

**St Edmund’s and St Thomas’ Catholic Primary School**

**Computing Curriculum Statement**

**Subject Leader – Jennifer Metcalfe**

# Intent

At St Edmund’s and St Thomas’ Catholic Primary School, our vision is to support children in becoming creative, independent learners and ensure that they develop a healthy relationship with technology. At our school we value and recognise the contribution that technology can make for the benefit of all pupils. Therefore, we strive to provide safe opportunities in computing to motivate, inspire our children across the curriculum. Everyone in our school community will be equipped with the digital skills to meet developing technology with confidence, enthusiasm and prepare them for a future in an ever-changing world.

As a result of the pandemic, children lost important opportunities to practice skills already gained in school as well as learn new, important skills. These are what we regard as life skills, essential for use in every day life, in high school, at University, in their future career paths as adults. We considered these factors as the children returned to normal school life in September 2021 and redesigned our Computing Curriculum to prioritise key areas that the children had missed. There has been an emphasis on Word Processing and Presentational skills, ‘essentials’ towards our children becoming independent learners prepared for the world around them. Key skills in these areas have been revisited and taught in depth so that our children are not prohibited from presenting their learning creatively using ICT. Similarly, with Coding and Programming, teachers have ensured that children have become familiar with this area in greater detail. We see this as a creative approach to learning in an ever-changing world where careers in gaming for example, are becoming increasingly attractive to young people. We focused on using one particular coding software and ensured all children could use this effectively before we move onto applying these skills to new varieties of coding software in the next academic year.

According to a recent report carried out by Childwise, 53% of children own a phone by the time they are seven. We are living in a society whereby children are spending three hours and 20 minutes each day messaging, playing games and being online, the report by Childwise found. As Educators, we understand the important role we play in, on the one hand, embracing the opportunities that technology can bring, but also in teaching our children about the risks and dangers that can come with technology. We have worked hard to adjust our curriculum so that each child in our school will learn about Online Safely, not only through stand alone lessons across the year, but also through coverage in other areas of the curriculum such as PSHE and during yearly ‘Internet Safety’ week. We want our children to leave us being ‘internet savvy’, filled with the knowledge and understanding required to be safe and protected when using their phones, tablets, i-pads, laptops, Chrome books etc.

