



**ST BERNARD'S PREPARATORY  
SCHOOL**

**ICT: COMPUTING POLICY**

**ADVENT 2016**

# St Bernard's Preparatory School

## COMPUTING POLICY

### Mission Statement

**With God as our shelter and Christ as our guide, the mission of St Bernard's Preparatory School is to educate towards love and service to God, each other and the wider community. Through our broad balanced curriculum we will develop an understanding of each faith and the values we share. We will treat each person with respect, knowing we are special and unique.**

**The Bernardine Cistercians, believing that Christ is the answer to all human needs and the foundation of all truth, cooperate in the apostolic mission of the Church by their whole monastic life, with its educational work. Their schools endeavour to proclaim Christ through monastic values of prayer, work, community living and unselfish service.**

### INTRODUCTION

Information and Communications technology is concerned with the handling, processing and organising of information (pictures, text, sound, graphics, tables) using any electronic device. Computers are now undeniably a part of our everyday life. For most of us, technology is essential to our lives, at home and at work. Computational thinking is a skill children must be taught if they are to be ready for the workplace and able to participate effectively in this digital world. The opportunities and careers that advances in technology will bring to our children as they grow up are hard to imagine.

The 2014 national curriculum saw the change of ICT to Computing, broken down into three main aspects:

- Computer Science (CS)
- Information Technology (IT)
- Digital Literacy (DL).

At St Bernard's Preparatory school, our long-term goal is to equip our children with high-level ICT skills, preparing them to apply these across the curriculum in secondary education, while using technology safely, respectfully and responsibly. The ICT curriculum is designed to promote both academic achievement and genuine enthusiasm for the current digital climate. Teachers provide extensive opportunities for enrichment within computing. Creativity is promoted through a wide range of resources as well as cross-curricular links with other subjects taught at St. Bernard's.

## **Purpose of study**

A high quality computing education equips children to use computational thinking and creativity to understand and change the world. 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 children 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, children are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that children 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.

## **Aims**

The National Curriculum for Computing aims to ensure that all children:

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

### **Key stage 1 children should be taught to:**

- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

### **Key stage 2 children should be taught 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.

### **LINKS TO THE SCHOOL DEVELOPMENT PLAN**

Resources are maintained and updated as required. An inventory of all serial numbers and licences is kept by the Bursar. Updated copies of inventories stating serial numbers and location of hardware is submitted to the Bursar annually.

### **TEACHING AND LEARNING STYLES**

Teachers are expected to employ a range of strategies and to use their professional judgement to decide on which is the most appropriate.

These should include:

- Using the computer to demonstrate to a group of children or the whole class.
- Leading a group or class discussion about the benefits and limitations of Computing.
- Individual or paired work using prompt sheets or charts.
- Collaborative writing and design work in groups.
- More able children used to demonstrate or teach a skill to others, when appropriate.
- Groups selected to ensure that all children are equally active in the task, and that all have equal access to equipment.
- Activities planned in order to allow different levels of achievement by children or to incorporate possibilities for extension work.
- Teacher intervention, where appropriate, to reinforce an idea or to teach a new point.
- Independent research.

### **EQUAL OPPORTUNITIES**

All children have access to computing resources regardless of gender, race, cultural background or any physical or sensory disability. The school will provide specialist equipment where necessary.

### **HEALTH AND SAFETY**

Many of the computing Health and Safety standards do not apply to children as equipment is not in use in excess of one hour. Health and Safety considerations are as follows:

- It is the responsibility of staff to ensure that classroom computing equipment is stored securely, cleaned regularly and that the *Amrit Mann Room* is left clean and tidy after use.
- Report any technical faults immediately to the Computing co-ordinator.
- Ensure electrical equipment is safe and checked annually by qualified technicians.
- Ensure wires and cables are safely secured to avoid trip hazards.
- Food and drink should not be taken into the *Amrit Mann Room*.
- Children should view the computer screen at eye level.
- In the event of an electrical storm in close proximity to the school, all machines should be shutdown at the main switch.
- All equipment should be switched off at the end of the working day.

The Online Safety Policy recommends safe practices on the internet. Other elements of safety are recorded in the Health and Safety Policy.

## **ASSESSMENT, RECORDING AND REPORTING**

Teachers use a range of formative strategies as part of the everyday teaching and learning process of computing, including: self-assessment, peer assessment, open questioning, discussion with peers and target setting.

