St Bernadette's Catholic Primary School

Computing Policy

"Doing our best for God"

Introduction

The use of information and communication technology is an integral part of the National Curriculum and is a key skill for everyday life. Computers, tablets, programmable robots and devices are a few of the tools that can be used to organise, store, manipulate, interpret, communicate and present information.

At St. Bernadette's, we aim to offer opportunities and experiences that will enable individuals to grow to their full potential. We therefore aim to provide a computing education that provides children with opportunities to explore technology and software to support their learning, preparing them for a digital future.

Aims and objectives

The school's aims are to:

- Meet the requirements of the National Curriculum programmes of study for computing.
- Provide a relevant, challenging and enjoyable curriculum for computing for all pupils.
- Use ICT and computing as a tool to enhance the learning thought the curriculum.
- To respond to new developments in technology.
- To equip pupils with the confidence and capabilities to use ICT and computing throughout their later life.
- To develop the understanding of how to use ICT and computing safely and responsibly.

The National Curriculum for computing aims to ensure all pupils:

- Can understand and apply fundamental principles of computer science, including logic, algorithms, data representation and communication.
- Can analyse problems in computational terms, and have repeated practical experiences 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.

Objectives

Early Years

It is important in the Foundation Stage to provide children a broad, play-based experience of Computing in a variety of contexts, including outdoor play. Early years learning environment should feature Computing scenarios based on experience in the real world, such as role play. Children gain confidence, control, language skills and understanding through opportunities to explore computer and non-computer based resources within the learning environment.

By the end of Key Stage 1, pupils 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.

By the end of Key Stage 2, pupils 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 accomplishes 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 reports concerns about content and contact.

Resources

We have a computer available for staff use in every classroom, with a small set of laptops available for daily use by pupils within each class. In addition, there is a bank of 32 laptops available for use, through a booking system, specifically for Computing. These laptops can also be booked out to support learning in other areas of the curriculum. We keep additional resources for computing in a central location for staff to access as required. In Reception, there is a bank of tablets and floor-bots for use in continuous provision, along with disused computing resources to enhance role play.

Care of Equipment

All staff have a responsibility to ensure any and all computing issues have been correctly reported to the subject leader and recorded in the 'ICT issues' book for the computing technician. Staff should be mindful of technical issues involving computing equipment and know how to appropriately respond to them.

- It is the responsibility of the user of a piece of technology to ensure that appropriate care is taking place when using and transporting technology.
- All equipment should be switched off at the end of the working day. This includes switching laptops and computers off at the mains.
- Staff should report and record how any equipment becomes damaged during use by groups or individuals.

Online resources for home use

In recent years, there has been a greater need to provide online educational opportunities. We have bought into the following educational programs to give pupils safe access to online education opportunities outside of school:

- Purple Mash
- Education City
- Times Tables Rockstars
- RMeasi Maths

Pupils have passwords that can be used to access these sites. Pupils have been shown how to use them and how to keep their passwords safe from others.
We have also established Google Classroom within school, providing every pupil with their own email address and password. Google Classroom is used as a means to share digital content to access at home.
Staff have the option to provide children with access to other online learning platforms to support learning.

Computing Technicians

The school is registered with a computing company that provides a computing technician whose specific roles relate to the provision of support in computing. This support takes a variety of forms, including:

- Dealing with technical queries relating to software and hardware.
- Carrying out rudimentary and routine maintenance and repairs of hardware.
- Updating computing systems and equipment.
- Supporting staff with the use of ICT within their roles.

Teaching of Computing

The school uses the National Curriculum Programme of Study for Computing as the basis of its curriculum planning. The school has adopted NCCE's Teach Computing scheme of work and Lancashire's Key Learning Indicators of Progression (KLIPs) to inform planning and assessment.

- NCCE's Teach Computing is followed across Key Stages 1 and 2 to ensure continuity, progression and familiarity for children.
- Each year group has their own progression of vocabulary, linked to the units of work from NCCE's Teach Computing
- NCCE's Teach Computing scheme of work is broken down into 4 areas of learning
    - Computing Systems and Networks
    - Creating Media
    - Data and Information
    - Programming
- E-safety is explicitly taught in addition to the NCCE's Teach Computing scheme of work. E-safety may also be covered through PSHE and RHE.
    - The first Computing lesson each year should be dedicated towards establishing appropriate rules for keeping safe online and using technology responsibly.
- Staff can, where applicable, use computing in a cross-curricular context with other subjects.

