

HPS/PRO/EXT/NS-012 Issue 2 Rev A

# **Computing Policy**

Page 1 of 8 **Date** - 29/11/2023

## 1. Title Page

	1	I
Revision	Revision Date	Description
1A	March 2019	First Issue
1B	May 2021	Reviewed
2A	November 2023	Reviewed and re-formatted

Prepared.	V Levy – Deputy Head Teacher	November 2023
Reviewed.	B Maynard - Chair of Governors	November 2023
Authorised and issued.	C Grattan – Head Teacher	January 2024
Date for next review.	November 2025	



HPS/PRO/EXT/NS-012 Issue 2 Rev A

# **Computing Policy**

Page 2 of 8 **Date** - 29/11/2023

## 2. Contents

1.	Title Page	1
2.	Contents	
3.	Intent	3
4.	Purpose of Study	3
5.	Aims	
6.	Curriculum	4
7.	The Foundation Stage	4
8.	Key Stage 1	4
9.	Key Stage 2	5
10.	Implementation and planning	5
11.	Differentiation and SEN	6
12.	Assessment and Recording	6
13.	Health and Safety (see also Health and Safety Policy)	
14.	Resources	
15.	Roles and Responsibilities	7
16.	Related Policies	8

HIGHAM PRIMARY
SCHOOL T

HPS/PRO/EXT/NS-012 Issue 2 Rev A

**Computing Policy** 

Page 3 of 8 **Date** - 29/11/2023

#### 3. Intent

At Higham, we want pupils to be confident and skilful users of technology. Technology is used everywhere and plays an essential part in our students' lives; therefore, we aim to model and educate them on how to use technology positively, responsibly and safely. Our pupils will experience a broad curriculum encompassing computer science, information technology and digital literacy. At Higham, we recognise that the best prevention for a lot of issues we currently see with technology/social media is through education and this starts at the very beginning of the children's school journey. We recognise that technology can allow pupils to share their learning in creative ways and also understand the accessibility opportunities technology can provide. We have planned a varied and rich curriculum which balances opportunities for pupils to apply their knowledge creatively which will in turn help our pupils become skillful computer scientists. We encourage staff to embed computing across the whole curriculum to make learning creative and accessible. We want our pupils to be fluent with a range of tools to best express their understanding and intend by Upper Key Stage 2, children will have the independence and confidence to choose the best tool to fulfil the task and challenge set by teachers.

## 4. Purpose of Study

The National Curriculum 2014 states that a high-quality computing curriculum equips children to use computational thinking and creativity to understand and change the world. The core of computing is computer science and at Higham Primary School, children will be taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Children will be equipped to use ICT to create programs, systems and a range of content. Computing at Higham, ensures that children become digitally literate, able to use and express themselves and develop their ideas through ICT, at a level suitable for their academic stage, that will develop them for the future workplace and as active participants in a digital world.

#### 5. Aims

At Higham Primary School we aim 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
- are able to use ICT safely.

HIGHAM PRIMARY
SCHOOL SCHOOL

HPS/PRO/EXT/NS-012 Issue 2 Rev A

**Computing Policy** 

Page 4 of 8 **Date** - 29/11/2023

#### 6. Curriculum

The new National Curriculum focuses on computational thinking and creativity, as well as opportunities for creative work in programming and digital media. There are three key aspects to the computing curriculum: computer science (CS), information technology (IT) and digital literacy (DL).

At Higham Primary School, knowledge, understanding and skills in computing are built upon and developed in each year group.

The Policies and Procedures at HPS are documents and guidelines which explain how HPS Staff, Pupils, Parents and Governors will undertake or manage a specific matter to achieve compliance, providing clarity on dealing with issues and establishing the expected behaviours and standards.

- Policies are a statement of intent and assist in both subjective and objective decision making, providing clarity on dealing with issues and establishing the expected behaviours and standards.
- Procedures are the instructions on how a policy is followed.

## 7. The Foundation Stage

In September 2020, Higham Primary School adopted the new Early Years Foundation Stage Framework. Although this framework no longer includes technology, during the Reception year, we still provide opportunities for children to;

- Know how to operate simple equipment, e.g. use a remote control, take a photograph using an ipad.
- Show an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones.
- Show skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images.
- Know that information can be retrieved from computers or ipads
- Complete a simple program on a computer or ipad.
- Use ICT hardware to interact with age-appropriate computer software.
- Recognise that a range of technology is used in places such as homes and schools.
- Select and use technology for particular purposes.

