



Computing Policy

2022- 2023

Intent:

Computing is a central part of every aspect of our everyday lives. From the minute we wake up to our phone alarm clocks to when we go to sleep by using our smart technologies to switch of the lights. Some of us even have 'apps' on our phones tracking the quality of our sleep. It is increasingly becoming more integral in our day to day lives we have wearable technology in the shape of smart watches and glasses. Children are exposed to it from infancy and many are computer literate in some form when they enter formal schooling.

Computing is such a vast area. At Pentland Infant and Nursery School we understand the need for the children to have a good understanding of Digital Literacy, including using the Internet, to retrieve, process, analyse and store information along with modelling, measuring and controlling external events by electronic means. It gives children the opportunities to enhance and extend their learning across the curriculum and to gain confidence and the capability to use computers and technology in a range of contexts.

Computing in particular coding and programming can improve the learning opportunities for young people. We are aware that more and more of our lives are online, we want our children to be prepared for what the future may bring. We want our children to leave Pentland Infant and Nursery school with the skills to be able to create content and not just be passive consumers. Computing provides our children with the opportunity to learn to develop software and games.

Implementation:

Teaching and Learning

Computing is taught as a discrete subject following the Purple Mash Scheme of work. Assessment criteria is built into Medium Term planning. Support for staff, exploration of learning intentions and activities, issues of continuity and progression are discussed at key stage meetings. The Computing co-ordinator is available to offer guidance in these issues as well as technical support. The Headteacher and Computing co-ordinator ensure coverage and continuity between classes and key stages, monitor the long-term map and the delivery and assessment of short-term planning.

As children progress and develop, the demands of the activities and the sophistication of the software increases. Also, a broader range of applications is encountered. A variety of teaching strategies are employed to ensure Computing is an integral part of the learning environment. Children are encouraged to work individually, in pairs, in groups, or as a whole class, as appropriate.

In addition to the computing scheme of work, children encounter activities that allow them to become familiar with a range of technologies. Much of their work is in the discussion and exploration of effects, creating text and images and considering everyday applications of technology. They use Beebots to support control work and simple algorithms. Children also are encouraged to use the internet to supplement learning throughout the curriculum for example it is used in KS1 for research purposes when writing non-Chronological reports.

Teachers are responsible for the provision of appropriate activities and learning experiences and ensuring equipment is accessible to the children. They should work alongside the children, sharing and helping them to develop their skills, encouraging and selecting appropriate tools and facilitating learning with this exciting medium.

The children will be taught how to become responsible Internet users. They will be educated in taking responsibility for their own actions and informed that checks will be made of their files.

They also need to ensure the safety of the children by carefully monitoring the materials that the children will become increasingly exposed to through the use of the Internet. Teachers and all school staff will supervise the children and take all reasonable precautions to ensure users access only appropriate material.

All teachers are responsible for reporting any problems – hardware/software or health and safety – to the relevant co-ordinators immediately.

Impact:

Pupils will know how to use digital devices respectfully. They will know how to recognise risks online and understand how to seek help. Teachers will provide opportunities for pupils to create a range of digital content including artwork, word-processed documents, spreadsheets, presentations and multi-media documents. Pupils will be able to create a simple computer program based on a given brief using a range of commands, variables and repetition. The vast majority of pupils will leave KS1 having met the criteria set out in the national curriculum.

Resources:

a) Hardware

All of the PCs in school use Windows 10 and are linked to the network via the hub/server in the staffroom. All classes have machines that are connected to a networked laser printer. In addition, the children have access to chrome books – this is available for computing lessons and cross-curricular time throughout the week. There are also a bank of iPads to use to supplement the computing curriculum and cross curricular activities.

There are fixed Smart boards in every classroom to support whole class cross curricular teaching of Computing. Each class teacher has their own computer to be able to use in conjunction with the smartboards.

All teaching staff have been given a leased laptop computer for planning and administrative purposes.

Staff are encouraged to maintain the operation of printers in the changing of printer cartridges, etc. Any technical problems should be referred to the coordinator immediately.

Inclusion:

All children are given equal access to the Computing curriculum irrespective of academic / physical abilities, culture or gender. Teaching takes account of pupil's cultural backgrounds, language needs, abilities and different learning styles.

The ethos of our school is one of a positive approach, committed to inclusion, in which we encourage each child to achieve his/her own potential. Work will be differentiated and reflected in planning to meet the needs, abilities and maturity of the all the children.

Teachers will acknowledge the positive effects and the role that new technologies can have on the lives of people with learning difficulty and/or disability.

Health and Safety

Care should be taken when using electrical equipment in accordance with the Health and Safety Policy. Equipment will be kept in good working order and regularly cleaned and cables tidied. Food or drinks of any description will not be permitted in the immediate vicinity of computers so as to limit possibilities of spillage or damage.

Assessment:

Each child is assigned a folder on Purple Mash. A portfolio of children's work continues to be developed. Their work is saved here and is used to record pupil progress related to these strands on a half termly basis. In KS1 this will be supported by staff. Teachers should endeavour to keep desktops tidy and the filing systems uncluttered.

Children will be encouraged to assess their Computing experiences including the value of applications and credibility of materials in relationship to other media and tools.

CPD:

We are constantly seeking to develop and maintain all staff's knowledge, understanding and skills in Computing through:

- a) The support of key stage meetings.
- b) Monitoring of planning by the co-ordinator.
- c) Appropriate use of the computer based resources.
- d) Internet courses for both teaching and support staff.
- e) The support of professionals in the field
- f) Staff meetings given over to the development of confidence and expertise in specific skills, knowledge and understanding.
- g) Whole school training days (CPD)
- h) The Computing co-ordinator / network manager supporting the class teacher.

The role of the ict co-ordinator / network manager

Specific responsibilities

- a) To be responsible for the co-ordination of Computing throughout the school.
- b) To research, prepare, monitor, report and review on a regular basis the use of Computing to ensure coverage, progression, balance and improved learning.
- c) To take the lead in producing a policy document, relevant guidance materials and curriculum audit out-lining future developments throughout the school.
- d) To give professional support and guidance to other members of staff.
- e) To organise and request support materials, publications and equipment and Computing specific software.
- f) To organise the collection of class contributions to the school website on a regular basis.
- g) To evaluate new approaches and materials keeping up to date with technological developments.
- h) Ensure support materials are accessible and in good order.
- i) Liaise with other schools and professionals.
- j) Inform and report to the Governors' Curriculum and Standards Committee.

Review

This policy will be reviewed annually by staff.