mails and know benefits and risks.	- Consider how a user will navigate through a program and plan for this. - Create a hyperlink to another slide or other digital media using a URL e.g. PowerPoint, wiki, internet. - Plan for an organised layout when creating multimedia e.g. consistency in font, size, images. - Plan automated routine and pre-set timings. - Capture, import/export and save video images. - Capture, import/export, save and edit photographic images. - Use ICT to produce music or sound effects for a specific purpose e.g. style, genre. - Begin to create own sounds and compositions to add to presentations and films. - Plan an appropriate device/software to use to record sounds. - Select, manipulate and combine sound files from a range of sources to create a composition. - Plan and create a short animated sequence using appropriate software.	- Plan, create, test, and modify control sequences which use inputs and outputs, e.g. using if… then… commands to control events. - Write script using standard commands involving variables to create a scoring system. - Create script which results in features of sprites to change due to a variable. - Devise and test sequences incorporating conditional statements, procedures and sub-routines.	- Construct and interpret a variety of charts and graphs including scatter/line. - Solve enquiries by processing data. - Design questions and perform basic searches using key words, to search a large pre-prepared database. - Recognise and look for relationships and patterns e.g. data on the internet, census data. - Be aware of what affects the reliability of data; identify inaccuracies. - Begin to choose and use appropriate software to present data and display findings. - Create and edit records and databases. - Search data using a criterion. - Create, organise and edit spreadsheets. - Use function tools in excel to recreate formulae e.g. Auto sum.	- Use ICT to explore patterns and relationships between two features. - Re-create models or simulations that have been studied. - Make predictions about how changing one variable affects another and begin to test their predictions. - Begin to investigate the effect of changing variables/data within the model.
	Typing	- Use the correct fingers on the keyboard. - Continue to develop increasing speed and accuracy when using the keyboard. - Begin to use shortcuts in various programs e.g. CTRL + S and SHIFT + lower case letter.				

		Create & Communicate			Preparing for Computer Science	Find & Analyse	
		Communicating	Exchange & Share information safely	Creative Multimedia	Problem Solving & Computing	Data Handling	Modelling
Y4		- Plan tasks with a clear purpose. - Begin to combine media e.g. images, text, when creating own ideas and information. - Select the most appropriate software to use, when given a choice. - Save, retrieve and store work independently on a network or using the cloud. - Begin to understand the advantages and disadvantages of a variety of digital communication tools.	- Be aware of the dangers of misusing the internet and begin to report misuse. - Abide by the SMART rules for using the internet. - Begin to understand how e-safety affects the communication tools we choose and use within and beyond school. (e.g. Hwb, e-mails, and forums.) - Independently use search engines to research, locate images/websites etc. - Select the most appropriate search engine for a task, when given a choice e.g. images, web, maps. - Be aware that all information online is not reliable, although they may be some misunderstanding about why. - Independently log on to an e-mail account, open, create, draft, edit and send e-mails. –Select a recipient from an e-mail address book and begin to use the reply and forward tools. –Begin to attach a range of media to e-mails e.g. images, documents.	- Create a range of hyperlinks to another slide. - Use different font sizes, colours and effects to communicate meaning for a given audience. - Use various layouts, formatting, graphics and illustrations for different purposes or audiences. - Use cut, copy and paste and other appropriate editing tools to edit content e.g. spell check, thesaurus. - Recognise and use key layout and design features, e.g., text boxes, columns and borders. - Select suitable text, sounds and graphics from other electronic sources and import into own work. - Select and import sounds from other sources, e.g., own recordings, sound effects and music. - Capture and import images and prepare for use e.g. cropping, resizing and editing.	- Plan, create, test and modify sequences of commands to solve problems using a floor robot, screen turtle or other device. - Use more advanced Logo programming including pen up/down and repeat to create, test, modify and refine sequences e.g. patterns, symmetry.	- Create and use a branching database to organise and analyse information to answer questions. - Begin to identify what data should be collected to answer a specific question. - Ask a series of yes/no questions to create a simple branching database. - Construct and interpret a variety of charts and graphs including bar/line/bar-line. - Solve simple enquiries by processing data. - Create frequency diagrams and graphs to answer questions. - Collect data and record under headings. - Compare charts, understanding they are used for different purposes e.g. spreadsheets, tables, databases.	- Change the contents of cells in a pre-prepared spreadsheet and explore the consequences. - Use a pre-prepared spreadsheet to record data and explore simple number patterns, e.g., multiples. - Make and test simple predictions. - Explore the effects of changing variables in models and simulations, asking 'What if?' questions.
	Typing	- Know the correct fingers to use on the keyboard. - Develop increasing speed and accuracy when using the keyboard. - Recognise and use the layout of the keyboard e.g. letters, numbers, ctrl, alt.					

