Computing

Sticklepath Intent

Our curricular aims are to develop **Growing Minds** that are **Curious, Critical Communicators**.

Computers are now part of everyday life. For most of us, technology is essential to our lives, at home and at work. 'Computational thinking' is a skill children must be taught if they are to be ready for the workplace and able to participate effectively in this digital world.

The curiosity, creativity and courage that we nurture in the children now should endure as they move on through education and into adult life. To fully exploit the opportunities that current and future technology offers them, pupils will draw on the understanding of computing we provide them with, as well as confidence gained through working on a range of meaningful projects throughout their primary education.

In line with the National Curriculum for Computing, our aim is to provide a high-quality computing education which equips children to use computational thinking and creativity to understand and **change** the world. The curriculum will teach children key knowledge about how computers and computer systems work, and how they are designed and programmed. Learners will have the opportunity to gain an understanding of computational systems of all kinds, *whether or not they include computers.*

At Sticklepath we actively educate children about managing risk and keeping themselves safe. E-safety is embedded throughout our computing and wider curriculum and not just a bolt on. As they develop computing skills, Sticklepath children will search out bias, never taking 'facts' at face value. Children will be able to critically evaluate websites for reliability of information and authenticity and demonstrate responsible use of online services and technologies. Children will know how to report risks and how to manage them effectively. The school will support and work with parents in partnership to keep children safe, highlight issues and challenge misinformation.

At Sticklepath, we actively teach children to use precise, technical computing vocabulary, empowering them to communicate in an ever complex digital world.

By the time they leave Sticklepath, children will have gained key knowledge and skills in the three main areas of the computing curriculum: computer science (programming and understanding how digital systems work), information technology (using computer systems to store, retrieve and send information) and digital literacy (evaluating digital content and using technology safely and respectfully). The objectives within each strand support the development of learning across the key stages, ensuring a solid grounding for future learning and beyond.

Computing at Sticklepath will be:

ACTIVE: Pupils should be actively engaged and motivated in their learning - typically this will be doing something on a computer, but could also be taking part in a discussion or an activity away from the computer.

CONSTRUCTIVE: This can be understood both in the sense of constructing meaning, developing pupils' mental mode of computation and technologies, and in the sense of making something, whether this is a computer program, a presentation or a blog post.

INTENTIONAL: Ideally, pupils should have some degree of choice over how they tackle a task or project, or perhaps even over the task or project itself. It is unlikely they will learn much from copying a worked solution off an IWB screen, and many projects can be constructed or adapted to allow plenty of scope for individual creativity.

AUTHENTIC: Wherever possible, try to link activities with pupils' own experiences, both within and beyond school; cross curricular, projects work well, as do those link to pupils' experiences of technology.

COOPERATIVE: Computing, in both industrial and academic contexts, is a collaborative endeavour. Where possible, our curriculum will construct activities so that pupils can work together, supporting one another in their learning.