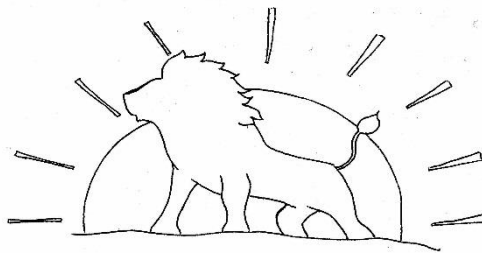


# Computing Policy

Northwick Park MAT



Northwick Park Primary and Nursery  
We Take Pride



...working together



Approved by: LGBS

Date: November 2024

Next Review Date: November 2027

# **Computing Policy**

## **Introduction – Preparing for a Digital Britain**

At the Northwick Park Academy Trust, we understand the importance of technology in a rapidly changing world. As it has always been, the children of today will develop and use the technologies of tomorrow. We aim to foster pupils' basic knowledge and understanding of the technologies currently in use e.g. tablets, computers, gaming systems and smartphones in order that they can successfully navigate their way into the future.

## **Curriculum Intent**

Computing skills are a significant contributing factor to the preparation of pupils for the next stages of their educational careers. The world around us is becoming increasingly digitalised and the pathways and careers of the future are likely to be heavily reliant on being able to coherently navigate the digital world of computing, computer science, information technology and the use of digital media. Our computing curriculum allows the development of basic skills of computational thinking.

As well as preparing our children for successful futures in terms of career prospects and learning key skills needed to use technology to their advantage, it is also important that children within the Northwick Park Academy Trust become digitally literate in order to keep themselves safe online. As technology develops and infiltrates all areas of our lives, our children are exposed to an increasing number of situations where there is potential for harmful interactions with others, cyberbullying or creating disparaging online footprints, which could negatively affect their futures.

We aim to provide children with the very best opportunity to be digitally literate, confident, technology users who are equipped with the skills, knowledge and moral compass to thrive in modern day Britain.

## **Curriculum Implementation**







At the Northwick Park Academy Trust, we pride ourselves on the consistent approach to teaching and learning across all phases of school. We believe that children should be using computers from an early age to help improve their skills when navigating and using devices, ensuring that children are prepared for new technologies and innovations.

Across the school, from EYFS through to Year 6, the children have access to PCs, iPads, Chromebooks, Lego technology and physical coding equipment e.g. Beebots etc.









A clear and effective scheme of work providing coverage of the National Curriculum is in place. To ensure that children are receiving high-quality lessons focusing on the skills and knowledge required to be successful 'computational thinkers', we have invested in Purple Mash. This ensures that all key areas of the computing curriculum are taught and revisited during a child's primary school years. This allows our children to build incrementally on learning, developing appropriate vocabulary, knowledge and skills.

In computing, lessons are delivered either discretely or as part of cross-curricular lessons where appropriate. Discrete lessons will usually focus on the teaching of computer science skills.

## **In Key Stage 1, children will be taught the following skills during these discrete lessons:**

-  To use technology purposefully to create, organise, store, manipulate and retrieve digital content
-  To recognise common uses of information technology beyond school
-  To 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
-  To understand what algorithms are; how they are implemented as programs on digital devices and that programs execute by following precise and unambiguous instructions
-  To create and debug simple programs
-  To use logical reasoning to predict the behaviour of simple programs

## **In Key Stage 2, children will be taught the following skills during discrete lessons:**

-  To design, write and debug programs that accomplish specific goals, including controlling
-  To simulate physical systems; solve problems by decomposing them into smaller parts
-  To use sequence, selection, and repetition in programs; work with variables and various forms of input and output
-  To use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
-  To 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
-  To use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
-  To 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
-  To use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

The other areas of the curriculum will be delivered in a cross-curricular context where possible. This may include using word processing to write reports in English or humanities lessons, spreadsheet software in mathematics or multimedia software in art or design and technology. Furthermore, online safety elements will be taught and revisited whenever children are using technology. These are also focused on during dedicated Safety Weeks throughout the year.

To support computing across all aspects of our school curriculum, Purple Mash is used for a variety of different tasks. These may include for documenting and presenting work, setting homework weekly and remaining connected during remote learning periods. Times Tables Rock Stars and RM Maths is used to support the maths curriculum alongside a range of other programs e.g. Spelling Shed.

## **Safe and Responsible Use**

Online safety is a fundamental element of computing teaching and the use of technology. We strive to keep children safe online and provide them with the knowledge and tools to protect themselves. The MAT has a separate online safety policy, and online safety sessions take place regularly in each year group as part of both computing and PSHE sessions. These lessons are delivered as part of the discrete teaching sessions and are embedded through teaching sessions that use the internet.

We also empower parents, carers and the wider community by providing up-to-date information regarding keeping children safe online. We recognise the unique contribution that e-learning makes to work in our school and our role in preparing pupils for their futures through developing an understanding of technology as an aid to learning.

## **Assessment**



Staff cover the objectives of the computing curriculum throughout the academic year and evidence their coverage through the online storage of data on the Purple Mash platform. Images and/or videos are uploaded to specific secure folders on the school system and through the use of the Target Tracker app on the class teachers' iPads, showing outcomes in computing throughout the year.

