St. Nicholas School Canterbury

Curriculum Progression Map

OAK	Computing 	Key Stage 1

Curriculum Intent:

Children develop skills and knowledge, so they are prepared and ready to use technology across the curriculum, and make safe and healthy choices about its use.

Children are offered opportunities to use a range of technological devices including, tablet computers, interactive white boards, switch toys and remote controlled/ programmable toys. The focus of learning is to access and control devices appropriately and safely.

Children will experience and contribute to the creation of a range of media using a variety of programmes. Associated devices such as cameras, video cameras and microphones will be used with support with a focus on developing independence. Activities will be imaginative, creative, collaborative and involve problem solving.

Safe use of the internet is explained whenever it is used. Children are guided in their use of the internet and safe choices are highlighted. The internet safety bulletin is used to support teaching with relevant updates about popular games and devices.

Implementation:

Teaching of computing is cross-curricular and is used by teachers in subjects as they consider to be most beneficial for student learning. Learning is predominantly practical and often play based, focusing on hands on experience of devices in a variety of environments and activities.

Learning Specific Skills:

- Children can operate some devices independently to access preferred activities.
- Children understand that computers can record, store and playback a variety of media including text, pictures, sound and film.
- Children use technology safely to collaborate and express themselves.

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Curriculum Progression Map

OAK	Computing 	Key Stage 2

Curriculum Intent:

Children's skills and knowledge develop because ICT resources continue to be widely used across the curriculum for a variety of purposes.

Children will be able to use a variety of technologies in different contexts with growing independence. Teachers will use technologies to support and inspire children's learning.

Children will have regular opportunities to access interactive learning games, online presentations and videos, create digital content, as well as operating a range of devices and appliances (including touch screens, laptops, appropriate control devices, programmable toys and virtual reality headsets)

Pupils learn about e-safety as part of their PSHE and Computing education in a stage appropriate ways to ensure they are developing their skills and understanding to keep themselves safe online. Schemes of work are in place to teach students about internet safety, privacy and cyber bullying.

Implementation:

Teaching of computing is cross-curricular and is used by teachers in subjects as they consider to be most beneficial for student learning. Learning is predominantly practical and combines adult directed activities with student led exploration.

Learning Specific Skills:

- Children **explore** the use of electronic devices and how they are controlled, for example using a remote controlled/ programmable toy or operating a simple programme/ app with purpose.
- Children use ICT to communicate and present their ideas, for example, creating a picture or using an appropriate word processor.
- Children are making safe choices when using technology, for example when accessing a website or choosing an activity within a computer program.

St. Nicholas School Canterbury

Curriculum Progression Map

OAK	Computing 	Key Stage 3

Curriculum Intent:

Computing is taught as a discreet subject and throughout the curriculum more broadly. Some early knowledge and skills of computer science and ICT are taught and students have the opportunity to explore and investigate these using a range of programs and devices.

Students continue to develop independence in their use of ICT and computing resources and are taught how to be responsible 'digital citizens'. Students take greater responsibility for skills such as logging in, managing passwords and printing credits.

Pupils learn about e-safety as part of their PSHE and Computing education in stage appropriate ways to ensure they are developing their skills and understanding to keep themselves safe online.

	YEAR 1	YEAR 2	YEAR 3
Computing	**Autumn: Exploring Simulations** (VR Headsets, Online resources accessed on laptops)	**Information through the Web** (Laptops, Edmodo, ThinkuKnow Resources)	**Surveys** (Laptops, Ipads)
	Spring: Information in the Community (Tablets, community based learning, laptops)	**Instructions and Sequences** (Spheros, Ipads)	**Social Networks** (Laptops, Edmodo, Think U Know Resources)
	Summer: Programming and Controlling Toys (Spheros, Ipads)	**Manipulating Sounds** (Ipads, Laptops, access to Audacity)	**Making Videos** (Ipads, video cameras, access to movie maker)

Learning Specific Skills:

Students can use ICT to work with text, images and sound to help them share their ideas. With minimum assistance students can use devices to record and programs to edit and present their work.

Students are able to use simple coding to give instructions to operate devices or in on screen activities.

Students talk about their use of ICT at home and school and use their knowledge of internet safety to make responsible decisions.

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Curriculum Progression Map

OAK	Computing	Key Stage 4

Curriculum Intent:

The planning and delivery of computing focuses on the application of functional skills across the curriculum.

Students use ICT independently to record, share and present their ideas. Programs and apps, including those that are web based are used safely and with purpose.

Internet Safety lessons continue to teach students how to effectively and safely access information and protect their identity and personal information. Where appropriate accreditation through OCR LLS will be used to demonstrate student achievement and progress.

Elements of the National Curriculum, will be suitably differentiated to enable students to develop and apply their analytic, problem-solving, design, and computational thinking skills.
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Learning Specific Skills:

Students can choose different kinds of software to work with different types of data for example Photoshop to edit images or Powerpoint to combine a variety of media.

Students use a variety of statements in programming instructions including loops and if statements.

Students can communicate independently and safely using web based programs, for example through email, messaging services and video conferencing.