“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 Eurolex, one of the UK's first online services.

Computing Vision Statement

At Shefford Lower School we believe we have a clear vision: the children should be equipped with the knowledge and skills to be safe online, confident online and have the experiences they need to prepare them for 21st century lifestyles. We understand that computing is an imperative part of life today. We prepare the children for the challenge of a rapidly developing and changing technological world. We recognise that as a school we have a responsibility to prepare the pupils for their future by improving their knowledge of and understanding of how technology enhances learning and the real world beyond school. Our high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The use of ICT enhances and extends children’s learning across the whole curriculum whilst developing motivation and social skills.

Intent – what does the Computing curriculum intend to do?

At Shefford Lower School we intend that children should master Computing to such an extent that they can go on to have careers within Computing and make use of Computing effectively in their everyday lives, without being completely reliant on technology. Our children will be taught to use technology responsibly and carefully, being mindful of how their behaviour, words and actions can affect others. Our children will be taught Computing in a way that ensures progression of skills, and follows a sequence to build on previous learning. Our children will gain experience and skills of a wide range of technology in a way that will enhance their learning opportunities, enabling them to use technology across a range of subjects to be creative and solve problems, ensuring they make progress.

Implementation – how is the curriculum implemented?

We follow a broad and balanced Computing curriculum that builds on previous learning and provides both support and challenge for learners. We follow a Computing scheme that ensures and progression of skills and covers all aspects of the Computing curriculum. All classes will have a scheduled Computing lesson each week/all classes will not have a scheduled Computing lesson each week but will be taught Computing alongside other curriculum subjects. Children’s work will be stored on network class folders and purplemash folders for reference and assessment. We want to ensure that Computing is embedded in our whole school curriculum and that opportunities for enhancing learning by using technology are always taken.

Impact – what progress will children make?

Our children enjoy and value Computing and know why they are doing things, not just how. Children will understand and appreciate the value of Computing in the context of their personal wellbeing and the technological, creative and cultural industries and their many career opportunities. Progress in Computing is demonstrated through regularly reviewing and scrutinising children's work, in accordance with our Computing assessment policy to ensure that progression of skills is taking place. Namely through:

Looking at pupils' work, especially over time as they gain skills and knowledge

Observing how they perform in lessons

Talking to them about what they know

The Computing curriculum will contribute to children's personal development in creativity, independence, judgement and self-reflection. This would be seen in them being able to talk confidently about their work, and sharing their work with others.

Progress will be shown through outcomes and through the important record of the process leading to them.

At Shefford Lower School in the Early Years Foundation Stage we teach:

- use beebots to program instructions
- use torches to understand input/process/output
- use of interactive whiteboard for input/output
- use of purplemash/2publish for artwork
- use of kindles/laptops for learning games

At Shefford Lower School in Key Stage 1 we teach:

Programming –

- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs

Information Technology -

- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school

E-safety -

Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

At Shefford Lower School in Key Stage 2 we teach:

Programming –

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

Information Technology -

- understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information