



# **Hilderthorpe Primary School Computing Policy**

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## **1.0 What is Computing?**

Computing is a rapidly evolving subject in which constant advances in computers and control technology demands ever changing skills and knowledge from users.

Computers are now part of everyday life and the prognosis is that they will become even more important in the future as the human and computer symbiotic relationship develops further. At Hilderthorpe Primary School we aim to develop children's understanding and appreciation of computing and the way it impacts on our lives. We believe that technology can provide: enhanced collaborative learning opportunities; better engagement of pupils; easier access to rich content; support conceptual understanding of new concepts and can support the needs of all our pupils.

Computing makes education accessible to all, irrespective of learning styles and individual needs. At Hilderthorpe Computing is provided in a safe, happy and disciplined environment to stimulate and challenge both pupils and staff.

### **1.1 Aims and Objectives**

- Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.
- Enthuse and equip children with the capability to use technology throughout their lives.
- Give children access to a variety of high quality hardware, software and unplugged resources.
- Instil critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with technology and its associated resources.
- Teach pupils to become responsible, respectful and competent users of data, information and communication technology.
- Provide technology solutions for forging better home and school links.
- Enthuse and equip children with the capability to use technology throughout their lives.
- Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Utilise computational thinking beyond the Computing curriculum. Give children access to a variety of high quality hardware, software and unplugged resources.
- Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves or others.
- Use technology imaginatively and creatively to inspire and engage all pupils, as well as using it to be more efficient in the tasks associated with running an effective school.
- Exceed the minimum government recommended/statutory guidance for programmes of study for Computing and other related legislative guidance (online safety).

## **2.0 Curriculum**

### **2.1 Curriculum statement of intent**

Our computing curriculum is designed to equip children with the skills and understanding to live, work and interact in a technological world. This includes being able to use a variety of computer software, hardware and coding programmes. Our children will learn knowledge and skills to help them understand how the Internet and World Wide Web is organised, how to harness software and hardware to present work creatively, understand simple coding techniques and how to interact with others and protect themselves in the digital world. Lessons are linked to inspire children to real life aspirations and careers.

### **2.2 Schemes of Work**

As a school, we have chosen the Purple Mash Computing Scheme of Work from Reception to Year 6. The scheme of work supports our teachers in delivering fun and engaging lessons which help to raise standards and allow all pupils to achieve to their full potential. We are confident that the scheme of work more than adequately meets the national vision for Computing. It provides immense flexibility, strong cross-curricular links and integrates perfectly with the 2Simple Computing Assessment Tool. Furthermore, it gives excellent supporting material for less confident teachers.

In addition, we are also teaching Common Sense Media's e-safety scheme in each year group. From Y2 -6 each class will be taught one lesson per half term. EYFS and Y1, e- safety lessons are taught on a termly basis. We believe it is important to keep issues of e-safety fresh in the minds of our children, parents and staff. We invite parents to our e-safety lessons in order for them to engage with their children and learn more about the digital world we live in.

### **2.3 Curriculum outcomes**

#### **Early Years**

We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts. We believe the following:

- Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in roleplay.
- Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys.
- Outdoor exploration is an important aspect, supported by ICT toys such as metal detectors, controllable traffic lights and walkie-talkie sets.
- Recording devices can support children to develop their communication skills. This is especially useful for children who have English as an additional language

#### **Key Stage 1 outcomes**

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.
- Write and test simple programs.
- Organise, store, manipulate and retrieve data in a range of digital formats.
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

## **Key Stage 2 outcomes**

- 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 worldwide 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
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

## **2.4 Inclusion**

At Hilderthorpe, we aim to enable all children to achieve to their full potential. This includes children of all abilities, social and cultural backgrounds, those with disabilities, EAL speakers and SEN statement and non-statemented. We place particular emphasis on the flexibility technology brings to allowing pupils to access learning opportunities, particularly pupils with SEN and disabilities. With this in mind, we will ensure additional access to technology is provided throughout the school day and in some cases beyond the school day.

## **3.0 Online Safety**

- A relevant up-to-date online safety curriculum (Common Sense Media) which is progressive from Early Years to the end of Year 6 and is regularly taught throughout the year.
- A curriculum that is threaded throughout other curriculums and embedded in the day-to-day lives of our pupils.
- Training for staff and governors which is relevant to their needs and ultimately positively impacts on the pupils.
- Scheduled pupil voice sessions and learning walks steer changes and inform training needs.
- Through our home/school links and communication channels, parents are kept up to date with relevant online safety matters, policies and agreements. They know who to contact at school if they have concerns.
- Pupils, staff and parents have Acceptable Use Policies which are signed and copies freely available.
- Our online safety policy (part of our safeguarding policy) clearly states how monitoring of online safety is undertaken and any incidents/infringements to it are dealt with.
- Filtering and monitoring systems for all our online access.
- Data policies which stipulate how we keep confidential information secure.

#### **4.0 Assessment**

- Pupil attainment is assessed with advice from the 2Simple Computing Assessment Tool for Years 1 to 6. The tool enables staff to accurately identify attainment of pupils through the detailed exemplification it has for each key learning intention.
- Formative assessment is undertaken each session/interaction in Computing and pupils are very much encouraged to be involved in that process. Through using the progression of skills documents and displays from 2Simple, both teachers and pupils can evaluate progress. Features such as preview and correct in Purple Mash are used to further support feedback and assessment.
- Summative assessment is undertaken in line with the assessment cycle (See Assessment Policy). Using electronic work samples from children's portfolios on Purple Mash, teachers enter judgements about children's abilities on O-Track.

