

PALFREY INFANT SCHOOL

COMPUTING POLICY

Lead Teacher: A Hennefer



Reviewed and amended: July 2023

Governing Body: to be agreed

As a Rights Respecting School we believe:

Every child has to learn and have an education. Article 28 & 29

Every child has a right to be safe from harm and abuse. Article 19

Every child has a right of freedom of expression. Article 13

Every child has a right to be part of a community and practise his or her own religion and use his or her own language. Article 30

Every child has a right to rest and leisure. Article 31

Every child has a right to keep healthy. Article 24

We believe we fulfil these rights at Palfrey Infant School

Introduction

This policy sets out the aims and strategies for the successful delivery of the Computing Curriculum at Palfrey Infant School and is based on government recommended/statutory programmes of study.

Due to the fast pace of technology, innovation and constantly emerging trends, it is recommended that this policy is reviewed annually.

At the forefront of teaching Computing is Online Safety. At Palfrey Infant School we teach Online Safety explicitly in discrete lessons, at least one every half term, from Nursery to Year 2. Online Safety also has a high profile in many Computing, PSHE and other curriculum lessons throughout the year. See Palfrey Infant School Online Safety Policy (reviewed annually).

At Palfrey Infant School 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.

Aims

- Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.
- Enthuse and equip children with the capability to use technology throughout their lives.
- Give children access to a variety of high quality hardware, software and unplugged resources.
- Instil critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with technology and its associated resources.
- Teach pupils to become responsible, respectful and competent users of data, information and communication technology.
- Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, retrieved, shared and manipulated.
- 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 and others.
- Use technology imaginatively and creatively to inspire and engage all pupils, as well as using it to be more efficient in the tasks associated with running an effective school.
- Provide technology solutions for forging better home school links.
- Utilise computational thinking beyond the Computing curriculum.
- Exceed the minimum government recommended/statutory guidance for programmes of study for Computing and other related legislative guidance (online safety).

Curriculum

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 this scheme of work more than adequately meets the national vision for Computing. It provides immense flexibility, strong opportunities for cross-curricular links and gives excellent supporting materials for less confident teachers. This scheme also gives our pupils a strong foundation in Computing which will enable them to continue their learning successfully as they move on to the next key stage, particularly for those who will progress to Palfrey Junior School, as they also follow the Purple Mash scheme.

All children from Nursery to Year 2 will be given an individual login to enable them to access Purple Mash at home. This allows children to access all the Purple Mash tools at home and provides a platform where teachers can set additional homework. We recognise that access to suitable technology at home is a significant issue for many of our families and therefore we provide paper-based homework as our main format.

Early Years

Although there is no explicit mention of Computing within the EYFS Framework, we recognise that computing and technology are still vitally important subjects to deliver. Computing is used in EYFS to support children's development across the seven areas of learning. Computing lessons in EYFS will support children to develop listening skills, problem-solving and thoughtful questioning skills. Computing in EYFS may be centred around play-based, unplugged activities alongside specific work on devices, including accessing programmes in Purple Mash. 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. Recording devices can support children to develop their communication skills. This is especially useful for the majority of our children who have English as an additional language. Additionally, in Reception we have chosen to follow the Purple Mash *Early Years Computing Skills* guide to focus on the foundations of computing skills that will give children a sound basis to explore topics using technology and to be ready for progressing through the

Computing curriculum. Familiarity with some of these skills will reduce the cognitive load on children in future learning and enable them to make progress more rapidly.

Key Stage 1

In KS1 our curriculum is taught weekly as a discrete subject using the Purple Mash scheme of work. These schemes of work enable us to implement the computing National Curriculum which is comprised of three main parts; Computer Science, Digital Literacy and Information Technology. We have refined the order of the units to meet the purposes and needs of our school and wider curriculum and we have chosen the units to provide a wide range of different technological experiences using a variety of tools. The overlaps between units serve to deepen understanding of computational concepts and provide opportunities for pupils to apply and extend understanding and make links in their knowledge and capabilities.

At the end of Key Stage 1 we expect children to:

- 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.

Assessment

Formative assessment opportunities are used by teachers to evaluate progress and inform planning. Progress is demonstrated in each year group through the use of floor books. These books are also used to support children's retrieval of prior knowledge both within lessons and as part of pupil voice assessments completed by the Computing Lead. Further assessment is to be developed in line with the school's curriculum review.

