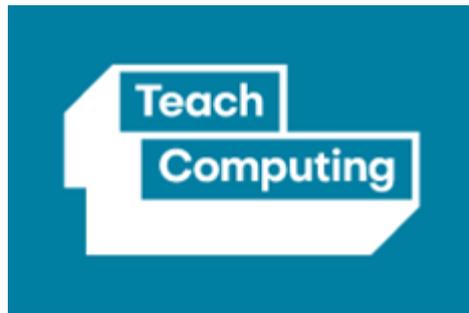


FOREFIELD COMMUNITY INFANT AND NURSERY SCHOOL



Computing Curriculum Policy



APPROVED BY GOVERNORS:
POLICY TO BE REVIEWED: January 2023

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1. Introduction

At Forefield Community Infant & Nursery

School we recognise that pupils are entitled to a broad and balanced computing education which provides a structured, progressive approach using prior knowledge to develop the necessary skills to equip them for the future. Children will use their computing knowledge and skills to enhance and enrich learning across other areas of the curriculum, developing their understanding of how to use computers and digital tools safely and responsibly, in order to become successful future Digital citizens.

2. Intent

In an increasingly digital world there now exists a wealth of software, tools and technologies that can be used by our children from a very early age to communicate, collaborate, express ideas and create digital content. Technology is now ingrained within our everyday lives and it is important that we provide our children with the correct skills and knowledge to safely and productively use these technologies.

At Forefield Community Infant and Nursery School, through the delivery of a challenging yet enjoyable curriculum for all our pupils, we aim to provide children with the knowledge to successfully navigate this digital world. With clear progression from their starting point in Nursery and/or Reception, our curriculum will develop pupils' computational thinking skills which will then benefit them throughout their future lives. All children will have the opportunity, through both our curriculum and extra-curricular activities, to develop their skills and knowledge whilst meeting the requirements of the National Curriculum programme of study for Computing in Key Stage 1 and also through elements of Early Years Foundation Stage 2021 strands of Understanding the World and Expressive Arts and Design.

Our computing scheme for Key Stage One, 'TEACH COMPUTING' from Steam Learning, offers children the opportunity to use their prior knowledge within creative, inventive and inspiring units that have a clear progression of skills, in order to equip pupils with the confidence and skills to use digital tools

and technologies in order to achieve the National Curriculum outcomes and ensure they are ready to continue to develop their knowledge in Key Stage 2.

3. Implementation

We use the Rising Stars 'TEACH COMPUTING' from Steam Learning schema of work to deliver our Computing curriculum however this is supplemented to ensure the needs of all of our children are met alongside our own school curriculum to ensure that children understand that computing can be used within everyday activities.

EYFS

Technology is no longer a strand within Development Matters 2021 or an Early Learning Goal in the new EYFS framework 2021, however there are elements within Understanding the World and Expressive Arts and Design areas of learning that relate to interacting and building knowledge and understanding of technology that ensure that our progressive curriculum is robust to enable continual learning into Key Stage 1.

In Nursery, children use and explore technology in continuous provision activities, in addition to direct teaching which will model the use of new technologies and programmes children may use in our setting. Children are given opportunities to 'Explore how things work' (Understanding the world (UtW) 3 & 4 Year olds), using remote control or mechanical toys, take photographs and videos using equipment such as cameras and iPads. 'Explore paint...using different tools and mark making' (Expressive Arts and Design (EAD) 3 & 4 Year olds) using a simple drawing program on the interactive board or when using the interactive board to play a simple game or interact with a program.

In Reception, knowledge of technology is built on as children are given opportunities to explore using technologies with increasingly challenging outcomes and expectations linked to EAD and UtW. For example; Reception children will begin to use simple maps - technology will enable this via interactions with google maps on the interactive board, or exploring how to use beebots to navigate around the buildings of London.

E Safety is built into all Computing lessons throughout the year and each year, in February aligned with National Safer Internet Day, E-Safety is taught as a separate unit of work. In EYFS children will use the CEOP materials from 'Think You Know' to develop online safety knowledge, learning through the online adventures of Smartie the Penguin.

Key Stage One

In Key Stage One, the Computing curriculum is taught using the TEACH COMPUTING schema of work which follows the National Curriculum aims and objectives. Computing lessons may take place in our ICT suite or be classroom based, using school iPads.

Computing lessons in Key Stage 1 will be based around 6 weekly units of work in which children will develop knowledge and skills in Digital Literacy, Computer Science and Information Technology building on the learning from EYFS. Lessons will be practical in nature, when appropriate, with children having real experiences, using technology for different purposes, mirroring real life scenarios. Lessons at the beginning of units of work will develop the knowledge and/or skills needed in any given area before children refine these skills practically, using a range of technologies for example computers, programmable toys, interactive boards and programs and using the internet. Children can use knowledge from other subjects to aid in computing or use their technology knowledge and skills to support learning in other areas of their study. For example, explore using google maps in geography to explore the oceans, or using their reading map skills to navigate an avatar around a map.

