



St Peter's Catholic Primary School, Sandy Lane, Doncaster.

Computing Policy - Revised Spring 2019

Introduction

This Policy outlines the purpose, nature and management of the computing taught at St Peter's. The policy has been written to encourage a development in the shared understanding of how Computing is taught and learned at the school as incorporated within the curriculum. The implementation of this policy is the responsibility of all school and teaching staff.

What is the nature of Computing?

Computing and new technologies play an increasingly significant role in society. It is therefore vital that our young learners are equipped to utilise technology in order to enhance their development as they become confident individuals, successful learners, responsible citizens, effective contributors and facilitate the process of lifelong learning. Computing is more than 'computers' as it embraces peripherals such as laptops, ipads, cameras, scanners, projectors, white boards, TV screens control equipment and programmable devices.

Aims

Our aim is to deliver a creative Computing curriculum which:

- Allows children to access new technologies that are used in daily life
- Prepare children for later life and employment using a range of new technologies
- Experience technology within practice to support them to think creatively
- Deepen children's understanding of computing through unplugged learning
- Encourage collaboration through group work
- Encourages staff to develop confidence and competence in utilising a range of new technologies and computing resources;
- Select and uses technologies and software appropriate to the task;
- Incorporate the three main aspects of Computing: **computer science (CS), information technology (IT) and digital literacy (DL)**. 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.
- These 3 core aspects will be addressed within our curriculum through 4 core skills strands as outlined below. Through these strands the aim is that by the time children leave Key Stage 2 at Year 6 they will be able to:
 - Understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation. (CS)
 - Analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems. (CS)
 - Evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems. (IT)



➤ Be responsible, competent, confident and creative users of information and communication technology. (DL)

• Uses relevant sources and techniques including:

- Microsoft Technologies
- Ipads
- Video cameras
- Data Handling software
- Email/ social media
- Research engines
- Sound and music equipment
- Data logging
- Beebots and probots
- BBC Microbits

- Enriches children's knowledge and understanding of other areas of the curriculum.
- Contributes to pupils' knowledge and understanding of the wider world.
- Encourages children to work independently in a variety of ways.
- Teaches children relevant skills.

Organisation

Teaching and Learning

Within Computing we use a diversity of teaching approaches to ensure that our policy aims are met. We aim to deliver a skills based computing lesson each week, with new technologies and Microsoft technologies embedded and present in daily lessons, where necessary. Pupils experience a wide range of sources of Computing, beginning with unplugged learning, which leads to a more secure understanding of the Computing skills. Pupils have the opportunity for learning both individually and through collaboration with others. Exciting stimulus will be used to enthuse and enhance children's learning in Computing, always ensuring that skills are applied to a variety of software and technologies. Cross-curricular links are made to strengthen the children's knowledge, skills and understanding: this is linked to the medium term planning for English, Maths, RE and the foundation curriculum.

Planning

Embedded within the curriculum, Computing is planned for with continuity and progression of knowledge and understanding alongside skills following a whole school curriculum overview which follows two cycles, working across mixed year groups N/R, Y1/2, Y3/4 and Y5/6. Progression in Computing is dependent upon the application of key skills consistently embedded within the curriculum. As part of the school's flexible approach to Computing teachers should ensure that the key skills are taught throughout each term and as part of the foundation planning. Evidence of Computing planning will be collected and held by the Computing Coordinator File at the end of each term so that this can be monitored. The Computing overview planned out for staff clearly states what each year group is expected to cover during the academic year. Each year group is to incorporate the relevant knowledge, skills and understanding within their Computing skills lessons. Each child is given the opportunity across the Key Stage to develop the Computing skills through differentiated tasks and activities. Activities are created to provide opportunities in order to develop apply and reinforce



Computing skills and concepts. Through these pupils can develop an understanding of Computing in the wider world.

Assessment

The teaching of Computing, in all year groups, is incorporated within daily lessons and focused skills based sessions. Assessment of pupil progress in Computing aims to assist pupils in understanding their own progress, aid teachers with their planning, as well as informing the school's monitoring of progression and attainment. Therefore children should assess their work in accordance with the school's policy for self-assessment as they would do for any other written work. Teachers should ensure that children strive to meet the skills, whilst also building up their knowledge and understanding of Computing, inclusive of knowledge of unplugged learning and key vocabulary.

Staff are to use STEM end of Year Expectations and NC statements to make judgements on the progression of skills and knowledge and the end of each unit of work.

The assessments made throughout the academic year are recorded and used to inform the end of year reports to parents/guardians. The co-ordinator with support from the wider management team will also carry out annual Computing drop ins, work scrutinies, evaluations of lesson planning, conducting pupil interviews, discussions with pupils, staff and parents as well as carrying out formal lesson observations.

Resources

Computing and new technologies is financed from the school budget. It is the responsibility of the Head teacher, Coordinator, ACS (UK) Ltd should resources need updating or replacing. The subject leader will regularly assess the available resources and ensures they are being used effectively. With regards to plans, the subject leader has access to termly plans (which will include resource requirements) and through this can monitor and review the delivery of Computing throughout the school. Wherever possible shared Computing resources should be kept in the ICT Hub, Maths Store (KS1 Intervention Room).

Pupils with Special Needs

Computing is taught in mixed ability classes and all pupils are taught the knowledge, skills and understanding of Computing in ways that suit their individual abilities. Work is differentiated for children of all abilities and provisions in place for those who are unable to access their year group curriculum. Pupils may be supported in Computing lessons by teaching assistants as well as the use of various resources. The language demands of Computing work will be differentiated to allow equal opportunities of access to the Computing skills. More able pupils will receive activities which are open ended, require a greater level of skills and higher order skills. Class teachers are responsible for ensuring that all pupils can access learning in Computing during topic lessons.

Equal Opportunities

During the incorporation of Computing insight is given to the promotion and use of positive images. This balance is supported through the use of suitable language, fictional and non-fictional texts, pictures, internet and resources. Activities are differentiated to ensure equal access for all pupils with special educational needs. We advocate co-operative work to enhance social skills. We will endeavour to ensure that all children are given the necessary support to access learning in line with other school policies.



Role of the New Technologies and Computing Coordinator

The role of the Subject Leader with the support of the Wider Management Team:

- Implement policy
- Monitor planning
- Pupil Questionnaires /Interviews
- RAP/ SIP
- Portfolio
- Work scrutiny
- Lesson drop ins
- Resources
- Collate assessment data each term

Review

A review will be undertaken in Spring 2021.