Resources

HARDWARE

At Palfrey Infant School we aim to provide well-maintained hardware to ensure technology opportunities for all pupils. Pupils will have access to iPad tablets, laptop computers, interactive and programmable toys and interactive white boards. Within the school pupils will see how technology enhances the smooth running of the school by the use of the telephone, fax machine, office computer, word processed letters, photocopiers and digital cameras. The need for future resource procurement is identified by the Computing lead and shared with senior leaders to enable appropriate budget setting.

SOFTWARE

All computers have an appropriate range of software to cover the Early Learning Goals and the National Curriculum. Teachers should ensure that the programmes and levels used are appropriate for their age group.

LOCATION AND MAINTENANCE

Laptops are located with every teacher and teaching assistant as a teaching resource and a bank of laptops and iPads is available for each year group. Interactive whiteboards are in most classrooms and positioned where the teacher can easily teach and monitor. Each class base has a digital camera and visualiser.

Teachers should ensure that:

- Hardware is kept dust free
- Keyboards are clean

- Any faults in hardware or software are recorded on the fault log
- Laptop computers/iPads are returned to the laptop cabinet and plugged in to charge

Inclusion

At Purple Mash 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.

Monitoring, Evaluation and Feedback

Monitoring standards of teaching and learning within Computing is the primary responsibility of the Computing Leader. All teachers are expected to contribute to floor books to demonstrate the progress being made in each unit. The floor books must contain work samples from all areas of the curriculum taught for the year group and pupil voice contributions that demonstrate their understanding. The floor books will be monitored termly by the Computing Lead alongside termly pupil voice discussions. Findings will be documented on the school's impact card and feedback given to teachers. Monitoring will also take place through scheduled learning walks and lesson observations. Any identified whole school areas of development will be discussed with senior leadership with relevant training identified and delivered.

Roles and Responsibilities

Due to technology extending beyond the National Curriculum for Computing, there are key roles and responsibilities specific members of staff have.

HEAD TEACHER

- Monitoring the implementation of the Computing Policy and its associated policies such as the Safeguarding and SEND Policies.
- Ratifying (in conjunction with the Governing Body) the Computing policy, Safeguarding policy and Computing Leader's Action Plan.
- Securing technical support service contracts and infrastructure maintenance contracts.
- Approving CPD and training which is in line with the whole school's strategic plan.
- Approving budget bids and setting them.
- Creating in conjunction with the Computing Leader, a long-term vision for Computing which includes forecasted expenditure and resources.
- Monitoring the performance of the Computing Leader in respect to their specific job role description for Computing. Ensuring any government legislation is being met.

COMPUTING LEADER

- Raising the profile of Computing for all stakeholders.
- Monitoring the standards of Computing and feeding back to staff in a timely fashion so they can act on areas for development.
- Ensuring assessment systems are in place for Computing.
- Maintaining overall consistency in standards of Computing across the school.
- Reporting on Computing at specific times of the year to the Governing Body/Head/Staff.
- Auditing the needs of the staff in terms of training/CPD.
- Actively supporting staff with their day-to-day practice.
- Seeking out opportunities to inspire staff in developing their practice through modelling and sharing new ideas, approaches and initiatives.

- Attending training and keeping abreast with the latest educational technology initiatives.
- Using nationally recognised standards to benchmark Computing.
- Creating Action Plans for Computing and supporting a long-term vision which feeds into the whole school development plan.
- Creating bids for the annual budgets and monitoring budget spend.
- Keeping an up-to-date log of all resources available to staff.
- Procuring physical and online resources that demonstrate best value.
- Reviewing the Computing curriculum and developing it as needed.
- Overseeing the effectiveness of the technician.
- Working as needed with the SENCO/Head Teacher to ensure online safety provision is above adequate and all legislation is in place.

TECHNICIAN

- Conducts routine scheduled maintenance/updates on systems.
- Fixes errors/issues with hardware and software set-up, prioritising as needed.
- Routinely checks school filtering, monitoring and virus protection.
- Maintains network connectivity and stability.
- Sets up new hardware and installations.
- Supports the Computing Leader and Head Teacher with future infrastructure needs and associated projected costs.

ADMINISTRATION STAFF

- Update content on the school website.
- Facilitate the creation of new user accounts for online subscriptions.
- Send approved messages via email or text using the school comms system.
- Supports procurement of resources and technical services.