E-Safety is taught discreetly throughout the year whilst pupils are using technology however it is also taught as a separate unit of work each year in February aligned National Safer Internet Day. In Key Stage 1 children will use the CEOP materials from 'Think You Know' to develop online safety knowledge. Year 1 children will explore issues around online safety using Hector's World resources and Year 2 will use Lee and Kim resources.

Children use the school iPads to complete weekly maths assessment quizzes, in line with the Maths curriculum 'Big Maths'. This is accessed through an app installed on the iPad with adult present and children do not access any other apps during this time.

4. Impact

The impact of our high-quality Computing curriculum will be to develop children who:

- Are confident using a range of technologies and programs based on their first-hand experiences.
- Can purposefully select and use a variety of computer programs for different purposes.

- Understand the use of algorithms in the modern world and know how they are used in familiar programs and games.
- Can write, input and debug a simple algorithm.
- Know how technology can be used to present ideas e.g. drawing or power point presentations.
- Understand internet safety and what they can do to stay safe online.
- Can use technology to communicate with others via online platforms safely.

EYFS End Points

By the end of Reception the vast majority of children will have a secure knowledge of how technology is used in every part of their lives and will select appropriate technology for different purposes e.g. using an iPad to take a photograph or using a paint computer program to draw a picture on the interactive board. Through the curriculum scheme children will have developed a broader and more current knowledge of technology in preparation for Key Stage 1 and be able to demonstrate that they:

- Can safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;
- Are confident to try new activities and show independence, resilience and perseverance in the face of challenge;
- Can explain the reasons for rules, know right from wrong and try to behave accordingly;
- Understand what is meant by internet, online.
- Have knowledge of how to stay safe when on the internet and what do if they feel unsafe.

Key Stage One End Points

By the end of Key Stage One, children will have built on their prior knowledge from EYFS and continued to develop their Digital Literacy, Computer Science and Information Technology knowledge and skills. They will be confident programmers who can use a range of technologies and programs to achieve an end goal. Children will be able to use the internet for a variety of purposes but will be acutely aware of the dangers this can pose and what to do in these situations. By the end of Key Stage 1, most children will be able to demonstrate:

- An understanding of how basic computer games are constructed and use this knowledge to create their own games.
- Confidence in the use of computing vocabulary when talking about algorithms in particular.
- How to send and receive emails quickly as a form of communication.
- How to use technology to take and edit photographs
- The use of a simple charting program
- An understanding of social media and to understand that websites can be utilised for learning
- Ways to keep themselves safe online and what to do if they do not feel safe.
- An understanding of how to keep personal information safe and why this is important e.g. passwords.
- How to use technology safely and respectfully within the setting and other environments.

At Forefield Community Infant and Nursery School we work closely with Forefield Junior School to ensure that progression and continuity in computing education is seamless as Year 2 children transition to their next phase of education. Key Stage 1 Computing curriculum knowledge is built upon further in Key Stage 2, developing children's knowledge of Digital Literacy, Computing Science and Information Technology further in line with Key Stage 2 expectations.

5. Assessment

At Forefield Community Infant & Nursery School, we assess the children's work in Computing whilst observing them working during lessons. In Key Stage One teachers record the progress made by children against TEACH COMPUTING objectives which have been inputted into Classroom Monitor and broken down into year groups. Assessments can be done in the lessons using iPads to take photographs, videos to evidence children's work or saving documents/evidence on the computer and uploading to Classroom Monitor. This allows teachers to assess and plan to meet the needs of all children in Computing.

6. Reasonable Adjustments

Within the Computing curriculum, teachers will make reasonable adjustments for all children through differentiation, adult support, adaptation of equipment, level of questioning and challenge to meet the needs and progression of all

children in the class. Class teachers can seek advice from the Computing subject leader and/or SENDCo to ensure reasonable adjustments are made for all children.

7. Remote Learning

Computing will be taught remotely if it is timetabled to be taught during a period of lockdown, whole class isolation or school closure. Lessons will be pre-recorded and delivered using the schools chosen remote learning platform - Teams. Lessons will be delivered by a class teacher, ensuring any resources required to complete the work are available to the pupils via the 'assignment' or 'class resources' section of Teams. Lessons will be delivered in line with the long-term plan, however units of work may be moved around if there are more suitable units for remote teaching, due to pupils having restricted access of equipment or programs at home. During lessons a teacher will deliver the lessons as close to the intended curriculum as possible however elements may have to be adapted or omitted due to the suitability of completing these remotely. Any lessons or content omitted due to the unsuitability of being delivered remotely, will be delivered once children return to school and or health and safety guidelines permit.

