

Continuing The Learning Journey Together

Computing Policy.

**Date: January 2019**

**Review: January 2020**

Social Media Policy



**Intr****oduction**



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 sound knowledge and understanding of ICT and Computing enables and prepares pupils to be active participants in a world where work, and other activities, are increasingly transformed by access to varied and developing technology. It is our duty as educators to ensure all children have access to an education in which such technologies are available and to ensure that skills are taught and practiced to a high standard in a variety of ways.

The National Curriculum for Computing reflects the developments that have taken place over recent years; shifting focus from children learning how to **use** computers, to becoming competent and confident analytical thinkers, computer programmers and understanding **how** technology works. The curriculum encompasses three main strands of Computing (C), Information and Communication Technology (ICT), and Digital Literacy (DL) which will be outlined in this policy.

This policy should be read in conjunction with the E-safety, Acceptable Usage and Social Media policies.

**Purpose**

This policy aims to reflect the academy values in relation to the learning and teaching of Computing, Information and Communication Technology (ICT) and Digital Literacy. It is intended to provide an overview of what we will do and act as a guide for teachers, learning support assistants, parents and carers and governors.

The purpose of the C and ICT policy at Park Hall is:

* To establish a framework for teaching and learning which meets the requirements of the Computing Curriculum 2014;
* To promote a good understanding of what C, ICT and DL are and how they will look at Park Hall;
* To establish clear expectations for staff and pupils;
* To promote continuity and coherence throughout school;
* To establish clear procedures and guidelines for staff to operate within.

**Aims and Objectives**

We aim for our curriculum to:

* Provide a whole school approach to C and ICT, ensuring continuity and progression;
* Provide children with opportunities to develop their computing capabilities in all areas specified by the National Curriculum Computing Programme of Study;
* Provide challenge and excitement for our pupils, both in C / ICT and through their use of technologies across the curriculum;
* Inspire children to be creative and innovative with new and emerging technologies.

We aim for members of staff to:

* Be confident users of new technologies to be able to use them effectively as powerful tools to support and enhance teaching and learning opportunities across the curriculum;
* Develop good subject knowledge in relation to C, ICT and DL so that they are able to deliver high quality lessons to enable pupils to be challenged and achieve highly;
* Use computing technologies, when appropriate, to improve access to learning for pupils with a diverse range of individual needs, including those with SEN and disabilities.
* Provide pupils with challenging, engaging and motivating lessons;
* Engage and develop creativity and cross-curricular use of technology in all subjects;
* Teach pupils the importance of and effective methods of e-safety; security, personal safety and confidentiality;

We aim for our children to:

* Become autonomous, independent users of computing technologies;
* Be confident users of new technologies and be able to experiment with them in different ways to communicate learning;
* Demonstrate effective practices, ensuring that they take responsibility for their on-line safety and model the academy values of respect, “Tweeting others the way we would like to be tweeted”.
* Be able to use logical thinking and reasoning to solve problems;
* Gain and apply new skills and knowledge in the areas set out in the POS;
* Understand how their C and ICT learning in school impacts on their future lives;

**The Computing Curriculum - C, ICT and DL**

The introduction of the Computing Curriculum focuses on three main areas:

• Computer Science / Computing (C) – The ability to understand how technologies work and how to be an effective author of them. The ability to apply logical reasoning and computational thinking to solve problems.

• Information and Communication Technologies (ICT) – The ability to be an effective and thoughtful user of technologies to store, present and communicate information.

• Digital Literacy (DL) - The ability to locate, organise, understand, evaluate, and analyse information using digital technology. It involves a working knowledge of current ‘high-technology’, and an understanding of how it can be used.

As described above, C and ICT are different, but complimentary subjects. It is also important to note that much of our C curriculum will be non-computer based. The focus in this area is computational thinking and logical reasoning to equip our children with the thinking skills they will need to solve computer based problems.

As described by Edsger Dijkstra –

*“We need to do away with the myth that computer science is about computers. Computer science is no more about computers than astronomy is about telescopes, biology is about microscopes or chemistry is about beakers and test tubes. Science is not about tools, it is about how we use them and what we find out when we do.”*

**Learning and Teaching**

We recognise that all classes have children with a wide range of computing abilities. This is especially true when some children have access to technology at home, while others do not. We provide suitable learning opportunities for all children by matching the challenge of the task to the ability and experience of the child.

**Computing Curriculum Planning**

Computing is a core subject in the National Curriculum. The school uses this as a basis for its curriculum planning. Curriculum planning ensures that learning and teaching is progressive and that children’s prior learning is built upon. We ensure that children of all abilities are challenged to ensure that all pupils make at least good progress.

Parents and carers are required to give signed authorisation before their child can use the Internet. Parents and carers are however, assured that their child’s use of the Internet at school is always supervised.

**Cross Curricular Learning**

The teaching of computing contributes to the learning and teaching in all curriculum areas. It also offers ways of impacting on learning which are not possible with conventional methods. Teachers use software to present information visually, dynamically and interactively, so that children understand concepts more quickly.

**Computing and Inclusion**

It is our policy that all children regardless of race, class or gender or ability have the same opportunities to develop their Computing and ICT capabilities, in line with our Equal Opportunities Policy.

**Assessment for Learning**

Teachers will assess children’s learning in computing by making informal judgements during lessons which inform future learning and teaching. Teachers use our Computing Assessment Tool to assess individual children’s attainment and progress. These are accessible to all children as they are stored in each child’s personalised learning journeys.

We also track pupil progress using DcPro.

