Computing Curriculum Statement

Intent

Technology is everywhere and will play a pivotal part in students' lives. Therefore, at St Anne’s we model and educate our pupils on how to use technology positively, responsibly and safely. We want our pupils to be creative content providers, not simply consumers and our progressive curriculum encompassing computer science, information technology and digital literacy reflects this. Our curriculum is based on the framework provided by the National Curriculum and invokes the children’s curiosity by allowing them to use a vast variety of equipment, software and devices to achieve their learning focuses.

We want our pupils to understand that there is always a choice with using technology and as a school we utilise technology (especially social media) 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 and we also understand the accessibility opportunities technology can provide for our pupils. Our knowledge rich curriculum has to be balanced with the opportunity for pupils to apply their knowledge creatively which will in turn help our pupils become skilful computer scientists.

We encourage staff to try and embed computing across the whole curriculum to make learning creative and accessible, combining use of software and their knowledge based curriculum to showcase how they know and remember more. We want our pupils to be fluent with a range of tools to best express their understanding and by Upper Key Stage 2, children have the independence and confidence to choose the best tool to fulfil the task and challenge set by teachers.

The substantive knowledge within the curriculum builds sequentially, so that children expand upon and deepen their knowledge over time. Our curriculum is designed so that every child, including those with a disability or who have special educational needs, has the opportunity to thrive and flourish as computer scientists. No child is taken out of studying computing. All children regardless of economic disadvantage and ability have the same knowledge-rich, high quality teaching and teachers will modify and adapt to ensure that this is accessible to all. As Computing is such a skill based subject, we find that those arriving without experience of digital devices thrive from mixed attainment sessions where children are encouraged to work collaboratively to gain knowledge and skills from each other, as well as the staff and lesson elements. This means that pupils leave St Anne’s with an array of skills across multiple platforms, being able to make conscious decisions about which ones to use and when, thus creating an excitement about the upcoming technological breakthroughs and developments which will inevitably change the way we use and see technology in our world.

Through all subjects at St Anne’s we increase the cultural capital of all pupils, this is done through carefully planned trips and visits from experts that will help bring the subject to life for all pupils. Enrichment opportunities within the classroom and the use of educational visits are carefully mapped to promote Computing and develop skills with new pieces of software which engage and inspire our pupils. Pupils from all year groups are invited to after school clubs to participate in extra coding lessons, competitions and community projects which develop all STEM subjects and create aspirations for our pupil’s futures. These opportunities are open and accessible to all children, with financial support and places available to those children who need it to ensure no one misses out.

The value of Computing alongside digital literacy within school is championed and highlighted through its weaving in and use of through other topics, such as English, Maths and Science and making it explicit to the children where these links are and encouraging them to seek out their own, ensuring that STEM links are stressed through each lesson. Our curriculum overview is planned to ensure that children have opportunities to revise and revisit knowledge and skills from previous years and units.

What are the key strands of the subject that the pupils will learn?

We aim to build high levels of competence in the subject specific skills of:

· Computer Science

· Information Technology

· Digital Literacy and Online Safety

Implementation

The knowledge and skills of Computer Science and Information Technology are taught in units over the course of the year. The units, where appropriate, have cross –curricular links to make the learning purposeful but at times some units cover knowledge and skills that do not link directly to a year group’s specific topic but could be used in lesson to promote retention of knowledge from other subject areas. Teachers are made aware of the software children are taught to use and can add this into any area of the curriculum they wish. Most learning will occur using iPads however there will be a strong encouragement for children to select the softwares they believe will be the best for the task at hand.

At St Anne’s we have a wealth of resources: each class has 10 iPads and 20 shared across the key-stage, 30 key-stage shared laptops, Roamers, Bee-Bots, Lego Wedo, Mindstorms and Spike kits, Green Screen, Crumble kits, Makey Makey kits and many other Apps to use alongside these devices. We use SeeSaw as a communication, sharing and learning tool in classes, enabling pupils to upload their own work, comment and collaborate with other’s work, building a school community with shared tasks and celebration of work. To celebrate work further, we use Twitter: @Stannecrumpsall and to create an evidence base and a school community, our School Blog:<http://stannes.primaryblogger.co.uk/>.

At St Anne’s, we utilise the Rising Stars Switched on Online Safety curriculum as the basis for our Online safety lessons. We combine this with our Computing lessons and incorporate safe searching, copyright laws and general safe use of devices in every session, linking our classroom rules to safe, responsible use of all equipment and platforms. The knowledge and skills for Computer Science and Information Technology are taught through the units of work developed with Ed Tech Hub and Remedian, our school IT support. The units provide coverage of all areas of the Computing National Curriculum with opportunities to revisit objectives in subsequent years.

Impact

Pupil’s progress of all areas of the subject is assessed against the school’s age-related expectations for ICT and Computing and based off of teacher’s judgements. Children re-visit previous learning and build their skills and knowledge, allowing those who have struggled to meet the expected standard another opportunity to develop the skills needed in a subsequent year. Children’s work will be recorded via a range of folders and applications which are used in teaching and learning. This will ensure a taught system of data management and accurate storage across our school, supporting our pupils to be mindful of their online footprint and repeating the need for a systematic approach to their learning tasks. Within St Anne’s pupil folders, there is a year group folder where a range of work may be kept, final piece documents that have been word processed such as; fact files, reports digital art work, photos, reflections and links to (or QR codes) to videos and pictures. As we use the application SeeSaw across our learning, it is expected that evidence will be organised via folders of subjects and that children can showcase their use of this specific IT with ease and confidence across all age ranges. The teachers will assess the outcomes each half term, against what was asked of the pupils within the lesson framework. No specific recording of assessments is expected but within the files for their classes, work should support the judgement the teacher is giving for Computing and Online safety. Our school blog will also provide an evidence base of any extra opportunities children have received and promote the subjects achievements over the years.

It is important that class teachers should continually monitor and evaluate the quality of coverage of the age related expectations in Computing to ensure that the quality of the provision is at its best and to inform areas of learning that require strengthening in order to improve the quality of provision, optimising pupil progress. In transition, teachers must be able to discuss the assessments made of pupils so that digital literacy is developed upon each year, for each individual child, regardless of attainment level. As Computing lead, resources will be made which support differentiation of each lesson across our curriculum.