Computing Intent at Oakley CE Junior School

Our vision and rationale

It is our aim that children should leave Oakley CE Junior School with a comprehensive understanding of computing principles, skills, and digital literacy that will equip them for the future. They will have the ability to use technology creatively and critically to solve problems and communicate their ideas. Through our computing curriculum, we strive to instil an appreciation of the evolving digital world, fostering confident and responsible digital citizens.

This vision is rooted in our Christian values of courage: encouraging children to explore new technologies and embrace challenges in their learning, respect: promoting responsible use of technology and showing respect for the digital work of others, and grace: supporting collaborative learning and helping peers navigate the digital landscape.

We recognise that to become proficient in computing, children need a variety of learning experiences beyond the standard curriculum. At Oakley CE Junior School, we provide opportunities for children to engage with different aspects of computing through dedicated lessons and integrated projects. This includes understanding coding, digital literacy, e-safety, and the use of various software and hardware tools.

Our computing curriculum is structured around a clear progression of skills and knowledge. Each week, children participate in lessons that build on previous learning while introducing new concepts. This approach ensures that pupils consolidate their understanding and remain engaged with their learning journey. The curriculum often intersects with other subjects, enhancing overall learning by demonstrating the practical applications of computing in various contexts.

By embedding computing in the wider school curriculum and providing a range of extra-curricular opportunities, we aim to nurture enthusiasm for technology. This prepares children to thrive in an increasingly digital world and inspires them to continue developing their skills beyond their time at Oakley CE Junior School.

Purpose of study:

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, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

The national curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

Inclusion

Pupils who need support in our curriculum may not need support in computing and those children with who are working at greater depth may need more support in computing. As teachers and educators, we need to flexible. As a school, we believe in '**Great expectations for all**' and this is fostered in our approach.

Some pupils might need the following adaptions:

-highlight key terms and provide simplified instructions for better understanding.
-offer extra time and support for skill development before advancing to new concepts.
-facilitate small group work with adult guidance for personalised learning.
-encourage partner work

-provide hands-on activities and IT tools to aid expression and organisation of ideas.
-break tasks into manageable steps for easier comprehension and success.
-provide templates to reduce cognitive load.
-use handouts that provide instruction reminders and clear steps to be successful.