Rotherhithe Primary School

Intent, Implementation and Impact Statement

Computing

Intent

At Rotherhithe Primary School, we want our pupils to be masters of technology and not slavesto it. Technology is everywhere and will play a pivotal part in pupils' lives. Therefore, we wantto model and educate our pupils on how to use technology positively, responsibly and safely. We want our pupils to be creators not consumers and our broad curriculum encompassingcomputer science, information technology and digital literacy reflects this. We want our pupilsto understand that there is always a choice with using technology and as a school we utilisetechnology to model positive use. We recognise that the best prevention for a lot of issues we currently see with technology/social media is through education. We recognise that technology can allow pupils to share their learning in creative ways. We also understand the accessibility opportunities technology can provide for our pupils.Our knowledge-rich curriculum is balanced with the opportunity for pupils to apply their knowledge creatively, which will in turn help our pupils become skillful computer scientists. We encourage staff to try and embed computing across the whole curriculum to make learning creative and accessible. We want our pupils to be fluent with a range of tools to best express their understanding and hope by Upper Key Stage 2, children have the independenceand confidence to choose the best tool to fulfil the task and challenge set by teachers. Across the Computing curriculum we want our children to acquire and then secure knowledge and transferable skills that are progressively embedded from early years to KS2 and beyond.

Implementation

At Rotherhithe Primary School, we follow the National Curriculum programme of study which covers all three areas of Computing: Computer Science, Information Technology and Digital Literacy. We have carefully selected a scheme of work that we feel more than adequately cover the National Curriculum statements for Key Stage 1 and Key Stage 2. Computing isplanned, taught and assessed using the online scheme of work, resources and assessment tool from Teach Computing. Teach Computing provides an innovative progression framework where computing content (concepts, knowledge, skills, and objectives) are organised intointerconnected networks called learning graphs. Teachers use these learning graphs to directly inform lesson planning and to identify opportunities to assess pupil understanding at key points in a lesson or unit. These creative and exciting lessons are carefully timetabled so that each class has access to a set of devices (laptops and iPads) for one hour a week. Whilst we use the unitsprovided in this scheme of work, teachers have changed their medium term plan so that strongcurriculum links can be made with subjects such as Mathematics, English, Art and Science. At Rotherhithe we understand the importance of our students developing skills such as leadership and teamwork. With this in mind, we carefully select pupils from Year 5 and 6 to be part of our Digital Leaders team. Our Digital Leaders are responsible for leading online safety developments throughout school. The Digital Leaders are here to help children learn how to stay safe online and on electronic devices. The team meet regularly to plan assemblies, review policies and prepare resources to share with classes based upon their needs.

Our children begin their journey with technology in Early Years, with access to iPads and BeeBots, as well as some time spent using laptops to familiarise children with a desktopsetup. Teachers facilitate children's curiosity with challenge and modelling how to use the equipment responsibly and safely.

In KS1 children continue their journey with the BeeBots, using them more precisely. They learnhow to programme a BeeBot to reach a destination and begin to be able to debug when something doesn't work out the way they imagined. They develop their mouse control and learn how to log on and off a computer using their own username and password.

They learn about online safety and what to do if they encounter something which makes them feel uncomfortable as well as what personal information is and why it is important, we don't share it with someone on the internet. Coding then progresses from BeeBots onto a computer-based programme where children learn how to programme a variety of sprites.

In KS2, children continue this coding journey, not only making the sprites move, but interact with each other. As children progress up KS2 the coding becomes more complex and they areable to create basic games with code. Their digital literacy skills are combined with English,science, history and geography and work is word processed and presentations are createdusing PowerPoint. Children learn how to use the hardware we have in school including webcams, where they are taught how to take and manipulate pictures, showing them thatwhat they view in the media isn't always accurate. The children are also taught internet safetythroughout each year of KS2. They know how to keep themselves safe online and what to do if they come across something that makes them uncomfortable. KS2 are taught the differencebetween being a bystander and an upstander and the importance of reporting somethingthey experience happening to themselves or another person, as in accordance with our Anti Bullying Policy and our Online Safety Policy. Upper KS2 understand the importance of media balance and appreciate that as they get older, they are more responsible for their online presence and how often they access a variety of forms of media.

Impact

We encourage our children to enjoy and value the curriculum we deliver. We will constantlyask the why behind their learning and not just the how. We want learners to discuss, reflectand appreciate the impact computing has on their learning, development and well-being. Finding the right balance with technology is key to an effective education and a healthy lifestyle. We feel the way we implement computing helps children realise the need for the rightbalance and one they can continue to build on in their next stage of education and beyond.We encourage regular discussions between staff and pupils to best embed and understandthis. The way pupils showcase, share, celebrate and publish their work will best show the impactof our curriculum. We also look for evidence through reviewing the pupils exercise books and reviewing pupil's knowledge and skillsdigitally through tools like Microsoft Teams and Tapestry. In addition to this, we observe learning regularly by conducting learning walks. Progress of our computing curriculum is demonstrated through outcomes and the record of coverage in the process of achieving these outcomes.