



We understand that the use of information and communication technology is an integral part of the national curriculum and is a key skill for everyday life. Computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Norton CEVC Primary School we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively.

Aims

- Provide a relevant, challenging and enjoyable Computing curriculum for all pupils.
- Meet the requirements of the national curriculum programme of study for computing using Purple Mash as the main resource for planning and delivering lessons.
- Use computing as a tool to enhance learning throughout the curriculum.
- To respond to new developments in technology.
- To equip pupils with the confidence and capability to use computing throughout their later life.
- To enhance learning in other areas of the curriculum using computing
- To develop the understanding of how to use computing safely and responsibly.
- To respond to new internet safety updates and make sure staff are aware of how to respond to these and make children aware.

Teaching and Learning

Children at Norton CEVC Primary School follow the National Curriculum 2013 and use Purple Mash for planning, resources and teaching computing across the school.

- **PLANNING**

Planning is in line with the National Curriculum and the identified KPI's for each key stage; these work alongside the Purple Mash units which provide clear learning intentions and progression of learning for each lesson and year group. Teachers are able to refer to the previous and future year group planning documents in order to help planning and progression.

- **TEACHING**

Teaching of digital literacy and ICT is largely delivered through cross-curricular subject links and individual computing lessons, these are taught weekly or blocked termly depending on teacher preference. The requirements of KS1 and KS2 coding/programming will be delivered through Purple Mash, Scratch or Espresso. The teaching of internet safety will be delivered throughout the year at appropriate opportunities, with a strong focus during Online-Safety week each year.

An audit of resources is taken on an annual basis to ensure that our computing provision remains appropriate to the latest requirements of the KS1 and KS2 primary computing programmes of study.

- **ASSESSING**

Ongoing formative assessment monitors pupil performance and progress during learning; the outcomes of which we will use to ensure that work matches the individual needs and abilities of pupils. A sample of evidence from each unit of computing is uploaded to 'Seesaw' across each year group, this includes the date, learning intention of the lesson, example of pupils work and possibly pupils discussing their work (Seesaw is

an online platform which all staff have access to). This helps the subject lead monitor and assess computing across the school.

Summative assessment reviews pupils' progress and abilities, and will be undertaken at the end of each unit of teaching. The class teacher is responsible for assessing the children against the KPI's listed on Insight, this is to be updated as and when the unit is covered. The KPI's link directly to Purple Mash and each objective links directly to the learning intentions for each Purple Mash unit.

Early Years Foundation Stage

Children follow the Early Years Foundation Stage Curriculum. Although the Statutory framework for early years foundation stage does not explicitly mention the delivery of computing, at Norton we feel it is important that children start to learn basic computing skills in EYFS. The delivering of computing helps to develop their fine motor skills and builds on developing their listening and attention.

The National Curriculum for computing aims to ensure that all pupils:

- Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication
- 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 digital devices and the Internet.

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.
- Create and debug simple programs.
- Use logical reasoning to predict and computing the behaviour of simple programs.
- Purposefully organise, store, manipulate and retrieve data in a range of digital formats.
- Communicate safely and respectfully online, keeping personal information private, recognise common uses of information technology beyond school, and identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

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.

Roles and responsibilities

The Headteacher carries out the following responsibilities:

- Health and Safety
- Ensuring the effective use of Computing for management and administrative purposes
- Meeting statutory requirements

The Computing Lead is responsible for:

- Curriculum development
- Ensuring that pupils use Computing appropriately across the curriculum
- Overseeing equipment maintenance
- Ensuring the consistent implementation of Computing policy
- Ensuring staff access to Computing
- Purchasing/organising Computing resources

Special Educational Needs

We teach Computing to all children, whatever their ability. Computing forms part of the school curriculum policy to provide a broad and balanced education to all children. Through our teaching we provide learning opportunities that match the needs of children with SEN while providing supported challenge.

Staff training

The Computing Lead will be responsible for the identification and delivery of staff training requirements.

Staff training requirements will be met by:

- Auditing staff skills and confidence in the use of computers and ICT termly.
- Arranging top-up training for individual staff members as required.

The Computing Lead will remain up-to-date with the latest developments in computing through subscriptions to relevant journals, attendance at relevant courses, etc., and will pass on any newly acquired knowledge/skills to staff members, where appropriate.

SMSC

Computing at Norton encourages children to continually formulate and reflect on their own beliefs and values through real life case studies and sharing their own experiences. Awe and wonder are encouraged as students continuously learn about the amazing capabilities of computers in our modern world.

Students are also exposed to the limitations of the internet, allowing discussions around other's beliefs and values and how they may differ from principles of their own, whilst being taught how to recognise the difference between right and wrong. Children learn the importance of perseverance by learning how to fix problems through debugging, tinkering, typing and exploring. Students are encouraged to use their problem-solving skills to achieve success and grow in self-belief.

Monitoring and Review

We appreciate that computers and ICT are rapidly changing, with new platforms being developed and technology being created all the time. We will review this policy in line with our policy review schedule. We will review our web filters on an annual basis in order to ensure that pupils continue to be protected from inappropriate content online.

Signed: Grace Diggins

Date: September 2024