

ICT Policy

Introduction

The use of information and communication technology is an integral part of the national curriculum and is a key skill for everyday life. Computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information.

At Willow Park School we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively. The purpose of this policy is to state how the school intends to make this provision.

Aims

• Provide a relevant, challenging and enjoyable curriculum for IT and computing for all pupils.

• Meet the requirements of the national curriculum programmes of study for IT and computing.

 • Use IT and computing as a tool to enhance learning throughout the curriculum.

• To respond to new developments in technology.

• To equip pupils with the confidence and capability to use IT and computing throughout their later life.

• To enhance learning in other areas of the curriculum using IT and computing.

• To develop the understanding of how to use IT and computing safely and responsibly.

The national curriculum for computing aims to ensure that all pupils:

• Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication

• Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems

• Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.

• Are responsible, competent, confident and creative users of information and communication technology.

Rationale

The school believes that IT and computing:

 • Gives pupils immediate access to a rich source of materials.

• Can present information in new ways, which help pupils understand access and use it more readily.

• Can motivate and enthuse pupils.

• Can help pupils to focus and concentrate.

 • Offers potential for effective group working.

• Has the flexibility to meet the individual needs and abilities of each pupil.

Objectives

Early years

It is important in the foundation stage to give children a broad, play-based experience of IT in a range of contexts, including outdoor play. IT is not just about computers. Early years develop fine motor, coordination and language skills through opportunities to ‘paint’ on the whiteboard or programme a toy. Recording devices are also an effective tool for children to develop their communication skills.

Key Stage 1

By the end of key stage 1 pupils should be taught to:

• 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

• Use logical reasoning to predict and computing the behaviour of 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

By the end of key stage 2 pupils should be taught to:

• Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

• 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 world-wide 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.

Resources and Access

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible pc system by investing in resources that will effectively deliver the strands of the national curriculum and support the use of IT and computing across the school. Teachers are required to fill out the faults on a general report from with any faults as soon as they are noticed.

Children at Willow Park School will not have access to computing devices without adult supervision. Computing will feature throughout the curriculum in all areas. We believe that all children have the right to access IT and computing. In order to ensure that children with special educational needs achieve to the best of their ability. We teach IT and computing to all children, whatever their ability. IT and computing forms part of the national curriculum to provide a broad and balanced education for all children. Through the teaching of IT and computing 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. Where appropriate IT and computing can be used to support SEN children on a one to one basis where children receive additional support.

All pupils have equal access to IT and computing and all staff members follow the equal opportunities policy. Resources for SEN children and gifted & talented will be made available to support and challenge appropriately.

The role of the co-ordinator

• To offer help and support to all members of staff (including teaching assistants) in their teaching, planning and assessment of computing.

• To maintain resources and advise staff on the use of materials, equipment and books.

• To monitor classroom teaching or planning following the schools rolling programme of monitoring.

• To lead staff training on new initiatives.

• To have a passion for computing and encourage staff to share this enthusiasm.

• To keep parents informed on the implementation of IT in the school.

• To liaise with all members of staff on how to reach and improve on agreed targets.

 • To help staff use assessment to inform future planning.

The Role of the IT Manager

• Maintain and manage the network.

• Monitor and maintain licenses including anti-virus.

• Support class teachers in IT delivery.

• Lead training for staff.

• Support the IT coordinator in developing new IT resources and strategies.

• Manage the school website.

• Ensure the smooth day to day running of the school WIFI and network.

• Ensure technologies are up to date and well maintained.

The role of the class teacher

Individual teachers will be responsible for ensuring that pupils in their classes have opportunities for learning IT and computing skills and using IT and computing across the curriculum Class teachers will:

• plan and deliver the requirements for IT to the best of their ability. At Willow Park School we set high expectations for our pupils. The class teacher ensures success by creating effective learning environments.

• follow the Computing scheme for year group; adapt where possible to suit the needs of all pupils

• provide equality of opportunity through teaching approaches

• use effective assessment tools to check pupils’ understanding

• set suitable targets for learning.

• provide a stimulating and engaging learning environment to motivate pupils The class teacher’s role is a vital role in the development of IT throughout the school and will ensure continued progression in learning and understanding.

