Information Communication Technology (ICT)/ Computer Science Policy



Garfield Primary

Today's children, tomorrow's future.

Policy written by: Hayley Pawson

Raised at: Teaching & Learning Committee 23rd January 2019

Agreed & ratified by Governing Body: 18th March 2019

Signed: Chair of Governors

Next review: Spring 2022

Rationale and Visions

Information Communication Technology and Computer Science knowledge and skills are crucial in all aspects of our modern day society. Whether at school, home or in a workplace, Information Communication Technology and Computer Science skills influence our knowledge and understanding of the world in which we live.

The use of Information Communication Technology is an essential part of the National Curriculum. Computers, tablets, programmable robots, digital and video cameras, laptops, micro bits are a few tools we use to organise, store, communicate and present information.

The school believes that Information Communication Technology and Computer Science:

Provides high quality devices which are appropriate to the age range of children that are using them.

Ensures the devices are well maintained with educational applications that link to the curriculum or topic that we are teaching.

Provides pupils immediate access to a rich source of materials.

Presents information in new ways which help pupils understand access and use it more readily.

Motivates and enthuses pupils.

Helps pupils focus and concentrate.

Provides opportunities for effective collaboration work within pupils.

Aims of Policy (Definition of Information Communication Technology and Computer Science)

To ensure that Computer Science is taught as a subject in its own right as well as find opportunities to apply ICT across the curriculum.

Information Technology knowledge and skills are crucial in enabling people to function efficiently in any area where information is gathered, processed and used. The aims of the school should be:

- To provide a relevant, challenging and enjoyable curriculum for Information Communication Technology and Computer Science (Computer Science) for all pupils.
- To ensure each class (Yrs 1-6) has a dedicated Information Communication Technology / Computer Science timetabled lesson a week in the ICT Suite.
- Meet the demand of the National Curriculum programmes of study for Information Communication Technology and Computer Science.
- To run Information Communication Technology and Computer Science after school clubs each term.
- To ensure pupils have equal opportunity of access to Information Communication Technology provision and the Information Communication Technology/Computer Science curriculum regardless of race, gender or educational needs.

Objectives

Early Years

It is important for pupils in Early Years to experience Information Communication Technology in a range of contexts, including indoor and outdoor play. In Early Years learning environments feature different uses of Information Communication Technology for example in every classroom they have access to an Interactive G Touch screen which they are allowed to use different software's and online resources to be creative with for example:

Using technology the pupils in Early Years and Foundation Stage develop the skills listed below:

Creativity:

Drawing
Creating
Building 3D models

Reading and Literacy

Electronic books
Phonics
Comprehension questioning
Phonics
Listening and Learning sounds

Hand Writing

Online handwriting tools
Practice writing letters and words
Hands on practice with writing and letter formation

We are currently using the following online platforms which are subject to change: Purplemash Bugclub Letter Join

They also have access to cameras, recording equipment and Beebots (programmable robots), these devices develop communication skills.

End of Key Stage 1

The curriculum is split up into 3 sections Computer Science, Information Technology and Digital Literacy

<u>KS1</u>	
Computer Science	Understand what algorithms are; how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs.
Information Technology	Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
Digital Literacy	Recognise common uses of information technology beyond school. Use technology safely and respectfully. Keep personal information safe and private. Where to go when they need help.

End of Key Stage 2

The curriculum is split up into 3 sections Computer Science, Information Technology and Digital Literacy.

KS2	
Computer Science	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. Appreciate how [search] results are selected and ranked.
Information Technology	Use search technologies effectively 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.
Digital Literacy	Understand the opportunities [networks] offer for communication and collaboration Be discerning in evaluating digital content. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Assessment and Record Keeping.

Assessing what the pupils have learned and achieved is done by observing them in lesson time, being aware of the Information Communication Technology/Computer Science skills they are developing, by asking them questions about what they think they have learned from the 'task' and from the work they produce. The Information Communication Technology/Computer Science Leader keeps notes of pupils' progress and attainment in Information Communication Technology Excel sheet and a portfolio of the pupils work is kept on the server.

