

## Computing Policy

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| Last review date | May 2022 |
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### Intent

At Havannah Primary School our intention within Computing, is to ensure that every child should have the right to a curriculum that champions excellence, supporting pupils in achieving to the very best of their abilities. We understand the immense value that technology plays, not only in supporting the Computing and whole school curriculum, but overall in the day-to-day life of our school. 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.

### The aims of the Computing curriculum at Havannah Primary School are:

- to provide an exciting, rich, relevant and challenging Computing curriculum for all pupils
- to enthuse and equip children with the capability to use technology throughout their lives.
- to give children access to a variety of high quality hardware, software and unplugged resources
- to instil critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with technology and its associated resources.
- to teach pupils to become responsible, respectful and competent users of data, information and communication technology
- to teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- to 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.
- to 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.
- to provide technology solutions for forging better home and school links.
- to utilise computational thinking beyond the Computing curriculum.
- to exceed the minimum government recommended/statutory guidance for programmes of study for Computing and other related legislative guidance (online safety).

### Safeguarding: Online safety

Online safety has a high profile at Havannah, for all stakeholders. We ensure this profile is maintained and that pupil needs are met by the following:

- A relevant up-to-date online safety curriculum which is progressive from Early Years to the end of Year 6

- We have 'Online safety' weeks each term where the ethos is reinforced throughout the school - latest one - week beginning 18/04/22
- 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. Most recent training - 12<sup>th</sup> March 2022 - delivered by High Speed Training
- 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

## Implementation



The majority of computing is embedded across the curriculum, along with a timetabled computing session each week that focuses on one of two elements: an explicit computer science lesson or a 'tinkering session'. The computer science part of the computing curriculum will often, but not always, need a more explicit approach. That is not to say it can't be embedded across the curriculum. A tinkering session looks at introducing a new app or tool and giving children the opportunity to experiment and familiarise themselves with the different elements and tools before it can be applied in

a more focused approach across the curriculum. Some weeks computing will be covered by using technology to demonstrate learning in other subjects. For example: If a class were covering World War 2 in Year 6 and they were exploring how the Second World War started, the children could be set the task of creating a video explaining this. First, the children may want to research some more information about how the Nazi party rose to power. This would involve covering some Digital Literacy: Managing Online Information -

- I can use search technologies effectively.
- I can explain how search engines work and how results are selected and ranked.
- I can demonstrate the strategies I would apply to be discerning in evaluating digital content.
- I can describe how some online information can be opinion and can offer examples.

If the pupils were to then create a video using an app such as Adobe Spark Video to demonstrate their learning, they would be covering some of the Information Technology: Video Creation -

- I can create videos using a range of media - green screen, animations, film and image.

If the pupils were to then upload or publish their work on a blog, they would also be covering this objective from Information Technology: Word Processing objectives -

- I can publish my documents online regularly and discuss the audience and purpose of my content.

Even though this would be a History lesson, they would be covering several computing objectives, therefore if the class needed to spend more time on other subjects that week, they are still covering computing without having a timetabled computing session. This is the way computing will be delivered at Havannah - embedded to allow learning to be more accessible and allow learners to be more creative in demonstrating their learning.

Desired outcomes are also achieved by:

- Setting common tasks which are open-ended and can have a variety of responses
- Setting tasks of increasing difficulty
- Planning across year groups to ensure progression of skills
- Grouping children by ability in the room and setting different tasks for each ability group
- Providing resources of different complexity depending on the ability of the child
- Using classroom assistants to support children individually or in groups.

## Computing Curriculum

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.

### Early Years

- Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in role play.
- 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;
- 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.

## Equal Opportunities

All teaching and non-teaching staff should ensure that all pupils, irrespective of gender, ability, ethnicity and social circumstances, have access to, and make the greatest progress possible, in all areas of the curriculum. Computing provides opportunities for teaching that reinforces this ideal. Special Educational Needs Children with special educational needs are taught the full Computing curriculum which is tailored by their teacher to meet their needs. 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. Some children may receive additional support to help them take a full and active role in Computing lessons. Tasks will be adapted if necessary to help children to succeed and reach their potential. See Special Education Needs Policy for more details.

## Assessment, Record keeping and Reporting

- Pupil attainment is assessed using 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.
- Teachers keep accurate records of pupil attainment by entering data using the 2Simple Computing Assessment Tool
- Tracking of attainment by using the 2Simple Computing Assessment Tool is used to inform future planning
- Children are encouraged to self, peer and group assess work in a positive way using online collaborative tools such as 2Blog in Purple Mash.
- 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 the samples into the 2Simple Computing Assessment Tool.

## Impact

### Monitoring and review

Monitoring standards of teaching and learning within Computing is the primary responsibility of the Computing Lead, (CLH). 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.

#### **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.

#### **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.
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### Roles and Responsibilities

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

#### **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 Leader's 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 Leader, a long-term vision for Computing which includes forecasted expenditure and resources.
- Monitoring the performance of the Computing Leader in respect to their specific job role description for Computing.
- Ensuring any government legislation is being met.

### **Computing Leader**

- 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.
- Creating bids for the annual budgets and monitoring budget spend.
- 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.
- Overseeing the effectiveness of the technician.
- Working as needed with the SENCO/Head Teacher to ensure online safety provision is above adequate and all legislation is in place.

### **Technician**

- 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.
- Maintains network connectivity and stability.
- Sets up new hardware and installations.
- Supports the Computing Leader and Head Teacher with future infrastructure needs and associated projected costs.