Calverton Primary School

Computing Policy

Person responsible for the policy	Karen Eaton
Date reviewed and shared with staff	Spring 2019
Date to be next reviewed by staff	Spring 2021
Date ratified by the Governing Body	
Date to be reviewed by the Governing Body	Spring 1 2019

Signed by Chair of Governor:	Signed by Head Teacher:

Introduction

We at Calverton Primary School believe that 'Computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with science, technology, engineering and maths (STEM). 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.' (The National Curriculum in England Framework Document (DfE) 2014)

This document outlines our school's policy regarding the delivery of Computing. The implementation of this policy is the responsibility of all staff members.

Equal Opportunities

All pupils at Calverton, regardless of ethnicity, religion, gender or special needs, are entitled to a broad, rich and balanced curriculum.
We aim to develop pupil's self-esteem, perseverance, resilience, cooperation and confidence. To place their skills, knowledge and understanding of the way in which this contributes to society and their own community.
For more specific guidance please see the Equal Opportunities policy.

Aims

The teaching of Computing aims to ensure that all pupils:

- Are offered a relevant, challenging and enjoyable Computing curriculum.
- Meet the requirements of the National Curriculum programmes of study for Computing.
- Use computing as a tool to enhance their learning throughout the curriculum.
- Respond to new developments in technology.
- Develop their understanding of how to use computing safely and responsibly both within and out of school.
- Are equipped with the confidence and capability to use computing throughout their later life.

Objectives

Foundation Stage

In EYFS pupils will have access to a wide range of technology to support their journey to reach the Early Learning Goals. Pupils will gain confidence, control and language skills through opportunities to explore using non- computer based resources such as walkie-talkie sets.

By the end of Key Stage 1 pupils should be taught to:

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions
- Write and test simple programs
- Use logical reasoning to predict the behaviour of simple programs
- Organise, store, manipulate and retrieve data in a range of digital formats
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

By the end of Key Stage 2 pupils should be taught to:

- Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
  Use sequence, selection, and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs
- Use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and 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
- Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Implementation

The pupils will work in the classroom in order to develop their computing skills. Opportunities provided by the class teacher will enable the pupils to work both individually, in pairs and in small groups. For all Computing lessons, the teacher ensures that pupils are aware of the learning objectives and level of progression through the use of the MUST, SHOULD and COULD assessment structure.

Pupils will use a range of resources that are appropriate in order to meet the learning and end of unit objectives.

As a fully inclusive school, Computing is made accessible to pupils with Special Educational Needs and Disabilities, by providing them with suitable software and tasks, and with extra support in the use available of software packages and peripherals . It can also develop their understanding in other curriculum areas.

Pupils with English as an Additional Language will also find computing is an invaluable resource for all those learning a new language. Likewise there is software available to support the teaching and learning of MFL.

Pupils are actively encouraged to use Bug Club and London Grid for Learning resources to support their English and Maths skills at home.

Planning, monitoring and delivery

The subject leader is responsible for monitoring the standard of the pupils' work and the quality of teaching. The subject leader is also responsible for supporting colleagues in the teaching of Computing, for being informed about current developments in the subject, and for providing a strategic lead and direction for the subject in the school. The governors will ensure this policy is reviewed.

Computing lessons are planned, using the Rising Stars scheme of work, in line with the national curriculum and allow for clear progression. Teachers follow long and medium term plans, which ensure complete coverage of the National Curriculum. These objective are then assessed using the MUST, COULD and SHOULD assessment statements. Assessment should be used to inform planning, ensuring that pupils make good or better progress. Monitoring will take place in the form of: learning walks, work scrutiny and pupil voice to ensure high quality teaching and learning is taking place.

A minority of pupils will have particular teaching and learning requirements which go beyond the provision for that age range and if not addressed, could create barriers to learning. This could include G&T pupils, those with SEN or those who have EAL. Teachers will take account of these requirements and plan, where necessary, to support individuals or groups of pupils to enable them to participate effectively in the curriculum.

Assessment

Teachers regularly assess capability through observations and evaluating completed work. Key objectives are taken from the national curriculum to assess key computing skills on a termly basis. As assessment is part of the learning process, it is essential that pupils are closely involved. Assessment can be broken down into;

- Formative assessments are carried out during and following teaching. They provide pupils and teaching staff with the opportunity to reflect on their learning in the context of the assessment statements. This feeds into planning for the next lesson or activity.
- Summative assessment should review pupils' capability and provide a best fit using the MUST, SHOULD and COULD statements. Summative assessment should be recorded for all pupils – showing whether the pupils are developing, meeting or exceeding in the learning objectives. Assessments are recorded on Integris termly. This should be used to form an end of year judgment.
- Computing work is currently saved on the school network. However, from September 2019 work will be saved on the school's Google site.

Resources and access

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible system by investing in resources that will effectively deliver the strands of the national curriculum and support the use of computing across the school. Staff are required to report all faults to the school based technician via email, support website or in person. Resources are located at various points around the school, accessible by all. A service level agreement with RM Education is currently in place to help support the technician to fulfill his role both in hardware & audio visual.

Security

The use of computing will be in line with the school's 'Acceptable Use Policy'. All governors, staff and pupils must sign a copy of the schools AUP. Parents will also be made aware of the 'acceptable use policy' through being given during the school induction process.

All pupils and parents will be aware of the school rules for responsible use of Computing equipment and the Internet and will understand the consequences of any misuse.

The agreed rules for safe and responsible use of Computing equipment and the Internet will be displayed in all classrooms.

Online/E-Safety

Calverton follows a strict Online Safety policy regarding the sharing of information on the school's website, and all considerations and concerns are taken into account when deciding whether information should be displayed. Parents are kept informed through workshops and by providing literature for them to read. Parental consent for Internet access is obtained before pupils are allowed access to the Internet.
(Please refer to our Online Safety policy for more information).

Email

All adults in the school have an email account that they use for work related communication. All members of staff are encouraged to check, review and delete their emails on a daily basis during working days

All pupils can access a secure email account when this is required for teaching a unit of work. (For more information regarding the protection of personal information see the Data Protection policy)

Leadership

The role of the Computing Subject Leader is to:

- Take the lead in policy development and review, including the continuing successful implementation of the Computing Curriculum.
- They will keep abreast of new initiatives and update colleagues accordingly.
- Take responsibility for the purchase and organisation of resources
- Meet with the link governor for Computing
- Monitor ongoing assessment of pupils to ensure progress