



Elton Primary School & Nursery

Computing Policy

In our school, the wellbeing and education of all our children comes first

Full Governors	Summer 2021
Review	Summer 2022

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. Through computing the children learn about how to stay safe when online which links closely with our school's 'Relationship and Health Education' policy.

Aims and Objectives:

At Elton Primary School and Nursery we aim 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,
- recognise common uses of information technology beyond school,
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when children have concerns about content or contact on the internet or other online technologies,
- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by deconstructing 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; 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,
- 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
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Principles of teaching and learning:

Differentiation & SEND

In planning lessons, teacher consideration will be given to modifying the task, or providing peer or adult support, for children with difficulty. Equally, for children who exceed national expectations, the teacher will extend the task appropriately to ensure challenge.

Breadth & balance

Teachers and Teaching Assistants will ensure that they understand the skills and concepts to be taught and the role of discussion in developing a critical awareness of the use of computing. The planning of computing will provide guidance on the skills and knowledge to be covered by each year group. Each year group starts the year with an age appropriate E-Safety unit which is based on the Common Sense Media planning documents. For all other areas, teachers plan their work using the 'Mr Andrews Online' planning framework which matches the National Curriculum. The skills and knowledge progression, and the units taught can be viewed in the appendix.

Activities using computing will be planned to allow for different levels of achievement by pupils or to include the possibility of extension work. Teachers will be expected to intervene where appropriate to reinforce an idea or teach a new point.

Variety

Pupils have the opportunity to participate in a variety of activities to learn to use computing and apply these skills in a meaningful context. They will also evaluate how computing is used in everyday life and compare this with the way they use it in school through:

- short directed activities to practise a specific skill,
- activities with a subject context to practise and develop skills previously learned,
- open ended activities which allow pupils to choose which tools to use or to select from a variety of media,
- whole class discussion to allow reflection on the use of computing.

Including All Learners

Inclusion involves the identification and minimising of barriers to learning and participation, and the maximising of resources to support learning and participation. We believe in giving children strategies to be successful through our embracing of a skills based curriculum.

Health & safety

The children are also taught about the correct typing position, and how to prevent R.S.I. Further guidance is available in the school's Health and Safety policy and E-safety policy.

A great emphasis is placed on the topic of safe internet use. All year groups teach an e-safety unit in autumn first half term and assemblies and awareness days are carried out throughout the year. We utilise community support for this area at every opportunity working with police, industry and charities regularly.

Assessment, recording & reporting

Teachers will assess the children's computing skills termly using both the 'Mr. Andrews Online' progression grid and Target Tracker, these will then be used to inform planning and the level of support, extension and differentiation required.

Management & administration

The curriculum will be planned to allow pupils to access a wide range of resources and activities to effectively deliver the National Curriculum skills. Teachers will ensure that pupils have sufficient access to experiences and equipment to receive a balanced experience of computing. Planning should identify opportunities for assessment and resources to be used, differentiation and clear learning intentions.

The role of the subject coordinator

The subject coordinator will work with the school leadership team to ensure implementation of the school's computing policy. The coordinator will be responsible for monitoring curriculum coverage and the quality of teaching and learning. The coordinator will plan and lead the development of all school staff in computing and monitor resources.

Resourcing

The school employs a technician who ensures that all resources are up to date and meet the schools and children's requirements.

Review

This policy will be reviewed every two years to evaluate the school's progress towards its Computing targets. Progress will be discussed with the school leadership team and reported to the governors. This evaluation will form the base for an action plan which will then inform the school development plan.