

Kings Road CPS



Computing Policy

Author	Ann Zaidi
Date	June 2020

Excellence, in every area without compromise

Computing and ICT Policy

'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.'

Computing programme of study, DfE, 2013

At Kings Road we believe that Computing is very important and plays a big part in the real world we are in. It is an integral part of preparing Children to live in a world where technology is rapidly changing and growing. We feel that it is important that children are able to participate in the creation of these new tools to fully understand and grasp the relevance of and the possibilities of emerging technologies thus preparing them for the world of work.

Our Vision

Our Vision is for all Teachers and children in our school to become confident users of ICT so that they can develop the skills, knowledge and understanding which enables them to use the appropriate resources effectively as powerful tools for teaching and learning, for example Beebots, Ipads, tablets etc.

Purpose

This policy reflects the values and philosophy in relation to the teaching and learning of and with ICT. It sets out a framework within which teaching and non-teaching staff can operate and give guidance on planning, teaching and assessment. This

policy should be read in conjunction with the scheme of work for computing that sets out in detail what children in different year groups will be taught.

This document is intended for:

- All teaching staff
- All staff with classroom responsibilities
- School Governors
- Parents
- Inspection Teams

Copies of this policy are kept centrally and are available from the Head Teacher and the Subject Coordinator.

The Computing in the National Curriculum expectations split the teaching and learning of Computing into three strands which are Computer Science, Digital Literacy and Information Technology. In relation to this it is important that children recognise and understand the difference between the three strands. Computing lessons taught from Reception to Year 6 will consist of practical lessons, discussions and understanding of computing and technology. Classes will be taught how computing can facilitate or enhance work in other curriculum areas.

Aims

Our aim is to provide children with opportunities to develop their Computing capabilities in all areas specified by the curriculum and to ensure ICT is used, when appropriate, to improve access to learning for pupils with a diverse range of individual needs, including those with SEN and disabilities.

Computer Science

- To enable children to become autonomous, independent users of computing, gaining confidence and enjoyment while completing activities on a range of devices.
- To develop whole school approach to computing ensuring continuity and progression of the National Curriculum.

- To enable children to become confident coders on different devices.
- To develop children's understanding of the 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.

British Values within Computing

Children at Kings Road Primary School demonstrate the following British Values whilst learning about Computing by :

Democracy :

- Listening to everyone's ideas in orders to form a majority.
- Working as part of a team and collaborating to use computing devices effectively.

Rule of Law :

- Developing knowledge of lawful computing behaviours.
- Demonstrating respect for computing laws.

Individual Liberty :

- Taking responsibility for our own computing behaviours.
- Exercising rights and personal freedoms safely through knowledge of E-safety.

Respect and Tolerance :

- Showing respect for other cultures when undertaking research using computing devices.
- Providing opportunities for pupils of all backgrounds to achieve in computing.

Objectives

In order to fulfil and develop the above aims and the computing and ICT capability and understanding it is necessary for us to ensure :

- Computing through all three stands taught within the classroom.
- A continuity of experience throughout the school both within and among year groups.
- The systematic progression through Key Stages 1 & 2.
- Ensure that the National Curriculum programmes of study and their associated strands, level descriptions and attainment targets are given appropriate coverage- mainly through the use of ICompute.
- That all children have access to a range of ICT resources.
- That computing experiences are focused to enhance learning.
- That cross-curricular links are exploited where appropriate.
- That children's experience are monitored and evaluated.
- That resources are used to their full extent.
- That resources and equipment are kept up to date as much as possible.
- That staff skills and knowledge are kept up to date.
- Access to computers and Ipads within class or in designated communal areas.
- Experience of a variety of well planned, structured and progressive activities
- Opportunities for children to recognise the value of computing and ICT in their everyday lives and their future working life as active participants in a digital world.

Equal Opportunities, Inclusion, Special Educational Needs and Disabilities (SEND)

It is our policy to ensure that all children have equal opportunity to develop computing and ICT capability by :

- Ensuring that all children follow the Scheme of ICompute.
- Keeping a record of children's work to ensure equal access and fairness of distribution of ICT resources.
- Providing curriculum materials and software which are in no way class, gender or racially prejudice or biased.
- Monitoring the level of access to computers in the home environment to ensure no pupils are unduly disadvantaged.
- 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.
- Communication or language difficulties by developing computing skills through the use of all their individual senses and strengths.