## 8. Key Stage 1

Throughout years 1 and 2, children will:

- Understand what algorithms are, how they are implemented as programs on digital devices and that programs execute by following precise and unambiguous instructions. (CS)
- Create and debug simple programs. (CS)
- Use logical reasoning to predict the behaviour of simple programs. (CS)
- · Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (IT)
- Recognise common uses of ICT beyond school. (DL)
- Use technology safely and respectfully, keeping personal information private, identify where to go to for help and support when they have concerns about content or contact on the internet or other online technologies. (DL)

HIGHAM PRIMARY
SCHOOL SCHOOL

HPS/PRO/EXT/NS-012 Issue 2 Rev A

Computing Policy

Page 5 of 8 **Date** - 29/11/2023

## 9. Key Stage 2

Throughout Years 3, 4, 5 and 6, children will:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems and solving problems by decomposing them into smaller parts. (CS)
- Use sequence, selection and repetition in programs, work with variables and various forms of input and output. (CS)
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. (CS)
- Understand computer networks including the internet, how they can provide multiple services, such as the worldwide web (CS) and the opportunities they offer for communication and collaboration. (DL)
- Use search technologies effectively (IT), appreciate how results are selected and ranked (CS) and be discerning in evaluating digital content. (DL)
- 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. (IT)
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. (DL)

## 10. Implementation and planning

At Higham Primary School, computing is taught both as a discrete subject, and in a cross-curricular way when the opportunity presents itself. The school has adopted the Teach Computing Curriculum published by the National Centre for Computing Education (NCCE). The curriculum is built around an innovative progression framework where computing content has been organised into interconnected networks called learning graphs. It has been created by subject experts using the latest pedagogical research and teacher feedback. The Teach Computing Curriculum provides resources including lesson plans, slides, activity sheets and assessment opportunities. Each key stage has a teacher guide and curriculum map to support teachers in delivering the curriculum.

Through our computing lessons, pupils will develop a love of the digital world and see its place in their future. Through our planning across the year groups, we help pupils build on prior knowledge and skills whilst introducing new concepts, skills and challenges. As a school, we believe that computing should be evident and support other curriculum subjects and pupils have access to a range of hardware and software to continue to develop their skills.

Online safety is taught using The ProjectEVOLVE toolkit, based upon the UK Council for Internet Safety's (UKCIS) framework "Education for a Connected World" (EFACW). This framework covers knowledge, skills, behaviours and attitudes across eight strands of our online lives from early years right through to eighteen. These outcomes or competencies are mapped to age and progress. The statements guide teachers to the areas that they should be discussing with children as they develop their use of online technology. Teachers use Knowledge Maps to assess where pupil's online safety knowledge is currently, then use this to plan what they are going to teach and then see what impact that has had.



HPS/PRO/EXT/NS-012 Issue 2 Rev A

**Computing Policy** 

Page 6 of 8 **Date** - 29/11/2023

#### 11. Differentiation and SEN

Pupils with special educational needs are entitled to the same access to ICT as their peers. Teachers will liaise with the SENCO on the use of ICT to improve their involvement in the curriculum. Software such as clicker connect will be used to support these children. Hardware such as special keyboards, mice and ipads have been purchased to further support these children.

## 12. Assessment and Recording

Pupils are formatively assessed continuously in Computing by teachers in the course of their teaching, through observation, questioning and analysis of work. It is the responsibility of the teacher to assess the progress of individual pupils. This involves identifying each child's progress, determining what each child has learned and what, therefore, should be the next stage in his/her learning, so informing future planning. Each class teacher creates a class book detailing the progression of skills covered over the course of a term. This includes photographs of children working with appropriate annotations, examples of children's work and pupil voice.

Children's work is saved onto their own area on the server.

## 13. Health and Safety (see also Health and Safety Policy)

The school is aware of the health and safety issues involved in children's use of IT and computing. All fixed electrical appliances in school are tested by an LA contractor every five years and all portable electrical equipment in school is tested internally every twelve months. It is advised that staff should not bring their own electrical equipment into school but if this is necessary, then the equipment must be pat tested before being used in school.

All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the IT Technician, who will arrange for repair or disposal.

- Children should not put plugs into sockets or switch the sockets on.
- Trailing leads should be made safe behind the equipment
- Liquids must not be taken near the computers
- Magnets must be kept away from all equipment
- E-safety guidelines will be set out in the Mobile and Smart Technology and Social Media Policy and Acceptable User Policy (AUP)

#### 14. Resources

#### 14.1 Human

Opportunities for training are offered, wherever possible, to meet whole school needs as well as those of individual teachers. These needs may be identified as a result of monitoring or performance management reviews.



