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All Saints National Academy

Computing Policy

Policy Review

This policy will be reviewed in full by the Local Academy Committee on an annual basis.

The policy was last reviewed and agreed by the Local Academy Committee on 17th May 2023

It is due for review on 17th May 2024

Signature Date

Academy Representative

Signature Date

Chair of Local Academy Committee

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Rationale

A high-quality computing education equips pupils 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 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.

National Curriculum 2014

Aims

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 learning throughout the curriculum.
- To respond to new developments in technology.
- To equip pupils with the confidence and capability to use ICT and computing safely and responsibly.

The three main content areas are: computer science, information technology and digital literacy. The pillars are interconnected and do not sit separately from each other.

The National Curriculum aims of Computing are to ensure that all pupils:

- 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 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.

Current resource provision at All Saints National Academy

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The school has 150 Chromebooks situated in trollies inside each classroom. Each trolley has enough for one between two. During computing lessons, these are shared between phases allowing enough for one per child. Each machine has internet access and all the relevant applications needed to teach computing in school.

An audit of resources is undertaken yearly to ensure that hardware and software are kept as up-to-date as possible and that obsolete or broken machines are scrapped or repaired.

Purple Mash & Teach computing is used to teach all three aspects of computing – information technology, digital literacy and computer science. This has a clear progression of computing skills from reception to year 6.

Online resources for home use

Times Tables Rockstars, Dojo and Google Classroom are to share homework and communication with parents. Children have their own passwords to access these sites.

The school has a service level agreement with the local authority who deal with technical queries and maintenance and repairs.

Classroom Provision

In addition to the above there is a variety of other ICT equipment in school including; Beebots, CD player, interactive whiteboards and headphones. There is a variety of software available for all machines. To ensure that copyright laws are adhered to, staff, pupils and parents are not permitted to run software brought in from outside school on school machines. An Internet safety policy has been developed in order to allow the safe and efficient use of the internet for both staff and pupils in an educational context. In Computing, as with all subjects, in order to develop the continuity and progression of teaching and learning, a balance between whole class, individual and group work, and direct teaching, pupil investigation and skills practice should be planned throughout the school.

Staff confidence and expertise will be developed through training sessions provided by the Computing leader. Support will be given with planning and teaching by the Computing leader. Computers will also be used to enhance learning in other subjects outside of the computing curriculum.

Roles and responsibilities

In order to prepare children for the increasing digital future:

- It is the responsibility of each class teacher to ensure that their class is taught all elements of the computing curriculum for the year group, and revise, if needed, prior objectives.

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- It is the responsibility of all staff to make themselves aware of the legislation relating to the use of ICT and computing, including copyright and data protection issues (see acceptable use policy and online safety policy).
- The Computing leader is responsible for the provision in Computing, including supporting teachers with the curriculum in order to have an effective impact on teaching and learning and to ensure that children are making good progress.
- Governors should receive updates on progress and developments across the curriculum.

Entitlement to the Computing curriculum (equality)

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 allows for children to begin to gain confidence in the use of a variety of technologies. A range of appropriate hardware, software and activities are offered. Purple Mash provides lessons for reception children.

Parental involvement

Parents are encouraged to support by encouraging the use of computing skills at home during home learning tasks and through class dojo. They will be regularly reminded about e-safety and encouraged to promote this at home.

Assessment 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 needs of the children and ensure progression in learning. We assess the children's work through observations and by talking to the children. Once children complete a unit of work, we make a summary judgement of the work as to whether they have reached the expected standard for their year group. Computing skills capability should be monitored regularly in relation to the Computing curriculum as outlined in the 'The National Curriculum' for England. Assessments are available for each unit of work in the Purple Mash scheme. Other opportunities for assessment will arise from cross-curricular work. Samples of work are kept in each class or saved in Purple Mash or google classroom. For Reception it may not always be practical to keep samples of work, but observations and discussions are recorded on tapestry.

Staff training

Needs will be met by:

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- Auditing staff skills and confidence in the use of information technologies regularly;
- Arranging training for individuals as required;
- The Computing leader should attend relevant 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;
- Purple Mash has online safety lessons for the children in every year group;
- All staff must be trained on professional conduct and safer working practices regarding technologies such as Twitter, Facebook, 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. 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 themselves leave the equipment clean and tidy after use. The trolleys should be plugged in to ensure that chrome books are ready to use at all times. 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).

Safeguarding

An adult should always supervise children when they are accessing information via the internet. The service provider filters information but staff are advised to take great care on the content accessed by children and are ultimately responsible for information that is accessed. All staff and children must adhere to the online safety policy.

Review and evaluation procedures

The everyday use of communication technology is developing rapidly, with new technology being produced. This policy therefore will be reviewed and revised regularly. The Computing leader 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 leaders will also ensure that the use of information technologies across the curriculum is planned for and evaluated.

Monitoring and Evaluation

Monitoring of Computing is the responsibility of the headteacher, the Computing lead and the governors. This policy sets out clear expectations that support children's learning. It should be followed as consistently as possible. The purpose of monitoring teaching and learning is to evaluate strengths, identify areas for development and further improve the quality of what we do. The quality of teaching and learning in Computing (as across the whole school) is monitored in a number of different ways. This may be through lesson observations, learning walks, the evidence produced by children and conversations with

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children about their learning. We identify the strengths and areas for development from the monitoring and ensure that these are shared with all staff in order to improve our offer.