

**St Anthony's Catholic Primary School**  
**Computing Policy**  
**Subject Leader: Miss E Clarke**  
**Date: 26/04/2022**

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to 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. (National Curriculum 2014).

Our aim is for children to become confident users of technology and to develop the skills and knowledge relating to Computer Science, Digital Literacy and Information Technology. Computing education is an integral part of preparing children to live in a world where technology is continuously evolving so, at St Anthony's, we dedicate an hour a week. We endeavour to ensure that our children fully grasp the relevance of and the possibilities of emerging technologies so that they can play a part in this rapidly changing landscape.

**Intent**

At St Anthony's we want pupils to be masters of technology. Technology is everywhere and will play a pivotal part in our students' lives in an ever-changing digital world, therefore, we want to model and educate our pupils on how to use technology positively, responsibly and safely. We want our pupils to be creators not consumers, our broad curriculum encompassing computer science, information technology and digital literacy reflects this. These strands are taught discreetly through a range of units during children's time in school to ensure the learning is embedded and skills are successfully developed and consolidated. St Anthony's children will understand that there is always a choice with using technology and as a school we utilise technology to model positive and independent use when digitally problem solving.

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 has to be balanced with the opportunity for pupils to apply their knowledge creatively, which will in turn inspire our pupils to become skilful computer scientists.

Online safety is woven throughout the computing curriculum, taught during HRSE lessons and on special celebration days. Pupils are taught to identify where to go for help and support, and when they have concerns about content or contact on the internet or other online technologies.

**Implementation**

At St Anthony's computing is taught in direct computing lessons, and the use of technology is encouraged to support learning across all curriculum areas. We use the NCCE Computing Curriculum scheme of work to cover the three areas of the Computing National Curriculum: Digital literacy, Computer Science and Information Technology. This scheme of work also teaches Online Safety supplemented with our HRSE curriculum. Every lesson in our scheme has been individually planned so that it can be effectively taught using the infrastructure we have in place at school we are then confident it will meet the needs of all our pupils. At St Anthony's we recognise Computing as a 'core

subject' and in that respect ensure we spend an hour a week teaching and/or accessing the Computing curriculum. During computing lessons, the children will use either iPads, laptops, computers and/or programming equipment in order to access a range of apps and software.

Online safety is taught regularly at an age appropriate level and forms the basis of all computing learning. Children are also taught about vocabulary linked to computing and key skills for life including touch typing.

St Anthony's staff aspire to embed computing across the whole curriculum to make learning creative and accessible for all. 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 independence and confidence to choose the best tool to fulfil the task and challenge set by teachers.

### **Computing in EYFS**

Reception children are taught through the EYFS curriculum using 'Development Matters' goals and is assessed using the Early Learning Goals where clear outcomes are found in the section related to Understanding the World (UTW). The work is ongoing throughout the year and is differentiated according to ability. It is important in reception to give children a broad, play-based experience of ICT in a range of contexts, including outdoor play. Computing is not just about computers but encouraging them to become problem solvers and computational thinkers. Early years learning environments should feature ICT scenarios based on experience in the real world, such as in role-play. A variety of ICT equipment is available in reception classrooms for the children to explore.

### **Impact**

Teachers are continually assessing and adapting lessons, as they feel appropriate. The Teach Computing scheme has assessment opportunities and guidance within its planning. There is also learning objectives and self-assessment opportunities in the PowerPoints linked with each lesson. In Key Stage 1 teachers are asked to gather written work in each child's folder and capture learning via Seesaw and Key Stage 2 record their learning via in-house electronic systems and computing journals, which shows levels of attainment.

### **Assessment**

- Children in the Foundation Stage are assessed in accordance with the EYFS curriculum.
- Assessment trackers are used in years 1-6. Class teachers collect data, assessing if children are working below, at or above the expected levels in the three key strands: Computer Science, Digital Literacy and Information Technology, per unit.
- As appropriate, teachers provide support and identify specific next steps in learning for target individuals or groups of learners.

### **Evidencing**

Staff will observe the skills displayed by pupils and discuss these with them, assessing them against objectives at the end of a unit of work which require the application of skills or knowledge.

- Reception – Floorbooks and Photographs.
- Year 1/2 - Seesaw, floorbooks and folders.
- Year 3/4 – Folders and digital folders.
- Year 5/6 – Computing Books and digital folders.

### **Monitoring**

The Curriculum leader, alongside SLT, is responsible for monitoring and evaluating curriculum progress. This is done through work scrutiny, planning scrutiny, resource audits and learning walks which involve lesson observation drop-ins, pupil interviews and subject-specific conversations with staff.

