Computing Curriculum and Technology in the classroom

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The Visions and Values of Courthouse Green Primary School

School Vision

Every child in our school will receive the very best of learning opportunities to enable them to achieve academic excellence and personal growth.

Computing Curriculum Vision

To use technology to create an innovative learning environment which enhances all learning opportunities; enabling children to work collaboratively and independently; reflect and improve and present their learning with pride.

To develop children's use of mobile technology to prepare them for life beyond our school as ICT is an essential life learning skills. (Primary Curriculum)

Skills

Children will develop skills in core apps on iPads from Year 1 to Year 6, equipping them with a variety of skills which will be essential in their lives outside of Courthouse Green Primary School. These skills are based upon Bloom's Taxonomy and how they can develop children to become confident, independent learners, removing any barriers to learning, particularly for disadvantaged pupils.

Children will be able to:

• access apps which will assist with recall of previous learning,

• use the internet to gather research and to gain understanding independently,

• analyse the effectiveness of a variety of apps for purpose, for their own performances and work and problem solve (see coding section in curriculum map),

• critique their learning, evaluating their work through the use of innovative teacher feedback which will become effectively personalised and specific,

  • create, publish and present their learning and share it with a wider audience

See Computing Curriculum map (Appendix 1) for curriculum coverage throughout the year groups, examples of how these apps can be used, linking to skills. Refer to table below for the core list of apps.

A table to show which apps children will use across school.						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Remember	Clips Voice memo Camera	Clips Voice memo Camera	Clips Voice memo Camera	Clips Voice memo Camera	Clips iMovie Voice memo Camera	Clips iMovie Voice memo Camera
Understand	Safari	Safari	Safari	Safari	Safari	Safari
Analyse	Clips iMovie Tellegami? Puppet pals	Clips iMovie Tellegami? Puppet edu	Clips iMovie Tellegami? Puppet edu	Clips iMovie Tellegami? Morfo?	Clips iMovie Tellegami? Morfo?	Clips iMovie Tellegami? Morfo?
Evaluate	SeeSaw	SeeSaw	Showbie	Showbie	Showbie	Showbie
Create	Clips	Clips Morfo	Clips Morfo Pages Keynote Poplet	Clips Morfo iMovie Pages Keynote Poplet	Clips Morfo iMovie Pages Numbers Keynote Popplet Garage band	Clips Morfo iMovie Pages Numbers Keynote Popplet Garage band

List of iPad apps for teachers

OneDrive

Showbie (year 3 - 6)

SeeSaw (rec - y2)

Voice memo

Notability

Morfo

Popplet

Pic Collage

Padlet

Word

PowerPoint

Excel

Clips

iMovie

Pages

Numbers

Keynote

Garage band

Swift Playground

Clicker

CiP

2 simple

List of iPad apps for children

Showbie (year 3 - 6)

SeeSaw (rec - y2)

Voice memo

Notability

Morfo

Popplet

Pic Collage

Padlet

Clips

iMovie

Pages

Numbers

Keynote

Garage band

Sphero

Appendix 1 - Computing Curriculum Map

Computing Curriculum Map

App examples   **Prog of Study**   **Exemplification**

<mark>The main teaching tool for coding will be sphero. However, the following apps can be made available: Beebot, Daisy, Alex, Dino, Lightbox, cargobot, Hopscotch, Fix a factory, furnace, scratch, hakitzu, gamepress</mark>

	Y1	Y2	Y3	Y4	Y5	Y6
Computer Science and Resources Children will be able to use simple code to program. Children will create different programs and debug them.	Skill: Understand and write simple algorithms. For example, use directional buttons to control character in terms of distance traveled and direction (including turns) Skill: Test algorithms in a variety of ways. For example, talk about whether the algorithms work.	Skill: Begin to use algorithms to program. For example, use directional buttons to control character in terms of distance traveled and direction (including turns) For example write an algorithm for a specific purpose or task. Skill: Use logical reasoning to debug programs. For example to be able to explain why their code didn't work and what they would need to change to make it work. Skill: Make predictions about the behavior of programs. For example task would involve suggesting what would happen if certain buttons were pressed in sequence.	Skill: Use debugging to refine and edit algorithms For example use of good mistakes as a teaching point which includes a screenshot of instructions. Children could discuss steps to change.	Skill: Design and create programs that include repetition For example use Cargobot to repeat actions in lines of programming. Skill: Use a physical action as part of an algorithm to change on-screen actions. For example use Hopscotch to create a game where you control the movement i.e. shake the ipad or in scratch you can shout.	Skill: Debug programs that accomplish specific goals For example create own virtual environment through which they experiment writing successful algorithms.	Explain how some simple algorithms work and be able to correct errors. Solve problems by decomposing them into smaller parts <mark>For example create Sydney Opera house</mark> Skill: Work with variables For example to be able recognise how algorithms interacting can alter the outcome. e.g. In hopscotch if you collide with a specified object something will happen e.g grow in size orHopscotch – the speed which travel, rate at which things fall)

