



Intent of the Computing curriculum

At St Patrick's we aim to prepare our learners for their future by giving them the opportunities to gain knowledge and develop skills that will equip them for an ever-changing digital world. Knowledge and understanding of ICT is of increasing importance for children's future both at home and for employment. Our Computing curriculum focuses on a progression of skills in digital literacy, computer science, information technology and online safety to ensure that children become competent in safely using, as well as understanding, technology. These strands are revisited repeatedly through a range of themes during children's time in school to ensure the learning is embedded and skills are successfully developed. We want children to become autonomous, independent users of computing technologies, gaining confidence and enjoyment from their activities. Not only do we want them to be digitally literate and competent using technology but through our computing lessons we want them to develop creativity, resilience and problem-solving, and critical thinking skills.

Computing teaching enables pupils to:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Implementation of the Computing curriculum

- Computing lessons are taught weekly or within a block as part of a spiral curriculum following 'Teach computing' scheme which has been designed by experts and closely referenced against the 2014 National Curriculum attainment targets in order to ensure progression and coverage. Teachers will use their professional judgement to decide how best to deliver the computing curriculum within their classroom through whole class, focused group teaching and individual task design.
- Each lesson is sequenced so that it builds on the learning from the previous lesson, and where appropriate, activities are scaffolded so that all pupils can succeed and thrive. Scaffolded activities provide pupils with extra resources, such as visual prompts, to reach the same learning goals as the rest of the class. Exploratory tasks foster a deeper understanding of a concept, encouraging pupils to apply their learning in different contexts and make connections with other learning experiences
- The themes of the curriculum are networks and computer systems, creating media (including photography, paint, animation, combining pictures and text, and publishing), data and information, and programming.
- A key part of implementing our computing curriculum is to ensure that safety of our pupils is paramount. We take online safety very seriously and we aim to give children the necessary skills

to keep themselves safe online. Children have a right to enjoy childhood online, to access safe online spaces and to benefit from all the opportunities that a connected world can bring them, appropriate to their age and stage. Children are reminded of how to be safe online regularly when using technology as well as being taught discretely using Ten Ten, Internet legends as well as celebrating Internet safety day.

Impact

By the time the children leave St Patrick's at the end of Key Stage 2 their computing knowledge should reflect the fact that they are growing up in a digital world. They will have learnt about the benefits of technology as well as developing a critical awareness of their own and others online behaviour. Our pupils leave us being able to use technology to create a range of digital content therefore, ensuring they are Secondary ready, prepared for a future workplace and can be confident digital citizens.