Assessment

Computing is assessed both formatively and summatively. Formative assessment occurs on a lesson by lesson basis based on the lesson learning objective and the outcomes in the scheme of work. These are conducted informally by the class teacher and are used to inform future planning.

Activities are planned at the end of a unit of work which enable summative assessments to take place where children's ICT capability is assessed. The work is accompanied by a description of the context in which pupils completed the learning objective task set and how it was undertaken. As well as this children are observed during their ICT lesson.

Health & Safety

We will operate all ICT equipment in compliance with Health & Safety requirements. Children will also be made aware of the correct way to sit when using the computer and the need to take regular breaks if they are to spend any length of time on computers. Computer Room Rules are also on display within the ICT room for reference along with specific rules for the use of Internet and E-mail. The school also has a 'Responsible Use of The Internet Policy' document. The Health and Safety at Work Act (1 January 1993), European Directive deals with requirements for computer positioning and quality of screen. This directive is followed for all administration staff. Whilst this legislation only applies to people at work we seek to provide conditions for all children which meet these requirements. The school has an alarm system installed throughout. Each computer system has individual security against access to the management system. The files and network system are backed up regularly. The virus checker is updated regularly. We ensure that children have a safe environment in which to learn. We ensure effective filters are in place to safeguard children. As such, we will ensure :

- Damaged equipment is reported to the school business manager who will arrange for repair or disposal.
- E-safety is discretely taught each term by class teachers, through assemblies delivered.
- There is also a parent presentation on our school website explaining and advising how to keep children safe online.
- For Safer Internet Day Mrs Zaidi, Mr Allcock and our school Digital leaders present an assembly for children as well as run an Online Safety Workshop for each class.
- Children learn about rights and responsibilities when using the Internet.

Security, Legislation, Copyright and Data Protection

All software uploaded on the School computer systems must have been agreed with the designated person in the school. All our software is used in strict accordance with the licence agreement. We don't allow personal software to be uploaded onto the

school computers, laptops or Ipads. We ensure that the school community is kept safe by ensuring that :

- The school ICT Technician is responsible for regularly updating the anti-virus software.
- The use of ICT and computing will be in line with the school's Acceptable Use Policy (AUP).
- All staff must sign a copy of the Acceptable Use Policy.
- Parents are made aware of the AUP at school entry.
- All children are aware of the school rules for responsible use on login to the school network and will understand the consequence of any misuse.
- Reminders for safe and responsible use of ICT and computing and the internet will be displayed in all areas.

Curriculum Development & Organisation

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

- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- 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,

ICompute is to be used to form the medium term plan and short term plans for computing on which are: Learning objectives, activities (differentiated), vocabulary and assessment. Adaptations are made to ensure the plan is progressive in developing pupil capability. These are used as working documents to identify time markers, additional resource needs and to indicate whether optional activities have been undertaken. Each class is allocated a time in the ICT suite to help aid follow this scheme of work. Each class is also allocated additional time to apply the use of computing to other subject areas.

We have class sets of Ipad's and Netbooks as well as a computer Suite which comprises of 36 computers to support the development of computing and ICT capability by enabling independent learning. Interactive whiteboards and visualizers are positioned in all classrooms and are used as part of teaching and learning resource across the curriculum.

Teaching and Learning

Teacher's planning is differentiated to meet the range of needs in any class including those children who may need extra support, those who are in line with average expectations and those working above average expectations for children of their age. A wide range of styles are employed to ensure all children are sufficiently challenged :

- Children may be required to work individually, in pairs or in small groups according to the nature or activity of the task.
- Different pace of working
- Different groupings of children - groupings may be based on ability either same ability or mixed ability.
- Different levels of input and support
- Different outcomes expected

The computing coordinator will review teachers' ICT plans to ensure a range of teaching styles are employed to cater for all needs and promote the successful development of computing.

Internet Safety

Internet access is planned help learning activities across the curriculum. We teach children the safety of going online and being aware whilst online whether inside of school or outside. We have a separate Internet Access Policy.

