



### 1 Introduction

At St John's we are Loved by God - Learning with Jesus - Living by the Spirit. Computing in the modern world is agreed by all to be an essential resource to support learning and teaching, as well as playing an important role in the everyday lives of children, young people and adults. Consequently, schools need to incorporate the use of this technology in order to provide our pupils with the skills to access life-long learning and employment.

It is important that the pupils of St John's gain the appropriate skills, knowledge and understanding to have the confidence, creativity and capability to use computers and programming throughout their lives. All pupils in our school should be encouraged to become originators and creators rather than passive users of computers and programming. The children will be taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. 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.

Computing covers a wide range of resources including web-based and mobile learning. It is also important to recognise the constant and fast paced evolution of digital technology within our society as a whole. Currently the technologies children and young people are using both inside and outside of the classroom include:

#### Internet-technologies

- Websites
- Learning Platforms and Virtual Learning Environments
- Email and Instant Messaging
- Chat Rooms and Social Networking
- Blogs and Wikis
- Podcasting
- Video Broadcasting
- Music Downloading
- Gaming
- Mobile/ Smart phones with text, camera, video and/ or web functionality
- Other mobile devices with web functionality

#### Non-internet technologies

- Media playing devices such as DVD or CD players
- Laptops, Smart boards and Projectors

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- Digital Cameras, Video Cameras, Digital Blue Cameras etc
- Remote controlled/programmable toys
- Visualisers
- Mobile phones
- Gaming
- Portable devices such as i-pods, mp3 players, PDAs
- Voting systems
- Personal computers

## 2 Aims and Scope

From the National Curriculum 2014:

*All Pupils are taught:*

- *to understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation*
- *to analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems*
- *to evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems*
- *to be responsible, competent, confident and creative users of information and communication technology.*

The National Curriculum 2014 for computing is a significant expansion of the previous ICT curriculum and the term computing in this policy covers the use of technology based on computing in any way.

Technology for learning should:

- promote social interaction and collaborative working
- support inclusive and innovative approaches to learning
- allow learners access so that they can study at any time and anywhere, e.g. using a range of devices and/or wireless technology
- provide access to high quality learning materials
- provide a safe environment, preventing access to unsuitable material and preventing inappropriate use of systems
- enable work to be produced, submitted and marked electronically
- enable learners to track their own progress and set their own goals
- enable parents to engage with their child's learning.

Technology for teaching should:

- ensure that all staff are motivated and skilled in the use of technology
- enable a culture of continuous development of technical skills

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- enable teachers to access a wide range of multimedia and digital resources
- enable technology to be used in a wide range of learning spaces in the school and with variety of different group sizes
- enable teachers to create, use and adapt teaching resources created by themselves and others
- support work planning and monitoring, for groups and individuals.

### Technology for management should:

- be secure and integrated with curriculum and student recording systems
- allow for efficient administrative and financial systems including electronic filing and cashless financial transactions within the school
- allow for integrated personnel, timetabling, cover and associated arrangements
- provide access to achievement and target-setting data for individuals (including data about lesson attendance and behaviour)
- enable the aggregation and analysis of data to provide information about course effectiveness, staff and learner performance
- enable the use of pupil performance data to inform decisions about staff development and deployment
- support communication with parents about students' attendance, behaviour and attainment
- enable secure transfer of data with other schools, local authorities, and children's services
- be accessible to all who need to use it - including school governors.

### **3 Roles and responsibilities**

#### Role of the Computing Coordinator

- Highlighting areas for the development of Computing within the School Development Plan and being aware of annual budget available for this.
- Co-coordinating the use of Computing across the curriculum.
- Ensuring the school's Computing resources are maintained and used effectively.
- Reviewing the continuing Professional Development needs of all the staff and providing suitable training opportunities.
- Keeping up to date with developments and new technologies.
- Ensuring that this policy is successfully implemented throughout the school.
- Reviewing and updating this policy periodically.

#### The Class Teacher:

- Developing the pupil's Computing capability in accordance with school policy
- Ensuring that each pupil has equality of access to Computing resources
- Monitoring and evaluating each pupil's experiences
- Determining the next stage in each pupil's use of Computing capabilities, ensuring continuity

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- Keeping records of pupils' computing achievements and assessing each pupil's attainment
- Developing their own capability to support their teaching and pupils' learning

### Classroom assistants and adults other than teachers:

- working with the class teacher to ensure pupils develop their computing capability
- developing their own capability to support teaching and learning

## **4 Teaching and Learning style**

Teachers are expected to employ a range of strategies and to use their professional judgement to decide on those most appropriate to cater to all learning styles and across all abilities within their class. Such strategies could be:

- using the computer to demonstrate to a group of pupils or the whole class
- leading a group or class discussion about the benefits and limitations of different technologies
- individual or paired work using worksheets and help cards
- collaborative writing and design work in groups;
- co-operative activities in groups.
- individual work

Where one pupil is used to demonstrate or teach a skill to others, the teacher must feel confident that this is of benefit to all those involved.