In KS1 and KS2 pupils' work is saved into each year groups 'My Documents'. They access this by logging on in two ways depending what year group they are:

Year 1 and 2 log on as a class log in.

Year 3, 4, 5 and 6 log on with an individual log in.

Depending on what they are working on and what software or cloud based programme depends where there work is saved for example:

If it is an online service, then they save on their online school account and save in the cloud.

If it is software they save their work on the school server.

Monitoring and Evaluation

The Information Communication Technology/Computer Science Leader is responsible for supporting members of staff with training on devices that they will use in the school. Also the Information Communication Technology/Computer Science Leader is responsible for training staff on new software and technology.

Pupils with Special Educational Needs

All pupils have an entitlement to develop Information Communication Technology/Computer Science capability. Pupils who are unable to communicate conventionally, because of physical or sensory impairment, may have access to the curriculum only through information technology.

References are made in the Order for English to technological aids for communication. It will be important to ensure that staff with responsibility for English, Special Educational Needs and Information Technology work closely together to identify and meet individual needs.

Information Technology offers particular opportunities for pupils with special educational needs. The Information Communication Technology Policy provides for special needs - for pupils with intellectual or emotional difficulties, pupils with communications difficulties and pupils with physical disabilities. For all these, the benefits of using Information Communication Technology can include,

- heightened motivation,
- better opportunities for work in small groups,
- improvement in the accuracy and appearance of work,
- better access to information,
- the development of creativity.

We are aware that equal opportunities is a major part in teaching that's why we ensure that resources and devices are available for Special Educational Need and Gifted and talented pupils to help support and challenge appropriately.

Staff Training

The Information Communication Technology/ Computer Science Leader and ICT Network Manager help staff when required with general Information Communication Technology issues or queries.

Throughout the academic year when INSET days are held where possible the Information Communication Technology/Computer Science Leader and the ICT Network Manager will hold a session addressing staff needs. Individual members of staff should attempt to continually develop their own skills and knowledge.

Teachers use Information Communication Technology and Computer Science to engage the pupils in cross curricular activities.

Health and Safety

Garfield Primary are aware of the health and safety issues involved in pupil's use of Information Communication Technology and Computer Science. All electrical devices in school are PAT tested. Staff are advised that they should not bring in their own electrical equipment into school.

Damaged equipment should be reported straight away filling out a form in the office and also an email to the ICT Network Manager straight away, and not to be used until fixed or disposed of.

Pupils are not allowed to put plugs into sockets or to switch sockets on.

Trailing leads should be made safe behind equipment

School policy is to only have lidded cups around the school and none in the ICT suite.

Resource Management and Security

The Information Communication Technology devices are bookable through emailing the ICT Network Manager giving 48 hours' notice where possible. When the devices are finished with the same teacher is to return all devices back to the ICT Network Manager who will secure them in a lockable room until needed again.

The Information Communication Technology Suite is a continuously locked and access is given to certain members of staff for security reasons. Teachers are allowed to use the room when it is not in use for Information Communication Technology/Computer Science lessons. They can arrange a time with the Information Communication Technology/Computer Science Leader and will then be given access to the room for that time frame.

Role of Pupils Curriculum Links

Pupils are to only use Curriculum links that are supplied by the school on the devices. Pupils are to understand how to use the applications and software's safely and sensibly. Pupils are to only access the devices under adult supervision.

Pupils are to use the curriculum links at home with adult supervision to extend and support the learning that takes place in school.

Role of Parents/Carers

Parents/Carers are encouraged to support the implementation of Information Communication Technology and computing where possible out of school hours. The use of technology and applications can support a range of subjects for example online Reading & Maths platforms that will support the children's learning. All of these online resources are accessible through our school website. During the academic year, the ICT department will host information workshops, to develop parent knowledge of ICT including online safety talks, help on accessing the online platform at home, as well as showing parents/carers their child's e-portfolio work.