

Newton Primary School

Computing Policy



Introduction

This document is a statement of the aims, principles and strategies for the teaching and learning of Computing at Newton Primary School.

Statement of Intent

At our school we want pupils to be MASTERS of technology and not slaves to it. Technology is everywhere and will play a pivotal part in students' lives. Therefore, we want to model and educate our pupils on how to use technology positively, responsibly and safely. We want our pupils to be creators not consumers and our broad curriculum encompassing computer science, information technology and digital literacy reflects this. . We want our pupils to understand that there is always a choice with using technology and as a school we utilise technology (especially social media) to model positive use. We recognise that the best prevention for a lot of issues we currently see with technology/social media is through education. We recognise that technology can allow pupils to share their learning in creative ways. We also understand the accessibility opportunities technology can provide for our pupils. Our knowledge rich curriculum has to be balanced with the opportunity for pupils to apply their knowledge creatively which will in turn help our pupils become skilful computer scientists. We encourage staff to try and embed computing across the whole curriculum to make learning creative and accessible. We want our pupils to be fluent with a range of tools to best express their understanding and hope by Upper Key Stage 2, children have the independence and confidence to choose the best tool to fulfil the task and challenge set by teachers.

Teaching and learning in Computing

Information Technology	Computer Science	Digital Literacy
Word Processing/Typing	Computational Thinking	Self Image and Identity
Data Handling	Programming	Online Relationships
Presentations, Web design and eBook	Computer Networks	Online Reputation
Animation		Online Bullying
Video Creation		Managing Online Information
Photography and Digital Art		Health, Wellbeing and Lifestyle
Augmented Reality and Virtual Reality		Privacy and Security
Sound		Copyright and Ownership

Foundation Stage -

Although computing is not a statutory part of the EYFS, we will ensure that children of reception age receive a broad, play-based experience of computing through the use of new technologies as well as an understand of how to stay safe when online.

KS1 -

Pupils will be taught to:

- Understand what algorithms are, and how they are implemented.
- Create and debug simple programs.
- Predict the behaviour of simple programs.
- Create, organise, store, manipulate and retrieve digital content.
- Recognise common uses of ICT beyond school.
- Use technology safely and respectfully, keeping personal information private, and to identify where to go for help and support when they have concerns online.

KS2 –

Pupils will be taught to:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems, and solving problems.
- Use sequence, selection, and repetition in programs.
- Work with variables and various forms of input and output.
- Explain how some simple algorithms work, and how they can detect and correct errors.
- Understand computer networks, how they can provide multiple services, and the opportunities they offer for communication and collaboration.
- Use search technologies, understand how results are selected and ranked, and be able to critically evaluate digital content.
- Select, use and combine a variety of software on a range of devices to design and create programs, systems and content that accomplish specific goals.
- Use technology safely, respectfully and responsibly, recognise acceptable behaviour and identify a range of ways to report online concerns.

Assessment

Pupils' knowledge and understanding of the primary computing curriculum will be assessed according to the provisions outlined in our Assessment Policy.

Ongoing formative assessment monitors pupil performance and progress during learning; the outcomes of which we will use to ensure that work matches the individual needs and abilities of pupils.

Summative assessment reviews pupils' progress and abilities, and will be undertaken at the end of each unit, term and school year via a number of means based on evidence collection.

Samples of work will be kept for groups of children, stored in both classrooms, on the school network, within relevant class and pupil folders and Seesaw.

Equal Opportunities

At Newton Primary School we are committed to providing a teaching and learning environment that allows all children to thrive and reach their potential. All teachers provide suitable learning opportunities for children, recognising that many children have individual needs and ensuring these needs are catered for in Computing lessons. This includes providing adult support and appropriate equipment and materials to enable all children to access the Computing curriculum. Teachers are aware of children who have a particular talent for Computing and aim to provide additional challenges for these children where appropriate.

Role of the Subject Co-ordinator

- Manage the computing budget, and keep appropriate records of expenditure in order to review them and make suggestions for the future.
- Secure and maintain computing resources, and advise staff on the correct use of digital technologies.
- Offer help and support to all members of staff in their planning, teaching and assessment of computing.
- Keep the headteacher and other stakeholders, such as parents, informed about the implementation of the primary computing curriculum.
- Keep up-to-date with new developments in computing and communicate such information and developments to colleagues, including, where necessary, through the creation and delivery of bespoke training programmes.
- Attend appropriate in-service training.
-

Monitoring the Effectiveness of the Policy

This policy will be reviewed every three years. The effectiveness of this policy will be reviewed by the subject lead, the Headteacher and the nominated governor and necessary recommendations for improvement will be made to the Governors.

Headteacher

Chair of Governing Body

Date: September 2023