When a period of remote learning is implemented, children will have access via 'assignment' or 'class resources' to the schools E-Safety program dependant on the child's year group (see section 9. E-Safety), to ensure their continual safety online whilst remote learning is taking place.

8. Extra-Curricular Activities

At Forefield Community Infant & Nursery School we pride ourselves on providing extra-curricular activities for all children to participate in, providing additional opportunities for children to develop as digital citizens.

Computing club is available to children, as extra-curricular activity within school. We also have our own Key Stage 1 Digital Leaders, a role for which children have to submit a letter of application to be a part of. Digital Leaders meet termly and responsibilities involve supporting the e-safety of their peers and adults, sharing information about computing lessons and knowledge they have gained as Digital Champions and monitoring the use of technology and computing equipment in school.

9. E-Safety

E-Safety is embedded within Computing and at Forefield Community Infant and Nursery School we are ambitious in promoting our children's development and understanding in this area, to ensure they are safe when using online technology. We promote National Internet Safety Day in February each year through a week of activities focused on E-Safety across the whole school from Nursery to Year 2. We introduce 'Smartie the Penguin' in Nursery and Reception, whilst Key Stage 1 use the CEOP resources 'Hector's World' in Year 1 and, in Year 2, 'Lee and Kim'.

During February, parents are also invited to participate in E-safety workshops. E-Safety information is also shared with parents at other key opportunities eg when they attend school events such as class assemblies, parent workshops, parent evenings. Information and links are readily available via the school's website.

Our Digital Leaders responsibilities also include ensuring that their peers and adults are being safe both within and outside of school. They use their prior knowledge and the knowledge and skills gained from the Digital Leader meetings to promote the skills they have and draw on these to support others when using technology. During E-Safety assemblies our Digital Leaders are highlighted as points of contact for others to use if they are worried about E-Safety either online at home or at school.

10. SMSC

Opportunities to promote children's spiritual, moral, social and cultural development is threaded throughout our Computing curriculum. Examples of how SMSC is woven through Computing and E-Safety lessons are below;

Through lessons children will know and understand:

- How to be a successful digital citizen in the 21st Century.
- The importance of using the internet in a respectful way, and the consequences of not doing this.
- What is right and wrong when using online platforms and making links to face to face behaviours and if they are right or wrong for example in the playground.

- How the internet can provide a platform for unkind and unacceptable behaviours and know how this makes others feel (even though it is online) and what they can do to challenge these behaviours.
- How to use technology and the internet to explore and research other cultures they may not have first-hand experience of.
- How to question and challenge sources of information from the internet.
- How different cultures use technology in different ways.
- How technology has impacted and changed lives within and beyond their living memory e.g. making gaming friends online vs making friends in youth clubs.
- How technology can have both positive and negative impact on us and our lives.

11. Role of Subject Leader

The role of the subject leader is to:

- Ensure high quality Computing lessons are taught across EYFS and Key Stage 1 through our agreed Computing curriculum and schemes.
- Provide subject specific guidance/CPD to colleagues.
- Monitor the Computing curriculum delivered to children across the school, highlighting strengths and areas for further development.
- Monitor the progress and attainment of children in school in Computing.
- Quality-assure extra-curricular activities (especially if offered by external partners) highlighting strengths and areas for further development.
- Manage equipment and resources including maintaining/replenishing/updating to support delivery of a high-quality curriculum.
- Liaise and work with the local CAPITAL Cluster of schools and other external agencies who provide computing support and provision to children/staff.
- Offer support and present a whole school assembly during E-Safety week to the children and also the parents.
- Stay up to date with changes, new initiatives and research that would enhance and support the development of Computing and E-Safety at Forefield Infant and Nursery School.
- Stay up to date with E-Safety training, in order to support and disseminate key information appropriately to children, parents and staff.

12. Equality Statement

The Computing curriculum adheres to our school Equality Policy. It is the responsibility of all staff to ensure that all children are treated equally, regardless of their background, gender, race or any other protected characteristic. We are an inclusive school and teach Computing to all children respecting individual needs. We aim to provide ample opportunities through our curriculum and extra-curricular activities to enable all pupils, (regardless of resources they may have or not have readily available to them at home), to acquire the skills and knowledge for a successful digitally literate future. Through our teaching, we provide learning opportunities for all pupils and we strive to meet the needs of all pupils, including those with special educational needs, disabilities, the gifted and talented and those learning English as an additional language.

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