

# Hill Avenue Academy

In Association with:  
Manor Multi-Academy Trust



**Hill Avenue Academy**  
**Computing, Internet & E-Mail**  
**Policy**

# Hill Avenue Academy

## Computing Policy

### Rationale

Computing equips pupils to use computational thinking and creativity to understand and change the world. Through teaching computing we equip children to participate in a rapidly-changing world where work and leisure activities are increasingly transformed by technology. We enable them to find, explore, analyse, exchange and present information. We also focus on developing the skills necessary for children to be able to use information in a discriminating and effective way. Computing skills are a major factor in enabling children to be confident, creative and independent learners. 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.

### Aims & objectives

The aims of computing are to enable children:

- To develop computing capability in finding, selecting and using information;
- To use computing for effective and appropriate communication;
- To monitor and control events both real and imaginary;
- To apply hardware and software to creative and appropriate uses of information;
- To apply their computing skills and knowledge to their learning in other areas;
- To use their computing skills to develop their language and communication skills;
- To 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.

### Teaching and learning style

As the 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 and practical 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 computers to help them in whatever they are trying to study. So, for example, children might research a history topic by using a search criteria, or they might investigate a particular issue on the internet. Children who are learning science might use the computer to model a problem or to analyse data. We encourage the children to explore ways in which the use of computing can improve their results, for example, how a piece of writing can be edited or how the presentation of a piece of work can be improved by moving text about etc.

We recognise that all classes have children with widely differing computing abilities. This is especially true when some children have access to computing equipment at home, while others do not. We provide suitable learning opportunities for all children by matching the challenge of the task to the ability and experience of the child. We achieve this in a variety of ways, by:

- Setting common tasks which are open-ended and can have a variety of responses;
- Setting tasks of increasing difficulty (not all children complete all tasks);
- Grouping children by ability in the room and setting different tasks for each ability group;
- Providing resources of different complexity that are matched to the ability of the child;
- Using classroom assistants to support the work of individual children or groups of children.

### **Computing curriculum planning**

The academy uses the national curriculum for computing as the basis for its curriculum planning. We have adapted the national scheme to the local circumstances of the academy.

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. The computing subject leader works this out in conjunction with teaching colleagues in each year group, and the children often study computing as part of their work in other subject areas. Our long-term computing plan shows how teaching units are distributed across the year groups, and how these fit together to ensure progression within the curriculum plan.

Our medium-term plans, which we have adopted from the national curriculum, give details of each unit of work for each term. They identify the key learning objectives for each unit of work and stipulate the curriculum time that we devote to it. The computing subject leader is responsible for keeping and reviewing these plans. 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 of each lesson. These daily plans list the specific learning objectives 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. While we offer opportunities for children of all abilities to develop their skills and knowledge in each unit, we also build planned progression into the scheme of work, so that the children are increasingly challenged as they move up through the academy.

## **Foundation stage**

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 the computers and a digital camera. 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.

## **The contribution of computing to teaching in other curriculum areas**

Computing contributes to teaching and learning in all curriculum areas. For example, graphics learning links in closely with learning in art, and learning using databases supports work in mathematics, while search tools and the internet prove very useful for research in the foundation subjects. Computing enables children to present their information and conclusions in the most appropriate way.

## **English**

Computing is a major contributor to the teaching of English. Through the development of keyboard skills and the use of computers, children learn how to edit and revise text. They have the opportunity to develop their writing skills by communicating with people over the internet, and they are able to join in discussions with other children throughout the world through the medium of video conferencing. They learn how to improve the presentation of their work by using desktop publishing software.

## **Mathematics**

Many computing learning opportunities build upon the mathematical skills of the children. Children use computing in mathematics to collect data, make predictions, analyse results, and present information graphically. They also acquire measuring techniques involving positive and negative numbers, and including decimal places.

## **Personal, social and health education (PSHE) and citizenship**

Computing contributes towards the teaching of PSHE and citizenship as children learn to work together in a collaborative manner. They develop a sense of global citizenship by using the internet and e-mail. Through the discussion of moral issues related to electronic communication, children develop a view about the use and misuse of computing (social media), and they gain a knowledge and understanding of the interdependence of people around the world.

