



Introduction

The use of computers and computer systems is an integral part of the National Curriculum and knowing how they work is a key life skill. In an increasingly digital world there now exists a wealth of software, tools and technologies that can be used to communicate, collaborate, express ideas and create digital content. At Cavendish Close Infant and Nursery School we recognise that pupils are entitled to a broad and balanced computing education with a structured, progressive, approach to learning how computer systems work, the use of IT and the skills necessary to become digitally literate and participate fully in the modern world. The purpose of this policy is to state how the school makes this provision.

Aims

The school's aims are to:

- Provide a broad, balanced, challenging and enjoyable curriculum for all pupils.
- Develop pupil's computational thinking skills that will benefit them throughout their lives.
- Meet the requirements of the Development Matters Curriculum and the National Curriculum programme of study for computing at Key Stage 1.
- To respond to new developments in technology.
- To equip pupils with the confidence and skills to use digital tools and technologies throughout their lives.
- To enhance and enrich learning in other areas of the curriculum using IT and computing.
- To develop the understanding of how to use computers and digital tools safely and responsibly.

Rationale

The school believes that IT, computer science and digital literacy:

- are essential life skills necessary to fully participate in the modern digital world.
- allows children to become creators of digital content rather than simply consumers of it.
- provides access to a rich and varied source of information and content.

- communicates and presents information in new ways, which helps pupils understand, access and use it more readily.
- can motivate and enthuse pupils.
- offers and promotes opportunities for communication and collaboration through group working both inside and outside of school.
- 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 and computing in a range of contexts, including off-computing and outdoor play.

Computing is not just about computers. Early years learning environments should feature IT scenarios based on experience of the real world, such as role play. Children gain confidence, control and language skills through opportunities such as ‘programming’ each other using directional language to find toys/objects, creating artwork using digital drawing tools and controlling programmable toys.

Outdoor exploration is an important aspect and using digital recording devices such as video recorders, cameras and microphones can support children in developing communication skills. This is particularly beneficial for children who have English as an additional language.

By the end of Key Stage 1 pupils should be taught to:

- understand what algorithms are, how they are implemented as programmes on digital devices, and that programmes execute by following 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.

Resources and Access

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards consistent, compatible computer systems by investing in resources that will effectively deliver the objectives of the National Curriculum and support the use of IT, computer science and digital literacy across the school. Teachers are required to inform the computing subject leader of any faults as soon as they are noticed and are required to log them in the office. Resources if not classroom based are located in the mobile iPad and laptop trollies. A service level

agreement with Derby City Council is currently in place to help support the subject leader to fulfil this role both in hardware and software. Computing network infrastructure and equipment has been sited so that:

- Every classroom from Nursery to Year 2 has 2 computers connected to the school network and an interactive whiteboard with sound, DVD and video facilities.
- There is an iPad Sync & Charge cabinet in school containing 20 iPads with 20 USB ports.
- There is a mobile trolley in the annex containing 12 laptops.
- There is a mobile trolley in the main building containing 8 laptops.
- Internet access is available in all classrooms.
- Pupils may use IT and computing independently, in pairs, alongside a TA or in a group with a teacher.
- The school has a computing technician who is in school twice a week.

Planning

Science will be taught in a thematic creative curriculum approach to enrich the requirements of the Early Years Curriculum and the National Curriculum. Science weeks will take place twice a year focussed on developing the children's observation and prediction skills. Planning will be moderated for continuity, progression and coverage by the science co-ordinator. Wherever possible, learning in science will be enhanced by outside visitors to demonstrate scientific phenomena or to provide links to the wider world. The emphasis will be on hands on learning wherever possible. Links to the literacy and numeracy curriculum will be made to develop learning in those areas.

Assessment & Recording

This will be done in line with whole school procedures. Teachers regularly assess through observations and evidence. Teacher assessments are recorded informally using objective boards and post-it notes and annotations to recorded work. These assessments can also be made by Teaching Assistants.

Monitoring and Evaluation

The subject leader is responsible for monitoring the standard of the children's work and the quality in teaching in line with the schools monitoring cycle. This may be through lesson observations, pupil discussion and evaluating pupil's work.

We allocate time for the vital task of reviewing samples of children's work and for visiting classes to observe teaching the subject.

Pupils with Special Educational Needs and Disabilities (SEND)

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, it may be necessary to adapt the delivery of the computing curriculum for some pupils.

We teach IT and computing to all children, whatever their ability. Computing forms part of the National Curriculum to provide a broad and balanced education for all children. Through the teaching of computing we provide opportunities that enable all pupils to make progress. We do this by setting suitable challenges and responding to each child's individual needs. Where appropriate IT can be used to support SEN children on a one to one basis where children receive additional support.

Equal Opportunities

We will ensure that all children are provided with the same learning opportunities regardless of social class, gender, culture, race, and disability or learning difficulties. As a result, we hope to enable all children to develop positive attitudes towards others. All pupils have equal access to computing and all staff members follow the equal opportunities policy. Resources for SEN children and gifted and talented will be made available to support and challenge.

The Role of the Subject Leader

There is a computing subject leader who is responsible for the implementation of computing policy across the school. Their role is to:

- offer help and support to all members of staff (including teaching assistants) in their teaching, planning and assessment of computing.
- provide colleagues opportunities to observe good practice in the teaching of computing.
- maintain resources and advise staff on the use of digital tools, technologies and resources.
- monitor classroom teaching or planning following the schools monitoring procedures.
- monitor the children's progression in computing.
- keep up-to-date with new technological developments and communicate information and developments with colleagues.
- lead staff training on new initiatives.
- attend appropriate in-service training.
- have enthusiasm for computing and encourage staff to share this enthusiasm.
- keep parents and governors informed on the implementation of computing in the school.

The Role of the Class Teacher

Individual teachers will be responsible for ensuring that pupils in their classes have the opportunities for learning computing and using their knowledge, skills and understanding across the curriculum. The class teacher will:

- secure pupil motivation and engagement
- provide equality of opportunity using a range of teaching approaches
- use appropriate assessment techniques.

Health and Safety

The school is aware of the health and safety issues involved in the children's use of IT and computing. All affixed electrical appliances in school are tested by a Local Authority contractor every five years and all portable electrical equipment in school is tested by an external contractor every twelve months. It is advised that staff should not bring their own electrical equipment into school but, if this is necessary, equipment must be PAT tested before used in school. This also applies to any equipment brought into school by, for example, visitors 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 a computer technician, bursar or head teacher who will arrange for repair or disposal.

In addition:

- 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
- drum extension leads should be fully unwound before and during use
- safety guidelines in relation to IWBs will be displayed in the classrooms
- e-safety guidelines will be set out in the e-safety policy and Acceptable Use Policy.

Security

We take security very seriously. As such:

- the computing technician will be responsible for regularly up-dating 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 AUP.
- parents will be made aware of the 'acceptable use policy' at school entry.
- all pupils and parents will be made aware of the school rules for responsible use of IT and computing and the internet.

Cross Curricular Links

As a staff we are all aware that IT and computing skills should be developed through core and foundation subjects. Where appropriate, IT and computing should be incorporated into schemes of work. IT should be used to support learning in other subjects as well as developing computing knowledge, skills and understanding. Our school provides pupils with opportunities to enrich and deepen learning using cross curricular links which embeds computing in English, Maths, Science, Geography and History.

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 for pleasure. Parents are made aware of issues surrounding e-safety and are encouraged to promote this at home.

This policy will be reviewed November 2018.

Policy Change History Sheet

Policy title: Computing		
This policy was rewritten November 2016		
Review Date	Section	Summary of change