#### **5.0 Resources**

##### **5.1 Resources principles**

- All resources are procured with the underlining considerations of value: The extent at which the resource impacts on learning and the material cost of this. Protocol details for procurement can be found in the school finance policy.
- A range of resources is available which successfully supports delivering the Computing curriculum and enables all learners to reach their full potential.
- Resources are suitably maintained and replenished when needed, which is overseen by the Computing Leadership Team, technical support and Office staff.
- An itemised list of all resources is shared with staff and kept up to date by the Computing Leader. Audits of school resources are conducted regularly by the Computing Leader, which informs bidding for budgets allocations.
- The Computing Leadership Team keeps up to date with the latest technology resources and will make informed decisions about possible procurement of them through their own research.
- Suggestions for getting the very best out of the resources are made available to teaching and support staff by the Computing Leadership Team.
- The Computing Action Plan details foreseen future resource procurement which is shared with senior leaders before the budget setting period.

##### **5.2 Available resources in school**

Children have access to a bank of laptops that can be utilised in any classroom. These include Chromebooks and Windows machines. There are some desktops available in the library for research purposes. There are Crumble programming boards available for children to use to support coding and problem solving. There are some Android tablets for children to take digital photographs and videos of their work. In addition, we have Virtual Reality Headsets that can be used by the children to explore places beyond the classroom.

In EYFS, there are Amazon Fire tablets, a large tablet for small groups of children to use as well as a range of programmable toys.

All teaching staff have an I-pad as well as access to a laptop computer and SMART touchscreens to teach and administer in the classroom effectively.  
The Computing leaders will ask for feedback and identify new hardware and software resources that may be of benefit to school and replace or augment the current resources within school.

## **6.0 Monitoring, Evaluation and Feedback**

Monitoring standards of teaching and learning within Computing is the primary responsibility of the Computing Leader. All teachers are expected to keep an online portfolio or track children's work using Purple Mash. This portfolio must contain work samples from all areas of the curriculum taught for the year group. Details of monitoring and evaluation schedules can be found in the Computing Action Plan and School Monitoring Schedule.

### **6.1 Monitoring will be achieved through:**

- Work scrutiny.
- Learning walks.
- Observations.
- Pupil voice.
- Teacher voice.
- Reflective teacher feedback.
- Learning environment monitoring.
- Dedicated Computing Leader and Assessment Leader time.

### **6.2 Evaluation and Feedback will be achieved through:**

- Dedicated Computing Leader and Assessment Leader time.
- Using recognised standards documentation for end-of-year expectations.
- Using recognised national standards for benchmarking Computing provision in primary schools.
- Written feedback on evaluation of monitoring activities to be provided by the Computing Leader in a timely manner. Feedback on whole school areas of development in regard to Computing to be fed back through insets/AOB/staff meetings.

## **7.0 Roles and Responsibilities**

Due to technology extending beyond the National Curriculum for Computing, there are key roles and responsibilities specific members of staff have.

### **7.1 Head Teacher**

- Monitoring the implementation of the Computing Policy and its associated policies such as the Safeguarding and SEND Policies. Ratifying (in conjunction with the Governing Body) the Computing policy, Safeguarding policy and Computing Leadership Team Action Plan.
- Securing technical support service contracts and infrastructure maintenance contracts. Approving CPD and training which is in line with the whole school's strategic plan. Approving budget bids and setting them.
- Creating in conjunction with the Computing Leadership Team, a long-term vision for Computing which includes forecasted expenditure and resources.
- Monitoring the performance of the Computing Leadership Team in respect to their specific job role description for Computing.
- Ensuring any government legislation is being met.

- Overseeing the effectiveness of technical support offered by contracted agencies or companies.

## **7.2 Computing Leadership Team**

- One team member represents each phase of learning from EYFS, KS1 and KS2 to contribute, promote and implement ideas and suggestions to improve the subject.
- Raising the profile of Computing for all stakeholders.
- Monitoring the standards of Computing and feeding back to staff in a timely fashion so they can act on areas for development. Ensuring assessment systems are in place for Computing.
- Maintaining overall consistency in standards of Computing across the school.
- Reporting on Computing at specific times of the year to the Governing Body/Head/Staff. Auditing the needs of the staff in terms of training/CPD.
- Actively supporting staff with their day-to-day practice.
- Seeking out opportunities to inspire staff in developing their practice through modelling and sharing new ideas, approaches and initiatives.
- Attending training and keeping abreast with the latest educational technology initiatives.
- Using nationally recognised standards to benchmark Computing.
- Creating Action Plans for Computing and supporting a long-term vision which feeds into the whole school development plan.
- Keeping an up-to-date log of all resources available to staff.
- Procuring physical and online resources that demonstrate best value.
- Reviewing the Computing curriculum and developing it as needed.
- Working as needed with the SENCO/Head Teacher/ Safeguarding officer to ensure online safety provision is above adequate and all legislation is in place.

## **7.3 Technical support**

- Conducts routine scheduled maintenance/updates on systems.
- Supports the administration and set-up of online services including the school website.
- Fixes errors/issues with hardware and software set-up, prioritising as needed.
- Routinely checks school filtering, monitoring and virus protection.
- Sets up new hardware and installations.
- Maintains network connectivity and stability.
- Supports the Computing Leadership Team and Head Teacher with future infrastructure needs and associated projected costs.

## **7.4 Administration Staff**

- Maintains the school website content with support from teaching staff.
- Posts approved requests to the school's social media accounts.
- Supports procurement of resources and technical services.
- Supports the technician with some data management.

## **8.0 Health and Safety**

At Hilderthorpe we take all necessary measures to ensure both staff and pupils are aware of the importance of health and safety. Both staff and pupils are trained to handle electrical equipment correctly including how to power off and on. Pupils are reminded about the dangers of electricity and the danger signs to look out for. Adequate displays and warning signs are strategically placed around the school to reinforce health and safety.



