



Easingwold Primary School Computing Policy

Rationale

The technological world is advancing rapidly and will play a pivotal part in student's lives in the years to come. Foundation Stage children who join us already have an awareness of technology and its impact on society. At Easingwold primary school, we want our children to leave as masters of technology; we want them to be confident, creative, respectful and safe users who leave behind a positive digital footprint. Therefore, our computing curriculum affords children hands-on experience with a range of hardware and software that supports the development of computing skills, including programming and word processing skills.

Aims

At Easingwold Primary School, we aim to ensure that, through effective teaching of Computing, children will:

- Develop their understanding of the fundamental principles and concepts of Computing.
- Develop their understanding of how digital systems work and the necessity for comprehensive digital skills in the working world.
- Develop their understanding of programming and debugging coding script to successfully solve problems and affect outputs.
- Develop their skills in using hardware and software to manipulate information in their process of problem solving, recording and expressive work.
- Instil positive attitudes towards Computing and the online world, recognising its value for themselves, others and society while raising their awareness of its advantages and limitations.
- Instil the values of respect and tolerance which are needed to leave behind a positive digital footprint.

Curriculum

At Easingwold Community Primary School, we use the iCompute curriculum which have been organised into a Year A/Year B structure for each phase. Each unit has been carefully selected and placed into a year and term to ensure a comprehensive progression of knowledge and skills, beginning in EYFS. Throughout the year, children are exposed to a range of units that address different computational and digital skills, in line with the outcomes in the National Curriculum 2014 document. Teachers use the ready-resourced plans which are obtained directly from the iCompute site, which is used in accordance with our own school-agreed proforma to ensure that all aspects of each lesson have been thought through carefully to promote the best possible outcomes for students. To provide a structured and robust approach to online safety, we follow the Google 'Be Internet Legends' materials for delivering online safety sessions. To support this, children are taught the mantra, 'Sharp, Alert, Secure, Kind, Brave' and its role in helping them to be positive digital citizens.

Our Computing Curriculum Progression document can be located on the Computing page on our website.

Teaching

We believe all children learn best when:

- Their learning can be hooked onto previous experiences or existing knowledge and skills.
- They have access to devices and technology that enable them to utilise their skills across a range of platforms.
- They can access a good balance of 'unplugged' and 'plugged' activities in order to develop their understanding of the underlying concepts of Computer Science while practising and demonstrating their levels of understanding.
- They are given hands on experience of programming codes that can be executed using bots, where they can evaluate code for successes and improvements.
- They are provided with opportunities to work independently or collaboratively to ask questions to develop their problem-solving skills.
- They are provided with opportunities to develop digitally literate skills that will support them across the curriculum.
- They are shown how to use the internet safely and respectfully.
- They are given the vocabulary necessary to confidently speak up when something does not feel safe.

Early Years Foundation Stage

Computing is taught in Foundation Stage as part of topic work that is largely child-initiated and adult-led. The children are given the opportunity to explore different technology with discreetly taught sessions. They are then able to elaborate on this in learning areas. Our Early Years learning environments feature computing scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to 'paint' on the whiteboard, program a toy or record their ideas on devices.

Key Stage 1

Children in KS1 develop the understanding that technology is constantly changing. They are introduced to algorithms as a set of precise instructions and their uses and begin to use positional language and block coding to programme simple bots. Children will begin to understand the principles of animation and how to use software to produce multimedia projects. They will communicate basic information they have researched from the internet using word processing skills. They will be introduced to networks and learn about the positive uses of the internet and will begin to understand how to communicate online using blogs and email. Children will learn how to present basic data. Children will be taught the key principles of staying safe online and who to report to if they feel unsafe. Children will begin to evaluate their own actions online and articulate how they can be a responsible, respectful citizen online.

Key Stage 2

During KS2, children continue to widen their knowledge algorithms and block coding, moving to script coding in UKS2. Children experience a wider range of contexts for programming and are encouraged to apply their programming and debugging skills independently. Children learn more intricate tools for animation and will construct more elaborate multimedia projects where students are expected to independently apply knowledge they have learned from KS1. Children will have a more in depth understanding of networks, including IP addresses and HTML coding. Children will be taught the advantages of using online databases and spreadsheets and developing their confidence in using both. All of this will be underpinned by regular reinforcement of how to be safe and respectful in a digital space, including the importance of privacy and passwords and the skills to evaluate the reliability of a source online.

Resources and Access

Easingwold Community Primary School acknowledges the need to continually maintain, update and develop its resources to effectively deliver the strands of the national curriculum and support the use of computing across the school. Teachers are required to inform the Computing Coordinator of any faults as soon as they are noticed. A service level agreement with Vital is currently in place to help support the coordinator to fulfil this role.

Computing network infrastructure and equipment has been sited so that:

- Wi-Fi is accessible throughout school.
- Every classroom from EYFS to Year 6 has an interactive whiteboard with sound and connected to the Wi-Fi.
- Each class from EYFS to Year 6 has an allocated slot across the week for teaching of specific ICT and computing skills
- iPads have been assigned to EYFS, three Year 1/2 classrooms and one Year 3/4 classroom on a 1:3 ratio.
- Chromebooks have been assigned to two Year 3/4 classes on a 1:2 ratio.
- Chromebooks have been assigned to a Year 5 class and two Year 6 classes on a 1:1 ratio.
- Pupils can access devices at any time through the day, either independently, in pairs, alongside a TA or in a group with a teacher.
- A governor will be invited to take a particular interest in computing in the school.

Assessment

Teachers' marking always sits within the guidelines of the whole school marking policy. In computing, feedback is mostly verbal, with some recording of feedback online. Where work is 'unplugged', marking will be carried out in accordance with the school's marking policy. Improvements and corrections will then be seen in Computing books with a green 'check our work' (COW) pen. Wherever possible this is carried out within the lesson, giving instant feedback.

Formative assessment is carried out in all lessons. This continually feeds into the next steps for learning. This is done through questioning and marking work. All lessons start with a 'retrieval' opportunity. This provides children with the chance to retrieve previously taught knowledge and provides an opportunity for teachers to carry out formative assessment and build upon existing knowledge.

Equal Opportunities

All children will be given an equal opportunity to fulfil their potential in this subject.

Signed: Imogen Hill (Computing Lead)

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