## **Teaching computing to children with special educational needs**

At our academy, we teach computing to all children, whatever their ability. Computing forms part of the academy curriculum policy to provide a broad and

balanced education to all children. Through our computing teaching we provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's different needs. Assessment against the national curriculum allows us to consider each child's attainment and progress against expected levels.

When progress falls significantly outside the expected range, the child may have special educational needs. Our assessment process looks at a range of factors – classroom organisation, teaching materials, teaching style, differentiation – so that we can take some additional or different action to enable the child to learn more effectively. This ensures that our teaching is matched to the child's needs.

Intervention through SEN Support will lead to the creation of an individual education plan (IEP) for children with special educational needs. The IEP may include, as appropriate, specific targets relating to computing. In some instances the use of computing has a considerable impact on the quality of work that children produce; it increases their confidence and motivation.

We enable pupils to have access to the full range of learning opportunities involved in learning computing. Where children are to participate in activities outside the classroom, for example, a visit to a computing exhibition, we carry out a risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

### **Gifted & talented**

In science staff will develop differentiated weekly plans to ensure pupils who are identified as gifted in computing and achieving exceptionally high levels of achievement are catered for. For these pupils, accelerated learning experiences, where programmes of Study from the next academy phase or key stage, are accessed by the pupils through investigative work, or enrichment activities are planned for giving pupils open-ended investigations to complete that link to the computing programmes of study being taught. Support from the academy gifted and talented co-ordinator (SENCO) or computing co-ordinator can be utilised to support this process.

### **Assessment and recording**

Teachers assess children's work in computing by making informal judgements as they observe them during lessons. On completion of a piece of work, the teacher will mark it and comments as necessary. At the end of a unit of learning s/he makes a summary judgement about the learning of each pupil in relation to the national curriculum sub levels of attainment, and records these attainment grades. We use this 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.

All teachers keep samples of the children's work in a portfolio for each pupil. This demonstrates the expected level of achievement in computing for each age group in the academy.

## **Resources**

All classrooms have three computers in addition to a computer room with a network of computers for groups of children. We keep resources for computing, including software, in a central.

## **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 of the academy. The computing subject leader is also responsible for supporting colleagues in the teaching of computing, for keeping informed about current developments in the subject and for providing a strategic lead and direction for the subject in the academy. The computing subject leader has specially-allocated time for carrying out the vital task of reviewing samples of the children's work and for visiting classes to observe the teaching of computing.

## **Management of computing**

### **Backing up data**

Back ups of all academy data is carried out three times each week by our computing technician. Our computing technician is a LA technician paid through a SLA and therefore is familiar with all council policies (curriculum server and office server).

### **Continuity plan**

In the event of office equipment being stolen, we have office laptops (two taken off site each night and two stored in the safe) that have all office software (SIMS, attendance module, FSM model etc) installed). These would be used temporarily and data would be transferred from our remote back-up drives by our computing technician, this means that the office can be fully operational within a day (this will be tested bi-annually by our computing technician).

A manual folder of all children's data is stored in the admin office and updated annually by office staff (then by parents/carers if any details change as and when) so children's contact details would be available for emergency purposes if needed whilst computers/ data being set up.

In the event of the curriculum server being stolen/damaged beyond repair we have two office laptops (stored in safe/off site) that are set up to access curriculum server. These would be used temporarily and data would be transferred over from our remote back-up tapes by our computing technician, this means that the curriculum server would be fully operational within a day.

If school devices/classroom technology was stolen/damaged beyond repair we would make an insurance claim and re-order the equipment immediately from Dell and/or the LA supplier who have a next day delivery policy. This would enable us to have school/classrooms operational by the next day.

### **Care of equipment**

The individual in whose care it is trusted should maintain all computing equipment in a clean and serviceable state.

- All equipment should be switched off at the end of the working day.
- Any technical fault should be reported immediately to the computing co-ordinator and an electronic support desk ticket raised with the support team (LA)

### **Software**

Under no circumstances are any staff allowed to bring software into academy to use. A site license is needed before any software can be used on our computers. These are in place for all items of software the academy has purchased. Staff also cannot copy any software that belongs to academy.

### **Use of internet**

All staff will follow the guidelines in the internet and e-mail policy

### **Data protection**

All staff will ensure all data is stored in appropriate files/ areas on server so that is accessible only by those who have access rights

### **Review**

This policy will be reviewed annually by staff and directors