Priestsic Primary and Nursery School

Computing Policy

Introduction

The use of information and communication technology is an integral part of the National Curriculum and is a vital skill in which the children we teach today learn the expertise for careers in an ever-growing digital world. Staff recognise the importance of children being active participants of technology and not just consumers. At Priestsic Primary and Nursery School, we recognise that pupils have the right to the very best teaching of Computing in order for them to create, develop and safely thrive with an ever increasing online environment. The purpose of this policy is to state how the school intends to make this provision.

Aims

The school's aims are to:

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

The national curriculum for computing aims to ensure that all pupils:

- Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication.

- 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

By the end of Key Stage 1 children should be able 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
- Use technology safely and respectfully, keeping personal information private; know where to go for help and support when they have concerns about material on the internet
- Recognise common uses of information technology beyond school

Key Stage 2

By the end of Key Stage 2 children should be able 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 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
- Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information

Rationale

The school believes that Computing: IT, computer science and digital literacy:

- Are essential life skills necessary to fully participate in a modern digital world.
- Allows pupils to become creators of digital content, rather than just being consumers.
- Gives pupils immediate access to a rich source of materials.
- Can present information in new ways which help pupils understand, access and use it more readily.
- Can motivate and enthuse pupils.
- Can help pupils focus.
- Foster cooperation and teamwork with pupils through opportunities for communication and collaboration.
- Has the flexibility to meet the individual needs and abilities of each pupil.

Resources and access

- The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible pc

system by investing in resources that will effectively deliver the strands of the national curriculum and support the use of ICT and computing across the school.

- Teachers are required to inform the ICT technician of any faults as soon as they are noticed. The faults should be recorded in the technician's record book in the office with details as to the problem and when it first occurred. Problems will be resolved internally if resources and time allows, as the technician's time is limited to one morning per week. In this case, the Computing Coordinator should be told.
- Resources, if not classroom based, are located in designated areas in secured trolleys or cupboards and should be collected and returned by members of staff only.

Planning

Staff in Key Stage 1 and 2 are using parts of the Rising Stars Switched on Computing scheme resources, Scratch from code-it.co.uk and Code.org to teach Computing, following the school progression framework directed from the coordinator. Computing should be taught in blocks, where relevant, adapting planning to include Computing in English, Maths and the wider curriculum.

It is important in the Foundation Stage to give pupils a broad, play-based experience of IT and computing in a range of contexts, including off-computer activities and outdoor play. Computing is not just about computers. Early Years learning environments should feature IT scenarios based on experience in the real world, such

as in role play. Pupils gain confidence, control and language skills through opportunities such as 'programming' each other using directional language to find toys/objects, creating artwork using digital drawing tools and controlling programmable toys.

Outdoor exploration is an important aspect and using digital recording devices such as video recorders, cameras and microphones can support pupils in developing communication skills. This is particularly beneficial for pupils who have English as an additional language.

Entitlement to the Computing curriculum

- All children should have access to the use of computing technologies regardless of gender, race, cultural background or physical or sensory disability. Where use of a school computer proves difficult for a child because of a disability, the school will endeavour to provide specialist equipment and software to enable access. Children with learning difficulties can also be given greater access to the whole curriculum through the use of these technologies. Their motivation can be heightened and they are able to improve the accuracy and presentation of their work. This in turn can raise self-esteem.
- Planning for Computing in the early years needs to be considered carefully if children are to begin to gain confidence in the use of a variety of technologies as soon as they start attending school. A range of appropriate hardware, software and activities needs to be offered.

Assessment, monitoring and record keeping

- On-going formative assessment is an integral part of good practice. Its main purpose is to enable the teacher to match work to the abilities and needs of

the children and ensure progression in learning.

- Computing skills capability should be monitored regularly in relation to the Computing curriculum as outlined in the 'The National Curriculum' for England. Teachers should assess module requirements with reference to children's knowledge, understanding and skills. Other opportunities for assessment will arise from cross-curricular work.
- Children will be given opportunity to self-assess their own understanding of concepts taught and final outcomes.
- Samples of work should be kept for groups of children stored in classrooms or on the school network within relevant class folders.
- Subject leader will monitor final outcomes of work saved on the network every term to ensure progression and coverage.
- For Reception it may not always be practical to keep samples of work, but observations and discussions could be recorded.

Acceptable Use

- The ICT and computing technician will be responsible for regularly updating anti- virus software.
- Use of ICT and computing will be in line with the school's 'acceptable use policy'. All staff, volunteers and children must sign a copy of the schools AUP.
- Parents will be made aware of the 'acceptable use policy'.
- All pupils and parents will be aware of the school rules for responsible use of ICT and computing and the internet and will understand the consequence of any misuse.

- The agreed rules for safe and responsible use of ICT and computing and the internet will be displayed in all ICT and computing areas.

Staff training

Needs will be met by:

- Auditing staff skills and confidence in the use of information technologies regularly;
- Arranging training for individuals as required;
- The Computing Co-ordinator should attend courses and support and train staff as far as possible.
- Annual e-safety training must be arranged and completed by all staff working with children
- All staff must be trained on professional conduct and safer working practices regarding technologies such as Twitter, Facebook, and Blogging etc.

Health and Safety

- Children should not be responsible for moving heavy equipment around the school.
- They may load software but should not be given the responsibility of plugging in and switching machines on without a member of staff present.
- It is advised that staff should not bring their own electrical equipment in to school, but if this is necessary, then the equipment must be PAT tested before being used in school. This also applies to any equipment brought into school by, for example, people running workshops, activities, etc. and it is the responsibility of the member of staff organising the workshop, etc. to advise those people.
- All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the ICT technician, Computing Coordinator or Head Teacher who will arrange for repair or disposal.

Security

- Food and drink should not be consumed near computing equipment.
- It is the responsibility of staff to ensure that classroom computing equipment is stored securely, cleaned regularly and that their class or they leave the equipment clean and tidy after use.
- Staff should ensure that the children are seated at the computers comfortably and be aware of the dangers of continuous use (e.g. eye/wrist strain etc.)
- An adult should always supervise children when they are accessing information via the Internet. The service provider does filter information but staff are advised to take great care on the content accessed by children and ultimately responsible for information accessed by pupils.

Review and evaluation procedures

- The everyday use of communication technology is developing rapidly, with new technology being produced all the time. This policy therefore will be reviewed and revised every two years.
- The Computing Co-ordinator will liaise regularly with staff, both at staff meetings and informally, to monitor the effectiveness of the policy and the Computing curriculum.
- Meetings with subject co-ordinators will also ensure that the use of information technologies across the curriculum is planned for and evaluated.

General Data Protection Regulations (GDPR)

Priestsic Primary and Nursery School fully complies with information legislation. For the full details on how we use children's personal information, please refer to the GDPR section on the school website

http://www.priestsicprimaryschool.co.uk/statutory-policies/