Granby Junior School

ICT Policy

Review Date	Approved by	Governor Minute Reference
	FGB	

Date: September 2022

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, ipads, tablets, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Granby Junior School we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively.

Aims

To meet the requirements of the National Curriculum programmes of study for Computing.

To provide a relevant, challenging and enjoyable curriculum for ICT and computing for all pupils.
We use ICT and computing as a tool to enhance learning throughout the curriculum.
To ensure that pupils become digitally literate and equip them to use ICT and computing confidently throughout their lives as active participants in a digital world.
To equip pupils to respond to new developments in technology.
To develop the pupils' understanding of how to use ICT and Computing safely and responsibly.

Intent Statement

At Granby Junior school, the children will access a modern and futuristic computing education where their learnt skills will enable them to be successful citizens of the 21st Century.

Our aim at Granby is to:

- **Explore** by engaging the children into a safe online experience, where they can engage and evaluate a range of sources.
- **Inspire** by providing the children will the opportunities to try new and exciting apps.
- **Spark** by igniting their minds to a whole new world of technology that correlates to solving real life problems.
- **Deepen** their computing skills, enabling them to have the abilities required for jobs not yet invented.

A computer scientist will leave Granby with the confidence that they can use technology in their everyday life with passion and enthusiasm. We hope to prepare our digital citizens for a future that will be shaped by technology. At Granby, we use computing in areas of the curriculum to enrich and advance learning opportunities, while also empowering children to be critical and conscious of online sources. We have three main areas of learning: Computer Science, Information Technology and Digital Literacy.

Computer Scientists will leave Granby having created complex algorithms. They will also understand how the internet, data and computers work.

Information Technologists will leave Granby having created and used a range of programs on our iPads. They will also have the skills to find relevant and reliable information online.

Children will leave Granby with the digital literacy skills to enable them to have the crucial ability to stay safe online. They will clearly know how to handle any digital experience safety. This is a crucial learning experience throughout school that is put at a forefront of our education.

Equality and Inclusion

Children of all abilities enjoy and benefit from the study of ICT at Granby Junior school, and teachers are able to adapt teaching to respond to the strengths and needs of all pupils enabling them to achieve.

Teachers have a secure understanding of how a range of factors can inhibit pupils' ability to learn and know how best to overcome these through adaptive teaching. High-quality teaching approaches to engage and support the needs of all pupils are used **within classrooms/ hall /etc as applicable** during ICT lessons. Assessment of pupils' progress is employed to identify barriers to learning and develop strategies to support all pupils through a graduated response – including but not limited to those with SEND, those of high ability, and those with English as an additional language.

Adaptive ICT teaching focuses on the whole class while providing scaffolding such as differing levels of support, access to resources, modelled first step examples or focused questioning to those who need additional initial support or challenge in order to access the same ambitious curriculum and meet our high expectations.

Diversity

At Granby Junior school our curriculum offers a diverse view of the world, beginning in our local community and extending beyond. Through the lenses of British values, children are positively exposed to a range of role models, reflected within the wider society, redressing the balance seen within our local community.

In ICT children learn about diversity both in terms of cultural diversity and that of gender. This is shown by knowing who invented the WWW – Tim Burners-Lee, James Gosling, (founder of Java script), Ada Lovelace (the inventor of coding)
The two pioneers of the IT industries, although Charles Babbage and Vannevar Bush are considered to be the true pioneers of the computer, Steve Wozniak and Steve Jobs are the Young Turks who made it possible to market the personal computer.

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.

Rationale

The school believes that ICT and Computing:

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 and concentrate.

Offers potential for effective group working.

 Has the flexibility to meet the individual needs and abilities of each pupil.

 Recording devices can support children to develop their communication skills.

 Help prepare pupils for the digital requirements of study and work in the 21st Century.

Key Stage 2

By the end of key stage 2 pupils will be taught to:

Design and write 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; generate appropriate inputs and predicted outputs to test programs.

Use logical reasoning to explain how a simple algorithm works 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.

Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.

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.

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 / Ipads 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. DCC are engaged to support with this. Teachers are required to inform the Computing leader or business manager of any faults as soon as they are noticed.

ICT and computing network infrastructure and equipment:

Wireless access to the internet is available throughout the school.

There are currently Ipads and some laptops in each classroom with internet access.
The ipads and laptops are available for use throughout the school day as part of ICT and computing lessons and for cross curricular use.
Pupils may use ICT and computing independently, in pairs, alongside a TA or in a group with a teacher.
The Teaching and Learning Committee monitor the teaching of subjects across the school and governors are invited to observe practice.

Planning

Each year group's planning shows coverage of the National Curriculum to show progression using Purple Mash, Scratch and or Microsoft Office. This enables the application of ICT / computing skills to be embedded across the curriculum. Other resources to secure the teaching of specific skills are used such as Purple Mash, Scratch and or Microsoft Office, which supports delivery of the programming strand of the new Computing curriculum. As the school develops its resources and expertise to deliver the

new Computing curriculum, planning resources will be reviewed and revised to enable pupils to achieve stated objectives. Currently, pupil progress towards these objectives.

Pupils' progress in Computing is evaluated by the subject coordinator through: observation of teaching and learning in the classroom. Scrutiny of children's work. Monitoring coverage of the new Computing curriculum through planning scrutiny.

E-Safety

The school promotes the importance of e-safety across a range of contexts. Rules for responsible use of the internet are displayed in the classrooms. Teachers are required to plan and teach e-safety each half term to ensure that pupils or staff, who are new to the school, receive appropriate safety advice. The school newsletter and school website are used to advise p to visit age appropriate e-safety websites. Aspects of e-safety and cyber bullying are also taught in more depth during Anti-Bullying Week each Autumn Term.

Health and Safety

The school acknowledges potential health and safety issues arising from the use of ICT and computing. All electrical appliances in school are tested accordingly. All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. This should then be reported to the Office, Business Manager or head teacher who will arrange for repair or disposal.

Security

DCC 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' which all staff, volunteers and children must sign.

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 the internet and will understand the consequence of any misuse.

The agreed rules for safe and responsible use of ICT and the internet will be displayed next to classroom computers.