

Computing

At Eastington Primary School, we endeavour to promote the development of the whole child. Together, we strive for children to be independent, life-long learners who are kind, cooperative, resilient, responsible and ambitious in all they do.

Our school values underpin our broad and balanced curriculum. We aim for children to enjoy and engage in the wide range of learning opportunities provided, resulting in confident, well-rounded individuals who are ready for their next steps.

Relationships amongst all members of our school family are highly valued and we have kindness at the heart of our school. We aim to develop children who care for themselves, each other and the wider world and encourage everyone to be the best they can be.

Aiming high together to be:

- Kind show respect and care
- Cooperative work well together
- Resilient keep trying
- Responsible reflect and learn
- Ambitious challenge yourself

Intent

When planning and teaching computing at Eastington Primary School, we believe that it is an essential part of the curriculum; a subject that not only stands alone but is woven and should be an integral part of all learning. Computing, in general, is a significant part of everyone's daily life and children should be at the forefront of new technology, with a thirst for learning what is out there. Computing within schools can therefore provide a wealth of learning opportunities and transferrable skills explicitly within the Computing lesson and across other curriculum subjects.

Through the study of Computing, children will be able to develop a wide range of fundamental skills, knowledge and understanding that will actually equip them for the rest of their life. Computers and technology are such a part of everyday life that our children would be at a disadvantage would they not be exposed to a thorough and robust Computing curriculum. Children must be taught in the art form of 'Computational Thinking' in order to provide them essential knowledge that will enable them to participate effectively and safely in the digital world beyond our gates.

Implementation

In Key Stage 1 the children will learn to understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. They will be taught to create and debug simple programs and use logical reasoning to predict the behaviour of simple programs. They will be shown how to use a range of technology purposefully to create, organise, store, manipulate and retrieve digital content as well as recognise common uses of information technology beyond school. They will be taught to use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. Each of these skills will be taught through exciting half termly units.

In Key Stage 2 the children will design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. They will use sequence, selection, and repetition in programs, use logical reasoning to explain how some simple algorithms



work and correct errors in algorithms and programs. Children will be taught to understand computer networks, including the internet, and the opportunities they offer for communication, cooperation and collaboration. They will use search technologies effectively, learn to appreciate how results are selected and ranked, and be discerning in evaluating digital content. Children will be taught to select, use and combine a variety of software (including internet services) on a range of digital devices to create a range of programs, systems and content that accomplish given goals. They will use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Even our children in Early Years provision will be exposed to the understanding of internet safety as they explore the world around them and how technology is an everyday part of their learning and understanding of the world. The needs of all children are met through the planning and delivery of this subject. This is carried out in a variety of ways, such as: differentiation through outcome/task, adult support, adapted tasks/materials and pre-teaching of skills and vocabulary if necessary.

Impact

After the implementation of this robust computing curriculum, children at Eastington Primary School will be digitally literate and able to join the rest of the world on its digital platform. They will be equipped, not only with the skills and knowledge to use technology effectively and for their own benefit, but more importantly - responsibly and safely. The biggest impact we want on our children is that they understand the consequences of using the internet and that they are also aware of how to keep themselves safe online.

As children become more confident and ambitious in their abilities in Computing, they will become more independent and resilient and key life skills such as problem-solving together using cooperation, logical thinking and self-evaluation become second nature.