Curriculum Intent Statement: Computing

Computing - Intent, Implementation & Impact

What is the Intent of our computing curriculum?

At St.Botolph's CE Primary School, it is our intent that children grow up being confident using the internet and online systems correctly and safely, and have the ability to use a variety of programmes to collect, share and transfer data. Children will understand that programming is used in everyday life and as they move through the key stages become more confident writing, trouble-shooting and refining their programming skills. Furthermore, children will learn that computing is crucial in creating media in many formats and will learn skills to create print, music, videos, games and websites. Children will also understand how computer systems work and that each component plays an important part within the process.

Knowledge and consistently high Quality First Teaching is key to delivering our computing curriculum and it is an area where we are still developing staff skills.

We aim to provide our children with a wide range of opportunities across the curriculum to build on their confidence using the chrome books as well as developing an understanding of how computing is shaping the world around us. Children are given time to practise skills as well as see the way things work in some unplugged settings too. Children also have time to revisit areas of the computing curriculum to secure knowledge.

We want them to be able to use their reasoning, justification and explanation skills to apply to their programming but with this also become more reliant across the curriculum being able to tackle problems in a logical and systematic way. They are given the support, skills and encouragement in order to enable them to enjoy a greater depth in learning. We also encourage them to develop inquisitive minds and self-belief so they want to push themselves to learn more.

How is our computing curriculum being Implemented?

We teach from a scheme called Teach Computing. Teach Computing provides a progressive framework, created by subject experts using the latest pedagogical research and teacher feedback, which teachers can follow to ensure our pupils are taught areas of the computing curriculum in a sequential manner allowing them to build on previous knowledge and skills.

Planning & Organisation
In our FS, staff work hard to provide the children with a range of experiences of computing using resources familiar to the children to build initial skills and understanding and give them exposure to computing with the interactive whiteboard and beebots. While the EYFS framework may no longer explicitly include technology, it remains a vital tool for delivering a well-rounded education. By

integrating computing into early years education, we can equip our children with the skills they need to navigate the digital world confidently and safely. With this in mind, FS also engages regularly with the online safety units recommended to cover each half term so children build an awareness of how to stay safe online.

In KS1 and KS2, staff can access a 2 year rolling curriculum map which provides long term plans for three main strands to be explicitly taught in computing lessons. Each year group follows the same structure for units which comprise of:

- Computing Systems and Networks
- Programming A
- Programming B

Each year, the children revisit learning in this unit to then build more knowledge. As you can see, there are two Programming units to provide extensive opportunities for developing skills within these topic areas. All teachers are able to access comprehensive planning and resources to support their teaching of the Teach Computing units. Where classes are pure, they are taught as a single year group, however in mixed classes, the children are taught in their mixed year groups. Therefore a two year rolling cycle will allow them to cover all essential learning objectives.

Within the Teach Computing curriculum, we have narrowed down the content to explicitly teach the areas above as they cover the national curriculum. However, teachers are also encouraged to find opportunities to also access three other units:

- Creating Media 1
- Data and Information
- Creating Media 2

Weaving these strands into other areas of the curriculum where they see fit.

Long-term planning	National Curriculum - Computing Teach Computing curriculum maps
Medium-term planning	Two year plan for each key stage. Some is discrete, some is built into cross curriculum lessons. Teach Computing unit plans KS teams to incorporate computing where possible through other areas of the curriculum.
Short-term planning	Teach Computing lesson plans Online safety lesson plans Curriculum mapping informs planning to ensure each area is covered.

Teachers focus on key computing vocabulary and terminology so children understand how important comprehension is to their understanding of computing throughout the world.

In classrooms, you will see children who are focused on their learning. Discussion, collaboration, tinkering and debugging which is actively encouraged to develop resilience. We ensure our lessons are engaging, enjoyable and informative. Children are given opportunities to repeat and reinforce learning and follow lines of enquiry and develop their computing using skills from across the key stage.

How do we know what Impact our computing curriculum is having on pupils' computing knowledge?

