

**Sacks Morasha JPS**

**Computing Policy 2015**



## **Introduction**

At Sacks Morasha we believe that Computing is a vitally important part of the children's learning and that it is something that they will be interacting with in many aspects of their life. We aim to give each pupil the opportunity to apply and develop their technological understanding and skills across a wide range of situations and tasks. Pupils are encouraged to develop a confident and safe approach to Computing through the teaching of E - safety. We believe strongly that Computing should not be a stand-alone subject. With this belief in mind, we endeavor to integrate computing into all of our lessons whether they are Chol or Kodesh.

## **Objectives**

The new National Curriculum 2014 states that a high quality computing curriculum equips children with the knowledge to not only use all of the technology around us but also to adapt and improve this technology. Its new focus is to teach children not only how to use technology but how to fix it, change and adapt it to fit users needs. Children will be immersed in this curriculum from Reception all the way up to year 6.

## **Aims**

At Sacks Morasha we aim to develop children's knowledge, understanding and skills so they can:

- understand and apply the fundamental principles and concepts of computer science.
- Experience writing computer programs and analytically solve the problems these programs may provide.
- evaluate and apply information technology, including new or unfamiliar technologies,
- become responsible, competent, confident and creative users of information and communication technology

## **The Curriculum**

### **Reception**

In the early years children will be taught to

- Operate simple equipment, e.g. turn on a computer and plug it back in to charge.
- Show an interest and be curious whilst operating technological toys 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.
- Complete a simple program on a computer.
- 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.

### **Key Stage 1**

Throughout years 1 and 2, children will:

- Understand what algorithms are and that we use them in everyday life.
- Create and debug simple programs,
- Use logical reasoning to predict why technology reacts the way it does.
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Children will be able to do this by making mind maps on Popplet or creating photo albums on ipads.
- Recognise common uses of ICT beyond school.
- learn about Esaftey and how to apply this learning every time they come into contact with technology.

### **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 tangible objects and solving problems by decomposing them into smaller parts.
- Use sequence, selection and repetition in programs, work with variables and various forms of input and output in order to create games and character movement within these games.
- Use logical reasoning to explain how some simple algorithms work 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. ( For example, mystery Skype classroom, where children get to interact with a classroom in another country)
- Use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content.
- 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.

## **Planning**

### **Early Years Foundation Stage**

Teaching plans are drawn up by the class teacher in accordance with the Early Years Foundation stage Curriculum – Understanding the World - Technology. EYFS Medium Term Planning Sheets are used by the class teacher to identify the objectives for each half term. The short term planning outlines each week's activities, identifying the knowledge, concepts, skills, attitudes and values that will be developed, and details differentiation, deployment of staff/volunteer support and resources. The class teacher keeps these individual plans, and the subject leader monitors and reviews them regularly.

### **Key Stage 1 & 2**

Computing is planned by each class teacher in accordance with the National Curriculum. Medium term plans are drawn up by class teachers at the beginning of each half term. They ensure an appropriate balance and distribution of work across each half term with ample opportunity to revisit and extend children's learning. During each half term, specific learning objectives, tasks and activities are recorded on short term weekly planning sheets. Sheets for weekly planning specify organisational details, including teaching modes, differentiation, deployment of staff/volunteer support and resources. The class teacher keeps these individual plans, and the subject leader monitors and reviews them regularly.

## **Progression and Continuity**

As Computing has replaced ICT in the 2014 National Curriculum, some of the attainment targets in Upper Key Stage 2 may not be attainable immediately as the knowledge, understanding and skills needed have not previously been taught. Therefore, the curriculum will be taught from the ability stage the children are at, rather than the expected age. After a few years, when children from Lower Key Stage 2 progress with the necessary knowledge, understanding and skills, the year 5 and 6 attainment targets will be met.

Effective teaching of Computing and ICT involves making connections across other curriculum areas. Children learn to create books using book creator in Literacy and practice their script writing within the same app in Kodesh.

We believe strongly that children should not see computing as a stand alone subject. Through cameras children can review their science investigations more clearly and through a magnified image. Via the Internet and apps like Skype children can learn about different countries and cultures from the people that live there rather than from a textbook. Through online math's games children are given the independence to challenge themselves by independently progressing through to higher levels of the game.

## **Resources**

At Sacks Morasha, children and staff have access to a range of I.C.T equipment, including computers which may be controlled by QWERTY keyboard and mouse control. The computers are linked to the school network and server and have facilities to connect to the Internet through WIFI. We currently have a laptop trolley, which provides a laptop per child for all computing lessons. We teach with ipads in year 3,4 and 5 with a vision to expand this to all year groups. We have 4 ipads in reception which are allocated to specific group activities (such as Phonics).

Key pieces of software are used throughout the school and use of these is developed as the children progress. Other software is used to support I.C.T work in a range of curriculum areas. Teaching resources are kept within each class and the internet is used regularly as a rich and varied provider of a variety of resources. Interactive Whiteboards are installed in all classrooms.

All teaching personnel have laptop computers, which have facilities for network connection.

Through the use, experience and discussion of a varied range of equipment, children gain knowledge about the use of I.C.T. and its implications in day to day life.

## **Assessment, Recording and Reporting**

Learners are formatively assessed continuously in Computing by teachers in the course of their teaching, through observation, questioning and analysis of work.

## **Computing and Homework**

Parents and careers have a vital role to play in their child's education, and homework is an important part of this process. Often children may be asked to carry out research, which may involve the use of the Internet. Children may also be asked to use web based math's games" or "Phonics Play" at home to further their learning.

## **Conclusion**

At Sacks Morasha we understand that in the future technology will not just be an accessory of life but a key part of it. We keep this in mind throughout all of our teaching. Throughout all year groups we ensure that children see technology and the lessons they learn whilst using it as a key stepping stone into their future academic and professional life.