Teachers gather evidence about a child's learning by observing, listening, questioning, discussing and reviewing his/her work. They can then use this evidence to:

- Identify progress and gaps in learning (including individual support needs)
- Set learning goals and success criteria
- Provide feedback to children

Children are assessed at the end of term. The following attainment and effort grades are used to report:

<b>Interpretation of Attainment Grades</b>	<b>Interpretation of Effort Grades</b>
<b>A</b> Excellent standard of work	<b>1</b> Excellent, consistent effort
<b>B</b> Working above the expected standard	<b>2</b> Very good effort
<b>C</b> Achieving the expected standard	<b>3</b> Good effort
<b>D</b> Sometimes reaching the expected standard	<b>4</b> More consistent level of effort required
<b>E</b> Working below the expected standard	<b>5</b> Effort consistently below the expected standard

Our aim is to develop a consistent approach to the assessment of ICT in line with the end of KS2 formative assessment for English and Maths. The children will be assessed against the criteria and objectives set out in the curriculum and will then be identified as either:

- Working towards the expected standard
- Working at the expected standard
- Working in greater depth of the expected standard

This should allow teachers to clearly identify the children's next steps and any gaps in their learning. Each teacher maintains a record of children's achievement through teacher assessment. Work is saved to the school network, exercise books or file folders depending on year group practises. On-going assessment has always been an integral part of good practice. Assessment of a child's computing capability is achieved by planning appropriate curriculum activities in line with the school's policy for assessment, recording and reporting. Any policy is only effective if teachers are actually implementing the policy. SLT monitor all areas of the curriculum – see policy. The Computing co-ordinator is responsible for monitoring the teaching of Computing to all children and curriculum planning as well as supporting staff in their Computing provision and training.

## **PROTECTION OF DATA**

Data on staff and children is held on the school's system in accordance with legal requirements. Disclosure of data is regulated in line with the Data Protection Act.

## **ACCEPTABLE USE STATEMENT**

The computer system is owned by the school and may be used by children to further their education and by staff to enhance their professional activities including teaching, research, administration and management. The installation of software or hardware unauthorised by the school, whether legitimately licensed or not is expressly forbidden. The school reserves the right to examine or delete any files that may be held on its computer systems or to monitor any Internet sites visited.

## **USE OF PORTABLE DEVICES**

*St. Bernard's Preparatory School is committed to safeguarding and promoting the welfare of children and young people and expects all staff and volunteers to share this commitment. It is our aim that all pupils fulfil their potential.*

The school provides portable equipment to enhance the children's education and to allow staff to make efficient use of such equipment to enhance their own professional activities. Equipment may be booked out for use according to staff requirements but should not be removed offsite unless special arrangements have been approved by the Computing co-ordinator or Headteacher. When not in use, equipment should be stored in a locked cabinet. When equipment is in a car, it must be kept in a locked boot. Where a member of staff is likely to be away from school for a significant length of time, arrangements must be made for any portable equipment to be returned to school. Any costs generated by the user at home, such as telephone bills, are the responsibility of the user. Once equipment has been used, it should be returned to the designated area.

## **ROLE OF THE COMPUTING CO-ORDINATOR**

The Computing Co-ordinator will:

- Have an enthusiasm and interest in the subject and keep up to date.
- Be committed to raising standards in Computing as a National Curriculum subject
- Be willing to learn and be able to ask for help when needed
- Be willing to listen and respond to other teachers' queries.
- Have some knowledge of using Computing.
- Be keen to develop other teachers' expertise and confidence.

The school expects the Computing co-ordinator (during normal contact time) to:

- Maintain resources and support other teachers.
- Develop the Computing curriculum policy and schemes of work.
- Co-ordinate the use of Computing across the curriculum
- Develop their own expertise with support from outside agencies and attending annual conferences, such as *BETT*.
- Prepare a development plan for the future.
- Make purchases within a budget subject to the approval of the Headteacher, involving other curriculum leaders as necessary.
- Identify needs, plan and arrange INSET for staff development.
- Encourage other curriculum leaders to develop their own expertise in Computing.
- Produce an action plan for each year outlining the targets for that year.
- Produce an annual audit of computing resources for insurance purposes.
- Ensure hardware and software are kept up to date and ensure that obsolete equipment is scrapped and malfunctioning equipment repaired or replaced.

**Applies to:**

Whole School, including Early Years Foundation Stage; all staff, peripatetics, students on placement, volunteers, the Trustees and Governors working in the school.

**Availability:**

This policy is made available to parents on our website [www.stbernardsprep.org](http://www.stbernardsprep.org) or a copy may be obtained from the school office on request.

**Related Policies:**

Safeguarding Portfolio, ICT E-Safety Policy, Curriculum Policy, Health and Safety Policy, Premises Management Documents, Reporting and Assessment Policies

**Monitoring and Review:**

This policy will be subject to continuous monitoring, refinement and audit by the Headmaster.

The Trustees will undertake a formal annual review of this policy for the purpose of monitoring and of the efficiency with which the related duties have been discharged or if legislation, regulatory requirements or best practice guidelines so require.

Signed by \_\_\_\_\_

Headmaster \_\_\_\_\_

Date \_\_\_\_\_

Chair of Governors \_\_\_\_\_

Date \_\_\_\_\_

Last review: Advent 2014

Review date: Advent 2016