Computing at Langford Village

What do we learn?

Early Years Foundation Stage
For our very youngest learners in the Foundation Stage Unit (FSU) we aim to give children a broad, play-based experience of computing in a range of contexts, including outdoor play. Computing is not just about computers. Early years learning environments feature computing scenarios based on experiences in the real world, such as role-play e.g. pretending to use a microwave. Children gain confidence, control and language skills through opportunities to 'paint' on the whiteboard and use cameras to take pictures of their experiences indoors and outside. Outside exploration is an important aspect for children in the FSU, supported by ICT toys such as controllable traffic lights, cameras and walkie-talkie sets.

Key Stage 1+2
Each half term children study computer science or information, communication and technology. Each lesson also has an online safety element through our teaching of digital citizenship (e-Safety) which is taught throughout the year allowing the children to be able to access the World Wide Web in a safe and respectful way, they will understand the necessary precautions to take to stay safe online and know where to seek help.

Computer Science
In the younger years children learn to use programmable toys for a purpose, ask questions when they don't work and think of ways to improve their code. Children then move on to creating simple programs through block coding and using a range of software such as Kodable, Espresso coding and Scratch Junior. As their skills develop they move onto using more complex programs in Scratch, Lego WeDo, Microsoft Kodu and using HTML. Teaching computer science ensures our children develop a 'can do' attitude to problem solving and logical thinking, teaching children how to think not what to think!

Information and Communication Technology
When focusing on the ICT side of computing children learn how to create, edit and select digital content for a purpose. From learning how to save and print in Key Stage one through to producing online surveys and learning how search engines rank their results children develop a range of ICT skills they will need in this digital age.

Children will learn to be digitally literate by learning how to use information technology to express themselves creatively presenting work in a purposeful way. This includes using Microsoft programs such as Word, Excel and PowerPoint, and a range of apps.

Digital Citizens and E-Safety
As they progress through Key Stage 1 & 2, children learn to be confident digital citizens who are discerning about what they read online and who want to contribute positively to the ever-changing digital world.

What does computing look like at Langford Village?

At Langford, we will provide all of our children with the skills, creativity and enthusiasm to live and thrive in a world increasingly dependent on computing. Our aim is to provide an aspirational and innovative Computing Education, which will equip our pupils to harness technology in a safe, purposeful and creative way.

Each of our classrooms is equipped with a smart board linked to the teacher's laptop, which are used within daily lessons. In addition, each classroom (Y1-6) has two networked PCs and Foundation Stage teachers and key workers have their own tablet. For whole school use we have two laptop trolley's each with a class set of laptops, a trolley of tablets, and the use of Beebots.

Links

How to talk to your child about online safety
Think you know: HYPERLINK
"https://www.thinkuknow.co.uk/parents"
https://www.thinkuknow.co.uk/parents

Advice for parents about the most current apps and games
Parent Zone: HYPERLINK
"https://parentzone.org.uk/advice/parent-guides"
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Why is it important?

As computing technology underpins today's modern lifestyle, it is essential that all pupils gain the confidence and ability they need in this subject, to prepare them for the challenge of a rapidly developing and changing technological works.

A 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, literacy, design and technology, and provides insights into both natural and artificial systems.

We believe that computational thinking is vital in helping children to solve problems, design systems, and understand the power and limits of human and machine intelligence. We believe it is a skill that empowers, and one that all pupils should be aware of and develop competence in. Pupils who can think computationally are better able to conceptualise, understand and use computer-based technology, and so are better prepared for today's world and the future.