

Griffin Primary School

Computing Policy

Reviewed By	Approved By	Date of Approval	Version Approved
Emily Stainforth	Governors	5/5/21	1.0

<u>Aims</u>

The National 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

At Griffin our vision for the computing curriculum is to embed computing in as many learning opportunities as possible, enhancing and extending children's learning across the whole curriculum. Computing is an essential part of today's modern lifestyle, so it is essential that all pupils gain the confidence and ability that they need in this subject, to prepare them for the challenge of a rapidly developing and changing technological world.

We will provide a high quality and practical computing curriculum, developed by our Computing subject leaders. This will ensure continuity and progression throughout the school for both subject knowledge and skills. Teachers will use agreed long-term and medium-term plans as the basis for their weekly planning. On-going teacher assessments will be made against the national curriculum and sticky knowledge.

Computing is a vital life skill and children will be taught how computing has developed over time and how the skills learned within their computing lessons will develop their learning and experiences in the future, making their learning relevant to them.

Objectives

- Become competent in coding for a variety of purposes.
- Connect with others safely and respectfully.
- Develop an understanding of the connected nature of devices.
- Communicate ideas by using applications and devices.
- Collect, organise and manipulate data effectively.

Whole School Curriculum Intent

At Griffin Primary School, our aim is to provide a curriculum for all of our students designed in response to what we already know about our children. Our over-arching goal is routed in promoting a positive attitude towards learning so that children enjoy coming to school, developing our children into life-long learners. Our curriculum is designed to provide all of our children with the core knowledge that helps them to make links between their prior and new knowledge, allowing them to develop a deeper understanding and be inspired to continue their learning outside of the classroom.

We aim to provide our children with stability through a consistent curriculum provision, allowing staff to become experts and build in assessment tools. At the heart of our curriculum there lies a respect for all of the subjects we teach and how this provides our children with an insight into the world around us.

At Griffin we teach children how to develop their behaviours and habits to become effective learners through asking questions in order to develop their curiosity. Griffin's curriculum has been developed so that our children are not afraid to make mistakes and accept ways forward as support rather than criticism. By the time our children leave Griffin, our aim is to ensure that they have the necessary skills in numeracy, literacy and communication – irrelevant of their starting point – and that they will be positive citizens in their community and the wider world.

Subject Curriculum Intent

The Computing curriculum is designed to equip pupils with the IT skills to live in the 21st Century:

- Develop problem solving skills which can be applied to other areas of the curriculum and life beyond school
- Educate pupils to ensure they are keeping themselves safe when online
- Develop word processing skills to support pupils in their lives beyond primary school (e.g. secondary school and the world of work)
- Enhance communication skills online and offline
- Educate pupils in a range of career paths involving computing skills

Subject Curriculum Implementation

The implantation of the Computing curriculum is through a number of elements, outlined below:

- LTP
- MTP
- Remember when knowledge (recap of prior learning)
- Progression of subject specific skills
- Subject specific key vocabulary
- Sticky knowledge
- Assessment
- Teacher subject knowledge
- Resources

Subject Curriculum Impact

- Outcomes of pupils in each year group
- Equip pupils with the skills to be successful in the technological world that we live in

- Enhance cross-curricular skills so pupils can independently apply skills they have learnt in computing to any situation and be resilient when faced with problems
- All pupils know how to stay safe online and ensure they are safe online. They also understand what to do when this might not be the case
- Pupils to be able to work collaboratively within school and beyond their school lives through the use of technology

Subject provision across the school

<u>EYFS</u>

Pupils in EYFS are encouraged to develop skills, knowledge and understanding that help them to make sense of their digital world. This learning forms the foundations for computing in KS1. These early experiences include asking questions about how things work, investigating whilst using a variety of age appropriate hardware and software.

We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking and discussion. These activities attract the children's interest and curiosity.

Key Stage 1 and Key Stage 2

At Griffin Primary School we follow the National Curriculum for Computing. Pupil in Key Stage 1 and 2 follow the Purple Mash scheme of work which equips children to use computational thinking and creativity to understand and change the world.

Computing has deep links with Maths, Science and Design and technology. The core of Computing is computer science, in which children are taught the principles of information and computation, how digital systems work and how to put this knowledge to use in programming. Building on this knowledge children also develop skills in information technology to create programs, systems and a range of content.

Computing also ensures that children become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology.

We have developed a computing Remember When document, as well as long-term and medium-term plans that are used to inform our weekly planning and to ensure the children develop a sound knowledge of computing to build on previous knowledge and skills.

Assessment

Teachers will assess children's work in Computing by making teacher assessment judgements during lessons. Work is handed in via PurpleMash or evidenced in the class Computing evidence file. There are regular checks and moderation of the work by the Computing lead and senior leadership team.

At the end of each term, a teacher assessment judgement is made about the work of each pupil in relation to the National Curriculum. Teachers formally assess the children's work using the online assessment tool O Track. The children are assessed as Working Towards (W) or Expected (E).

Resources

High quality resources will be used to support the teaching and learning throughout the school:

- Access to a class set of laptops and/or desktops in each classroom at Griffin Primary School.
- Interactive whiteboards are located in all classrooms.
- A variety of software and hardware to support the teaching of all subjects.
- Tablets or iPads available to all members of staff.
- Access to Purple Mash online resources

Computing resources will be reviewed yearly, and an action plan of new equipment will be developed to enhance the use of Computing in every classroom and lesson.

E-safety / Data protection

lpads, tablets, computers etc, unless static, are stored in a secure area each night. Smaller items are locked in a cupboard/trolley. The last member of staff who was using this equipment is responsible for its safe storage. The school has an alarm system installed throughout.

Children will be taught to work in a safe manner; this will include safe use of the internet (see Online Safety policy). All electrical equipment is tested annually.

Security

Each computer serial number is held on record and each computer has individual security marking against theft which is registered in the School Property Inventory. This is the responsibility of the School Business Manager.

The school network system is protected from any viruses by the use of anti-virus software and the prohibiting of the use of any home software without the permission of the Head of School. Any staff/adults who abuse school equipment or misuse the internet may face disciplinary action. IT equipment taken from the school site is the responsibility of that person and must be signed out with the School Business Manager. All laptops or mobile technology assigned to a staff member must be signed for. This information is held on their personal file until the laptop is returned.

Role of the Subject Leader

It is the responsibility of the subject leader to monitor the standards of children's work and the quality of teaching and learning in Computing. Monitoring may involve looking at planning, scrutinising work, lesson observations and pupil voice. Pupil voice is valued and helps to inform the vision and aims of Computing across the

school, pupils are interviewed to gain an insight into the subject. The subject leader produces an annual action plan for the development of Computing and also reports termly to the governing body.

This policy will be reviewed every two years.