



Hughenden Primary Computing
Curriculum: Intent,
Implementation and Impact

Date of Next Scheduled Review:

January 5th 2021

Curriculum Intent:

Integrated, innovative and interconnected. The Computing curriculum at Hughenden Primary is an essential part of the curriculum. Based on a foundation of computational thinking, which is an integral skill to the learning of any curriculum subject, Computing is about the logical understanding, decoding and rebuilding of the digital world that our children are growing up in.

Through a range of online and offline teaching strategies and technologies, we aim to provide a deep, rich and joined up curriculum that enables children to become more effective users of technology, but to encourage them to see patterns, create content and solve problems through a clearly structured and progressive set of skills.

Our Hughenden Computing curriculum incorporates our C.H.E.E.R value at the heart of all its teaching and learning. Its focus on creating a safe, respectful place online for people to share, learn and create is at the heart of our E-safety message, which overlays and precedes all our Computing teaching.

As clearly defined areas our pupils will be able to experience a curriculum that seeks to help them:

- Understand and apply the essential principles and concepts of Computer Science, including logic, algorithms and data representation;
- Analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems;
- Evaluate and apply information technology analytically to solve problems;
- Communicate ideas well by utilising appliances and devices throughout all areas of the curriculum.

In an expanding digital world with ever more precarious and enticing terrain, our aim is to provide our children with the tools to navigate it in a safe and respectful manner; making the most of the limitless resources buried within it.

Implementation

Computing at Hughenden Primary uses a range of offline and online tools to teach. Although computers and technology are an essential part of our everyday lives many of the Computational and Digital Literacy skills can be created away from a screen.

When it is necessary to use technology to teach and learn, we employ a range of tools and devices to support the transmission of the skills we are imparting. When focusing on the Computational and Coding skills in our computing curriculum, we use a range of age appropriate programs to differentiate, challenge and inspire our pupils' learning. In key stage One, we use a blend of hands on input-based toys, such as Beebots and online programs such as Espresso Coding, which use Block coding to teach the fundamentals of code sequencing. As children's skills develop and accumulate, we employ more complex programs such as Scratch Jr, Scratch 3.0, Python and where the challenge requires it HTML. We are also developing the use of creative programs such as Tinker Cad to help pupils create content that moves from the digital realm to the real world through the use of our 3D Printer.

With the National curriculum as the corner stone of our teaching, we provide a learning experience that aims to facilitate progression across all key stages within the strands of E-Safety and E-Sense, Programming, Handling data, Multi Media and Technology in our lives all under the umbrella headings of Digital Literacy, Information Technology and Computer Science. From EYFS to Year 6, all children will consistently be made aware of the importance of Online Safety, which our Digital Leaders will continue to work on developing.

The Role of the Subject Leader:

At Hughenden Primary the role of the Computing subject leader is to:

- Develop and create a progressive framework that focuses on the key skills that children will build on at every stage of the primary career.
- Support Teachers in developing cross-curricular links between not only Computing related subjects but the wider curriculum as well. E.g. connecting English, Design Technology and History with Computing.
- Through their own CPD, they will support and offer advice to colleagues on issues related to their subject area.
- They will monitor pupil progress in that subject area, through the use work scrutinises, summative assessment data and lesson observations.
- They will also seek to provide external links for whole school and class based learning opportunities in their subject area.
- Computing subject leader will maintain the whole school resources for this subject and actively seek new resources to help deliver excellence first teaching across all the subject areas.

Impact:

At Hughenden, we want children to have built a firm foundation of skills and knowledge for navigating the digital world and it's content. We want them to be confident, respectful online contributors, who know how to manipulate and select the correct tools to get the best outcome in a timely manner.

Throughout the course of their primary computing career, children will be shown how to:

- To develop a wide range of fundamental skills, knowledge and understanding that will actually equip them for the rest of their life.
- Be more than just confident users of technology -being digitally literate- they will be able to use it to create and share ideas, ask and solve problems and generate new ways of thinking.
- Show they have a secure knowledge of the implications of technology and digital systems.
- Be confident to use programs and technology for their own benefit in safe manner.
- Be able to apply the British values of democracy, tolerance, mutual respect, rule of law and liberty when using digital systems.
- Understand the consequences of using the Internet and be aware of how to keep themselves safe online.

We measure the impact of our curriculum through the following methods:

- Pupil voice in one-to-one book reviews
- Lesson observations with a focus on the level of learning rather than the level of teaching
- Learning walks from the science coordinator, Middle leadership Team and Senior Leadership Team
- The cross-curricular opportunities for the teaching and recording of computing ideas
- The completion of online program based tasks. E.g. Block Code sequences.
- Summative and formative tracking of progress using the online tracking tools.
- Governor curriculum meetings with a focus on Computing progression

We aspire for our pupils to be digital literate thinkers, who consider the consequences of their content and actions online. Pupils who are confident not only in their judgements of others people intentions, but remain curious about the evolving digital world around them. We seek to provide online citizens for the next generation whose digital footprint will light on regrets and worries and heavy with accolades and discoveries about the fascinating world they live in.