

GREAT CHESTERFORD C OF E PRIMARY ACADEMY



Two are better off than one, because together they can work more effectively.
Ecclesiastes 4:9

Policy for Computing

Approved by the Full Governing Body

At Great Chesterford C. of E. Primary Academy, we aim to provide the best possible education for each child within the context of a caring Christian community. Our school values underpin all aspects of school life, including behaviour and relationships within our school. Our school values are: God's Guidance, Respect One Another, Excellent Behaviour, Aiming High and Tremendous Teamwork. Our Golden Rule is to 'treat others as you would like to be treated'.

Our curriculum promotes the spiritual, cultural, intellectual, moral, mental physical, health and social well-being of each child. We strive to provide a high standard of education for all children, irrespective of gender, culture, ability or aptitude. Computing is taught as part of a broad and balanced curriculum, which will enable each and every child to develop confidently to the very best of their ability.

Purpose

Computing and ICT (Information and Communications Technology) play a vital role in our lives, particularly in current times where technologies are constantly changing and evolving. 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 and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. 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 and Objectives

Our aims for the computing curriculum in school covers three main aspects: Computer Science, Digital Literacy and Information Technology.

Computer Science

- To enable children to become confident coders.
- To create opportunities for collaborative and independent learning.
- To develop children's understanding of technology and how it is constantly evolving.

Digital Literacy

- To enable a safe computing environment through appropriate computing behaviours.
- To allow children to explore a range of digital devices.

Information Technology

- To develop ICT as a cross-curricular tool for learning and progression.
- To promote learning through the development of thinking skills.
- To enable children to understand and appreciate their place in the modern world.

Teaching and Learning

Computing skills are important because their use is widespread in the modern technological world. Computing skills are recognised as cross-curricular within the National Curriculum and their use is called for or assumed in all subjects to support and enrich pupils' learning. It is also a knowledge and skill area in its own right. As in other areas of the curriculum, we incorporate the requirements and recommendations of the National Curriculum into our planning and assessment.

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. Pupils will have the opportunity to work individually, in pairs and in small groups, and will experience the frequent use of ICT in their own classrooms. Pupils will become increasingly independent in their use of ICT and the choice of software required for any given curriculum activity. This aim should be kept in mind from the earliest contacts pupils have with computers, by informing them clearly why they are using a computer for a particular activity.

Lessons are differentiated to meet the range of needs in each class. A wide range of teaching and learning styles are employed to ensure all children are sufficiently challenged. Different outcomes may be expected depending on the ability and needs of the individual child.

Curriculum Planning

The school follows the National Curriculum for Computing as the basis for its curriculum planning. The long-term plan maps the discrete Computing topics that some classes will teach. 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 give details of each unit of work for each term. They identify the key learning objectives which will be covered in that particular unit of work. The computing subject leader is responsible for keeping and reviewing these plans. The class teachers are responsible for writing the medium-term plans with the Computing component of each lesson. 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 school.

Across Key Stages 1 and 2, our children will use technology to:

- Learn programming
- Develop computation thinking
- Develop computing creativity
- Investigate how computer networks and the internet work
- Communicate and collaborate
- Support productivity.

Early Years

The children in our Reception class follow the 'Early Years Foundation Stage curriculum. Although Computing is not a discrete subject at this age, it forms part of the Understanding of the World area. We believe it is important in the Foundation Stage to give children a broad, play-based experience of ICT in a range of contexts, including outdoor play. Computing is not just about computers. Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in role play to help them gain confidence, control and language skills. Recording devices can support children to develop their communication skills. They will use apps to support their learning across the curriculum as well as iPads to record their achievements through videos or photographs. Children in the Early Years will also have opportunity to begin to explore simple programming through the introduction of programmable toys.

Organisation

Computing and ICT skills are taught through both discrete subject lessons as well as through cross-curricular on a weekly basis. Samples of computing work is kept in a class book. Children should be able to save electronic copies of their work in their own folder on the school network. Paper copies of work may be included in pupils' work folders or subject books.

Equality of Opportunity

All pupils should develop positive attitudes towards computing and ICT. They should develop an understanding of the potential of technology and show confidence and enjoyment in its use. It is our policy to ensure that all children, regardless of race, class or gender, should have the opportunity to develop computing and ICT capability.

