

Hedon Primary School

Computing Policy

Approved by committee 24th November 2020

Approved by full governors 5th January 2020

Reviewed

This policy will be reviewed every 2 years unless significant changes current or a situation requires a specific response.

Important policies linked to this one:

- E-Safety Policy
- Acceptable Use Policies
- Teaching and Learning Policy

Linked documents:

- Email agreements
- Long term plan for Computing

Introduction

This policy expresses the school's purpose for the teaching and learning of Computing. It sets out the aims; planning of the curriculum and assessment and monitoring. It is based on the Computing programme of study (POS): key stages 1 and 2 (DfE September 2014).

Purpose

At Hedon Primary School, we believe that an engaging and motivating Computing curriculum will enable our learners to accomplish several goals:

- Use computational thinking and creativity to understand and change the world.
- Make deep links with mathematics, science and design and technology.
- Build knowledge of principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.
- Become digitally literate – able to use, express themselves and develop ideas through information and communication technology.

Aims

- The Computing Subject Leader and leadership team support staff to deliver a high quality computing education.
- Computational thinking – the ability to solve problems in a creative, logical and collaborative way – is developed through repeated programming opportunities and opportunities to build understanding and apply the concepts of computer science.
- Pupils become responsible, competent, confident and creative users of information and communication technology.

- Pupils have a growing awareness of how technology is used in the world around them and of the benefits that it provides. They are supported to evaluate and use information technology, including new or unfamiliar technologies.
- Opportunities for communication and collaboration develop understanding of the purposes for using technology and these are used to bring together home and school learning experiences.
- Technology is used imaginatively to engage all learners and widen their learning opportunities,
- Pupils have access to a variety of devices and resources and are encouraged to reflect on the choices they make to use them.

We expect our pupils to:

- Develop computing skills, knowledge and understanding
- Develop an understanding of the wider applications of computer systems and communication technology in society
- Develop independent and logical thinking through reasoning, decision making and problem solving
- Develop imagination and creativity
- Work independently and collaboratively

Our Curriculum

Planning for Computing is implemented using two core documents: The National Curriculum Programme of Study for Computing and the Statutory Framework for Early Years Foundation Stage. By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Long term and medium term planning ensures coverage and progression of the attainment expectations at the end of Key Stage 1 and Key Stage 2 as identified in the Computing POS. Planning is derived from a range of sources including:

- Barefoot Computing
- CAS
- Code Club
- Scratch
- Pivot
- Adobe
- Google Classroom
- microbit.org;

It is adjusted to meet the needs of our pupils.

The teaching of email use is via GSuite for Education Gmail; the pupil accounts only allow emails to and from other @hedonprimaryschool users.

Every pupil has a login QR Code (managed through Wonde) that takes them straight to their Google Drive and other accounts such as TTRockstars and Spelling Shed, when using a Chromebook. Teachers can access pupil's Google Drives and share folders of work with them.

Early Years Foundation Stage

Pupils build confidence to use technology purposefully to support their learning for all Early Learning Goals as appropriate. Pupils in the Foundation Stage class will have experiences using technology indoors, outdoors and through role play in both child-initiated and teacher-directed time. This includes Opportunities for technology as a tool to support learning and teaching in all areas are identified in curriculum planning.

Assessment

Progress is assessed on an on-going basis against statements in the Computing progression document. These statements are derived from the national curriculum and are appropriate to the children's stage of development and are listed under these headings:

- Computers and using computer
- Coding
- Networks including emails
- Internet and Searching
- E-Safety (Rising Stars)

Pupil's work is saved into their Google drive when possible. Some evidence may be more appropriately gathered in curriculum books or via dialogue with the pupils, depending on the nature of tasks. This evidence supports teachers' judgements and assessments.

E-Safety

Due to the increasing importance and ever-changing nature of e-safety aspects, a separate e-safety policy has been created, detailing filtering and monitoring procedures along with various other matters. Using the Rising Stars Switched On Computing scheme of work, our school provides a progressive computing curriculum which also provides some links to e-safety, allowing pupils to develop skills to keep them safe online. Opportunities for learning about online safety are part of PSHCE and reinforced whenever technology is used. Clear rules for online safety are set out in the form of acceptable usage policies (AUP) which parents and pupils sign when they first start at the school and again in Year 3.

Monitoring

The impact of the Computing curriculum is monitored regularly by the Computing subject leader through pupil discussion, samples of work and discussion with teachers and pupils.

Systematic monitoring of all threads of Computing informs the subject leader and school development plan.

The Computing leader conducts regular audits of the training needs of teachers and teaching assistants to improve their subject knowledge and confidence. Requests for training in Computing can be part of an individual teacher's performance management plan.

SEN / Inclusion

The school maintains its policy of equal opportunities as appropriate for Computing. Computers and related technology are made available to all pupils regardless of gender, race or abilities. The class teacher differentiates work by task, resource or support, to ensure the individual needs of more-able and SEN pupils are met.

The school is aware that not all pupils have the same access to computers at home and this is considered by staff in the planning and delivery of the curriculum.

Resources

The school has a range of resources to support the delivery of the Computing curriculum, the Early Years Framework and learning across all areas of the National Curriculum including a set of 32 Chromebooks, which are stored securely in a charging trolley, a set of iPads, Beebots, Spheros and Micro:Bits. Online tools such as Seesaw and Google Apps for Education (including Google Classroom) are part of the experience for pupils and managed by class teachers and the Computing subject leader.

The Computing subject leader keeps up to date with new technologies and reviews the school's provision, as well as maintaining the existing resources in partnership with the school's technology support provider - Primary Tec.

The Computing Action Plan expresses the school's priorities for future expenditure and is reviewed by the Computing subject leader, governors and senior management who consider its impact on all learning.

Cultural Capital

Ensuring that a rich and broad curriculum is experienced at Hedon Primary school is very important. This is done in many different ways, responding to local and national events and including, but not limited to, the following:

- Using computational thinking vocabulary in computing lessons and the wider curriculum:
 - Decomposition - breaking a problem into smaller parts
 - Tinkering - changing things to see what happens
 - Abstraction - identifying what is important and leaving out detail we do not need
 - Debugging - finding out what is wrong in a programme and fixing it
 - Evaluation - making judgements based on different factors
 - Persevering - never giving up, being determined, resilient and tenacious
- making links to current affairs, e.g. apps on smartphones, creative industries such as gaming, social media and space travel;
- investigating the concept and use of number in different countries and identifying cultural differences;
- investigating how the concept of communication and computing has changed over time, and learning about the pioneers of computing such as Ada Lovelace, Charles Babbage and Alan Turing.
- Evidencing the importance of computing in roles such as engineering and science.

Roles and responsibilities

The school community works together to ensure the implementation of the Computing policy. The subject leader is responsible for monitoring curriculum coverage, the impact of learning and teaching, creating knowledge organisers for each unit of work and assists colleagues in its implementation.

The Computing subject leader provides an annual report to governors on the impact of the Computing curriculum and how resources are being effectively deployed. Governors may include Computing in their learning walks around the school.

The class teachers are responsible for delivering an effective Computing curriculum and integrating this into their planning for other subject areas where this is appropriate.

The school receives technical support from Primary Tec and they are responsible for the maintenance of computers, printers, the school network and keeping software up to date. The subject leader liaises with the technician to ensure that the systems are running efficiently.