Where pupils work in groups, they should be selected to ensure that all pupils are equally active and involved in the task and that all have equal access to the resources, the 'doing', and the 'thinking'.

Teachers are expected to intervene as appropriate to reinforce an idea, teach a new point, challenge and extend pupils' knowledge and understanding. Pupils should not be left unattended for long periods while using Computing resources.

### **4.1 Discrete Computing**

All classes will have timetabled sessions using the laptop trolley and/or suite. A copy of this can be found in the Computing coordinator's file.

## **4.2 Cross-curricular Computing**

Pupils' entitlement to use Computers in their subject learning is vital to extending and enhancing learning in all curriculum areas. Wherever possible, teachers will use Computing across the curriculum in creative and diverse ways to enrich learning and excite pupils (as exemplified through the Rising Stars "Switched on Computing" Schemes of Work now used within St John's School). Evidence for this can be collected by class teachers through photographs, annotations or copies of children's work.

## **5 Computing curriculum organization – Planning structure**

Long term planning and scheme of work in place, clearly identifying links with other subjects (See the Rising Stars "Switched On Computing" scheme)

Medium-term planning: these outline the unit of work for each term, stating the learning outcomes for the unit and suggest a breakdown of how the unit could be covered to ensure learning is progressive. National curriculum attainment levels are also included.

Short term planning: Teachers are responsible for planning learning in each lesson, adapting medium term plans to include work related to any cross curricula links that meets the need of their class.

The topics studied in Computing are planned in order to build upon prior learning. While we offer opportunities for children of all abilities to develop their skills and knowledge in each unit, we also build planned progression into the scheme of work so that the children are increasingly challenged as they move up through the school.

### **5.1 Early Years**

The positive and noticeable benefits of young children using Computing are similar to those of the older pupil. Thinking and problem solving skills are developed through a structured focus which is stimulating and linked to other activities. However, Computing in the Early Years should also reflect the use of technology in everyday life and be included in opportunities for role play.

The Computing Co-ordinator will work with the Early Years Foundation Stage Co-ordinator to ensure that resources are appropriate to the needs of the pupils in order to enhance life skills and support the seven areas of the learning.

## **6 Assessment**

"Switched on Computing", our Computing scheme of work, follows the recommendations of the DfE's National Curriculum Expert Panel and the statutory attainment target in relating all assessment to the content of the programme of study. Each unit includes a number of assessable outcomes, presented in the format 'all', 'most' and 'some', which are then mapped to corresponding statements from the programme of study. So a single unit could allow pupils to demonstrate learning relating to several bullet points from the programme of study. Note that although specific software is often referenced in these statements for clarity, other relevant software/tools that allow children to accomplish the same goal are perfectly acceptable.

## **7 Inclusion**

All pupils, regardless of race, gender, culture or disability shall have the opportunities to develop their Computing capability. The school will promote equal opportunities for laptop usage and fairness of distribution of Computing resources. Children with a computer at home are encouraged to use it for educational benefit and to share their experiences in school.

### **7.1 Provision for Special Educational Needs**

Pupils with Special Educational Needs can benefit from using computers as it enhances access to the curriculum, and this in turn encourages motivation and the development of skills.

Computing resources in the school will reflect the needs of all our students and the Computing co-ordinator will work with the SENCO to develop a portfolio of Computing resources to support the needs of specific children in the school.

### **7.2 Online Safety**

The school has an Online Safety Policy. This will be shared regularly with pupils, staff and parents. Teachers will regularly remind children about online safety issues when using computers and other devices. The "Switched On Computing" scheme of work regularly revisits online safety issues within each unit of learning.

It should be noted that disclosures and safeguarding procedures specifically related to computing and online safety can be cross referenced with the schools Child Protection and Safeguarding Policy which is updated annually, kept by the Headteacher and can be found online.

## **8. Responsibilities of the Governing Body**

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As well as fulfilling their legal obligations, the governing body should also make sure that:

- all pupils make progress in achieving the expected educational outcomes;
- the subjects are well led, effectively managed and well planned;
- the quality of provision is subject to regular and effective self-evaluation;
- teaching is delivered in ways that are accessible to all pupils with SEND;
- clear information is provided for parents on the subject content and the right to request that their child is withdrawn;
- the subjects are resourced, staffed and timetabled in a way that ensures that the school can fulfil its legal obligations.
- the religious ethos of the school is maintained and developed.

### Linked Policies

Due to the focus and purpose of this policy, there are also direct and intrinsic links to the following:

- Behaviour and Discipline Policy
- Anti-Bullying Policy
- Online Safety Policy
- Safeguarding Policy
- Collective Worship Policy
- SMSC Policy
- RSE Policy
- Equalities Policy
- Science Policy
- RE Policy
- PE Policy
- SEN Policy

Please also refer to those named policies for more comprehensive information.

**Signed: Mr B Dunne**

		Date
Version	1.3	

## St John's CE VA Primary School

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