At termly intervals, teachers assess progress using computing statements matched to Target Tracker. These assessments generate particular stages, which indicate the curriculum year the child is working at, in addition to whether they are 'emerging, developing, or secure' with the knowledge and skills within this year group.



## **Computing and Fundamental British Values**

Children at the Northwick Park Academy Trust demonstrate the following values whilst learning about computing by:




### **Democracy**

-  Listening to everyone's ideas in order to form a majority
-  Working as part of a team and collaborating to use computing devices effectively



### **Rule of Law**

-  Developing knowledge of lawful computing behaviours
-  Demonstrating respect for computing laws

### **Individual Liberty**

-  Taking responsibility for our own computing behaviours
-  Challenging stereotypes and bias
-  Exercising rights and personal freedoms safely through knowledge of E-safety







### **Respect and Tolerance**





-  Showing respect for other cultures when undertaking research using computing devices
-  Providing opportunities for pupils of all backgrounds to achieve in computing

## **Equal Opportunities, Inclusion, Special Educational Needs and Disabilities**

### **(SEND)**

All children, regardless of race, class or gender, should have the opportunity to develop computing and ICT capability. We aim to respond to children's needs and overcome potential barriers for individuals and groups of children by:

-  Ensuring that all children follow the scheme of learning for computing
-  Providing curriculum materials and programmes, which are in no way class, gender or racially biased
-  Providing opportunities for our children who do not have access at home to use the school computers/Internet to develop independent learning through a loan system
-  Providing suitable challenges for more-able children, as well as support for those who have emerging needs
-  Responding to the diversity of children's social, cultural and ethnic backgrounds
-  Overcoming barriers to learning through the use of assessment and additional support

-  Responding to communication or language difficulties by developing computing skills through the use of individual senses and strengths.
-  Overcoming movement or physical difficulties by developing computing skills through utilising individual strengths or modified equipment
-  Overcoming behavioural or emotional difficulties (including stress and trauma) by developing the understanding and management of their own learning behaviours
-  Effectively using ICT equipment to support children with physical and visual impairments making learning more accessible. This includes the use of individual monitors to support children with visual impairments, Chromebooks to support typing instead of relying solely on writing as a form of recording, and oversized mouse equipment where this is supportive

## **Home School Links**

Our school website promotes MAT and pupils' achievements in addition to providing information and communication between the MAT, parents and the local community. Facebook is used to keep parents up to date. Texts and/or emails are sent to parents to inform or remind of school events, rather than sending letters home with children. We also use Purple Mash, Spelling Shed and Times Table Rock Stars to set homework on a weekly basis for all year groups from Reception to Year 6. Each school in the Trust also have a social media presence using Facebook, Instagram and X to share successes, events and year group projects with families to engage with parents and to promote the schools and Trust.








## **Health and Safety**

Staff are aware of the health and safety issues surrounding children's use of ICT. We ensure that pupils have a safe environment in which to learn. We ensure effective filters are in place to safeguard pupils. We ensure that:

- All fixed and portable appliances in school are tested by an approved contractor every twelve months
- Damaged equipment is reported to the computing leaders and office manager who will arrange for repair or disposal
- Online safety is discretely taught each term by class teachers, through assemblies delivered by external visitors and through parent presentations annually. There is also a link on our school website to direct parents to further information on how to keep children safe online
- Children learn about rights and responsibilities when using the Internet

## **Security, Legislation, Copyright and Data Protection**

We ensure that the MAT community is kept safe by ensuring that:



-  The school technician is responsible for regularly updating anti-virus software
-  The use of ICT and computing is in line with the MAT's Acceptable Use Policy (AUP)
-  All staff, volunteers and children must sign a copy of the AUP
-  Parents are made aware of the AUP at school entry
-  All children are aware of the school rules for responsible use on login to the school network and will understand the consequence of any misuse
-  Reminders for safe and responsible use of ICT and computing and the Internet are displayed in all areas
-  Adequate filtering and monitoring procedures are in place across all Trust schools.

## **Impact**




We aim for the children of the Norwick Park Academy Trust to leave our care with a love of technology, a confident grasp of how to manipulate technology for a variety of purposes and a strong moral compass which guides them to make the right choices when using the internet (including for social or recreational purposes). We aim for them to respect the dangers of the internet, have strategies to cope with uncomfortable content and know where to turn to in times of need. The majority of children will have achieved the curriculum aims while enjoying and exploring their own interests in these areas where appropriate.

Computing plays a vital role in ensuring our curriculum is engaging and current. We ensure that teaching and learning in computing enables our pupils to continue to learn and grow in the digital world and provides the skills and knowledge to do this effectively and safely. We link skills taught to real-life situations to ensure our pupils understand the importance of computing in our ever-growing, evolving, technological world.

## **Monitoring**

-  Work saved on Purple Mash is checked by senior staff/subject leaders
-  Pupil voice meetings take place annually to check learning and gauge understanding of online safety

## **Staff Training**

-  All staff have access to Purple Mash to help plan high quality provision
-  Staff have received external training from the Purple Mash team
-  Subject leaders pro-actively address training needs in response to new initiatives/staff needs