Tracking and Assessment

Key objectives to be assessed are taken from our bespoke Progression of Computing Skills document, which is based on the National Curriculum and KLIPs. Teachers regularly assess capability through observations, discussions with pupils and looking at completed work at the end of each unit. Progression is assessed on an on-going basis using the Progression of Computing Skills documents

- A bespoke document has been created to match up the KLIPs end of year statements and the NCCE's Teach Computing scheme of work.
- Teacher's judgement is supported through a mixture of recording work in books and electronic storage on the school's server.
- Each class teacher maintains a record, indicating pupil's progress that year and passes it on the next class teacher.

E-Safety (Online Safety)

Internet access is planned to support and enhance learning across curriculum. As a result, we have a responsibility to ensure that pupils are responsible and safe users of the internet and other communication technologies both in and out of school.

- A progressive e-Safety curriculum ensures that pupils are able to develop skills to keep them safe online.
- Opportunities for learning about e-Safety are incorporated into our PSHE and RHE schemes of work, as well as Safer Internet Day.
- Clear rules for e-Safety are established by each class at the beginning of the year. This includes:
    - Keeping safe online.
    - How to report concerns.
    - Acceptable use of technology.
    - Acceptable online behaviour.
- Staff may use their own resources to meet objectives related to Online Safety, however, access to Project Evolve is available to staff.

Inclusive teaching of Computing

At St. Bernadette's Catholic Primary School, we teach computing to all children, whatever their ability, age, gender or race. Computing forms part of our school curriculum policy to provide a broad and balanced curriculum for all children.

We provide learning opportunities that are matched to the specific needs of children with learning difficulties. In some instances, the use of ICT has considerable impact on the quality of work that children can produce; it increases their confidence and motivation and allows access to parts of the curriculum to which children may otherwise not have had.

Teachers identify children who are gifted and talented in the area of computing.. It is the teacher's responsibility to ensure that these children are suitably challenged in their use of ICT and computing both in specific computing lessons and in using ICT in other curriculum areas.

Role of Subject Leader

The Subject Leader is responsible for improving the standards of teaching and learning in Computing through:

- Preparing and reviewing policy documents, curriculum plans and schemes of work for the subject.
- Encouraging staff to provide effective learning opportunities for all pupils, to develop valid activities appropriate for all pupils at different stages of development which enables pupils to progress in the subject.
- Help colleagues develop their subject expertise and organise and monitor their professional development.
- Collect, evaluate and inform staff of all resources.
- Ensure standard formats for planning and assessment are being used,
- Provide annual subject action plans including costings and priorities which help inform the school development plan.
- Organise and advise on the contribution of Computing to other curriculum areas including cross curricular.
- Help with the monitoring and evaluation of the effectiveness of the subject within the school.
- Monitor and update the Computing webpage.

Security

- The computing technician will be responsible for regularly updating anti-virus software.
- Use of computing equipment will comply to acceptable use.
- All staff, parents and pupils will be aware of the school rules of responsible use of ICT and computing and the internet and will understand the consequences of any misuse.
- All staff, parents and pupils will sign an 'Acceptable Usage' form (see Online Safety policy)
- Agreed rules for safe and responsible use of ICT and computing and the internet will be displayed in all classrooms.

Health and Safety

The school is aware of the health and safety issues involved in the children's use of ICT and computing. Portable electrical equipment in school is tested annually. It is advised that staff should not connect their own electronic devices to the mains supply but if this is necessary, then the equipment must be PAT tested before being plugged in. This also applies to any equipment brought in to school by, for example, people running workshops, activities etc. Staff should visually check electrical equipment before they use it and take any damaged equipment out of use.

- Children should not put plugs into sockets or switch sockets on/off
- Trailing leads should be made safe behind equipment.
- Liquids should not be taken near computers.

Signed: Mr. Hopkinson (Subject Coordinator)

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To be reviewed: September 2024