

ALEXANDRA PARK JUNIOR SCHOOL

Computing Policy 2022/2023

Rational

At Alexandra Park Junior School we believe all children should have a high-quality computing education that equips pupils to use computational thinking and creativity to understand and change the world. Strong links will be made with mathematics, science, and design and technology. The core of computing will be computer science, in which pupils will be taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. We believe that it is equally important that children become confident users of technology, and that they are able to use technology safely and responsibly.

Objectives

1. To develop knowledge and understanding so that pupils are equipped to use information technology to create programs, systems and a range of content.
2. To ensure 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.
3. To ensure that pupils can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
4. To ensure that pupils can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
5. To enable pupils to evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
6. To ensure that pupils are responsible, competent, confident and creative users of information and communication technology.

Teaching and learning

Our computing curriculum will provide children with opportunities to develop key skills such as creativity, teamwork and logical thinking and reasoning.

Our curriculum will focus on the three programmes of study outlined in the National Curriculum.

Computer Science

Pupils will be taught to:

- Design, write and debug 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
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

Digital Literacy

Pupils will be taught to:

- 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
- Use technology safely, respectfully and responsibly; recognize acceptable/unacceptable behaviour; identify

a range of ways to report concerns about content and contact.

Information Technology

Pupils will be taught to:

- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

A scheme of work has been devised by Asma Rashid for each year group. Each year group will complete a half termly unit of work. The scheme allows each of the three programmes of study to be covered throughout the year. Each year group SOW also has certain Computing units with cross curricular links.

Each class is allocated time in the computing suite to complete their units of work. Additional time can also be booked if the class needs to use the computers in other subject areas. We also have a class set of Ipad, which can be used as and when suitable for computing work, or for work in other subject areas.

Management

The subject leader (Asma Rashid) will facilitate the use of Computing in school in the following ways:

- By updating the policy and scheme of work.
- By ordering and updating resources.
- By keeping staff up to date with any changes or new developments.
- By taking an overview of whole school planning to ensure that opportunities occur for pupils to develop Computing capability and that progression is taking place.
- By supporting staff in developing pupils' capability.
- By attending appropriate courses to update knowledge of current developments and by keeping links with local schools and sharing best practice.
- By contributing to the School Improvement Plan on an annual basis
- By making sure all staff understand the procedure for logging faults and the use of the Internet and email.
- By monitoring the curriculum.

Resources

Children have access to a well-equipped computing suite, with 30 computers. They also have access to a class set of iPads which can be booked out on Firstclass. Each class also has one desktop computer and an Ipad for the teacher and children to use as appropriate.

Inclusion

All pupils regardless of race or gender shall have the opportunity to develop computing capability. The school will promote equal opportunities for computer usage and fairness of distribution of computing resources. Children with a computer at home will be encouraged to use them for educational purposes, and parents will be offered advice about what is appropriate during Parent's Workshops throughout the year.

Groupings for computer usage should generally follow the same pattern as for all lessons. It is appropriate to match pairs of equal ability, rather than to have more able children partnered always guiding a less able child. This generally leads to passivity and dominance. However it is appropriate to plan to have peer tutors for some lessons, where the objectives also enable the more able user to learn by specifically teaching.

Positive images of computer use by people of both sexes will be promoted. The school recognises the advantages of the use of computers by children with special educational needs.

Assessment and Monitoring

Assessments are carried out termly and are recorded in Target Tracker. Evidence for making these judgments will be gathered through discussion and observation of the pupil during the lesson and by the child's recording of the activities, e.g. planning, designing, and photographing practical activities. Evidence will also be in the pupils user areas on the computer. Asma Rashid has access to these areas whenever evidence is needed. Evidence may also include print outs of pupil's work or evidence stored on line. Asma Rashid is responsible for assessing all the pupils along with the class teachers. Children are also given the opportunity to fully participate in the assessment process, through peer and self assessments. Steps to Success have also been introduced in Computing so that it is clear what pupils are expected to achieve in each lesson and so that they can be responsible for their own learning and can assess and challenge themselves. The learning line is used to reflect on learning.

Monitoring and evaluation of subject

Monitoring and evaluation will be carried out by the subject leader (Asma Rashid) and SLT member, in the following ways:

- Monitoring teachers' planning
- Reviewing resource provision
- Monitoring the standards of children's work via evidence scrutiny session
- Providing and evaluating termly action plans
- Attending appropriate INSET as necessary
- Collection and analysis of end of unit assessments
- Pupil voice

Health and Safety

Before being allowed to work in the computer suite all children are to be made aware of the arrangements if they hear the fire alarm.

Children will also be made aware of the correct way to sit when using a computer and the need to take regular breaks if they are to spend any length of time on a computer.

Computer room rules are on display within the computer room, with specific rules for E- safety.

The Health and Safety at Work Act (1st 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.

Computers and I pads are locked in classrooms with shutters down at night. 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 also updated regularly.

This policy has been approved by

Signed

Signed

Chair of Governors

Headteacher

Date

Date