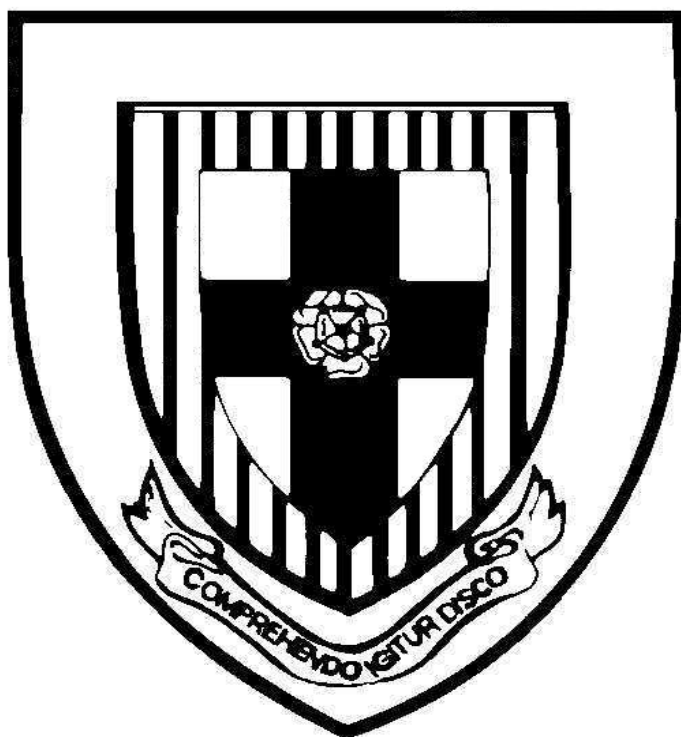


Oak Cottage Primary School



Computing

Curriculum (Intent, Implementation, Impact)

October 2023

Intent

At Oak Cottage Primary School we aim to ensure that all pupils become confident and secure in the use of computers and technology. Therefore, it is imperative that we model and educate our pupils on how to use technology positively, responsibly and safely. This is incredibly important as our world continues to develop at an ever-increasing pace and our pupils will enter a workforce and indeed social world that is closely linked with technology.

As a school, we want our pupils to:

- Be digitally literate.
- Confident, responsible and safe when using information technology.
- Understand that there is always a choice when using technology and as a school, we utilise it positively (especially for social media).
- Recognise that technology can be used positively and that by educating ourselves we can be prepared for instances where we come across content that is upsetting or not appropriate.
- To embed digital technology in other curriculum areas: using devices to research, record work or create projects (e.g. design and technology), for example.
- Are provided with sufficient challenges and support to progress at their own level.
- Encourage girls to engage in the discipline.
- Enjoy and take pride in what they do.

Implementation

At Oak Cottage, our computing curriculum is based on the 'Teach Computing' education programme provided by the National Centre for Computing Education (NCCE). This curriculum is closely mapped against the topic themes in each year group so that skills can be applied to areas of experience for pupils. Key knowledge and skills build towards mastery of specific objectives at the end of Key Stage (Yr 2 and 6) with EYFS focussing on giving children personal experiences and practical opportunities to explore computational thinking readying them for the National Curriculum's programme of study in Year 1.

We use a range of hardware to support teaching and learning of computing, including our computer suite, two class sets of Chromebooks, microphones/headphones, Sharp interactive screens in each classroom and 14 iPads. We also have a range of programmable robots (Beebots) for EYFS and KS1 and a set of Micro:bits and Crumble Controllers for KS2. This ensures that all year groups have the opportunity to use a range of devices, programs and physical computing equipment across the curriculum as well as in discrete computing lessons. Employing cross-curricula links, such as in design and technology, motivates pupils and supports them to make connections and remember the steps they have been taught.



Crumble controllers attached to wheel units – Go Kart kit.



Crumble controller motherboard



Micro: bit motherboard

Our curriculum guides pupils towards accomplishing the learning objective through knowledge of the criteria needed to succeed and practical tasks. Hands-on opportunities are integral and give children the chance to explore and work together before completing independent tasks. Each 6-week unit builds towards a project to be completed or an assessment piece with each lesson providing the key skills needed to succeed. These range from creating podcasts to programming BeeBots (KS1), programming playable pianos (Scratch) and making moving circus carousels using physical computing equipment such as Crumble controllers, for example.

Overall, our curriculum aims to ensure that pupils leave Oak Cottage with digital literacy, computational thinking and computer science knowledge to succeed in later education and outside the classroom.

Impact

Our Computing Curriculum is high quality, well thought out and is planned to demonstrate progression and build on and embed current skills. Children become increasingly proficient on school equipment and have good, transferable knowledge and understanding of online safety which is transferred into their own lives.

Through the Teach Computing curriculum, children have a broad base of transferable knowledge that can be used on similar platforms. Progress in our curriculum is demonstrated through the outcomes of our pupils. This is evidenced through Google Classroom (in KS2), subject standards file, pupil voice, subject monitoring and lesson observations. These steps ensure a positive impact of computing as a subject.