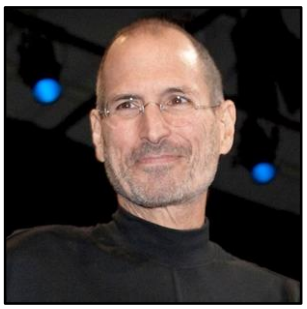
Intent, Implementation and Impact – Computing

''Computers themselves, and software yet to be developed, will revolutionize the way we learn.” – Steve Jobs.



Intent

At Lewknor Church of England Primary School, our aim is to prepare our learners for their future by giving them opportunities to gain knowledge and develop skills that will equip them for an ever-changing digital world.

We want all our pupils to be competent in the key areas of computing and ICT and able to apply their knowledge and understanding safely in real-life and ever-changing situations.

Knowledge and understanding of ICT is of increasing importance for our children’s future both at home and for employment. We believe that all children need to be equipped with the necessary computing skills, and knowledge and understanding in order to succeed and flourish throughout their education and in the future workplace. Through our computing curriculum, we aim to give our children high quality, enjoyable and memorable experiences through access to a range of digital and electronic software and hardware.

Teach Computing focuses on a progression of skills in digital literacy, computer science, information technology and online safety to ensure that children become competent in safely using, as well as understanding, technology. In computer science we will teach the principles of information and computation, how digital systems work and how to put this knowledge to use through programming information. In addition, we aim to ensure our children are equipped to use information technology to create programs, systems and a range of content.

Computing also ensures that our pupils become digitally literate – able to explore, 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.

Implementation:

The goal of *Teach Computing* is to transform the way computing is taught in schools across the country – and enable more young people to benefit from studying this important subject. Through this, their skills and career opportunities will be enhanced in the future.

At Lewknor, our pupils have access to a variety of digital devices which are used to support teaching across the curriculum. We have interactive screens in every classroom, laptop computers, data loggers, programmable toys, and other devices to help children apply their skills.

We have based our computing curriculum on the *Teach Computing* curriculum, which was created by the Raspberry Pi Foundation on behalf of the National Centre for Computing Education (NCCE). We chose this as the basis of our computing curriculum design for two key reasons:

1. It is inclusive and ambitious. The *Teach Computing* curriculum has been written to support all pupils. Each lesson is sequenced so that it builds on the learning from the previous lesson, and where appropriate, activities are scaffolded so that all pupils can succeed and thrive. Scaffolded activities provide pupils with extra resources, such as visual prompts, to reach the same learning goals as the rest of the class. Exploratory tasks foster a deeper understanding of a concept, encouraging pupils to apply their learning in different contexts and make connections with other learning experiences. As well as scaffolded activities, embedded within the lessons are a range of pedagogical strategies which support making computing topics more accessible.
2. It is informed by research. The subject of computing is much younger than many other subjects, and as such, there is still a lot more to learn about how to teach it effectively. To ensure that our pupils are as prepared as possible, the *Teach Computing* curriculum builds on a set of pedagogical principles which are underpinned by the latest computing research. To remain up-to-date as research continues to develop, every aspect of our computing curriculum will be reviewed each year and improved as necessary.

Impact

Children will:

- develop essential skills including folder structures, formatting, Email, printing and the use of cloud computing.
- be better able to work across all subjects through skills learned in ICT for example, Internet searching skills.
- develop understanding that will make better and safer use of Smartphones, tablets and technology in general.
- understand the basics of computers and how they work.
- be able to extend their vocabulary using ICT related terminology.
- have an improved knowledge of career options that relate to ICT.
- learn how ICT can be useful in any career option.
- learn about the key aspects of computing (digital literacy, information technology, and computer science) through a variety of units that provide them with key skills that will serve them now and in later life. of cloud computing.
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