

Computing Policy

1. Intent

At Hallaton Primary School, we aim to provide a high-quality Computing curriculum that will equip children with the skills and knowledge they need to use technology safely, responsibly and creatively, both in the home and beyond. We hope to inspire a lifelong love of play, design, code and invention with technology.

Computing isn't a subject just about memorising facts and vocabulary words, it's about solving complex problems, being able to collaborate with others and learn from mistakes. We want children to become independent and to have fun with technology while developing 21st-century skills.

We believe in a curriculum that meets the interests of all learners, with a range of exciting creative activities and open-ended challenges based on the essential requirements of the computing program of study, incorporating Computer Science, Information Technology and Computational Thinking. We believe that there are non-negotiable digital skills that children must possess: -

- All children must have a basic understanding of coding and how the web works.
- All children must able to evaluate online information and be social media savvy.
- All children must understand online safety rules and know how to report and block.
- All children must be proficient with word processing and able to use cloud storage.
- All children must be able to create visually engaging content/presentations in order to present learning to others.
- All children must have experience of online collaboration and using communication tools.

Today's children and young people are growing up in a digital world. As they grow older, it is crucial that they learn to balance the benefits offered by technology with a critical awareness of their own and other's online behaviour, and to develop effective strategies for staying safe and making a positive contribution online. Online Safety is an integral part of our computing curriculum which will support our children to live knowledgeably, responsibly and safely in a digital world.

2. Implementation

At Hallaton, we use a variety of teaching and learning styles in our computing lessons and make use of a wide range of online resources. Our principal aim is to develop children's knowledge, skills and understanding and make technology an integral part of school life. Children have the opportunity to work as a whole class, in small groups and independently to develop their skills.

Computing is taught both as discrete lessons and as part of other subjects. Wherever possible we encourage children to use and apply their learning in other areas of the curriculum; technology is regularly used to complete topic work and develop literacy, analytical and presentation skills.



We follow the Kapow Scheme of Work which is complemented by units from Twinkl and Oak National Academy and our Golden threads are:

Online Safety ~ Computing Systems and Networks ~ Programming ~ Creating Media ~ Data Handling.

We have in place:

- Computing Curriculum Map (Big Picture) and Progressions of skills (Overview and EYFS to Y6 End Points). These documents outline the knowledge and skills that all children must master.
- Online Safety policy and expectations. This forms part of daily school life and is reinforced whenever technology is used.
- Safer Internet Day takes place in February to promote the safe and positive use of technology for children and the community.
- Google Classroom accounts for all staff and pupils to help teach, monitor progress and keep a record of children's work. Children also have individual folders stored on the server so they can practise saving files locally as well as in the cloud.
- Year 5/6 visit to the Warning Zone every two years; Esafety Zone.

Lesson Content:

In line with the 2014 National Curriculum for Computing, lessons are to include:

<u>KS1:</u>

<u>Year A</u>

Online Safety: Online security

Computing systems and networks:

Improving Mouse Skills

Programming:

Algorithms unplugged

Programming Bee-Bots

Creating media:

Digital Imagery

Data handling:

Introduction to data

Year B

Online Safety: Online security

Programming:

Algorithms & Debugging



Programming Scratch Junior

Computing systems and networks:

What is a computer?

Word processing

Creating media:

Stop Motion Animation

Data handling:

International Space Centre

LKS2

Year A

Online Safety: Fake news, the dangers of Social media

Taught at the start and throughout the year including Internet Safety Day

Computing systems and networks:

Networks

Emailing

Programming:

Scratch

Creating media:

Video Trailers

Data handling:

Comparison cards databases

Year B

Online Safety: Online search results & bots

Taught at the start and throughout the year including Internet Safety Day

Computing systems and networks:

Collaborative Learning

Computational Thinking

Programming:

Scratch



Creating media:

Website Design

3D Modelling

Data handling:

Investigating weather

UKS2 Year A Online Safety: Online presence and cyberbullying Taught at the start and throughout the year including Internet Safety Day

Computing systems and networks: Search Engines

Programming: Scratch – programming music Micro:bit

Creating media: Stop Motion Animation

Data handling: Mars Rover 1

Year B Online Safety: Digital reputation and online security Taught at the start and throughout the year including Internet Safety Day

Computing systems and networks: Bletchley Park

Programming: Introduction to Python

Creating media: History of Computers

Data handling: Big data 1 & 2

3. Impact

Our Computing Curriculum has been structured to demonstrate a progression of skills and ensures that children can build on their understanding, as each new concept and skill is taught with opportunities for children to revisit skills and knowledge as they progress through school.

Teachers assess children's knowledge, understanding and skills in Computing by:

• making observations



- having conversations with the children during lessons, which includes discussion of their thoughts, ideas, processing and evaluations of work.
- the children's computing folders and Google Classroom accounts
- the quality of the digital content they create

Built into the activities are several points were the teacher has the opportunity to assess and take stock of the children's progress, then provide feedback. Computing is tracked termly against the Year end points to assess whether children are Working Towards, At or above Age Expectations. This is fed back to parents in the end of year report.

It is the teacher's responsibility to plan, carry out and monitor the delivery of the Computing scheme of work. A work scrutiny is carried out annually and links made to computing skills and their progression.

The Computing Subject Leader is responsible for supporting members of staff in all aspects of Computing, updating the resources and monitoring and evaluating the planning and assessment to ensure continuity and progression. The Head teacher and Governors play a vital role in encouraging good practice and ensuring the policy is adhered to.

Monitoring of the standards of children's work and the quality of teaching in Computing is the responsibility of subject leader, supported by the Head teacher. The work of the subject leader also involves supporting colleagues in their teaching, being informed about current developments in the subject, and providing a strategic lead and direction for Computing in the school.

Resources and Access

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. These include, but are not limited to:

- Google Classroom
- 20 Chromebooks
- 10 Samsung tablets
- Online tools such as Junior Scratch, Scratch, Dance Mat typing, TinkerCad
- Micro:bits
- 6 Beebots
- 3D printer

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.

Policy Links: Online Computing PSHCE RSE

Reviewed Date: January 2024 By: Claire Stevens Computing Subject Lead Presented to Governors: February 2024