Computing Policy 2018 -2019 - 2020





Proud to Belong

Date reviewed: November 2018/ November 2019 -no changes;

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The Computing Faculty will review this policy in November of each year and at any other time to comply with changes in legislation, regulation or in view of the other urgent events.

Computing Policy

1. Introduction

1.1

The 2014 National Curriculum replaced ICT with Computing. This represents continuity and change, challenge and opportunity. It gives schools a chance to provide an even more exciting and rigorous curriculum that addresses the challenges and opportunities offered by the technologically rich world in which we live.

1.2

The Acceptable Use of ICT and Online Safety Policy should also be read in conjunction with this policy.

1.3 Aims:

- To equip all learners with the experience and skills of computing that they will use in a rapidly changing technological world.
- Learners in our environment will be confident and independent in their use of computing to solve problems across the curriculum.
- Meet the requirements of the Early Years Foundation Stage Curriculum and National Curriculum for Key Stage 1 and 2.
- Ensures children have a growing awareness of how computing is used in the world around them and of the benefits that it provides.
- To ensure computing is used to support problem solving and learning across the curriculum.
- To support children, parents, staff and governors to become progressively aware of Online Safety issues.
- To guide children, parents, carers, staff and governors on how to be up to date on issues relating to social networking and safe guarding.

2. Computing

2.1

The National Curriculum for Computing has been developed to equip young people in England with the foundational skills, knowledge and understanding of computing they will need for the rest of their lives. There is a focus on computational thinking and creativity, as well as opportunities for creative work in programming and digital media.

The introduction makes clear the three aspects of the computing curriculum: **computer science** (CS), **information technology** (IT) and **digital literacy** (DL).

2.2

Computing equips children with the basic understanding of how computers and computer systems work, and how they are designed and programmed. 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 transfer the knowledge to use within programming. Children will build on this knowledge and understanding, Pupils will then go on to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate.

| | Key Stage 1 | Key Stage 2 |
|--------------|--|---|
| Computer | Understand what | Design, write and debug |
| science (CS) | algorithms are; how they are implemented as programs on digital devices; and that | programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. |
| | programs execute by following precise and unambiguous instructions. | Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. |
| | Create and debug simple programs. | Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. |
| | Use logical reasoning to predict the behaviour of simple programs. | Understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web and the opportunities they offer for communication and collaboration. |
| | | Use search technologies effectively, appreciate how results are selected and ranked. |

| Digital literacy (DL) | Recognise common uses of information technology beyond school. | Understand the opportunities [networks] offer for communication and collaboration. |
|--------------------------------|--|---|
| | Use technology safely and respectfully, keeping personal information private; identify where to go for | Use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content. |
| | help and support when they have concerns about content or contact on the internet or other online technologies. | Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. |
| Information technology (IT) | Use technology purposefully to create, organise, store, manipulate and retrieve digital content. | Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. |

Evaluation

ASSESSING, RECORDING AND REPORTING

The Computing curriculum is monitored throughout the year and this is reported to parents at the end of each academic year. Teachers keep some samples of the children's work and we are currently developing a system of self-evaluation and review that will support the children with their learning.

Health and Safety

All children and staff will be made aware of the hazards of using electronic and electrical equipment.

There is a separate Acceptable Use Agreement that all staff/governors sign and adhere to. In addition, there is a separate Online Safety Policy.

MONITORING, EVALUATION AND REVIEW

The effectiveness of this policy will be monitored by the Computing Faculty in consultation with the Head Teacher and staff. It is to be reviewed and updated regularly.