Computing Curriculum Intent

"Everybody in this country should learn to program a computer, because it teaches you how to think."

Steve Jobs



"I think the best piece of advice I can give anyone with a dream is never be afraid
to share your dreams and talk about what you wish to create and see in the world."

Shree Bose

Our over-arching curriculum intent for children from Bovey Tracey Primary School in Computing:

We aim to give our pupils the life-skills that will enable them to embrace and utilise existing and new technology in a socially responsible and safe way in order to flourish.

With technology playing such a significant role in society today, we believe 'computational thinking' is a skill that children must be taught if they are to be able to participate effectively and safely in this digital world. A high-quality computing education equips pupils to use 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.

At Bovey Tracey Primary School, the core of computing is computer science in which pupils are introduced to a wide variety of technology including BeeBots, laptops, iPads and interactive whiteboards, allowing them to continually practice and improve the skills they learn. This ensures they become digitally literate so that they are able to express themselves and develop their ideas through information and computer technology – at a level suitable for the future workplace and as active participants in a digital world.

Through a relevant, inspiring and progressive curriculum, children a Bovey Tracey Primary School will:

- Become confident in using coding and can understand and apply the fundamental principles and concepts of computer science, including logic, algorithms and data representation.
- Analyse problems in computational terms and have repeated practical experience of writing computer programs in order to solve such problems.
- Be able to develop their curiosity and allow their interests to flourish through the varied uses of technology and software.
- Effectively communicate and can evaluate and apply information technology.
- Be able to connect with others responsibly and are competent, confident and creative users of information and communication technology.
- Appreciate our rich and varied computing heritage and draw inspiration from key figures and what they have achieved.
- Have a breadth of experience to develop their understanding of themselves as individuals
 within their community but also as members of a wider global community as responsible
 digital citizens.

To achieve this, we will:

- Ensure children are immersed in exciting and relevant content and themes.
- Directly teach a range of higher-level vocabulary to enrich each child's understanding and ability to communicate
- ensure children are taught explicitly the knowledge and skills they need
- Plan and sequence computing well so that knowledge builds on knowledge and skills build on skills, enabling the children to remember what they have been taught.
- Plan so that all children can access the subject well by providing scaffolding, vocabulary support, extension questions and theories to explore.
- Ensure our knowledge of pedagogy enables us to deliver lessons in a variety of ways to increase engagement.
- Use challenge questions for pupils to apply their learning in a philosophical and open manner.