

# Hill Avenue Academy

In Association with:

Manor Multi-Academy Trust



## Computing Policy

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## Intent

At Hill Avenue we aim to equip pupils to use computational thinking and creativity to understand, adapt to and change the world. Through our diverse teaching of computing, we enable children to develop their computer science, information technology and digital literacy understanding and skills. This will enable our children to participate in a rapidly-changing world where industry, work and leisure activities are increasingly transformed by technology. We enable them to find, explore, analyse, exchange and present information. Furthermore, we focus on developing critical skills across a range of hardware and software for children to be able to use technology in an effective way. Through all of this, we ensure that E-Safety underpins all aspects of computing to ensure our children are prepared to use technology safely and responsibly.

Computing skills are a major factor in enabling our children to be confident, creative and independent learners in an ever-changing, diverse society. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Our core aims of computing at Hill Avenue are to enable children to:

- develop computing capability in finding, selecting and using information;
- use computing for effective and appropriate communication;
- monitor and control events both real and imaginary;
- apply hardware and software to creative and appropriate uses of information;
- apply their computing skills and knowledge to their learning in other areas;
- use their computing skills to develop their language and communication skills;
- explore their attitudes towards computing and its value to them and society in general. For example, to learn about issues of security, confidentiality and accuracy.
- use technology safely and responsibly to be a positive digital citizen

These core aims are used to drive the teaching of computing across the whole school. Our ethos ensures that technology is used purposefully and effectively across the whole breadth of our curriculum. This enables pupils to use technological devices across all types of lessons for varying purposes to achieve outcomes in different ways. Enabling our pupils with access to technology freely and frequently allows them to opportunities to excel and showcase their talents in creative and independent ways.

## Implementation

### Teaching and learning style

As our aims of computing are to equip children with the skills necessary to use technology to become independent learners, the teaching style that we adopt is as active, practical and immersive as possible. While at times we do give children direct instruction on how to use hardware or software, the main emphasis of our teaching in computing is for individuals or groups of children to use technology to help them in

whatever they are trying to study. We encourage our children to explore ways in which the use of computing can improve their learning in all subjects to strive for excellence.

At Hill Avenue we use the Rising Stars computing scheme of work as a foundation for our teaching and learning of computing – which follows all of the National Curriculum aims. However, we adapt this scheme of work to what best fits our school, our ethos and our children to ensure it is purposeful and meaningful in every lesson to develop critical skills progressively as children get older. This means that from the EYFS up to Year 6, our children gain experience in a wide range of computing aspects and understand how computing is used to enhance the world around us. Computing is taught as a bespoke one hour session weekly in every class but also embedded within all aspects of teaching and learning in every subject. For example, technology is used in history lessons for research, MFL to record speaking and listening or PE to review physical performance. Computing is engrained in all areas of the curriculum.

### **E-Safety**

Through the teaching and learning of computing, E-Safety is absolutely paramount and key to all of our teaching. Each topic the children learn is started with a bespoke E-Safety lesson which then underpins and is referred to throughout the entire duration of that topic and all future topics. Children are continually taught about our school ethos of E-Safety and how they can stay safe using technology at home and in the wider world. E-Safety is also referred to during PSHE lessons to ensure it is at the forefront of our technology teaching to ensure our children are equipped with the knowledge and understanding of using technology safely and responsibly at all times.

### **Computing curriculum planning**

We use the national curriculum for computing as the basis for our curriculum planning. To break this down, we use the Rising Stars scheme of work as the foundation and journey of learning to then adapt to the needs of our children. We carry out the curriculum planning in computing in three phases (long-term, medium-term and short-term).

The long-term plan maps the computing topics that the children study in each term during each key stage. Our medium-term plans, which we have adopted from the national curriculum, give details of each topic for each term. They identify the key learning objectives for each topic and stipulate the curriculum time that we devote to it. As we have some mixed-age classes, we do our medium-term planning on a two-year rotation cycle. In this way we ensure that we cover the national curriculum without repeating topics. The class teacher is responsible for writing the short-term plans with the computing component and core aims of each lesson. The class teacher keeps these individual plans and s/he and the computing subject leader often discuss them on an informal basis.

The topics studied in computing are planned to build upon prior learning to ensure there is progression from EYFS up to Year 6. While we offer opportunities for children of all abilities to develop their skills and knowledge in each topic, we also

build planned progression into the scheme of work, so that the children are increasingly challenged as they move up through our school.

