

The Florence Nightingale Academy

Computing Policy



Computing Coordinator - Mr Heritage

Review Date - 2024

Introduction

The use of technology is an important aspect of the National Curriculum across all subjects. Alongside this, technology in everyday life has grown using computers, tablets, machinery, photo, and video cameras as well as many others. At Florence Nightingale Academy, we want our pupils to experience and gain confidence in using technology to research, obtain, store, manipulate and communicate information effectively.

Aims

Our school's aims are:

- Meet the National curriculum objectives for Computing.
- Ensure an appropriate, safe and engaging curriculum is provided in Computing lessons.
- Use ICT across all subjects to develop learning further.
- Adapt and improve our Computing curriculum inline with new developments.
- Teach our pupils to be safe online citizens for their future lives.
- Improve the understanding of all pupils to be safe online.

The National Curriculum aims are:

- 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 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

Objectives

Early Years

Computing for Early Years in Florence Nightingale is focussed around providing a broad, play-based experience in different contexts. Pupils will have opportunities to use ICT during indoor and outdoor play and given scenarios to complete tasks with a range of different technologies.

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 precise and unambiguous instructions.
- Create and debug simple programs.
- Use logical reasoning to predict the behaviour of simple programs.
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- Recognise common uses of information technology beyond school.
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Key Stage 2 – Pupils should be taught to:

- Design, write and debug 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.
- Use logical reasoning to explain how some simple algorithms work 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.
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating 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.
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Resources

We have 8 class sets of 30 chrome books across key stage 1 and key stage 2 classrooms that can be used across different subjects. Also, we have a class set of 30 I pads that are managed by the White Hill Trust Academy. All devices have internet access as well as a variety of education software and applications. New software can be requested and downloaded off-site by the technician team.

Online Resources

In the last few years, there has been an increased demand for home learning applications and software. For this reason, we have access to a range of online resources including:

- Google Classroom (used for Computing lessons, homework activities and home learning)
- Times Table Rockstars
- Purple Mash
- Tapestry (EYFS)

For these resources, pupils have their own login details. These have been shared with pupils and parents, and pupils understand how to keep their passwords safe from others.

Planning

The Computing Curriculum at Florence Nightingale Academy follows these topics within the subject:

- Programming and modelling
- Multimedia and Word Processing
- Digital Media
- Using the Internet
- Online Safety

Medium Term plans allow for each topic to be adapted for each half-term and allow for cross-curricula links with other subjects. Lessons follow the National Curriculum objectives detailed above and progress is recorded by teachers against key performance indicators.

Assessment and Evidence

Key performance indicators are taken from the National Curriculum and are regularly assessed by teachers online through Insight. This is done through discussions with pupils, summative judgements and assessments of work. In

particular, the process should be focussed on the techniques and skills taught to develop their use of ICT. It is important pupils are part of this process too and can self-assess their skills using a range of technology.

Monitoring and Reviewing

Responsibility for the standards of Computing falls on the Computing Lead. This includes monitoring the teaching, planning and outcomes across the school and in extra-curricula subjects. Moreover, the subject leader is to ensure the development and confidence of teachers with Computing through discussions, staff meetings and online training. An action plan is developed every year which sets targets and strategies to improve the infrastructure and teaching of Computing in school.

Inclusive Teaching

At Florence Nightingale Academy, we ensure all pupils are taught Computing, regardless of ability, age and race. Planning is differentiated for each class and covers a broad range of topics. Technology is also used to support children with additional needs, including children with English as an additional language. In some instances, the use of technology can positively impact the quality of work as well as their confidence in their learning.

Roles and Responsibilities.

Subject Leader – The subject leader is responsible for the development and delivery of Computing across Florence Nightingale Academy. This includes monitoring the standards of high-quality teaching across all year groups, the effective use of technology and resources inside and outside of school, and accurate assessment of key objectives from the National Curriculum. The subject leader will complete this using lesson observations and recordings through the IRIS application.

Class Teachers – It is the responsibility of every class teacher to plan engaging and differentiated lessons for their class, making sure they follow the National Curriculum programme of study.

All staff – It is the responsibility of all staff to be aware of the legislation relating to the use of ICT in school, including copyright and data protection issues.

Training

All staff, including managerial and administrative staff, receives support from the subject leader and technicians as part of the White Hills Trust Academy. Also, external training for hardware or software can be provided for staff.

Security

- The IT Helpdesk and technicians are responsible for regularly updating software and anti-virus software.
- Use of computing resources will be in line with the school's 'acceptable use policy'. All

Health and Safety

Health and Safety is taken seriously at the Florence Nightingale Academy. Pupils are taught how to stay safe online including alerting adults of anything they are not sure of, not sharing personal details and cyber bullying. Electronic devices are monitored by staff and the academy technicians and PAT tested every 12 months. It is the responsibility of staff to alert the subject leader and IT technicians of any problems or deficiencies with any devices.