THE FEDERATION OF ST. EDMUND'S AND ST. PATRICK'S

Computing Curriculum Statement

Intent

Our computing curriculum has been specifically tailored to meet the unique context of our schools. It is designed to be broad and balanced, providing all pupils with the opportunity to master their learning and deepen their knowledge, making sense and giving purpose as to why we learn about computing. Teachers will provide pupils with challenging big questions about computing, which will help them change and transform our society, putting their faith into action.

At St Patrick's and St Edmund's we believe that computing helps to prepare the children for life in 21st century Britain, encouraging children to develop a greater understanding of technology and the technological world around them.

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.

We aim to build high levels of competence in the subject specific skills of:

- Algorithms and Programming
- Information Technology
- Digital Literacy

Implementation

Computing is taught through the framework of the 2014 National curriculum. The principles and content of its requirements have been carefully placed at the heart of the school's programmes of study in computing.

The school uses the 'Rising Stars – Switched on Computing' Scheme of work, focusing on Digital Literacy, Information Technology and Computer Science. To help ensure children have the opportunity to develop a wide range of skills, experiences and competencies with technology, the curriculum has been broken down into 6 key areas, with the core principles permeating through each area.

- **Algorithms**
- **Programming & Development**
- **Data & Data Representation**
- **Hardware & Processing**
- **Communications & Networks**
- **Information Technology**

These principles are directly linked to the school's Age-Related Expectations (AREs) in computing for each year group which allows a consistent application of the curriculum throughout the Key stages.

A class floor book is kept for each class. The floor book provides evidence of coverage within the subject and key reference to where the children meet the A.R.E statements. Each year group has a class login and an individual file to save their work on the system. A curriculum coverage file is kept for each cohort. This enables both class teachers and the subject leader to monitor coverage and identify progress made throughout the lifetime of a cohort in the school.

Both schools are equipped with a set of IPADs and laptops. The iPads are kept in a trolley while the computers are locked in a container in the Rising Stars room needing a key to access them. The laptops have *Scratch* installed for programming purposes as well as Microsoft office. Each teacher has their own personal IPAD to use in class, a user name and password to access the school system and a school e-mail. Both schools have a computing technician to monitor and maintain the database and school network who visits on a weekly basis.

In Computing, assessment of pupil progress is undertaken against the age-related expectations for Computing. This includes any final pieces of work and any whole class assessment that staff might undertake. The outcomes of these assessments are used by class teachers to evaluate the quality of coverage of the ARE in Computing and to inform aspects of learning that need to be strengthened to improve the quality of provision and to enhance pupil progress.

Impact

A high quality of computing education aims to develop a range of programming and technological skills that are transferable to other curriculum areas, including Science Mathematics, English and History. As they progress through KS1 and 2 children will become increasingly confident in:

- The application of their digital skills,
- Becoming increasingly efficient and effective communicators, collaborators and analysts,
- Showing imagination and creativity in their use of ICT in different aspects of their learning and life beyond school.
- E-safety and the risks involved when using the internet.

We seek to inspire in children a love of computing and the aims of computing is to equip children with the skills necessary to use technology to become independent learners. The teaching style that we adopt is as active and practical as possible.