Monitoring

Monitoring computing will enable the coordinator to gain a good overview of the teaching and learning throughout the school. This will assist the school in the self-evaluation process identifying areas of strength as well as those for development. In monitoring of the quality of computing teaching and learning the coordinator will:

- Scrutinise plans to ensure full coverage of the computing curriculum requirements
- Analyse children's work
- Observe computing teaching and learning in the classroom
- Hold discussions with teachers
- Analyse assessment data
- Examine plans to ensure full coverage of the computing and cross-curricular ICT requirements.

There is an annual review of this policy by the computing coordinator. A major review involving all staff will take place every three years.

After School Clubs

Computer and Code Club is ran throughout the Year.

Deployment of Computing/ICT Resources

ICT resources are deployed throughout the school to maximise access, to enhance teaching & learning and to raise attainment. To enable regular and whole class teaching of computing the school has an ICT suite which all classes in key stages 1 & 2 use for approximately 1 hour per week to develop their ICT skills. Children also have access to class sets of Ipads, tablet computers and laptops which are available

for staff to book out. All classrooms, including the ICT room, have interactive whiteboards available at all times. A consistent interface is provided on all machines to enable familiarity and continuity with generic 'toolkit' software licensed and available on all curriculum computers in school. A curriculum 'peer to peer' network enables internet access on all machines as well as storage and access to shared files.

Inclusion

We recognise computing offers particular opportunities for pupils with special educational needs and gifted and/or talented children and /or children with English as an additional language for example. Computing can cater for the variety of learning styles which a class of children may possess. Using computing can :

- increase access to the curriculum
- raise levels of motivation and self esteem
- improve the accuracy and presentation of work
- address individual needs

We aim to maximise the use and benefits of ICT as one of many resources to enable all pupils to achieve their full potential. If the situation arises, the school will endeavour to provide appropriate resources to suit the specific needs of individual or groups of children.

Roles and Responsibilities

Senior Management

The overall responsibility for the use of ICT rests with the senior management of a school. The Head, in consultation with staff:

- determines the ways computing should support, enrich and extend the curriculum;
- decides the provision and allocation of resources ;
- decides ways in which developments can be assessed, and records maintained ;
- ensures that ICT is used in a way to achieve the aims and objectives of the school;

- Ensures that there is a computing policy, and identifies a computing co-ordinator.

Computing Coordinators

There is a designated computing Co-ordinator to oversee the planning and delivery of computing within the school. The coordinator will be responsible for

- raising standards in computing as a national curriculum subject
- facilitating the use of ICT across the curriculum in collaboration with all subject coordinators
- providing or organising training to keep staff skills and knowledge up to date
- advising colleagues about effective teaching strategies, managing equipment and purchasing resources
- Monitoring the delivery of the computing curriculum and reporting to the Head teacher on the current status of the subject.

The Subject Coordinator

There is a clear distinction between teaching and learning in computing and teaching and learning with computing. Subject coordinators should identify where ICT should be used in their subject schemes of work. This might involve the use of short dedicated programs that support specific learning objectives or involve children using a specific application which they have been taught how to use as part of their computing study and are applying those skills within the context of another curriculum subject. Subject coordinators work in partnership with the computing coordinator to ensure all National Curriculum statutory requirements are being met with regard to the use of ICT within curriculum subjects.

The Classroom Teacher

Even though whole school co-ordination and support is essential to the development of computing capability, it remains the responsibility of each teacher to plan and teach appropriate ICT activities and assist the co-ordinator in the monitoring and recording of pupil progress in computing.

Home School Links

Our school Website shows children's achievements, what they have been learning in the classroom and show cases various activities that have taken place within school.

There are a number of ways which we communicate with parents which are :

- Twitter - which is used to keep parents up to date and to share children's achievements in a more accessible way.
- Class Dojo - used to send parents information and letters
- Parent Hub- send parents/carers texts regarding information.

Statement

This Policy was formulated by Ann Zaidi, June 2020.

Review Date : June 2023.

Review Statement :

This policy is brought to the attention of Staff, Pupils and Parents in the Autumn term each year and is formally reviewed, along with the principles that underpin it, generally every three years.