# Implementation

|  |
| --- |
| During the academic year from September 2021-July 2022, the Computing Curriculum was adapted to prioritise missed learning in the Presentational and Word Processing Skills areas. Emphasis was placed on using Scratch Animation and BeeBot’s to explore Coding and Programming. With the implementation of a new, themed approach to learning across school, medium term plans across phases were created to match both the themes per half term, and the curriculum objectives that needed to be prioritised.  The four phases of our school are;  Nursery and Reception ‘The Inventors of our Learning’  Years 1 and 2 ‘The Authors of our Learning’  Years 3 and 3 ‘The Engineers of our Learning’  Years 5 and 6 ‘The Architects of our Learning’  There are four significant elements to our new long-term curriculum map for our school.  1) Computer Science (CS); Computational Thinking, Coding, Logical Reasoning, Networking and Online  2) Information Technology (IT); Harnessing Technology and Online  3) Digital Literacy (DL); Technology in the Read World, Media Content and Online Safety  4) ‘Theme Links’; how our school connects the Computing Curriculum objectives to our whole school ‘thematic approach’ to learning.  To cover the objectives in the first three areas of our Computing Curriculum, the children have a stand-alone unit (completed over time) that allows them to learn the new skills for that phase group in relation to the learning objectives covered in the task. These activities are used to help assess the progress made throughout the year by children. These are taken from the Knowsley Scheme of Work.  The ‘Theme Links’ element provides children with an opportunity to apply their knowledge and skills to other areas of the curriculum, in each of the six whole school Curriculum themes which are ; We Are Family, Journeys, Planet Earth, Objects/ People that Changed the World, Can you help me? Wildlife Connections. This enables children to gain a more secure understanding of all Computing areas.  Our inventors (Reception and Nursery) explore technology in the world around them through having easy access to equipment that allows them to find out for themselves how ICT plays an important role in their everyday lives. The children use i-pads for example to take photographs of themselves and others. They are already introduced to the skill of using the camera application to edit images they capture. They are encouraged to be ‘tech detectives’ at home and in their local area, looking out for examples of technology being used at traffic lights, on television remotes and music systems. They explore ‘cause and effect’ in devices such as remote-control cars. They record their learning through the use of talking clipboards, pens and even begin to capture videos. Children in Reception are introduced to algorithms and explore this using Beebot’s, planning routes around a floor map. All activities are linked with themes. Google Earth for example is used to explore where they live in comparison to other locations.  In other phases, activities are planned that link across the curriculum to other areas. Medium term plans for Computing were produced to connect with other subjects; Geography, Science and Design and Technology. The plans have allowed for opportunities to apply their ICT skills to other subjects with each phase finishing the year carrying out a ‘Using and Applying’ project. In Upper Key Stage Two for instance, children worked independently to produce their own campaign work linked with our local valley, Rimrose Country Park. Children applied their Computing Skills in a number of ways including; creating their own e-books using Book Creator, adding films and interviews they recorded using i-pads during our trip to the valley, producing Powerpoints to promote a love of the location across the school, recording interviews and editing and cropping, air-dropping images to other i-pads when working collaboratively with peers. Children across Key Stage Two have the opportunity to peer teach to younger children, helping them recently to produce Science based Powerpoint presentations about local wildlife.  From September 2022, teachers will also use the Knowsley Scheme of Work alongside their theme-linked medium-term plans. This is as a result of myself as subject leader being part of a local cluster of Computing Leads. Teachers will deliver four of the units across the year which will help to ensure that all areas of the Computing Curriculum are covered in greater depth and new skills are taught effectively using the scheme and its resources which staff have received training on. The units taken from the scheme will be assessment units providing staff with an opportunity to assess children individually against the focus Curriculum objectives related to that unit. This will be recorded in an assessment grid given to staff at the beginning of each academic year. If these skills are observed when children are completing ‘theme-linked’ tasks from the school medium term plan, then this is marked as achieved on the assessment grid too.  The data is then transferred at the end of each term into our whole school i-tracker system in order to monitor progress and impact across all classes as well identifying areas of weakness and therefore areas for developmenti.e. potential opportunities for CPD in a particular area.  Across the school, children have access to laptops, i-pads and Kindles to support their learning. There are applications used by the younger children which support the Computing National Curriculum objectives. The younger children use their interactive class whiteboard to access Educational games to support their skills across other areas of the curriculum. All children have their own Google Classroom accounts which allow them to upload work for others to see. This also creates a link between home and school. Book Creator has recently been introduced and has been used by a number of classes in a cross-curricular way. With the implementation of the Knowsley Scheme of work, children are now being introduced to units of work that cover creative, exciting opportunities in Computing. Some of these include;  -Using QR Codes on an animal hunt  -Creating Podcasts  -Robot coding  -Making AR games  -Designing web pages  -Creating beats and rhythms  -Podcasting  There will be a unit in every phase focused on ‘My Online Life’ which equips children with the knowledge to be safe online.  Progression Maps for Computing vocabulary are shared with staff and children to enable them to become more familiar with the correct terminology to use during Computing lessons.  Knowledge Organisers are given to children at the beginning of the year which help to promote Reading in Computing. Children are introduced to significant role models in the world linked to ICT and Computing.  The skills of reading are also promoted during researching lessons. Children are encouraged to read through information found using a search engine and summarise it in their own way through note taking and not to simply ‘copy and paste’ from internet sources. Children are provided with these opportunities of ‘predicting, questioning, and summarising’ key information read in the same way that they are taught during daily Reciprocal Reading sessions. |

**Impact**

Staff will develop a passion for ICT, a confidence in the subject as a result of training on the Knowsley Scheme of Work and easy to follow theme-linked medium-term plans to use throughout the year.

Coverage of the National Curriculum objectives will be taking place in all phases.

Children will make progress from their baselines in September to their end assessment in Summer term.

Possible gaps in learning can be identified through I-tracker assessment, leading to further support for staff and CPD opportunities.

Children will have the ability to use and apply their skills and knowledge across all areas of the curriculum, it becomes more purposeful to them.

Children will be equipped with the computing skills that will enable them to progress to and access the curriculum in the next key stage and into high school.

Pupils of all abilities and of differing learning styles will have the opportunity to shine in other ways through regular computing and ICT opportunities.

Children will be independent learners, able to access the next stage of their Computing life in high school.

Children will be inspired to look at careers in Technology!