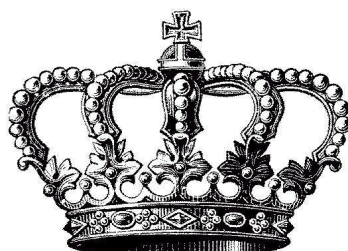


QUEEN'S DRIVE INFANT SCHOOL



COMPUTING Policy

May 2020

Queen's Drive Infant School

Computing Policy

May 2020

VISION

To use technology safely and respectfully across the curriculum.

Aims/INTENT

We believe that every child should have the right to a curriculum that champions excellence; supporting pupils in achieving to the very best of their abilities. We understand the immense value technology plays not only in supporting the Computing and whole school curriculum but overall in the day-to-day life of our school. We believe that technology can provide: enhanced collaborative learning opportunities; better engagement of pupils; easier access to rich content; support conceptual understanding of new concepts and can support the needs of all our pupils.

Our aims:

- Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.
- Teach pupils to become responsible, respectful and competent users of data, information and communication technology.
- Provide technology solutions for forging better home and school links.
- Enthuse and equip children with the capability to use technology throughout their lives.
- Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Utilise computational thinking beyond the Computing curriculum.
- Give children access to a variety of high quality hardware, software and unplugged resources.
- Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves or others.
- Exceed the minimum government recommended/statutory guidance for programmes of study for Computing

IMPLEMENTATION/ORGANISATION

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.

Defining and Demystifying the Destination

Children are given direct instruction on how to use hardware and software through the 'Purplemash Scheme'. Software templates are produced for children to see 'What a Good one looks like'. Computing is also planned across the curriculum where the emphasis is on using computing as a tool for learning. So, for example, children might research a history topic using the Internet. Children who are learning science might use the computer to record and analyse data. We encourage the children to explore ways in which the use of computing can improve their results, for example, how a piece of writing can be edited or how the presentation of a piece of work can be improved by moving text about etc.

High Expectations/ Challenge for ALL (Inclusion)

We recognise that all classes have children with widely differing computing abilities. This is especially true when some children have access to computing equipment 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. We achieve this in a variety of ways, by:

- setting common tasks which are open-ended and can have a variety of responses;
- setting tasks of increasing difficulty (not all children complete all tasks);
- grouping children by ability in the room and setting different tasks for each ability group;
- providing resources of different complexity that are matched to the ability of the child;
- using classroom assistants to support the work of individual children or groups of children.

At Queens' Drive Infant School, we aim to enable all children to achieve to their full potential. This includes children of all abilities, social and cultural backgrounds, those with disabilities, EAL speakers and SEN statement and non-statemented. We place particular emphasis on the flexibility technology brings to allowing pupils to access learning opportunities, particularly pupils with SEN and disabilities. With this in mind, we will ensure additional access to technology is provided throughout the school day and in some cases beyond the school day.

Feedback

Children are moved on with their computing understanding through 'in the moment' feedback during lessons.

Teachers are able to set tasks for children to complete in order to consolidate learning and address errors.

Children are encouraged to give peer on peer feedback through working with each other and viewing each other's tasks. We celebrate errors and teach that with computing errors can lead us to a better understanding of the software. (e.g. Through coding, debugging)

Computing Curriculum Planning

As a school, we have chosen the Purple Mash Computing Scheme of Work from Reception to Year 2. The scheme of work supports our teachers in delivering fun and engaging lessons which help to raise standards and allow all pupils to achieve to their full potential. We are confident that the scheme of work more than adequately meets the national vision for Computing. It provides immense flexibility, strong cross-curricular links and integrates perfectly with the 2Simple Computing Assessment Tool. Furthermore, it gives excellent supporting material for less confident teachers. Teachers use core websites and books in order to engage the children in learning.

Safeguarding: Online Safety (see internet safety policy)

Online safety has a high profile at Purple Mash School for all stakeholders. We ensure this profile is maintained and that pupil needs are met by the following:

- A relevant up-to-date online safety curriculum which is progressive from Early Years to the end of Year 2.
- Through our home/school links and communication channels, parents are kept up to date with relevant online safety matters, policies and agreements.
- They know who to contact at school if they have concerns.
- Data policies which stipulate how we keep confidential information secure.
- A curriculum that is threaded throughout other curriculums and embedded in the day-to-day lives of our pupils.
- Pupils, staff and parents have Acceptable Use Policies which are signed and copies freely available.
- Training for staff and governors which is relevant to their needs and ultimately positively impacts on the pupils.

