



What does Computing look like at Humberston Cloverfields?

Intent

At Humberston Cloverfields, we believe that it is vital for all our pupils to learn from and about Computing and Technology, so that they can understand the world around them. Through teaching the Enquire Learning Trust computing curriculum, we aim to equip our children to participate in a rapidly changing world where work and leisure activities are increasingly transformed by technology. It is our intention to enable children to find, explore, analyse, exchange and present information as well as having the skills to manipulate, develop and interpret different forms of technology in an everchanging world.

In such a fast-moving curriculum, we are constantly looking at new ways of delivering relevant and exciting activities, while still delivering the fundamental skills needed for computing. Using technology safely and responsibly is a main priority and ensuring all pupils are able to use the internet and equipment appropriately is of paramount importance. We encourage our pupils to make links across the curriculum, the world and our local community, to reflect on their own experiences, which are designed in our curriculum, allowing horizontal and vertical links with previous year groups.

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.

Our ambitious computing curriculum is now structured in 3 areas that allow all pupils from EY to year 6 to progress through different categories of knowledge. These are:

Digital Literacy	Information Technology	Computer Science
(Mechanics, searching/selecting information and E-safety)	(Digital Artefacts and computing contexts)	(Algorithms, programming, data and systems)

Each area of the curriculum gives pupils time to practice and rehearse the knowledge needed to be proficient at computing and be ready for the next age of learning.

Implementation

The Enquire Learning Trust bespoke computing curriculum offers a cross curricular scheme of work for EYFS, Key Stage 1 and Key Stage 2 which matches the expectations of the National Curriculum. The curriculum looks at the progression needed for all pupils to develop and embed skills and knowledge within the strands of: computer science, information technology and digital literacy. The curriculum is designed to support teaching and learning and the acquisition of subject knowledge in all areas. Children will have the opportunity to explore and respond to key issues such as digital communication, cyber-bullying, online safety, security and social media.

Impact

- Children will be confident users of technology, able to use it to accomplish a wide variety of goals, both in school and at home.
- Children will have a secure and comprehensive knowledge of the implications of technology and digital systems which is important in our ever-evolving society.
- Children will be able to apply the British Values of democracy, tolerance, mutual respect, rule of law and liberty when using digital systems.
- solve problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

Aims

The curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation

- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

Evidence Collection for Subject Leaders

The subject leader saves evidence of some pieces of work within pupil's Microsoft Teams when children are able to demonstrate independently a new skill or knowledge they have learned. This might be the end piece for their design. It is not necessary to save every piece of work but to get a sample of pupils work across the curriculum to show breadth and coverage. Evidence of progression could also be a discussion with pupils about what they have learnt within that strand and how they would use that new skill in different contexts.

Assessment

This computing curriculum is also paired with an assessment framework to support teacher assessment, next steps planning and gap analysis. This framework provides information that can be used to help plan and assess pupil knowledge, understanding and skills in primary computing. It covers the main expectations for children at the end of each Key Stage. It sets out reasonable expectations of what children could achieve in each year at primary school, thus allowing teachers to track progress towards the statutory attainment targets.

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.

The progression statements derive from the Programme of Study for computing; they break down the original bullet points into shorter, more manageable chunks. Each statement is accompanied by 'What to look for' descriptors. These are designed to support planning for teaching and learning. The framework sets out a sequence that illustrates progression and that can be used to make judgements about pupil achievements. The framework is not intended to be definitive – it should be seen as indicative rather than prescriptive.

Assessments may be made during computing lessons or when pupils are using apps during topic learning that showcase their computing skills.

These statements are just guidance and suggestions to show the progression from Emerging towards, working towards, ARE and Greater Depth. Remember that pupils need to be confidently showing they understand how to use each key concept confidently and independently.

All of the assessment statements are found in the BromCom website which allows teachers to assess as they move through the curriculum. It enables realtime assessment and aids planning for next steps and quickly identifies which children are secure in a skill and which children need further support.