## **Curriculum Design**

Each term a class will work on completing one or two units of work from the yearly overview (Long Term plan). This will ensure the breadth of skills and knowledge as detailed in the national curriculum for computing is taught during each key stage. In key stage 1, a two year curriculum cycle is detailed to ensure children undertake the breadth of activities required in the programme of study and avoid duplication.

The curriculum is reviewed annually, with developments based on monitoring conducted throughout the year. A whole-school curriculum map is in place that outlines relevant coverage of Computing, as well as individual maps for each year group. This has been meticulously planned out with clear progression within year groups, incorporating the EYFS expectations and National Curriculum programme of study. There is an appropriate balance of content (e.g. IT, computer science, Digital Literacy) and Online Safety is covered in every year group both as part of the Computing scheme of work as well as through other curriculum areas and through the Evolve project, delivered through the PSHE curriculum which maps resources to 'Education For a Connected World'. Guidance for teachers is provided in the form of a yearly expectations overview, which identifies expected standards (skills, knowledge and understanding) for each year group. Resources are located and stored on the network in a shared folder for teachers to access as well as online at <https://teachcomputing.org/curriculum>

Each class is allocated a time in the IT suite or using the bank of laptops to teach computing. Sufficient time is also available to reserve laptops to support learning in other aspects of the curriculum.

## **Online Safety**

Pupils at St Anthony's Catholic Primary School have access to a range of online materials that enrich and extend teaching and learning opportunities. The benefits of teaching and learning are many and varied. Pupils will be given clear objectives for internet use and will access material under guidance from their class teacher. Teachers will supervise pupils and take all reasonable precautions to ensure that users only access material appropriate to their learning.

St Anthony's pupils are taught to use technology safely and respectfully, keeping personal information private. Pupils are taught to identify where to go for help and support, and when they have concerns about content or contact on the internet or other online technologies.

The Internet provides access to a greater library of resources to support learning. However, whereas the resources in school are carefully selected to be consistent with national and school policies those on the Internet are not. Therefore, the school will only connect to the Internet through the BT Lancashire site. A service provider that is monitored and regulated to allow material that has been deemed suitable for children to be viewed. Children will only be allowed to use the Internet when there is adult supervision. The positive use of the internet as a learning resource far outweighs the risks involved. The children will be taught about the issues and concerns and receive ongoing education in choosing and adopting safe practices and behaviours. Rules for the safe use of the Internet have been established. These rules will be discussed with the pupils and also displayed near Internet access for a referral. We also monitor the online activity of staff, children and visitors to St Anthony's Catholic Primary School. Any concerns that arise are reported immediately to our Online Safety Leader/Designated Safeguarding Leader Mrs Ballard (DSL), Mrs Berry (Deputy DSL) and Miss Clarke (Computing Lead).

Action is taken immediately to address any concerns that arise (in line with our Behaviour, Anti-Bullying, Equalities, Safeguarding or PREVENT policies and procedures). This information is then shared on a termly basis with the Online Safety Group (IT Team). Any action that arises from this is reported to the Governing Body.

## **Planning and evaluation**

Planning is normally at the individual class level and is overseen by the Computing leader. Planning is used to:-

- a. Set clear objectives;
- b. Ensure that work is matched to pupils abilities, experience and interests;
- c. Ensure progression, continuity and subject coverage throughout the school;
- d. Provide criteria for assessment and evaluation of teaching and learning.
- e. Ensure the needs of pupils in mixed age classes are met at the appropriate level

Teachers are encouraged to use the unit overview that accompanies each unit of the NCCE scheme of work. This provides objectives for the lesson, a clear lesson by lesson sequence and links to resources. Teachers are encouraged to adapt the resources and plans to suit individual cohorts and circumstances.

## **Special Educational Needs & Disabilities (SEND)**

Computing is taught to, and inclusive of, all children, whatever their ability. Using high quality resources, teachers provide learning opportunities that are matched to the needs of children with learning difficulties and when necessary, take into account the targets set for individual children in their Individual Education Plan (IEPs).

## **Learning at Home**

At home children are substantial consumers of computing technologies including for gaming, communication, content creation and research purposes. Home learning projects capitalise on these skills.

## **Cultural Capital**

Within Computing at St Anthony's, I would like us to focus on:

- The People – Ada Lovelace, Alan Turing, Grace Hopper, Bill Gates, Steve Jobs, etc . Include in your Scientist of the Month and celebrate national recognition days.
- Their Future – careers that would appreciate these skills (Suite display/PSHE/external talks).
- Technology – How it can be disruptive but also improve lives, along with the negative impact – through honest conversation, PSHE, and Online Safety dedicated days and discrete lessons.
- Opportunities – Extra-curricular activities (coding club), going to museums (Science and Industry Museum- technology), entering events and competitions (PA Raspberry Pi competition), talks by / visits to employers and further education (STEM ambassador).