We aim to respond to children's needs and overcome potential barriers for individuals and groups of children by:

- Ensuring that all children follow the scheme of learning for Computing.
- Providing curriculum materials and programmes, which are in no way class, gender or racially prejudice or biased.
- Providing opportunities for our children who do not have access at home to use the school computers/Internet to develop independent learning.
- Providing suitable challenges for more able children, as well as support for those who have emerging needs.
- Responding to the diversity of children's social, cultural and ethnographical backgrounds.
- Overcoming barriers to learning through the use of assessment and additional support.

The role of the ICT Coordinator

The Computing subject co-ordinator oversees the implementation and delivery of computing and ICT teaching. They are responsible for reviewing and updating the School's policies relating to Computing. The Computing coordinator will also offer advice on and demonstrate new peripherals as well as appropriate software when requested or appropriate; liaise with other curriculum coordinators to ensure effective use of technology in their areas; lead or organise staff training; and keep abreast of new software. The subject co-ordinator is also responsible for ordering any resources required (in liaison with the Headteacher and School Business Manager) and for monitoring pupil progress in the subject.

The role of others in the school

The classroom teacher is responsible for planning and teaching the appropriate Computing and ICT activities appropriate for the age and ability of the children in their class. They are also responsible for the delivery of the policy and the care and security of the software and hardware in their classroom as well as any other resources used.

Subject co-ordinators are responsible for liaising with the computing co-ordinator to ensure effective use of technology in their areas.

The school is corporately responsible for ensuring that copyright regulations and GDPR requirements are not infringed when working with technology.

Recording and assessment

Pupils' work in Computing is assessed and recorded in line with the school policy on assessment. MME sheets for Computing should be completed each term by the class teachers and shared with the Computing Coordinator. Whole school trends and subject improvement points will be drawn up by the coordinator after analysing pupils' progress.

Each class from Years 1 to 6 will record their progression in Computing skills in a class book. This may include examples of the finished outcomes as well as reflections from pupils on what they have learnt and screen shots of the programs used.

Resources

The Computing coordinator will arrange for the care and security of central ICT resources including master copies of all software in use on the school's computers, master copies of documentation and associated software for control and measurement activities. Class

teachers are responsible for the safe storage and care of iPads and laptops which are housed in their classrooms. Any technical issues should be logged in the ICT technicians book in the office.

Responsibility for other ICT equipment such as video and sound recorders, microphones, piano keyboards, televisions and video recorders (with the exception of any permanently attached to the Interactive Whiteboard), electronic toys etc. lie with the purchasing coordinator. The ICT Coordinator will offer advice on new equipment and technologies and support their introduction into classrooms use.

Laptops

Laptops bought to support the curriculum are for the use of pupils. Staff may be allocated a school laptop for work use at home. These computers will be maintained by the school but staff should take reasonable care in their handling. School laptops used at home should not be used for any activity in contravention of the school's acceptable internet use policy, such as illegal file sharing.

The school will pay for and install anti-virus software but any internet connections for use at home are the responsibility of the staff member. Staff should carry out any updates when requested by the school or hand the laptop into the school for updating when requested. Staff are encouraged to take their assigned laptops home in order to prepare resources and develop personal competence and confidence in the use of ICT. The school's insurance policy will not cover any equipment while it is at the teacher's home or in the teacher's car, even if in use on school business.

E-safety

Internet access is planned to enrich and extend learning activities. The school has acknowledged the need to ensure that all pupils are responsible and safe users of the Internet and other communication technologies. We aim to provide a curriculum which includes education on how to stay safe online and when using other technology. We also offer a safe online environment through filtered internet access. Teachers should teach the content from the 'Education for a Connected World' specific to their year group. Please refer to the school E-safety, Acceptable Usage, RSE and Information Security policies for further details.

Health and safety

ICT equipment should be treated with the same care as any other electrical equipment.

Pupils should be encouraged from the earliest age to consider and adjust their posture when using the keyboard in order to avoid strain to the arms and back.

Staff should consult the SENCO with regard to any implications of the use of ICT for known medical conditions e.g epilepsy, visual impairment.

Staff using digital projectors should be made aware of the safety guidelines and follow the safety guidelines in them.

Monitoring

The implementation of this policy will be monitored by the Head teacher, Co-ordinator and Governing body.

Evaluation, Review and Revision

This policy was written in November 2019. It was drawn up in consultation with, and reflects the consensus of, the Headteacher, members of the teaching staff, members of the Governing Body and the children. It will be reviewed in three years' time or before, if it is felt appropriate.

Signed:	Date: November 2019
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Headteacher	
Signed:	Date: November 2019
On behave of the Governing Body	
Next Review Date	November 2022