Staff training

The IT and computing coordinator will assess and address staff training needs as part of the annual development plan process or in response to individual needs and requests throughout the year. Individual teachers should attempt to continually develop their own skills and knowledge, identify their own needs and notify the coordinator. Teachers will be encouraged to use IT and computing to produce plans, reports, communications and teaching resources.

Health and Safety (see also Health and Safety Policy)

The school is aware of the health and safety issues involved in children’s use of IT and computing. All fixed electrical appliances in school are tested and all portable electrical equipment in school is tested every twelve months.

It is advised that staff should not bring their own electrical equipment in to school but if this is necessary, then the equipment must be pat tested before being used in school. This also applies to any equipment brought into school by, for example, people running workshops, activities, etc. and it is the responsibility of the member of staff organising the workshop, etc. to advise those people. All staff should visually check electrical equipment before they use it and take any damaged equipment out of use.

Damaged equipment should then be reported to the IT Technician who will arrange for repair or disposal.

• Children should not put plugs into sockets or switch the sockets on.

• Trailing leads should be made safe behind the equipment

• Liquids must not be taken near the computers

• Magnets must be kept away from all equipment

• E-safety guidelines will be set out in the E-Safety Policy.

Security

The School’s IT manager will be responsible for regularly updating anti-virus software. Use of IT and computing will be in line with the school’s ‘acceptable use policy’. All staff, volunteers and children must sign a copy of the schools Acceptable Use Policy (AUP). Parents will also be made aware of the AUP. All pupils and parents will be aware of the school rules for responsible use of IT and computing and the internet and will understand the consequence of any misuse.

Cross Curricular Links At Willow Park school, we are all aware that IT and computing capability should be achieved through core and foundation subjects. Where appropriate, IT and computing should be incorporated into schemes of work for all subjects. IT and computing should be used to support learning in other subjects as well as develop IT and computing skills.

Parental Involvement

Parents are encouraged to support the implementation of IT and computing where possible by encouraging use of IT and computing skills at home. They will be made aware of e-safety and encouraged to promote this at home.

Computing Curriculum Statement Intent – What we are trying to achieve?

In line with the 2014 National Curriculum for Computing, our aim is to provide high-quality computing education which equips children with the skills, knowledge, computational thinking for an everchanging digital world.

• By the time they leave Willow Park School, children will have gained key knowledge in both concepts and skills in the three main areas of the computing curriculum: computer science (programming and understanding how digital systems work), information technology (using computer systems to store, retrieve and send information) and digital literacy (evaluating digital content and using technology safely and respectfully).

• E-safety is at the heart of all computing lessons and children will be explicitly taught how to stay safe online and when using all kinds of technology.

• The objectives within each strand support the development of learning across the key stages, ensuring a solid grounding for future learning and beyond. These strands are revisited repeatedly through a range of themes during children’s time in school to ensure the learning is embedded and skills are successfully developed.

• Our intention is that Computing also supports children’s creativity and cross-curricular learning to engage children and enrich their experiences in school.

Supporting the learning

Formative and summative assessment tools are used to gauge understanding, application of skills and vitally, next steps for learning.

Employing cross-curricular links motivates pupils and supports them to make connections and remember the steps they have been taught.

.Teachers are trained regularly in latest technologies and relevant E-safety information. Ensuring that teachers are happy and confident in delivering all areas of curriculum and upskill where needed. Parents are regularly updated about the Computing curriculum and E-safety information via the school communications and events for parents run by the school.

Impact – What is the impact of our curriculum on the students?

• Our children are confident and independent learners, who are able to use a wide range of hardware and software.

• Pupils take online safety very seriously, they know how to keep themselves safe and respect others’ privacy.

• Our approach to the creative curriculum results in a fun, engaging, and high-quality computing education

• Pupils show an eagerness to learn, an increasing technical ability and creative flair across a range of digital tasks. They are continually recapping and building on concepts and skills learned which enables them to consolidate learning.

• Pupils can use technology to help them learn in a range of contexts and can display their learning using a wide range of digital formats.

. • Our children will become more independent throughout their school-life and develop key life skills such as problem-solving, logical thinking and self-evaluation will become second nature.