Furneux Pelham School Curriculum

Statement of Intent, Implementation and Impact

“We need technology in every classroom and in every student and teacher’s hand, because it is the pen and paper of our time, and it is the lens through which we experience much of our world.”

David Warlick

Subject: COMPUTING

Subject Leader: Suzanne Kennard

Intent

At Furneux Pelham Primary School we believe a high-quality computing education will equip our pupils for participation in the increasingly digital world.

Pupils need to have a sound knowledge of **Computer Science**, understanding how digital systems work and developing programming skills and computational thinking. This will encourage them to be systematic in their thinking and able to problem-solve in a logical way.

They will also experience a range of **information communication technology**, which will enable them to create programmes, systems and a range of content. Their future will need them to manipulate software in their everyday lives and they will need to have a wide experience and confidence in doing so.

Pupils will also be taught **digital literacy** so they are able to use equipment, express themselves and develop their ideas safely and with regard for others. As digital interactions become the norm, a firm grounding in safe rules and appropriate use is essential.

The combination of these three elements will help our pupils become competent, active and safe participants in a digital world.

Implementation

At Furneux Pelham School in 2021 we are implementing the Teach Computing resources found at TeachComputing.org. This comprehensive and progressive bank of materials supports both pupils and staff in delivering exciting and engaging computing activities. Lesson plans, slides and supporting materials are all accessed via the website and are reviewed and updated to ensure they are current.

Our mixed-age classes follow a two-year rolling programme to ensure coverage of the whole curriculum at an appropriate level as detailed in the long term plan.

A set of class laptops is used on a timetabled basis, they also available in morning sessions to complement teaching in English and Maths. Tasks using the whole class set of iPads are also incorporated into the school day for use in topic work.

Unplugged or offline lessons are also frequently used to embed the theory behind programming algorithms or investigative activities to supplement learning.

Our use of technology in the classroom via the interactive whiteboard exposes pupils to the many ways it can enhance our learning experience.

Each pupil has a Google Classroom account and associated applications. This has been used most successfully for periods of remote learning and is available as a teaching tool for in-school lessons as well. Documents are shared and accessed via ipads or laptops, work can be submitted remotely and links to learning materials can be easily shared. Home learning projects are set via Google Classroom, submitted remotely and feedback given.

Each class has server-based files (J: drive) into which pupils save their work in topics. This builds up a collection of work for each class and individuals work can be accessed from these files. Older classes also make use of Shared Google drives where they save and retrieve work which has been shared with them.

Pupils are assessed termly against appropriate statements in conjunction with the skills progression documents.

Long Term Plan Computing
Resources available at Teachcomputing.org

		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	A and B	**Understanding the World (Technology)** • Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. • Understand that you may have to put your name/password into the device to retrieve your own files • Understand that you can connect with others via a device • Experience digital devices with an input/output. • Change the output of a device/toy by altering the input			• Experience research via whole class activities • Know that information and a range of services can be found online • Use the keyboard to enter own name and print document • Use the keyboard and mouse to move a character around a game • Experience recording own voice and hearing the playback. • Experience videos of self and ability to re-watch		
Y1/2	A	Technology around us Y1 (CS AL)	Information technology around us Y2 (NW CS)	Digital Painting Y1 (ET CM)	Digital photography Y2 (ET CM)	Moving a robot Y1 (AL PG)	Robot Algorithms Y2 (AL PG)
	B	Grouping Data Y1 (DI AL)	Pictograms Y2 (DI ET	Digital Writing Y1 (ET CM)	Making Music Y2 (CM DD)	Programming Animations Y1 (PG DD)	Programming Quizzes Y2 (PG DD)
Y3/4	A	Connecting Computers Y3 (NW CS)	The Internet Y4 (NW SS)	Stop Frame Animation Y3 (ET CM)	Audio Editing Y4 (ET CM)	Sequencing Sounds Y3 (PG DD)	Repetition in shapes Y4 (PG AL)
	B	Branching Databases Y3 (DI ET)	Data Logging Y4 (CS DI)	Desktop Publishing Y3 (ET CM)	Photo Editing Y4 (CM ET)	Events and Actions in programs Y3 (PG DD)	Repetition in games Y4 (PG DD)
Y5/6	A	Sharing Information Y5 (NW ET)	Internet Communication Y6 (NW ET)	Video Editing Y5 (CM DD)	Webpage Creation (CM DD)	Selection in Physical Computing Y5 (PG CS)	Variables in Games Y6 (PG DD)
	B	Flat file databases Y5 (DE ET)	Introduction to spreadsheets Y6 (ET DI)	Vector Drawing Y5 (ET CM)	3d Modelling Y6 (ET CM)	Selection in quizzes Y6 (AL PG)	Sensing Y6 (PG CS)

Impact

By the time pupils leave our school they will have:

- The pupils will be confident in selecting and using appropriate equipment and software for their needs.
- They will be able to solve problems by analysing data in a variety of forms.
- They will be able to break tasks down into their component parts and transfer instructions into a logical programme to achieve their aims.
- They will be confident in their abilities and have a range of problem solving strategies when using a range of software and applications.
- They will have a sound knowledge of how the digital systems in our lives function and interact.
- **Above all, they will use technology responsibly and safely with regard to themselves and others**.