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	Communicating	Exchange & Share information safely	Creative Multimedia	Problem Solving & Computing	Data Handling	Modelling
Y3	- With guidance, plan tasks for a purpose. - Insert text and images into a range of media e.g. PowerPoint, word, with guidance. - Save, retrieve and store work with guidance on a network. - Begin to understand the advantages and disadvantages of basic communication tools e.g. word, PowerPoint.	- Be aware of the dangers of misusing the internet and how to report misuse. - Abide by the SMART rules for using the internet. - Begin to understand how e-safety affects the communication tools we choose and use within school. (e.g. Hwb, e-mails, and forums.) - With guidance, use search engines to research and locate images/websites etc. - Be aware that all information online is not reliable. - Log on to an e-mail account, open, create and send e-mails. –Select a recipient from an e-mail address book and use the reply tool.	- Create a hyperlink to a home page. - Know how to choose different font sizes, styles and colours. - Use various layouts with guidance and a growing awareness of different purposes or audiences. - Use copy, paste and spellchecker to edit work. - With guidance, begin to use key layout and design features, e.g., text boxes and borders. - Select from a range of suitable images and sounds and import into own work. - Capture images and prepare for use e.g. cropping, resizing and editing.	- Plan, create and test sequences of commands using a floor robot, screen turtle or other device. - Begin to use more advanced Logo programming including pen up/down and repeat to create and test sequences e.g. patterns, symmetry.	- Enter data into a prepared database and begin to organise information to answer questions. - Begin to ask a series of yes/no questions to create a simple branching database. - Begin to construct and interpret bar graphs. - Begin to create frequency diagrams and graphs to answer questions. - Collect data and begin to record under appropriate headings. - Begin to recognise the purpose of using different charts to record data e.g. table, spreadsheet, database.	- Begin to recognise the effect of changing variables/data within a model. - Begin to change the contents of cells in a pre-prepared spreadsheet. - Use a pre-prepared spreadsheet to explore simple number patterns, e.g., multiples. - Begin to make and test simple predictions. - Start to explore the effects of changing variables in models and simulation.
	Typing	- Use both hands for typing and know the correct fingers to use on the keyboard. - Begin to type with some fluency. - Develop correct use of the layout of the keyboard e.g. letters, numbers, ctrl (for capital letters, not caps lock), alt.				

		Create & Communicate			Preparing for Computer Science	Find & Analyse	
		Communicating	Exchange & Share information safely	Creative Multimedia	Problem Solving & Computing	Data Handling	Modelling
Y2		- Select appropriate images from an image bank to add to work, beginning to consider purpose and audience. - Select or record appropriate sounds to add to work, beginning to consider purpose and audience. - Word process short texts. - Navigate around text in a variety of ways e.g. mouse, keyboard. - Select text using an appropriate method e.g. clicking, highlighting. - Begin to save and retrieve work.	- Begin to understand the risks of using the internet. - Know what to do if they see something dangerous when using ICT. - Abide by the SMART rules for using the internet. - Consider e-safety when using the internet. - Type a given website address into a web browser. - Log on to an e-mail account. - Send an e-mail including a subject heading. -Begin to use the reply tool to respond to an e-mail.	- Make use of graphics, videos and sounds to enhance multimedia work. - Explore making simple changes to text e.g. colour. - Create simple presentations using a template for support. - Use a range of digital devices to capture images and videos e.g. camera, iPad, microscope, webcam. - Explore making simple changes to images e.g. rotation. - Begin to use spellchecker to edit work.	- Give and follow commands to navigate programmable toys including straight and turning movements. - Plan or follow a series of on screen commands. - Explore and begin to create a sequence of commands to produce simple patterns.	- Carry out on screen sorting activities e.g. Venn diagram, Carroll diagram. - Use simple software e.g. 2simple to produce basic tables and graphs e.g. pictogram/bar. - Use a prepared branching database to sort and classify items. - Use basic search tools in a prepared branching database.	- Explore simulations/models in other curriculum areas e.g. BBC science, virtual plants/pets. - Make informed choices when talking about what happens in a simulation. - Explore simple predictions.
	Typing	- Begin to use both hands for typing. - Begin to recognise the layout of the keyboard e.g. letters, numbers, space bar, enter.					