HPS/PRO/EXT/NS-012 Issue 2 Rev A

**Computing Policy** 

Page 7 of 8 **Date** - 29/11/2023

#### 14.2 Technical

Any faults with the computers are reported to the IT Technician. The curriculum is backed up remotely by EIS every working day. This is then confirmed by email to the IT technician.

#### 14.3 Hardware

- The school has a Computer suite with Internet linked computers with a printer attached. Pupil's access is timetabled on a weekly basis. The suite is equipped with an LCD screen.
- All classrooms and the school hall are equipped with a Genie Interactive board with LCD screen. Five Two other teaching areas are equipped with a SMART Board and projector.
- Each teacher has the use of a wireless laptop and ipad.
- There are 7 spare teaching laptops which are network ready for adults to use.
- The school also has 11 Government funded laptops and 6 further laptops which were donated to the school. The school has also purchased 2 printers. These devices are loaned to vulnerable and pupil premium pupils for all times of school closure for a period of more than 3 days including school holidays.
- There are 3 admin laptops which are network ready and the kitchen also has use of one.
- Years 2, 3, 4, 5 and 6 have the use of 15 ipads in the classroom, Year 1 and Year R have use of 5 ipads in the classroom, with the option of using the Year 2 ipads as well.
- Bee-bots, Micro-bits and green-screening equipment are available for use
- Replacement of hardware is considered via the Resources Strategic Plan.

## 14.4 Software

- The IT Technician is responsible for ensuring that the automatic updating of anti-virus software is operating efficiently, however staff also need to be vigilant when using their school laptops.
- Staff are made aware of new software in staff meetings.
- Resources are purchased and deployed effectively to meet the requirements of the Foundation Stage Curriculum and National Curriculum.
- New software is purchased only after evaluation, whenever possible, to ensure that it fits the purpose for which it is intended and that it is non-discriminatory.
- Licences are kept together by the IT Technician.
- An ICT asset register is maintained.

### 15. Roles and Responsibilities

The head teacher is responsible for monitoring the teaching of Computing through all curriculum areas. The Governing Body ensures adequate funding is allocated to cover equipment and all necessary contracts.

#### 15.1 The role of the co-ordinator

- The Computing Coordinator is responsible for producing an IT and computing development plan implementing the IT and computing policy across the school.
- To offer help and support to all members of staff (including teaching assistants) in their teaching, planning and assessment of computing.
- To maintain resources and advise staff on the use of materials, equipment and books.



HPS/PRO/EXT/NS-012 Issue 2 Rev A

## **Computing Policy**

Page 8 of 8 **Date** - 29/11/2023

- To monitor classroom teaching or planning following the schools rolling programme of monitoring.
- To lead staff training on new initiatives.
- Share management of IT budget
- To attend appropriate in-service training and keep staff up to date with relevant information and developments.
- To have a passion for computing and encourage staff to share this enthusiasm.
- To keep parents and governors informed on the implementation of IT in the school.
- To liaise with all members of staff on how to reach and improve on agreed targets.
- To help staff use assessment to inform future planning.

#### 15.2 The role of the IT Technician

- Maintain and manage the network.
- Monitor and maintain licenses including anti-virus.
- Support class teachers in IT delivery.
- Support the IT coordinator in developing new IT resources and strategies.
- Manage the school website.
- Ensure the smooth day to day running of the school WIFI and network.
- Ensure technologies are up to date and well maintained.
- Support the IT coordinator when extracting data for staff and governor reporting.

#### 15.3 The role of the class teacher

Individual teachers will be responsible for ensuring that pupils in their classes have opportunities for learning IT and computing skills and using IT and computing across the curriculum Class teachers will:

- plan and deliver the requirements for IT to the best of their ability. At Higham Primary School we set
  high expectations for our pupils and provide opportunities for all pupils to achieve, including pupils
  with special educational needs, pupils with disabilities, pupils from all social and cultural
  backgrounds, and those from diverse linguistic backgrounds. The class teacher ensures success by
  creating effective learning environments.
- follow the Teach Computing scheme for their year group; adapt where possible to suit the needs of all pupils.
- provide equality of opportunity through teaching approaches
- use effective assessment tools to check pupils' understanding
- provide a stimulating and engaging learning environment to motivate pupils

The class teacher's role is a vital role in the development of IT throughout the school and will ensure continued progression in learning and understanding.

#### 16. Related Policies

- Acceptable Use Policy
- Child Protection Policy
- Mobile and Smart Technology and Social Media Policy
- Home and Remote Learning Policy