Computing and ICT Policy

Information and Communications Technology (ICT) is concerned with the storage, processing, presentation and communication of information by electronic means. This includes the measurement, modelling and control of external events. ICT continues to evolve very quickly and has now become firmly entrenched in many aspects of everyday life, both at home and in the workplace.

A high quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science and design & technology, and provides insights into both natural and artificial systems.

As ICT underpins today's modern lifestyle it is essential that all pupils gain the confidence and ability, that they need in this subject, to prepare them for the challenge of a rapidly developing and changing technological world. The use of ICT will also enhance and extend children's learning across the whole curriculum whilst developing motivation and social skills.

At Manor Primary School our aims are that:

- Computing and ICT be presented as a creative and fascinating process in which children are encouraged to use their own initiative, imagination, reasoning and investigative skills;
- Children appreciate the relevance of computing and ICT in our society and that they see them as an essential tool for learning, communication, finding information and for controlling and understanding their environment;
- Children receive equal opportunity to develop their computing capability;
- Differentiation is planned for in each area of the computing curriculum and in the use of ICT in the wider curriculum so that children achieve to the best of their ability;
- Children learn to work individually and collaboratively;
- Children have a heightened interest and awareness of ICT through the regular display of their ICT enhanced work in the classrooms and around the school, and the positive attitude of staff towards the use of ICT.

Teaching & Learning

ICT is to be used in the teaching and to support the learning of broader curriculum. Pupils will be given the opportunity to develop their awareness of the use of ICT both within the school and in the wider community. We follow the computing National Curriculum and have structured medium term planning in place in order to ensure progression of skills across the age range, and the knowledge and understanding being taught. We ensure that effective use of interactive whiteboards in each class helps to deliver the curriculum in a variety of ways. We provide a good quality learning environment for the children to work in, using display in the ICT suite to enhance the teaching and learning, and ensuring there are also ICT displays in classrooms and in shared areas.

There is a timetabled session each week where explicit computing skills are taught and children learn to use new software / hardware. In addition to this there will be provided opportunities, both in class and in the ICT suite, in which children can use ICT to help access and to enhance other areas of the curriculum.

Early Years Foundation Stage

We teach computing and ICT in nursery and reception classes as an integral part of the unit work covered during the year. As these classes are the Foundation Stage of the National Curriculum, we relate the ICT aspects of the children's work to the objectives set out in the Early Years Foundation Stage, which underpin the curriculum planning for children aged three to five. The children have the opportunity to use the computers, digital cameras, tablets, programmable toys and numerous

interactive programs with the Interactive Whiteboard. Then, during the year, they gain confidence and start using the computer to find out information and to communicate in a variety of ways.

Key Stages 1 and 2

The units studied in computing and e-safety are planned to build on prior learning. While we offer opportunities for children of all abilities to develop their skills and knowledge in each unit, we also plan progression into the scheme of work, so that the children are increasingly challenged as they move up through the school.

The teaching of computing and ICT contributes to teaching and learning in all curriculum areas. It also offers ways of impacting on learning which are not possible with conventional methods. Teachers use software to present information visually, dynamically and interactively, so that children understand concepts more quickly. For example, graphics work links in closely with work in art, and work using databases supports work in numeracy, while the Internet proves very useful for research in humanities and science subjects. ICT enables children to present their information and conclusions in the most appropriate way.

ICT is a major contributor to the teaching of literacy. Children's reading development is supported through talking stories and access to a variety of texts available from the Internet. As the children develop mouse and keyboard skills, they learn how to edit and revise text on a computer. They have the opportunity to develop their writing skills by communicating with people via email. They also learn how to improve the presentation of their work by using desktop publishing software. There is in addition a variety of software and online resources which targets specific reading, grammar and spelling skills. They learn how to create short video sequences, with tablets, cameras and movie editing software.

Children use ICT in maths to collect data, make predictions, analyse results, and present information graphically. Coding opportunities allow pupils to explore and apply their mathematical skills. A number of software programmes support the teaching of maths across the school. The children also use maths programmes independently that are suited to their ability and stage.

Software is used to animate and model scientific concepts, and to allow children to investigate processes which it would be impracticable to do directly in the classroom. Data loggers are used to assist in the collection of data and in producing tables and graphs.

The senior leadership team and the Computing subject leader are responsible for monitoring the computing and ICT planning, teaching and learning across the school.

Safety / Security

Children can use the internet, LGFL's system will block unsuitable sites. The adults in the lesson are responsible for ensuring children do not access anything inappropriate. Any concerns should be reported to the E-safety co-ordinator.

(Please also refer to the school's E-Safety Policy)

All school equipment is marked and should be logged in and out of the ICT suite / Science cupboard.

Equipment not being used needs to be securely stored in the curriculum suite.

Lap-top and i-pad trolleys need to be locked after use, with the computers connected in order to re-charge.

Assessment

Teachers will assess children's work in computing by making informal judgements during lessons. On completion of a piece of work, the teacher assesses the work, and uses this assessment to plan for future learning. Written or verbal feedback is given to the child to help guide his/her progress. Older children are encouraged to make judgements about how they can improve their own work.