The Subject Leaders and teachers discuss and assess the impact of our curriculum on our pupils in terms of their computational knowledge, engagement, progress and attainment in different ways as stated, including:

- Every lesson includes formative assessments to allow teachers to observe which children have met the learning outcomes but also ensure misconceptions are recognised and addressed if they occur.
- Observations of children using their skills and knowledge within lessons to assist with the task they have been set.
- Pupil/teacher 1:1 meetings - How do the children feel about computing? What are their perceptions of how they are doing? What can they do well? What are their next steps? What do they enjoy? What do they do if they are finding things tricky or if things don't work the first time?
- Monitoring and evaluation of pupil voice, planning, observation of lessons and pupils work.
- Summative assessments - provided for each unit in the KS2 topics.

The impact of our computing curriculum is that children understand the relevance of what they are learning in relation to real world concepts. Children are encouraged to: use computational thinking to approach problems; to question and explore to provide opportunities to find solutions and debug programs and children 'tinker' to help them learn.

Teachers build good relationships with children during sessions so they know when a child is progressing well and when they require further support. We support children to strive to be the best they can be, ensuring a greater proportion of children are on track to meet and exceed their potential.

In Foundation Stage, computing is centred around play-based, unplugged (no computer) activities that focus on building children's listening skills, curiosity and creativity and problem solving. This learning may look like: taking a photograph with a camera or tablet; searching for information on the internet; playing games on the interactive whiteboard; exploring an old typewriter or other mechanical toys; using a Beebot; listening to music or watching a video clip.

Children from year 1 to year 6 have their own email log in for the Chromebooks. They are able to log on and off independently. They can use Google Classroom to access work. They have their own accounts for Times Table Rockstars and Numbots which they can log in to and access. They are able to use a variety of software to help them produce work relating to their topics. In KS2, children use the Chromebooks to research, check and improve their work across subjects. They are able to use applications such as Google Slides and Sheets to produce presentations and texts and images. St Botolph's children are also learning how Computing and associated technology is impacting and changing the world as it develops. Children are able to safely access online services through teaching and guidance. They are aware of online dangers: what to be aware of and how and when to seek support.

Who else supports the pupils so they can excel and enjoy computing?

Working together - Support from Stakeholders

Pupil Voice - Teachers have the opportunity to speak to individual pupils on a one-to-one basis each term. They discuss areas of strength and challenge, setting targets to work on.
Parental support - We work with parents to keep them informed of how they can support their child at home and how well their child is doing. Parent/teacher meetings are held twice a year and reports are sent out during the summer term. Copies of Pupil 1:1 meeting sheets are also sent home for parents to see. We share a monthly Online Safety Newsletter with parents/carers on Weduc which provides articles and advice on online safety issues and gives parents the opportunity to speak to us about these. We encourage parents to make use of the online systems we have in place for contacting us, as well as to support their child's learning. Such as, encouraging the use of TTRs, SATS Companion and Google Classroom, when appropriate. We also have an 'Open Door' policy and welcome parents in when they have any issues or want to talk to us about any concerns they have.
Governor Support - Our computing governor meets regularly with the subject leader to discuss computing. Monitoring visits are made and data is shared and discussed each term. Governors will ask challenging questions of subject leaders and reports are written following the meetings.

Inclusion and Intervention

For those children who require additional support, we have a number of ways in which we provide help. Such as:

1. **Individualised Learning Plans:** Tailor lessons to meet the specific needs of each student.
2. **Assistive Technology:** Utilise software and devices designed to help students with their specific needs (e.g. text-to-speech, speech-to-text, screen readers)
3. **Clear Instructions:** Provide step-by-step instructions and use visual aids where possible.
4. **Extra Time:** Allow additional time to complete tasks and assignments.
5. **Flexible Grouping:** Group students strategically to balance abilities and foster peer support.
6. **Regular Feedback:** Provide frequent and constructive feedback to help students stay on track.

We have a growing number of children who are entitled to SEN support. The member of support staff will have the necessary support to enable the child to access appropriate lessons.