**The Computing and E-Safety Leader** **Will**:

Oversee the planning, teaching and organisation of C and ICT / DL. The Computing and E-Safety Leader will be responsible for:

* Raising standards in C and ICT/ DL across the academy by:
  + Supporting others in planning, teaching and assessment;
  + Facilitating the use of ICT across the curriculum, in collaboration with other subject coordinators;
  + Ensuring staff are up to date with training to enable them to deliver the curriculum confidently and effectively.
  + Providing advice to staff in terms of resourcing, planning, using software and equipment, effective resources;
  + Managing school resources to ensure we have the technology to be able to deliver the new curriculum effectively;
  + Monitoring the planning and delivery of the new C curriculum and reporting to the Principal

**The Principal and Local Governing Body** **Will**:

Provide support for the Computing and E-Safety Leader to fulfil their role, as outlined above. They will provide support by:

* Ensuring teachers are able to deliver the new curriculum by having access to the appropriate training and resources necessary;
* Providing opportunities for the Computing Leader to work with staff to plan and deliver lessons for the new curriculum;
* Reviewing policies relating to C, E-safety and Information Security.

**The Class Teacher** **Will**:

* Follow the guidelines set out in the C, E-safety and Information Security policies.
* Plan effective C and ICT / DL lessons using the objectives from the National Curriculum;
* Ensure all objectives for their year group are planned for either through discrete or cross-curricular lessons;
* Provide many opportunities for C and ICT / DL skills to be applied by pupils in a variety of ways, using a wide range of technology and software;
* Ensure that E-Safety is incorporated into all Computing lessons;
* Plan lessons which will support and/or challenge pupils as appropriate;
* Ensure they have access to a range of necessary resources to be able to deliver the curriculum effectively. This includes liaising with the Computing Leader to ensure that resources are available, ensuring equipment is ready to be used, and returning equipment for others to use. Any breakages or faults must be reported by teaching staff to the Computing Leader.
* Support the Computing Leader in monitoring and assessment by completing the relevant assessments.
* Ensure support staff have access to planning and have the knowledge and skills to be able to support and challenge them in completing tasks.

**Support Staff** **Will**:

* Ensure they have the relevant planning necessary to support and challenge pupils;
* Ask for support from the class teacher and/or Computing Leader to ensure their training requirements are met.

**Resources and Access**

ICT resources are accessed and deployed in a variety of ways across the academy. This ensures that resources are effectively utilised and are easily accessible to enhance the delivery of an effective and powerful computing curriculum.

We are fortunate to have access to a wide range of appropriate, high quality resources, curriculum use of these resources is well planned and designed to support the development of ICT capability.

We use the skills and expertise provided by Evolve, an external company to provide high quality technical support. We ensure that our systems are upgraded with forensic software and filters to ensure that they remain secure. In order to keep our school computers virus-free, every PC and laptop, including teacher’s laptops have current and up-to-date anti-virus software installed on them. No software from home will be installed on school computers

To further safeguard all staff and children each member of staff and child has a unique username and password which is used to log onto the academy network. We have also purchased forensic software which monitors the usage and content accessed on all laptops and computers in school. This provides a regular detailed report to the Principal and Computing Leader of the activity of all users in school

**Continued Professional Development**

Across our academy, we have a wide range of staff with differing areas of skills and knowledge in terms of C and ICT / DL. There is an expectation that all staff with endeavour to keep up to date with new developments and requirements in this area. To support this, the Computing Leader, Principal and Governing Body will:

* Provide regular updates with regards to the curriculum;
* Identify key areas to develop staff knowledge and skills;
* Provide opportunities for staff continued professional development in areas identified and/or requested. This may be delivered by the Computing Leader or by Specialist Leaders in Education or external agencies;
* Identify areas of strength in knowledge and skills, and encourage members of staff to assist in training and supporting others, as well as leading by example and leading projects or specialism areas (E.g. programming, podcasting, blogging).

The coordination and planning of the computing curriculum are the responsibility of the subject leader, who also:

* supports colleagues in their teaching, by keeping staff informed of current developments in computing and by providing a strategic lead and direction for this subject;
* uses dedicated leadership time to review evidence of children’s work, and to observe computing lessons across the school.

**Monitoring and Evaluation**

In order to ensure the curriculum is being planned for and delivered effectively, the Computing Leader will monitor the following:

* The training requirements of staff as new concepts and technologies are introduced to the curriculum;
* The impact of training already undertaken;
* Planning and assessment formats – taking on board any suggestions from staff on how they could be amended or used more effectively;
* Planning for each year group to ensure it is pitched appropriately, challenging, engaging, uses a wide range of resources and meets the requirements of the new curriculum;
* Children’s work. This will be done in a variety of ways, including work scrutiny with commentary from the class teacher on how it was done; conversations with pupils; pupil skills audits;
* Computing teaching and learning by undertaking lesson observations.
* The impact of the Computing action plan and how this can be taken forward to further develop the subject;
* Academy resources to ensure staff and pupils have access to the appropriate and necessary equipment and software.

By monitoring the above areas, the Computing Leader, Principal and Governing Body will be able to identify any areas of strength and development. These will be used to inform the next action plan to ensure clear direction.

This policy was written in collaboration with the Computing and E-Safety Leader, Principal, Computing and E-Safety Governor and the Children’s Safeguarding Board.

This policy will be reviewed at least every two years.

**Signed:**

**Miss N. Dono, Mrs G Frost, Mr M Wootton and The Children’s Safeguarding Board.**