We teach computing in nursery and reception classes as an integral part of the topic work covered during the year. As the nursery and reception class is part of the foundation stage of the national curriculum, we relate the computing aspects of the children's work to the objectives set out in the early learning goals (ELGS) which underpin the curriculum planning for children aged three to five. The children have the opportunity to use computers, cameras and other technology suitable to their age. Then during the year they gain confidence and start using the computer to find information and use it to communicate in a variety of ways.

### **Resources**

The school has a laptop trolley to ensure a class has a laptop for each child. In addition, the school has invested in thirty-five I-Pads ensuring that every child in a class can access one too. Furthermore, the school endeavours to update its technological resources through hardware and software to meet the needs of the curriculum and advance the learning across the curriculum. For example, the school is investing in a range of resources to support and facilitate learning such as Bee-bots for younger children, a range of educational apps, 3D printers and potentially VR sets to advance the teaching and learning elements across the curriculum immensely.

### **Equal opportunities**

All children will have equal access to the Computing Curriculum, regardless of gender, ethnicity, socio-economic background or special educational needs as outlined in the school's Equal Opportunities Policy. In advance to this, teaching will take into account the age, ability, readiness, and cultural backgrounds of children [and those with English as an additional language] to ensure that all can fully access computing education provision. This will be done through purposeful differentiation and drawing on expertise from the subject leader to make every lesson meaningful to every child.

Close monitoring of lessons and learning along with reviews will be made by senior leaders, middle leaders, subject leaders. This will allow us to observe learning and outcomes within the curriculum, allowing us to gain feedback around what is going well and what are the ways to grow and move forward with children of all backgrounds and abilities. If there are areas where children are not making expected progress then class teachers will work alongside leaders and our SENCO to set specific targets within lessons to boost progress and attainment. Likewise, where children are showing themselves to be at a greater depth level, class teachers will provide further challenge to ensure children excel in every lesson.

### **Assessment and recording**

Teachers assess children's work in computing by making informal judgements as they observe them during lessons which informs planning for future lessons. Children are assessed by teachers using Hill Avenue's Building Block system to monitor progression in key skills and understanding. Each child has their own individual folder on the shared area within the school's network to save their learning into. If learning has been completed away from technology, each class teacher

keeps records of learning in their computing folder. Teachers use this evidence as the basis for assessing the progress of the children and to pass information on to the next teacher at the end of the year.

### **Monitoring and review**

The monitoring of the standards of the children's work and of the quality of teaching in computing is the responsibility of the computing subject leader and senior staff at Hill Avenue. The computing subject leader is also responsible for supporting colleagues in the teaching of computing through effective discussions or CPD, for keeping staff informed about current developments in the subject and for providing a strategic lead and direction for the subject. The computing subject leader uses an annual action plan to ensure measures are taken to review, evaluate and develop the effectiveness of computing across the school. This is done through learning walks, regular discussions with staff and monitoring planning, lessons and evidence produced by the children across all stages of learning.

### **Parents, carers and the wider community**

Parents and carers are always welcome at Hill Avenue and we strive to work alongside our community to benefit the lives and learning of our children. We offer learning together days throughout the academic year for parents to join their children in lessons to work together on areas within the national curriculum. Furthermore, we work strongly with children and parents alike to ensure they are aware of computing learning in school and in particular with our E-Safety policies and focus throughout computing learning. Parents are encouraged to access information we share online through our website and to use online resources available at home to enhance the learning of children whilst not in school.

### **Impact**

At Hill Avenue we aim to equip pupils to use computational thinking and creativity to understand, adapt to and change the world. Our curriculum allows children to experience and use technology in a wide range of situations purposefully and effectively to achieve across the curriculum spectrum. This enables our children to thrive and make excellent progress to achieve positive, meaningful outcomes in a range of ways across different hardware's and software's. Furthermore, as well as for bespoke purposes, our children use technology side by side with their day to day learning and lives within school so it is fully embedded in their way of living and learning. As technology advances, we equip pupils to use it in school, but also out of school, safely and responsibly to enhance their lives now and in their future lives and workplace.

### **Review**

This policy will be reviewed annually by the subject leader, members of the SLT, staff and our governance body.