Computing Statement of Intent, Implementation and Impact

Intent

Technology is an essential part of our lives today and it is difficult to imagine life without it. At Humshaugh C of E (Aided) First School, we aim to equip our children to participate in this rapidly changing world where work and leisure activities are increasingly transformed by technology. We aim to prepare our children to use technology in the future workplace and to participate in the digital world around them.

We aim for our children to be able to use technology to research, collate, analyse, evaluate, share and exchange information effectively. We aim for our children to understand how digital systems work and use this to design, write and debug their own programs.

At Humshaugh First School, we want our children to use technology to solve problems and to present content in a variety of ways. We want them to create, organise, store, manipulate and retrieve digital content independently and confidently.

We aim for our children to be digitally literate. We want them to recognise common uses of information technology that is used in industries across the world and how these technologies are evolving. It is our intention that our children are responsible users of technology and can use the internet respectfully and safely.

In line with our Vision, 'Being Good Soil', we seek to create ethical, responsible and respectful users of digital content to enable them to enhance their knowledge and contributions towards the community and wider world.

Implementation

Across the Computing curriculum we want our children to acquire and then secure knowledge and transferable skills that are progressively embedded from Early years to Lower Key Stage 2 and beyond.

At Humshaugh C of E (Aided) First School, we follow the National Curriculum programme of study which covers all three areas of Computing; Computer Science, Information Technology and Digital Literacy. We use the NCC and School 360 Scheme of work that we feel more than adequately cover the National Curriculum statements for Key Stage 1 and Key Stage 2. Computing is planned, taught and assessed using the scheme of work and its resources. These creative and exciting lessons are delivered using our class set of ipads. Whilst we use the units provided in this scheme of work, teachers have changed their medium term plan so that strong curriculum links can be made with subjects such as Mathematics, English, Art and Science.

Online safety lessons take place every half term following the 1decision and CEOPS schemes of work. Each unit covers a different aspect of staying safe online; developing online safety guidelines, social and emotional wellbeing and developing resilience, responsible internet use, keeping information safe, digital citizenship and playing games and having fun. These important aspects of online safety are every changing in this digital world therefore, any new risks to child welfare will result in extra lessons that inform, advise and educate our children linked closely with PSHE. National Safer Internet Day is celebrated each year starting with a whole school assembly and ending the day with a celebration of work assembly.

Impact

We aim for our fun, engaging and challenging Computing lessons taught by confident, knowledge rich staff to equip our children to be proficient users of technology both now and throughout their lives. We want our children to be:

· Confident and competent users of technology

· Critical thinkers that can solve problems

· Responsible, respectful and safe users of data, information and communication technology

· Creative and imaginative using technology to present, record and share their work to a wider audience

· Aware of technological uses and developments in the wider world.

NCC School 360 Computing Scheme-TOPIC OVERVIEW

CYCLE A

YEAR GROUP	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
EYFS	See separate EYFS curriculum	See separate EYFS curriculum	See separate EYFS curriculum	See separate EYFS curriculum	See separate EYFS curriculum	See separate EYFS curriculum
YEAR 1/2	Unit 1.1 Computing Systems and Networks- Technology Around Us	Unit 1.2 Creating Media- Digital Painting	Unit 1.3 Creating Media- Digital Writing	Unit 1.4 Data and information- Grouping data	Unit 1.5 Programming A- Moving a robot	Unit 1.6 Programming B- Introduction to animation
YEAR 3/4	Unit 3.1 Computing systems and networks- Connecting computers	Unit 3.2 Creating media- Stop frame animation	Unit 3.3 Creating media- Desktop publishing	Unit 3.4 Data and information – Branching Databases	Unit 3.5 Programming A- Sequence in music	Unit 3.6 Programming B- Events and actions

CYCLE B

YEAR GROUP	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
EYFS	See separate EYFS curriculum	See separate EYFS curriculum	See separate EYFS curriculum	See separate EYFS curriculum	See separate EYFS curriculum	See separate EYFS curriculum
YEAR 1/2	Unit 2.1 Computing systems and networks-Information technology around us	Unit 2.2 Creating media-Digital Photography	Unit 2.3 Creating media-Making music	Unit 2.4 Data and Information-Pictograms	Unit 2.5 Programming A-Robot Algorithms	Unit 2.6 Programming B-An introduction to quizzes
YEAR 3/4	Unit 4.1 Computing systems and networks-The internet	Unit 4.2 Creating media-Audio editing	Unit 4.3 Creating media-Photo editing	Unit 4.4 Data and information-Data logging	Unit 4.5 Programming A-Repetition in shapes	Unit 4.6 Programming B-Repetition in games

Progression of key skills from EYFS – Y4

	Computer Science	Information Technology	Vocabulary
End of EYFS	• Children recognise that a range of technology is used in places such as homes and schools. • They select and use technology for particular purposes.		ipad Computer Log on User name
End of Year 1	● To understand what algorithms are. ● To create simple programs.	● To use technology purposefully to access, create, store and retrieve digital content. ● To use technology safely & to understand the need to keep personal information private. ● To recognise common uses of information technology beyond school.	Program (algorithm) Logical reasoning Instructions Debug Information retrieval Manipulation Online
End of Year 2	● To understand that algorithms are implemented as programs on digital devices. ● To understand that programs execute by following precise and unambiguous instructions. ● To use logical reasoning to predict the behaviour of simple programs and debug simple programs.	● To use technology purposefully to access, organise, edit and manipulate digital content. ● To use technology respectfully and identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	Internet Digital Software Hardware Login/out Desk top APP Safety Program
End of Year 3	● To write and debug programs that accomplish specific goals.	● To use search technologies effectively. ● To use a variety of software to accomplish given goals.	Program (algorithm) Logical reasoning Instructions

	● To use sequences in programs. ● To work with various forms of input and output.	● To collect information. ● To design, create and present content. ● To use technology responsibly and identify a range of ways to report concerns about contact.	Debug Information retrieval Manipulation Online Internet Digital
End of Year 4	● To design, create and to use logical reasoning to debug programs that accomplish specific goals. ● To use repetition in programs. ● To control or simulate physical systems. ● To understand how computer networks can provide multiple services, such as the world wide web. ● To appreciate how search results are selected.	● To select a variety of software to accomplish given goals. ● To select, use and combine internet services. ● To analyse and evaluate information. ● To collect and present data. ● To understand the opportunities computer networks offer for communication. ● To identify a range of ways to report concerns about content and recognise acceptable and unacceptable behaviour.	Software Hardware Login/out Design Input Output, Sequence and Repetition Network WWW Analyse and Evaluate Search Browser Control Physical Systems Simulate e-safety