Palfrey Junior School

Computing Policy

Current Policy Date: November 2024
Review: November 2027

Introduction

This policy document sets out the school's aims, principles and strategies for the delivery of Computing. This policy will be reviewed at regular intervals and updated as necessary by the Computing Co-ordinator.

Our Vision for Computing

Our 21st Century society could not function without technology. The rapid speed of innovation means that our children will be routinely using technology five years from now that many of us cannot even conceive of today. It is essential that all pupils gain the confidence and ability, which they need in this subject, to prepare them for the challenge of a rapidly developing and changing technological world. The use of technology will enhance and extend children's learning across the whole curriculum. The Curriculum has been chosen as a vehicle to provide children with numerous technology-embedded opportunities to develop motivate and challenge their learning and use of technology.

Guidelines

At Palfrey Junior School our aims are to:

- Allow staff and children to gain confidence in and enjoyment from, the use of technology. Additionally to allow staff to develop professionally by enhancing their teaching skills, management skills and administrative skills.
- Allow children to achieve specific Computing skills as set down in the school's scheme of work;
- Allow children to appreciate the relevance of technology in our society and that they see it as an essential tool for learning, communication, finding information and for controlling and understanding their environment.
- Give pupils a heightened interest and awareness of Computing through the regular display of their technology enhanced work in the classrooms and around the school.

Pupils will be given opportunities to:

- Use technology with purpose and enjoyment
- Develop their Computing capability
- Become autonomous users
- Evaluate the benefits of technology and its impact on society
- Meet the requirements of the National Curriculum as fully as possible and help all pupils achieve the highest possible standards of achievement
- Celebrate success in the use of technology.

Cross-curricular use of Information Communication Technology

Technology is a powerful tool, which can be used to enhance teaching and learning across the curriculum, challenging the most able while supporting those with learning difficulties. Pupils will be taught and given opportunities to consolidate computing skills through highly motivating cross-curricular activities. This will be achieved as follows:

Computing is incorporated into the planning of each subject scheme of work using The New Curriculum.

When planning lessons involving the use of technology, teachers identify activities in which the emphasis is on both the development of computing skills and the subject being supported.

Delivery of Computing in the National Curriculum

Information Technology can be divided into three main areas:

- Computer Science
- Digital Literacy
- Information Technology

Expectations at Key Stage 2

National Curriculum Aims: At Key Stage 2, pupils will be given opportunities to build on the knowledge, understanding and skills acquired at Key Stage 1. They will be given opportunities to understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation. They will have opportunities to analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems. They will evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems and will be responsible, competent, confident and creative users of information and communication technology.

National Curriculum Attainment Targets: Pupils should be given opportunities 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
- 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 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
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Details of the implementation of the National Curriculum requirements to ensure continuity and progression can be found in the 'Weaving Skills and Understanding' document of The New Curriculum.

Curriculum Management

The Computing Co-ordinator in conjunction with Administration/Finance staff will ensure that resources are distributed and effectively timetabled when appropriate and facilitate the use of Information Communication Technology in the following ways:

- By updating the Policy and Schemes of Work
- Identifying the need to update resources
- By co-ordinating and/or providing INSET
- To keep staff abreast of new developments
- By providing support to enable staff to develop their pupils' capability
- Monitoring the Computing curriculum
- Oversee and maintain records of software licences
- Oversee the school website is updated and maintained
- Monitor the teachers' and the children's use of 'Google Classroom' to ensure it reflects current issues

Inclusion

All pupils, regardless of race, gender, culture or disability shall have the opportunities to develop their computing capability. The school will promote equal opportunities for computer usage and fairness of distribution of technology resources. Children with a computer at home are encouraged to use it for educational benefit and to share their experiences in school.

Provision for Special Educational Needs

Pupils with Special Educational Needs can benefit from using technology as it enhances access to the curriculum, and this in turn encourages motivation and the development of skills.

Computing resources in the school will reflect the needs of all our students and the Computing co-ordinator will work with the Special Needs Co-ordinator to develop a portfolio of Computing resources to support the needs of specific children in the school.

Assessment

It must be remembered that the process more than the outcome is the important issue when assessing computing skills.

Wherever possible assessment will be planned into schemes of work and will be used both formatively and diagnostically, helping teachers to meet the developmental needs of each pupil.

The use of many software packages encourages collaborative work. Pupils will work in pairs or groups whenever appropriate. The group mix will vary according to the activity. Consideration should be given as to whether groups will need to be of mixed or similar ability. Online class portfolios should be encouraged.

Differentiation in set tasks, as well as the outcome from pupils will enable the teacher to assess whether a pupil needs extra time to consolidate skills or whether the pupil is ready to acquire more.

Summative assessment for each half term will be made by teachers in their class curriculum booklet. Children are assessed against age related statements appropriate to their year group, as to whether they are meeting the expected level, exceeding or emerging.

Internet

When the Internet is being used, then the School's Acceptable Use Policy will always be strictly adhered to.

Continuing Progression

Pupil folders containing examples of their work will be established on the school's network. This folder will be updated regularly to ensure that there is evidence of continuity and progression.

Monitoring and Review

Monitoring is carried out by the Head Teacher and the Computing Co-ordinators, in the following ways:

- Informal discussion with staff and pupils
- Observation of Computing displays
- Collection of class Computing files which is saved on their Purple Mash pupil profiles
- Computing Class book
- Classroom observation and learning walks

Policy review

This policy will be reviewed in line with the school's policy review programme and no later than the following date: November 2027 or sooner if changes occur.