	Y1	Y2	Y3	Y4	Y5	Y6
IT and Resources To maximize the children's application and to ensure regular use of all IT equipment. Children should use ipads as apart of their day to day life in school. Children are able to use the iPad to enhance their learning experience, knowing when and how to use them mot effectively.	Skill: Create digital content. For example: writing, recording video, drawing a picture. Skill: Store digital content. Use Showbie or seesaw to save work. Most apps will auto save. Teach children to name their files effectively and placing them in folders. Skill: Retrieve digital content. Open a variety of apps to find saved work e.g Finding popplet with their name on. This should also include modelling how sometimes content can be accessed through a variety of points e.g. a photo through camera or photos program. Showbie, seesaw, Popplet, voice memo, clips	Skill: Manipulate digital content. For example, take photo and change the colours, crop or resize it, remove red eye, copying text from a website, changing the size and colour of the text. Morfo Booth, Pages, keynote, popplet Skill: Organise digital content. Choosing how and where to store work (pupil share folder, personal folder). Choosing the order in which you put information into an app (for a purpose). Showbie, pages, clips Create simple presentations using different applications, redrafting to improve where necessary	Skill: Use a search engine to find info. For example using the most simplistic words, always separating words with a space and not using punctuation. Google Search using safari Skill: Use a variety of software to accomplish given goals. Children choose from powerpoint or keynote to create a presentation, this could include using clipart images or importing from the camera roll. This may include: Keynote and power point (children may choose to use a variety of other apps to add objects or clips into their presentation). Skill: Design and create content. Add pictures and animation. Change layout options and create links to move to another page. Use Apple TV or reflector to present to the class. Clips, Morfo, Pages, Keynote, Poplet	Skill: Appreciate how search results are selected. For example discussion on how results are ranked. Using QR codes or links as a quick way to share information. Google Search using safari Skill: Select a variety of software to accomplish given goals. Children make informed choices about the apps and programmes they use to reach an outcome. Skill: Design and create content. Create an end product with book creator or IMovie. Edit their work for greater visual effect- add/ edit pictures or animation. Book creator (photos, video, voice recordings), Imovie, popplet, pages, numbers, Morfo, keynote	Skill: to select, use and combine multiple internet services. Using tabs to find many websites that are useful. Using split screen or docking to share work to other apps or compare. Email, airdrop, Apple TV, qr codes, showbie Skill: Appreciate how search results are selected, analysing and evaluating information,. For example discussion on how results are ranked. Consider the source (Wikipedia) and the purpose of why websites are made and how. Google Search using safari Skill: Select a variety of software to accomplish given goals. Children combine apps/programmes/ content to create an end product, this may include importing GIFs from an internet search or inserting a link a video or website. Skill: Design and create content. Confidently edit a range of features including; layout, pictures, size, font, background and page size. Import content from a variety of sources to create content. Skill: Collect data. Use apps and measuring devices to collect data. Data collection software. Skill: Present data. Use excel/ spreadsheet to input data into a pre-made spreadsheet for the purpose of collecting said data. Excel/numbers	Skill: Select use and combine software on a range of digital devices. Use the cloud to save and retrieve various content which can be combined to reach an outcome. For example upload animation clips from the IPad to the cloud, access them from the iPad and import into IMovie. iPads, associated apps. Skills: Analyse and evaluate data Good opportunity for problem solving- start with a pre-made spreadsheet and a question. They evaluate effectiveness. Skills: Present data for a specific audience. Present the information to parents via the blog, by uploading the progress of their investigation. This should involve inputting data onto a spreadsheet to keep track (upload spreadsheet to blog with summary). This could be in the context of awareness of a local or global issue. Apps: keynote, PowerPoint, numbers Skill: design and create systems Create own world and edit and adjust according to changing circumstances.

	Y1	Y2	Y3	Y4	Y5	Y6
Digital Literacy and Resources Use technology safely and respectfully, identifying where to go for help	Recognise common uses of information technology beyond school (phones, TV, credit cards) Use technology safely Esafety in PSHCE curriculum, safe use of the iPads, how to look after the iPads, keeping them safe, Charing them, keeping them up to date and why this is important. Start to be aware of 'closed environments' like a school Learning Platform and social networks	Use technology safely and respectfully Esafety in PSHCE curriculum, safe use of the iPads, how to look after the iPads, keeping them safe, Charing them, keeping them up to date and why this is important, ensure core values are applied to use of technology, especially kindness when commenting. Keep personal information private Identify where to go for help and support what they should do if an inappropriate website / image flashes up Start to be aware of online identities through own logon to a network. Apple ID and Showbie login.	Use technology safely and responsibly (make sure you switch off / log off before you put your ipad back, close your ipad, don't pass your log in on to anyone else, plug your ipad in after you have used it) Keep personal information private Identify where to go for help and support what different things can I do if an inappropriate website / image. flashes up. Only write positive comments on the class blogs. Begin to make choices about when and when not to use ICT and in what form. Start to independently select ways to communicate their own ideas.	Use technology safely and responsibly (make sure you switch off / log off before you put your ipad back, close your ipad open, don't pass your log in on to anyone else, plug your ipad in after you have used it) Keep personal information private Identify where to go for help and support – Identify different ways to report concerns about a contact. What different things can I do if an inappropriate website / image. flashes up. Only write positive comments on the class blogs. Recognise acceptable and unacceptable behavior e.g.when you take a photo of someone you should gain their consent first. Begin to understand about online identities and differences between private (Learning Platform) or public presence (social networks). Start to find ways of validating information to ensure it is correct	Understand the opportunities that computer networks offer for communication and collaboration (email, blog, skype, forums, save work to server). Keep personal information private Identify where to go for help and support what different things can I do if an inappropriate website / image. What information can I share online with people I do not know. Use collected data to create a game which would be a safe environment for children. What things would they need to consider?	Appreciate how search results are ranked. (use of boolion, the amount of people that visit a website, if you pay for the website). Be discerning in evaluating digital content. Keep personal information private Identify where to go for help and support what different things can I do if an inappropriate website / image. What information can I share online with people I don not know