The Early Years Foundation Stage Outcomes

We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts. We believe the following:

- Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in roleplay.
- Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys.
- Outdoor exploration is an important aspect, supported by ICT toys such as metal detectors, torches and walkie-talkie sets.
- Recording devices can support children to develop their communication skills. This is especially useful for children who have English as an additional language.
- Engagement with 'minimash' on laptops and ipads provides links to subjects and opportunities to access purplemash software.

Key stage One Outcomes

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.

- Write and test simple programs.
- Organise, store, manipulate and retrieve data in a range of digital formats.
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

The contribution of COMPUTING to teaching on other curriculum areas

Computing contributes to teaching and learning in all curriculum areas. For example, graphics work links in closely with work in art, and work using databases supports work in mathematics, while the Internet proves very useful for research in humanities subjects. Computing enables children to present their information and conclusions in an alternative way.

English

Computing is a major contributor to the teaching of English. Through the development of keyboard skills and the use of computers, children learn how to edit and revise text. They learn how to improve the presentation of their work by using desk-top publishing software, and to improve their reading skills by using talking books.

Mathematics

Many computing activities build upon the mathematical skills of the children. Children use computing in mathematics to collect data, make predictions, analyse results, and present information graphically. Children also have access to a programs dedicated to improving their maths skills, e.g. Mathletics and selected games on the Internet.

Personal, social and health education (PSHE) and citizenship

Computing makes a contribution to the teaching of PSHE and citizenship as children learn to work together in a collaborative manner. They develop a sense of global citizenship by using the Internet and e-mail. Through the discussion of moral issues related to electronic communication, children develop a view about the use and misuse of computing (E-safety), and they also gain a knowledge and understanding of the interdependence of people around the world.

IMPACT / Assessment and monitoring

- Pupil attainment is assessed using statements from the 2 simple assessment guidance. The tool enables staff to accurately identify attainment of pupils through the detailed exemplification it has for each key learning intention.
- Work from a range of classes and abilities is shared during pupil progress meetings in order to moderate assessment.
- Children are encouraged to self, peer and group assess work in a positive.
- Formative assessment is undertaken each session/interaction in Computing and pupils are very much encouraged to be involved in that process so they can evaluate their own progress.
- Summative assessment is undertaken half termly at the end of each computing unit. Teachers track accurate records of pupil attainment by entering data into the whole school 'insight' tracking System. This tracking informs future planning or activities for computing and the use of computing cross circularly.

Health and Safety

- Electrical items checked annually
- No drinks next to computers
- No trailing wires from laptops
- See Risk Assessment
- Children are taught to use computers in a careful and safe manner

Resources

- Our school is in the fortunate position of being well resourced, laptops are available in each class, years one and two each have a bank of desktops in the corridor and each class has access to I-pads
- Each class also has a Smartboard plus computer with a visualizer for teaching and teachers have a tablet and laptop.
- Resources are suitably maintained and replenished when needed, which is overseen by the Head teacher, Computing Lead and IT support.
- Audits of school resources are conducted regularly which informs decisions on future budgets.
- A computer action plan is formed which is shared with senior leaders yearly which features future resource needs.

Hardware includes the following:

- colour printers
- digital cameras
- electronic keyboard;
- CD players;
- calculators;
- Bee-bots/ robotic toys
- microphones and headphones;
- Video cameras
- Walkie talkies
- Recording devices for speaking and listening;

Software: includes the following:

- Espresso
- Bee-bot software
- 2 simple
- Purplemash
- Oxford owl home reading tool
- Mathletics online maths programme.

School Website

This is currently <http://www.queensdriveinfantschool.co.uk>

Monitoring and Review

- The monitoring of the standards of the children's work and the quality of teaching in computing is the responsibility of the computing subject leader.
- Monitoring is achieved through: work scrutiny, learning walks, observations, pupil voice, teacher voice, teacher feedback, learning environment monitoring.
- The computing subject leader is also responsible for supporting colleagues in the teaching of computing, for keeping informed about current developments in the subject and for providing a strategic lead and direction for the subject in school.
- The computing Lead monitors computing through yearly subject scrutiny with which she evaluates the strengths and weaknesses in the subject and indicates areas for further improvement.
- The computing subject leader updates the Head teacher and Governors termly with an impact statement which demonstrates actions completed over the term.
- School governors are involved in discussions on the school development plan and for the review of policy and practice.